

## SECTION 6.3

### MILITARY EQUIPMENT (PRE-CONFLICT)

#### Contents

Introduction and key findings .....	2
Planning and readiness for expeditionary operations .....	2
Testing the UK's expeditionary capability: lessons learned? .....	6
The UK's expeditionary capability by 2002 .....	11
Equipment preparations for the invasion (2002 to 2003) .....	12
Planning begins .....	12
Detailed planning for UORs begins .....	25
The decision to deploy ground forces to the South and its implications .....	43
Concerns about Combat ID .....	53
Progress on UORs .....	56
The situation in the week before the invasion .....	66
Issues that emerged post-invasion .....	69
Desert uniforms .....	77
Enhanced Combat Body Armour .....	80
Biological and chemical warfare protection .....	84
Ammunition .....	90
Combat ID .....	92
Asset tracking .....	93
MOD reflections on equipping the forces deployed for the conflict .....	99
Conclusions .....	106

## Introduction and key findings

### 1. This Section addresses:

- the arrangements made to provide equipment to forces deploying for operations in Iraq;
- difficulties in the provision of Combat Identification (Combat ID), ammunition, Enhanced Combat Body Armour (ECBA), desert clothing, and equipment to protect against a chemical or biological attack; and
- asset tracking.

### 2. This Section does not address:

- the UK's military planning for the invasion of Iraq, which is addressed in Sections 6.1 and 6.2;
- the background to decisions made by the Treasury on equipment and Urgent Operational Requirement (UOR) funding, which is described in Section 13.1; and
- assessments of Iraq's capabilities and intent. Intelligence assessments relevant to military planning are addressed in Section 6.2 and the UK's assessment of Iraq's WMD programmes in Sections 4.1 to 4.4.

### Key findings

- The decisions taken between mid-December 2002 and mid-January 2003 to increase combat forces and bring forward the date on which UK forces might participate in combat operations compressed the timescales available for preparation.
- The achievements made in preparing the forces in the time available were very considerable, but the deployment of forces more quickly than anticipated in the Defence Planning Assumptions meant that there were some serious equipment shortfalls when conflict began.
- Those shortfalls were exacerbated by the lack of an effective asset tracking system, a lesson from previous operations and exercises that the Ministry of Defence (MOD) had identified but not adequately addressed.
- Ministers were not fully aware of the risks inherent in the decisions and the MOD and Permanent Joint Headquarters (PJHQ) were not fully aware of the situation on the ground during the conflict.

## Planning and readiness for expeditionary operations

**3. The Armed Forces' capacity to deploy and sustain expeditionary operations was determined by decisions in the 1998 *Strategic Defence Review* (SDR).**

**4. The SDR identified a major regional crisis, including in the Gulf, as the most demanding scenario against which the UK should plan for military operations.**

5. The SDR set out the UK's "defence requirements in the period to 2015".<sup>1</sup> That included the UK's defence priorities, the scenarios in which the Government envisaged deploying military forces, and what this meant for the UK's military force structure.

6. The SDR explained that, "in the post Cold War world", there was a greater need for the Armed Forces to build an expeditionary capability because "we must be prepared to go to the crisis, rather than have the crisis come to us".

7. A supporting essay to the SDR about future military capabilities listed those it considered "increasingly important", including:

- command, control, communications and computers and Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR);
- transport or lift capabilities because of "the trend towards force projections operations, for which we may need to deploy very rapidly in order to be successful";
- combat service support (logistics, equipment and medical support), which was "key to sustaining deployed operations, particularly those of significant duration"; and
- "protection against chemical and biological weapons" which was described as critically important in some of the regions in which we are likely to have to operate, such as the Gulf".<sup>2</sup>

8. The SDR was explicit in envisaging the UK operating in a number of areas, including the Gulf region. It stated:

"We have particularly important national interests and close friendships in the Gulf ... There are already significant sources of instability in these regions – including the continuing threat represented by Saddam Hussein's Iraq ... These dangers seem unlikely to diminish and may grow. Many of our Allies and Partners have similar important interests and friendships in these areas. We would therefore expect to work with them in responding to any future crises."<sup>3</sup>

9. The SDR continued:

"Outside Europe, the greatest risks to our national economic and political interest – and probably to international stability – will remain in the Gulf ... this Mission may involve major combat operations ... Such operations also impose demanding requirements, for example, in relation to strategic transport for deployment and supply, and to command and control ... In operational terms, the most demanding individual scenario against which we must now plan is no longer all-out war in

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<sup>1</sup> Ministry of Defence, *Strategic Defence Review*, July 1998.

<sup>2</sup> Ministry of Defence, *Strategic Defence Review: Supporting Essays*, July 1998.

<sup>3</sup> Ministry of Defence, *Strategic Defence Review*, July 1998.

Europe but a major regional crisis involving our national interest, perhaps on NATO's periphery or in the Gulf.”

**10.** The SDR acknowledged that “major equipments take years to develop”.

**11.** While the SDR identified no definitive timescales for its proposed changes, the MOD did publish a series of targets in December 1998 as part of its Public Service Agreement for 1999 to 2002.<sup>4</sup> Targets included achieving a “Full Joint Rapid Reaction Forces Capability by October 2001” and to “achieve reductions in book value of stocks of non-munitions of £2.2bn by April 2001”.

**12.** The Public Service Agreement recognised that the plans set out in the SDR would “require substantial investment to improve inherited areas of weakness measured against future operational needs and to fund a continuing major equipment modernisation programme”. The resources necessary to achieve this would be found “from making savings from rationalisation in other areas, a continuing programme of efficiency improvements and smarter procurement”.

**13. Decisions on the allocation of resources to the MOD, and within the MOD, were underpinned by a set of Defence Planning Assumptions (DPAs) about the totality of the commitments that the MOD would expect to meet and sustain at any one time and the time needed to prepare for operations.**

**14.** The ability of the UK to deploy and sustain forces on operations was determined by the size of the Armed Forces and the readiness of units within the force structure. That is still the case today.

**15.** Decisions on those issues and the allocation of resources to and within the MOD were based on the DPAs. DPAs were developed by the MOD to convert policy into detailed guidance that could be used by military planners.<sup>5</sup> The DPAs outlined the levels of activity the Armed Forces were expected to be able to undertake, and the contexts in which they were expected to operate. They were (and are) used to identify and resource the planned force structure, capabilities and equipment of the Armed Forces.

**16.** The SDR “set some broad benchmarks for the scale of our planning” and said that the UK should be able to:

“ – respond to a major international crisis which might require a military effort and combat operations of a similar scale and duration to the Gulf War when we deployed an armoured division, 26 major warships and over 80 combat aircraft.

“or

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<sup>4</sup> *Public Services for the Future: Modernisation, Reform, Accountability*, December 1998, Cm 4181.

<sup>5</sup> Ministry of Defence, *Strategic Defence Review*, July 1998.

“ – undertake a more extended deployment on a lesser scale (as over the last few years in Bosnia) while retaining the ability to mount a second substantial deployment – which might involve a combat brigade and appropriate naval and air forces – if this were made necessary by a second crisis. We would not, however, expect both deployments to involve war-fighting or to maintain them simultaneously for longer than six months.”

17. The DPAs are addressed in more detail in Section 6.1.

18. The ‘Defence Strategic Plan’ was a confidential MOD document which included greater detail than was published in the SDR report.<sup>6</sup> The Plan identified some specific readiness criteria in relation to regional conflict outside NATO:

“... we need to maintain the ability to respond within short warning times to an Iraqi threat, and to build up forces thereafter. This again requires us to hold capabilities needed to mount a medium scale deployment at high readiness (30 days) ... For a large scale deployment we need to plan on a framework division being ready within 90 days.”

### Scales of military operation

To inform the DPAs, the scales of military effort, over and above those required for day-to-day commitments, were defined in the SDR as:

- **small scale:** “a deployment of battalion size or equivalent”;
- **medium scale:** “deployments of brigade size or equivalent”, such as the UK’s contribution to Bosnia in the mid-1990s;
- **large scale:** “deployments of division size or equivalent”, such as the UK’s contribution to the 1991 Gulf Conflict; and
- **very large scale and full scale:** forces needed “to meet significant aggression against an Ally”, the difference between the two reflected the time available for preparation – “warning time” – and the size of the threat.<sup>7</sup>

Other factors to be considered included:

- **endurance** – the likely duration of any operation and the potential need to sustain a deployment for an indefinite period; and
- **concurrency** – the number of operations of a given scale of effort and duration that could be sustained by the force structure.

More detail on the planning assumptions for the scales of military operation is provided in Section 6.1.

<sup>6</sup> Ministry of Defence, 1998, ‘Defence Strategic Plan 1998’.

<sup>7</sup> Ministry of Defence, *Strategic Defence Review: Supporting Essays*, July 1998.

## Testing the UK's expeditionary capability: lessons learned?

### **19. The first Gulf Conflict had highlighted inadequacies in the UK's asset tracking and Combat ID equipment.**

**20.** The UK deployed an armoured division during the Gulf Conflict in 1991, Operation GRANBY, comprising two combat brigades: 4 Brigade and 7 Armoured Brigade.<sup>8</sup>

**21.** The MOD identified a number of lessons relating to equipment following the 1991 Gulf Conflict in its *Statement on the Defence Estimates* in 1992.<sup>9</sup> It found that deficiencies in the reliability of older equipment had “considerable implications” for the UK's operational capability, and were “only overcome by a disproportionate application of maintenance effort and deployment of spares”.

**22.** The MOD also found that the volume of stores and equipment that had to be moved to theatre, and the compressed timescales involved, led to problems with the visibility of stockholdings and items in transit.<sup>10</sup> A temporary system was devised for tracking operationally vital items but the MOD was examining “improved arrangements for the future”. The system for allocating priorities in the movement of freight was “overloaded by the volume of high priority items” and a review had been commissioned to learn the lessons from the operation.

**23.** A secure and effective battlefield electronic identification system, which later became known as Combat ID,<sup>11</sup> “did not exist” during Op GRANBY. While practical steps were taken to avoid engagements between Coalition Forces, a number of incidents occurred.

**24.** The MOD stated that the UK was working with the US “to identify technical and operational options” to minimise the risk of further incidents. The Defence Research Agency was “also undertaking a research programme aimed at assessing both short term solutions and options for the longer term”.

### **25. Concerns about progress on asset tracking systems were raised in Public Accounts Committee reports in 1993, 1997 and 2000.**

**26.** A Public Accounts Committee report in 1993 on the first Gulf Conflict stated that it was “concerned the Department did not have a sound system for tracking freight”.<sup>12</sup>

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<sup>8</sup> Ministry of Defence, *Statement on the Defence Estimates – Britain's Defence for the 90s*, July 1991, Cm 1559.

<sup>9</sup> Ministry of Defence, *Statement on the Defence Estimates*, July 1992, Cm 1981.

<sup>10</sup> Ministry of Defence, *Statement on the Defence Estimates*, July 1992, Cm 1981.

<sup>11</sup> Combat ID enables military forces to distinguish friend from foe during operations, minimising the risk of accidental destruction of friendly or allied forces, otherwise known as fratricide or Blue-on-Blue incidents. The systems and procedures in place must be interoperable with those used by allied forces.

<sup>12</sup> Twenty-sixth Report from the Committee of Public Accounts, Session 1993-94, *Ministry of Defence: Movements of Personnel, Equipment and Stores to and from the Gulf*, HC 393, paras 18-19.

**27.** The Public Accounts Committee stated:

“We consider it unacceptable that the lack of elementary tracking led to some operationally critical items being ‘lost to view’, and note that 228 aircraft pallets worth £680,000 went missing completely during GRANBY. The failure to be able to locate some equipment also led to some duplicate requisitioning.

“We stress the importance of the Department taking urgent action to improve their management information systems relating to movements ... we recommend that the Department have regard to the best systems in operation in the commercial sector, in particular those used for keeping track of assets.”

**28.** In 1997, the Public Accounts Committee report on the UK’s operations in the former Yugoslavia found that it was “unsatisfactory” that asset tracking had “again proved to be a problem”, despite assurances given by the MOD following the first Gulf Conflict.<sup>13</sup>**29.** The Committee added:

“We suggest that some of the problems with the Department’s asset tracking systems, particularly the strain on communications systems and the large volumes of data, could be regarded as foreseeable consequences of an operational environment. We note that the Department are considering what systems might be appropriate for the future. We recommend that, in doing this, they give particular attention to ensuring that they have systems robust enough to deal with operational conditions; it is at such times that large quantities of equipment and stores tend to be moving around, and it becomes easy to lose sight of them.”

**30.** The Public Accounts Committee reported on operations in the former Yugoslavia again in 2000 and found that:

“The Department has little capacity to monitor the supply chain’s performance in theatre, nor the condition and reliability of equipments in theatre. The Department do not expect to have IT systems fully operating to provide such information until 2003 ...”<sup>14</sup>

**31.** A military exercise in 2001 found that British equipment did not work well in hot and dusty conditions and needed to be improved, given the UK’s focus on expeditionary operations.**32.** The exercise also identified difficulties with clothing, boots and asset tracking.

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<sup>13</sup> Twenty-third Report from the Committee of Public Accounts, Session 1996-97, *Ministry of Defence: Management of the Military Operations in the Former Yugoslavia*, HC 242, paras 45-46.

<sup>14</sup> Forty-sixth Report from the Committee of Public Accounts 1999-2000 – *Ministry of Defence: Kosovo – The Financial Management of Military Operations*.

**33.** In October 2001, the MOD conducted Exercise Saif Sareea II in Oman.<sup>15</sup> The exercise, which involved around 22,500 British Armed Forces personnel from all three services, aimed to test the Armed Forces' ability to conduct a medium scale operation over long distances, in the post-SDR expeditionary force structure. It tested the principle that the Joint Rapid Reaction Forces should be ready to conduct expeditionary operations in any area of the world at short notice.

**34.** In August 2002, the National Audit Office (NAO) published a report into the exercise, which included a number of recommendations and identified a number of problems to be addressed.<sup>16</sup>

**35.** Much equipment performed well, including Warrior Armoured Fighting Vehicles (AFVs) and the C17 strategic lift aircraft.

**36.** As a result of pre-exercise reconnaissance, 4 Armoured Brigade had made a number of recommendations for the modification of equipment, including 'desertisation'<sup>17</sup> of Challenger 2 tanks. Despite the recommendation, the Permanent Joint Headquarters (PJHQ) directed that the modifications would not be required given the predicted climatic conditions in Oman.

**37.** During the exercise, a number of Challenger 2 tanks experienced difficulties relating to the hot and dusty conditions. As a result, a much larger quantity of spare parts was required and equipment availability was lower than expected.

**38.** Sand filters were fitted to the engines of Lynx and Chinook helicopters, as a result of lessons learned from the 1991 Gulf Conflict. Overall helicopter availability, however, was 55 percent.

**39.** The MOD had insufficient desert combat suits and desert boots for all personnel. As a result, desert-specific clothing was issued only to personnel who would be in theatre for an extended period. Standard issue boots were unsuitable for the task; 4 Armoured Brigade's post-exercise report cited melting boots and foot rot as "a major issue".

**40.** The NAO reported that asset tracking systems remained weak. The Visibility In Transit Asset Logging (VITAL) system, introduced as a result of NAO recommendations following the first Gulf Conflict, had been operating "at 500 percent of its originally planned capacity" by 2001. It was slow during the exercise, taking 15 minutes to find the contents of a single ISO container. As VITAL was not available at the point of exiting the UK, there was no visibility of an item until it arrived in theatre.

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<sup>15</sup> National Audit Office, *Exercise Saif Sareea II*, 1 August 2002, HC 1097.

<sup>16</sup> National Audit Office, *Exercise Saif Sareea II*, 1 August 2002, HC 1097.

<sup>17</sup> Modifications to equipment that enable it to operate in desert conditions.

**41.** On learning lessons, the NAO report stated:

“Some lessons identified during previous operations were re-learned, which illustrated the tendency that skills learned on medium size operations such as the Gulf War dissipate over time as people move on. There is a strong argument that exercises of the size of Saif Sareea need to be conducted regularly in order to keep skills and experience up to date and to check that lessons previously identified have been implemented.”

**42. In March 2002, the NAO considered the MOD’s progress in implementing a Combat ID strategy following the 1998 SDR.**

**43.** A report by the NAO on 7 March 2002 acknowledged the complexities surrounding Combat ID and recognised that the MOD had developed a clear strategy for finding a solution.<sup>18</sup>

**44.** The NAO did find, however, that there was more that could be done to move the issue forward. Amongst the projects it identified as a way of enhancing Combat ID work was Battlefield Target Identification (BTID). The NAO wrote that the MOD had spent £7m over the last 10 years on researching land solutions to Combat ID and there had been a successful trial of a BTID prototype in September 2001. Despite that, a proposal to fit an armoured brigade with BTID had not passed an Initial Gate Business Case.<sup>19</sup>

**45.** The MOD was confident that it would have integrated BTID equipment ready to participate in a US-led NATO demonstration in September 2005. That would provide an opportunity to show if its solution was compliant with the relevant NATO Standardisation Agreement. The MOD was confident that its solution was “already compliant”.

**46. A meeting in May 2002 highlighted concerns about whether the readiness levels specified in the SDR could be met.**

**47.** On 21 May, Mr Blair attended a meeting with the Chiefs of Staff, Mr Geoff Hoon, Defence Secretary, and Sir Kevin Tebbit, MOD Permanent Secretary, to discuss current operations and resources.<sup>20</sup>

**48.** The note of the meeting recorded that Admiral Sir Michael Boyce, the Chief of the Defence Staff (CDS), said that the Armed Forces had “been under-resourced since the SDR” and they “could not continue to make do”. From “each operation there was a lengthening list of inadequacies”. In August the MOD “would reach a cliff edge, having to collapse operational capability to stay in budget”.

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<sup>18</sup> National Audit Office, *Ministry of Defence: Combat Identification*, 7 March 2002, HC 661.

<sup>19</sup> The procurement process, including the phases for business cases, is explained in Section 14.1.

<sup>20</sup> Note Rycroft, 21 May 2002, ‘Prime Minister’s Meeting with Chiefs of Staff’.

49. Adm Boyce also said that SDR readiness levels were not being met:

“For instance, a division should be capable of being produced in 90 days<sup>21</sup> but it would now be difficult to produce two thirds of a division in 6 months, with consequences on Iraq (US lead time by contrast would be 3 months).”

50. In addition, “resources were needed for new investment to secure information-dominance for the war on terrorism/asymmetric threats”.

51. Mr Hoon described the three levels of funding that were required:

- “(1) to deliver the SDR assumptions;
- (2) to modernise equipment/training to deliver a modern Armed Forces; and
- (3) to get the capabilities right post-11 September.”

52. Sir Kevin “said the priority was filling gaps in capabilities”.

**53. In July 2002, the MOD published a follow-up to the 1998 SDR which confirmed that the shift towards expeditionary operations was likely to become more pronounced.**

54. In July 2002, the MOD published *The Strategic Defence Review: A New Chapter*, an update on the SDR’s progress and a consideration of the “UK’s defence posture and plans” in light of the 9/11 attacks.<sup>22</sup>

55. The MOD stated it was likely that the trend towards expeditionary operations would “become even more pronounced”. While the core regions identified in the SDR – Europe, the Gulf and the Mediterranean – were likely to remain “the primary focus” of UK interests, it was “increasingly clear that a coherent and effective campaign against international terrorism – and indeed other contingencies – may require engagement further afield more often than perhaps we had previously assumed”.

56. On the Armed Forces’ ability to conduct multiple, simultaneous operations, the MOD wrote:

“The capability of our forces is strained not just by the scale of operations, but by the number of simultaneous or near-simultaneous operations. Since the SDR we have assumed that we should plan to be able to undertake either a single major operation (of a similar scale and duration to our contribution to the Gulf War in 1990-91), or undertake a more extended overseas deployment on a lesser scale (as in the mid-1990s in Bosnia), while retaining the ability to mount a second substantial deployment – which might involve a combat brigade and appropriate naval and air

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<sup>21</sup> This text reflects what is recorded in the note but is not what the SDR stated; it specified that a framework division should be ready within 90 days.

<sup>22</sup> Ministry of Defence, *Strategic Defence Review: A New Chapter*, July 2002.

forces – if this were made necessary by a second crisis. We would not, however, expect both deployments to involve war-fighting or to maintain them simultaneously for longer than 6 months.”

**57.** The MOD had “analysed a set of plausible and realistic scenarios” to assess the demands potentially faced by the UK overseas. That work had taken account of lessons learned from operations, including in Afghanistan. The MOD recognised that the particular scenarios it had envisaged might not be “replicated precisely in real life”, but they did allow the MOD to “draw general conclusions about the capabilities that may be particularly important”.

### The UK’s expeditionary capability by 2002

**58.** By 2002, UK forces had not yet acquired the equipment envisaged by the SDR.

**59.** Mr Hoon’s evidence to the Inquiry suggested that the time needed to deliver the changes envisaged by the SDR and the *New Chapter* was appreciated:

“[We] were moving the emphasis of the Ministry of Defence away from the kind of static territorial defence of the Cold War period to a much more flexible ... expeditionary capability. But that sounds quite straightforward to describe. It actually ... requires massive adjustments in capabilities.”<sup>23</sup>

**60.** Asked if the SDR had “worked itself through satisfactorily” by the time of the invasion, Lord Walker, Chief of the Defence Staff from May 2003 to April 2006 said “No.”<sup>24</sup> Asked to expand on that, Lord Walker stated that continuously operating outside the DPAs, and a shortfall in funding, were key reasons.

**61.** Air Chief Marshal Sir Jock Stirrup, Deputy Chief of the Defence Staff (Equipment Capability) (DCDS(EC)) from April 2002 to May 2003, told the Inquiry that some progress towards delivering the capabilities to support this expeditionary capability had been made by 2002 but the process was not complete: “We had moved some way, but we still had a fair distance to go.”<sup>25</sup>

**62.** Sir Kevin Tebbit told the Inquiry that the SDR contained “big challenges for the Armed Forces and there were such a large number of actions for implementation for the SDR that it was inevitably going to take time to work through”.<sup>26</sup>

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<sup>23</sup> Public hearing, 19 January 2010, pages 124-125.

<sup>24</sup> Public hearing, 1 February 2010, page 40.

<sup>25</sup> Public hearing, 1 February 2010, page 3.

<sup>26</sup> Private hearing, 6 May 2010, page 44.

**63.** Lieutenant General Sir Robert Fulton, who succeeded ACM Stirrup as DCDS(EC), told the Inquiry:

“My take on it would be that we went to Iraq with our Cold War capability, that there simply was not time between 1998 and 2002 to re-orientate a Capital Equipment Programme that stretched for 20 years.”<sup>27</sup>

**64.** Lt Gen Fulton added:

“... it was not possible in the time that I saw it from the time I was first engaged in the equipment area to be able to turn a Cold War-equipped military into a flexible, deployable, sustainable military within the life of the equipment plan.”<sup>28</sup>

## Equipment preparations for the invasion (2002 to 2003)

### Planning begins

**65.** The MOD’s initial thinking on options for military operations in Iraq focused on the deployment of an Army division. That would require a minimum of six months’ lead time and ideally longer.

**66.** Consideration of the UK’s options in the event of a US-led military invasion of Iraq began at the end of February 2002. That is addressed in detail in Section 6.1.

**67.** This Section considers the arrangements made for providing equipment to forces as part of the planning process for potential operations in Iraq.

**68.** On 6 March 2002, the Chiefs of Staff were informed that Iraq was “sliding rapidly up the scale of interest and a degree of strategic planning was essential at some point in the near future, given the lead times necessary to shape pol/mil thinking effectively”.<sup>29</sup>

**69.** The Chiefs of Staff agreed that Air Chief Marshal Sir Anthony Bagnall, Vice Chief of the Defence Staff, who was chairing the meeting in CDS’ absence, should “refresh” work on Urgent Operational Requirements (UORs)<sup>30</sup> to ensure that it was not left “too late”.

**70.** On 3 April, Sir Kevin Tebbit asked Mr Trevor Woolley, MOD Director General Resources and Plans (DGRP), “just by way of prudent contingency planning you understand ... what a deployment to Iraq of a Division minus (25-30,000 with enablers) would do to our SDR force structure and concurrency assumptions, assuming all other operations remained more or less as they are”.<sup>31</sup> Sir Kevin asked Mr Woolley not to share the work with the Commitments area of the MOD.

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<sup>27</sup> Public hearing, 27 July 2010, pages 8-9.

<sup>28</sup> Public hearing, 27 July 2010, page 19.

<sup>29</sup> Minutes, 6 March 2002, Chiefs of Staff meeting.

<sup>30</sup> An Urgent Operational Requirement (UOR) seeks to address a capability gap by rapidly procuring new or additional equipment or the enhancement of, or essential modification of, existing equipment. The procurement process is described in Section 14.1.

<sup>31</sup> Minute Tebbit to DG RP, 3 April 2002, ‘Iraq Pre-Contingency Mind Clearing’.

**71.** On 8 April, following Mr Blair’s talks with President Bush at Crawford, Texas (see Section 3.2), Mr Hoon instructed the MOD to undertake work on “the specific equipment requirements (UORs)” necessary to deliver the military options being considered as part of the initial discussions about possible UK participation in military action against Iraq.<sup>32</sup> This was because “equipment – rather than personnel – was likely to be on the critical path in terms of deployment timelines”.

**72.** Following consultation with Sir Kevin Tebbit and Adm Boyce, Mr Simon Webb, MOD Policy Director, sent Mr Hoon a think piece entitled ‘Bush and the War on Terrorism’ on 12 April.<sup>33</sup> Mr Webb’s minute provided formal advice on the possible scale of any UK military contribution and included a draft letter to Mr Blair.

**73.** Setting out the MOD’s thinking on military issues, Mr Webb wrote:

- “The fundamental building block for a major US ground force operation is a division. Only on that scale (requiring 3 brigades as our planning base) would UK have significant influence over how the operation was developed and conducted: an independent brigade does not fit into the US structure and would in any case need substantial divisional scale enablers in order to be safe for high intensity operations ...
- “Such a deployment would be at the extreme end of the UK’s capacity after the SDR: it was the scenario against which the ‘large’ option was scaled.”
- The UK “should seek only to make a respectable large contribution that we can sustain properly ...”

**74.** On 9 May, Sir Kevin Tebbit was sent the first assessment of equipment lead times for potential operations in Iraq in response to his 3 April request.<sup>34</sup> The assessment noted that a minimum of six months lead time was “necessary to fill essential capability gaps before we could launch a Gulf War scale operation against Iraq”. It also noted that the six months lead time was measured from “the point at which an unambiguous authorisation to spend the necessary money is given”.

**75.** The MOD’s assessment identified several “showstopping” equipment capability deficiencies with “the timelines for rectifying them”, including:

- The desert environment modifications to the Challenger 2 tank would take six months, with a further three if air filtration was added.
- Chemical protection measures would require six months and biological protection measures would require between nine and 12 months.
- Aircraft secure communications.

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<sup>32</sup> Minute Watkins to PSO/CDS, 8 April 2002, ‘Iraq’.

<sup>33</sup> [Minute Webb to PS/Secretary of State \[MOD\], 12 April 2002, ‘Bush and the War on Terrorism’.](#)

<sup>34</sup> [Minute Witney to PS/PUS \[MOD\], 9 May 2002, ‘Iraq – Equipment Lead Times’.](#)

- Support helicopters were identified as “a clear pinch point”. The eight Chinook Mk3 ordered in 1995 but not available for use would not be ready for another two years (see Box, ‘The eight modified Chinooks’, in Section 14.1).
- The UK had only enough tented accommodation for “some 2,500 personnel”. The remainder of the stock was in use on other operations in Afghanistan, the Balkans and Oman. Acquiring more was identified as a high priority.

**76.** The assessment was sent to Adm Boyce and a limited number of senior MOD officials and military officers.

**77.** Adm Boyce instructed that the advice should be circulated to the Single Service Chiefs, who were not on the original distribution.<sup>35</sup>

**78.** In response to a suggestion from his Private Office that the work be shared with the Chief of Defence Logistics, Adm Boyce wrote: “No, not yet.”<sup>36</sup>

**79.** Shortly afterwards, Sir Kevin Tebbit’s Private Secretary sent a minute to Mr Webb and Lieutenant General Sir Anthony Pigott, Deputy Chief of the Defence Staff (Commitments) (DCDS(C)), proposing a limited core distribution list for Iraq contingency planning.<sup>37</sup> He wrote: “There may be occasions when you (or indeed the Spending Review team) feel that an even more limited distribution should apply but I would hope this would not be frequent.”

**80.** The list did not include the Defence Logistics Organisation (DLO) or the Defence Procurement Agency (DPA). Neither organisation had been consulted on the 9 May advice.

**81.** The MOD established an informal inter-departmental group of senior officials for planning purposes, which became known as the “Pigott Group”. The Pigott Group was supported by a Strategic Planning Group (SPG) and both are described in Section 6.1.

**82.** Lt Gen Pigott sent Mr Hoon an update on the SPG’s work on 10 May.<sup>38</sup> Lt Gen Pigott stated:

“Any thinking we do about joining the US in military operations against the Iraqi regime needs to be informed by our thinking in two key areas: the impact of potential courses of action open to a coalition and the capability the UK might contribute to such a coalition.”

**83.** Work had been commissioned on the capabilities the UK might aim to provide within periods of three to four and six to eight months, setting out the key decision

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<sup>35</sup> [Manuscript comment Adm Boyce on Minute Witney to PS/PUS \[MOD\], 9 May 2002, ‘Iraq – Equipment Lead Times’.](#)

<sup>36</sup> [Manuscript comment Adm Boyce on Minute Witney to PS/PUS \[MOD\], 9 May 2002, ‘Iraq – Equipment Lead Times’.](#)

<sup>37</sup> Minute PS/PUS [MOD] to Policy Director and DCDS(C), May 2002, ‘Iraq’.

<sup>38</sup> [Minute DCDS\(C\) to APS/Secretary of State \[MOD\], 10 May 2002, ‘Iraq’.](#)

and deployment points. Lt Gen Pigott suggested that this could lead to “a note to the Prime Minister setting out these and the financial implications of taking contingency action now”.

**84.** General Sir Michael Walker was Chief of the General Staff (CGS) from 2000 to February 2003. His Private Office wrote to the Chiefs of Staff Secretariat on 13 June, referring to the 9 May advice on equipment lead times.<sup>39</sup> He stated that the advice highlighted “just a few of several areas where key deficiencies exist” if a medium or large scale operation were to be undertaken. Other areas included battlefield helicopters, the issue of stocks and the supply of items such as ammunition. Gen Walker would elaborate on these other areas at the Chiefs of Staff meeting on 18 June.<sup>40</sup>

**85.** The minutes from the weekly Chiefs of Staff meeting do not record any reference to a discussion on equipment planning for Iraq.<sup>41</sup>

**86. As work on military options in the MOD progressed, it was recognised that, if a large scale option was pursued, not all of the essential UOR equipment required for operations in the Gulf could be procured and fitted within six months.**

**87.** A paper produced by the SPG on 24 May, ‘Contingency Thinking: Force Generation and Deployment for the Gulf’, was sent to the Chiefs of Staff and a limited number of named MOD addressees.<sup>42</sup>

**88.** The SPG identified a number of key assumptions that included:

- Operations would not commence before autumn 2002.
- Decisions would not be taken incrementally because that would “add to timelines by making force generation increasingly complex and costly”.
- Enhancements would be needed to enable units to operate in the Gulf. That would expose preparations from an early stage given the significant number of contracts that would be required with industry.

**89.** Three broad levels of effort in line with the MOD’s planning assumptions were examined:

- the maximum the UK could provide (a large scale contribution);
- a “credible” medium scale package; and
- a small scale package.

**90.** Reflecting the UK’s existing military commitments and the most recent MOD budgetary planning round, the SPG advised that the UK could realistically produce a

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<sup>39</sup> Note MA1/CGS to COSSEC, 13 June 2002, ‘Iraq – Equipment Lead Times’.

<sup>40</sup> It is believed that Gen Walker’s Office was referring to the Think Tank discussion on 18 June referred to later in this Section, for which there was no record.

<sup>41</sup> Minutes, 18 June 2002, Chiefs of Staff meeting.

<sup>42</sup> Paper SPG, 24 May 2002, ‘Contingency Thinking: Force Generation and Deployment for the Gulf’.

“maximum contribution ... at the lower end of large scale ... medium scale (minus) for maritime (about 10 major warships), and medium scale for air (about 60 fast jets)”.

**91.** The force mix might not be evenly balanced (in terms of scale of effort) across the sea, land and air environments; but the UK would “always seek to achieve strategic influence across the three environments such that UK influence is in place throughout the joint environment”.

**92.** Lt Gen Pigott presented the findings from the SPG analysis to Mr Hoon on 24 May.<sup>43</sup> He advised that “until there is greater visibility and clarity of US intent our work on potential approaches to an Iraq campaign remains speculative; this work is advancing but will lack definition until we engage with the US”.

**93.** Three broad options (“force packages”) had been identified, which were “illustrative of the maximum potential ... contribution” that the UK might be able to make available for any offensive operations within given time periods:

- a. **Three months’ warning:** Deployment of medium scale joint force – 10 warships including a carrier, an armoured brigade, about 60 fast jets and associated support. That was described as at risk of being a “token contribution”. The cost, including “essential” UORs for equipping the force was estimated at £500m to £800m.
- b. **Six months’ warning:** Deployment of a large scale, war-fighting force in addition to the medium scale maritime and air components, which would be “comparable to the 1990/1991 conflict” and “confer significant influence on the control of the campaign”. Though the land element would be “capable of limited independent war-fighting”, there would be sustainability issues. Large numbers of vehicles could become “unserviceable” and there would be reliance on others to supply ammunition and other stock. There would not be enough time for “the procurement and fitting of *all* UOR equipment considered to be essential for operations in the Gulf (such as the desertisation of all armoured vehicles)”, which would generate further operational risks and result in the degradation of the “credibility of the UK’s contribution as [the] campaign unfolded”. That option would require the call out of 5,000-10,000 Reservists and cost £800m to £1.1bn. A decision would need to be taken immediately for operations to begin in December 2002.
- c. **Nine months’ warning:** The force package would be the same as (b) but would be better prepared and carry fewer risks, as a result of additional training and equipment. The package would have “enough capability and sustainability to be a credible contribution to any coalition”. The cost would be £100m higher because of a greater volume of UORs.

**94.** The deployment and campaign costs would be additional to the costs identified for each option.

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<sup>43</sup> [Minute DCDS\(C\) to PS/Secretary of State \[MOD\], 24 May 2002, ‘Iraq’.](#)

**95.** Lt Gen Pigott explained that current commitments in Afghanistan<sup>44</sup> and subsequent recovery and deployment times would “limit the UK’s ability to contribute significantly to any offensive operations in the region until November at the earliest”.

**96.** If it was “likely that the UK would wish to contribute” to US action “when the call came”, there was a “need to consider what action” was needed “now to reduce risks and as far as possible readiness times”.

**97.** Mr Hoon was asked to agree further work to refine contingency planning, to be submitted in mid-June; and informed that “proper preparations” would require wider involvement in the MOD and discreet approaches to industry.

**98.** Mr Hoon wrote to Mr Blair on 31 May, explaining that UK contingency planning had concluded that, for the UK to have influence on US planning, a significant military contribution would be needed. That was defined as at “division level” for land forces.<sup>45</sup>

**99.** Mr Hoon suggested raising “in general terms, that our contingency planning has shown we need plenty of warning in order to be able to contribute to military action”.

**100.** The SPG produced a paper in preparation for a “Strategic Think Tank on Iraq”, to be held by the Chiefs of Staff on 18 June.<sup>46</sup>

**101.** While the paper was not designed to consider equipment in detail, a section on “UK enablers” briefly considered force capability requirements. It reiterated the analysis of 24 May about what would be possible with either three, six or nine months warning. The paper also identified additional requirements for force protection, including “NBC” [Nuclear, Biological and Chemical] protection.

**102.** The MOD has been unable to locate any record of the think tank discussion.

**103.** Subsequent revisions of the paper before the end of 2002 are addressed later in this Section and in Section 6.1.

**104.** Mr Tom McKane, Deputy Head of the Cabinet Office Overseas and Defence Secretariat (OD Sec), wrote to Sir David Manning, Mr Blair’s Foreign Policy Adviser and Head of OD Sec, about the think tank discussion the same day.<sup>47</sup> He recognised that there was “a huge amount of work to be done if the UK is to be in a position to participate in any operation against Iraq”.

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<sup>44</sup> The UK had deployed 45 Commando Royal Marines from May to July 2002 as part of Operation JACANA that targeted Taliban and Al-Qaida fugitives in Afghanistan. *GOV.UK*, 14 January 2014, *The UK’s work in Afghanistan: timeline*.

<sup>45</sup> [Minute Hoon to Prime Minister, 31 May 2002, ‘Iraq’](#).

<sup>46</sup> [Minute Driver to PSO/CDS, 13 June 2002, ‘Supporting Paper for COS Strategic Think Tank on Iraq – 18 Jun’ attaching Paper \[SPG\], 12 June 2002, \[untitled\]](#).

<sup>47</sup> [Minute McKane to Manning, 18 June 2002, ‘Iraq’](#).

**105.** Mr McKane recommended that Sir David should reply to Mr Hoon's letter of 31 May seeking "further and better particulars on the timelines and precisely what decisions incurring significant expenditure would be required now in order to keep open the possibility of a large scale deployment in six months time".

**106.** Sir David commented to Mr Jonathan Powell, Mr Blair's Chief of Staff: "We certainly need much greater precision from MOD."<sup>48</sup>

**107.** Mr Powell replied that he believed there was "a danger of getting ahead of ourselves here unless this is absolutely necessary to get us into detailed military planning with the US".<sup>49</sup> He recommended discussing the issue with Mr Blair.

**108.** Sir David Manning asked Mr McKane to "confirm that it is now absolutely necessary to get into the detailed planning with the US".<sup>50</sup> He added: "I suspect it is if we are to have a voice."

**109.** On 25 June, Sir David wrote to Mr Peter Watkins, Mr Hoon's Principal Private Secretary, referring to Mr Hoon's letter of 31 May.<sup>51</sup> He stated:

"... the Prime Minister has asked for further advice on precisely what steps would have to be taken now, including financial commitments, in order to keep open the possibility of deploying a large scale force by the end of this year – bearing in mind we may not get six months warning ..."

**110.** Mr Watkins replied on 26 June with an update on the MOD's understanding of US plans.<sup>52</sup> He wrote that a small MOD team would be going to Washington and Tampa "immediately" and that would inform whether the UK could "secure adequate influence for a large scale contribution". That would determine the need to commit resources, on which Mr Hoon would provide "specific advice" shortly.

**111.** Lt Gen Pigott, Air Marshal Joe French, Chief of Defence Intelligence, and Mr Desmond Bowen, MOD Director General Operational Policy, visited Washington and CENTCOM from 27 to 29 June 2002.<sup>53</sup>

**112.** Before they left, Major General Robert Fry, Deputy Chief of Joint Operations (Operations) (DCJO(Ops)) from May 2002 to July 2003, provided a paper commenting on US planning, which at that stage offered two basic approaches:

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<sup>48</sup> [Manuscript comment Manning on Minute McKane to Manning, 18 June 2002, 'Iraq'](#).

<sup>49</sup> [Manuscript comment Powell on Minute McKane to Manning, 18 June 2002, 'Iraq'](#).

<sup>50</sup> [Manuscript comment Manning on Minute McKane to Manning, 18 June 2002, 'Iraq'](#).

<sup>51</sup> [Letter Manning to Watkins, 25 June 2002, 'Iraq'](#).

<sup>52</sup> [Letter Watkins to Manning, 26 June 2002, 'Iraq'](#).

<sup>53</sup> Minute Fry to MA/DCDS(C), 26 June 2002, 'Comments on US Planning for Possible Military Action Against Iraq'.

- A “running start”, with extra forces being deployed as the initial attacks were under way, which would have the advantage of surprise and allow for operations as early as October 2002.
- A “generated start”, allowing full deployment before the beginning of operations, which was expected to require three months longer.<sup>54</sup>

**113.** Maj Gen Fry wrote that the “running start” option carried considerably more risk and would be “much more manoeuvrist” than the type of operations which had been conducted in 1991. A number of issues for the UK were identified including: the role and timing for a UK contribution; the need for very early decision making; how to integrate into a complex US plan; levels of risk; UK participation in US exercises; and the likely US expectations that would result from UK involvement in the planning process.

**114.** On 2 July, Mr Watkins wrote to Sir David Manning with the outcome of the US visit.<sup>55</sup> While a “de facto invitation to the UK and Australia to participate” was “now on the table”, the extent of the desired UK contribution was “unclear”.

**115. In July, the Chiefs of Staff were informed that some stocks were sufficient to protect only a medium scale UK deployment from biological attack.**

**116.** A revised version of the SPG paper ‘UK Military Strategic Thinking on Iraq’ was produced on 11 July for a “Strategic Think Tank” on Iraq the following week.<sup>56</sup>

**117.** The section on NBC force protection had been expanded to explain that the UK possessed “sufficient stocks” of Individual Protective Equipment for a large scale deployment. Taking UOR action (“in 3 months or less”) could address “a number of shortfalls” but the “main shortfall” was in protection against a Biological Warfare (BW) attack, for which manufacturing time was needed for additional equipment. There were limited medical countermeasures to respond to a BW attack and the UK had “adequate stocks” only to support medium scale UK deployments.

**118.** The sustainment of operations beyond the level set out in the DPAs had “not been factored into calculations to date”.

**119.** The key risks for UK capabilities included:

- preparation times for the desertisation of vehicles;
- not knowing whether there was sufficient industrial capacity available to satisfy the “likely UOR/preparation requirements” (and this could not be resolved until clearance had been given to engage industry); and
- BW medical countermeasures being restricted to a medium scale force package.

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<sup>54</sup> Minute Fry to MA/DCDS(C), 26 June 2002, ‘Comments on US Planning for Possible Military Action Against Iraq’.

<sup>55</sup> [Letter Watkins to Manning, 2 July 2002, ‘Iraq’.](#)

<sup>56</sup> [Paper \[SPG\], 11 July 2002, ‘UK Military Strategic Thinking on Iraq’.](#)

**120.** Lt Gen Pigott briefed Adm Boyce on 17 July that his view was that the UK should encourage thinking to move towards action in 2003 to 2004 rather than in 2002 to 2003, which “had a better chance of success” given the challenges “including political red cards”.<sup>57</sup> That was: “Not a recipe for delay, indeed quite the reverse.” It would be difficult for the UK to send land forces to participate in a “running start” but the UK thinking was “taking us towards a ‘distinctive’ (Package 3) role”. For any significant contribution, force preparation would need to start “now”.

**121.** The advice from Lt Gen Pigott and the SPG was discussed in a restricted Chiefs of Staff meeting on 17 July.<sup>58</sup>

**122.** In preparation for a meeting to be held on 18 July, Mr Bowen outlined the MOD’s thinking in a minute to Mr Hoon on 17 July.<sup>59</sup> He drew attention to the US concepts of “running” and “generated” starts. He advised that the indications were that the US favoured the “running start” option (which could see US operations beginning during 2002).

**123.** Mr Bowen suggested that:

“In the meantime, as we begin to explore possible UK contributions we need to identify what preparation – such as procurement for **urgent operational requirements** – could usefully begin now ... ”

**124.** In mid-July, a Cabinet Office paper invited Ministers to “note” the potentially long lead times for equipping UK forces to undertake operations in Iraq and sought agreement that the MOD could bring forward proposals for procurement of equipment.

**125.** Although it was agreed that the UK should proceed on the assumption that the UK would participate in any military action, there was no decision on whether funds could be spent on preparations.

**126.** The Cabinet Office paper ‘Iraq: Conditions for Military Action’ was issued on 19 July to those attending a meeting to be chaired by Mr Blair on 23 July.<sup>60</sup> That meeting is addressed in Section 3.3.

**127.** Ministers were invited to “note the potentially long lead times involved in equipping UK Armed Forces to undertake operations in the Iraqi theatre”; and to “agree that MOD should bring forward proposals for the procurement of Urgent Operational Requirements under cover of the lessons learned from Afghanistan” and the “outcome” of the 2002 Spending Review.

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<sup>57</sup> Minute DCDS(C) to DPSO/CDS, 17 July 2002, ‘Iraq: Summary of Key Issues’.

<sup>58</sup> Minutes, 17 July 2002, Chiefs of Staff (Restricted) meeting.

<sup>59</sup> Minute DG Op Pol to PS/Secretary of State [MOD], 17 July 2002, ‘Iraq’.

<sup>60</sup> [Paper Cabinet Office, 19 July 2002, ‘Iraq: Conditions for Military Action’.](#)

**128.** In preparation for Mr Blair’s meeting, Mr Bowen advised Mr Hoon that Adm Boyce had directed that UK planning should concentrate on two packages:

- a supporting/enabling package, including basing, maritime and air assets, in which the “the only land contribution would be Special Forces”; and
- a discrete land contribution of a division (minus) for operations in northern Iraq.<sup>61</sup>

**129.** Mr Bowen wrote that:

“Other options, such as providing land forces to integrate with the US main effort in the south have been discounted because [sic] the severe difficulties we would face due to interoperability, deployment time and geographic constraints affecting logistics in particular.”

**130.** Mr Bowen provided “schematic timelines” showing decision dates and readiness which could be achieved.

**131.** Commenting on Mr Bowen’s advice, Mr Watkins wrote that a division (minus) option “would require immediate action on UORs etc and early decisions (October) on reserves”.<sup>62</sup> The latter would “definitely be visible”.

**132.** Separate advice from Lt Gen Pigott to Adm Boyce stated that one of the issues to be covered in the “way forward” was that it should be agreed to implement “invisible” UORs now, and to be prepared to advise Ministers later on visible UORs.<sup>63</sup>

**133.** A record of the meeting on 23 July stated that Mr Hoon advised Mr Blair that, if he wanted UK military involvement, Mr Blair “would need to decide this early”.<sup>64</sup>

**134.** The meeting concluded that work should proceed on the assumption that the UK would participate in any military action. Adm Boyce was to tell the US military that “we were considering a range of options”.

**135.** Mr Blair stated that he would “revert on the question of whether funds could be spent on preparation for this operation”.

**136.** The MOD identified three possible options for a UK contribution on 26 July but no recommendation was made about which option should be selected. The largest option comprised the deployment of a division but the MOD was also examining the possibility of deploying an additional light brigade and providing the framework for a UK-led Corps headquarters.

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<sup>61</sup> [Minute Bowen to PS/Secretary of State \[MOD\], 22 July 2002, ‘Iraq: Meeting with the Prime Minister’.](#)

<sup>62</sup> [Manuscript comment Watkins on Minute Bowen to PS/Secretary of State \[MOD\], 22 July 2002, ‘Iraq: Meeting with the Prime Minister’.](#)

<sup>63</sup> Minute DCDS(C) to DPSO/CDS, 22 July 2002, ‘Iraq: Update on Key Issues’.

<sup>64</sup> [Letter Rycroft to Manning, 23 July 2002, ‘Iraq: Prime Minister’s Meeting, 23 July’.](#)

**137. Mr Hoon expressed caution about both the timescales required for a UK deployment and the impact of potential industrial action by the Fire Brigades Union in the autumn.**

**138. Mr Blair was advised that no decision was needed at that stage.**

**139.** Following the 23 July meeting, No.10 asked the MOD to provide details of the proposed military campaign, and options for a UK contribution.<sup>65</sup>

**140.** Mr Bowen sent Mr Hoon a fuller analysis of the options for a UK contribution on 25 July.<sup>66</sup> He advised:

- It would take another couple of months to increase forces to medium scale.
- “To meet probable US timescales” it would “not be possible to deploy a fully prepared, fully sustainable armoured division for war-fighting”. A fully prepared and sustained armoured division (one which could fight a significant Iraqi force) would take 10 months.
- Deployment of an armoured division (minus) would only be possible “within six months of a decision to deploy”, and would have “limited sustainment and reach”.

**141.** On 26 July, further MOD advice on options for a UK contribution to US-led military operations in Iraq was provided in a letter from Mr Watkins to Mr Matthew Rycroft, Mr Blair’s Private Secretary for Foreign Affairs.<sup>67</sup>

**142.** Adm Boyce had recommended three options:

- **Package 1** – an “in-place support package” using forces already in the region.
- **Package 2** – an “enhanced support package” comprising Package 1 with additional air and maritime forces. While no conventional land forces could meet the timescales for the deployment of maritime and air forces: “Special Forces could be deployed very rapidly to match US timescales and priorities. This is likely to be very attractive to US planners, and their contribution to success would be significant ...”
- **Package 3** – a “discrete UK package” based on deployment of an armoured division which the MOD envisaged would be used in northern Iraq, in addition to the forces in Package 2. The UK might consider providing an armoured division either as part of a US-led Corps or as part of a larger coalition force possibly led by the UK using the framework of the NATO Allied Rapid Reaction Corps [ARRC].”

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<sup>65</sup> Minute Rycroft to McDonald, 23 July 2002 ‘Iraq: Prime Minister’s meeting, 23 July: Follow Up’.

<sup>66</sup> Minute Bowen to PS/Secretary of State [MOD], 25 July 2002, ‘Iraq – Potential UK Contribution’.

<sup>67</sup> [Letter Watkins to Rycroft, 26 July 2002, ‘Iraq’](#).

**143.** Mr Watkins stated “it would take **six months** for the whole division to be in place and then with limited sustainment and reach”.

**144.** Mr Watkins cautioned that:

“... the timescales indicated are the best planning estimates we can make at this stage ... they assume that, as soon as a decision in principle is reached to participate, funding will be available to improve sustainability ... and implement urgent operational requirements ... The ability of industry to respond to our demands can only be estimated at this stage.”

**145.** Mr Hoon had:

“... commissioned more work in respect of sustainability and UORs with a view to expediting what would need to be done once a decision in principle was taken, with what visibility to the public eye and with what cost ... It will involve widening the net of knowledge about this contingency planning within the MOD, although we will not yet contact industry who will have to be involved at some stage to determine actual lead times for procurement of UORs.”

**146.** The advice was sent to Mr Blair on 31 July, as one of several “background papers” he had commissioned at his meeting on 23 July “for summer reading”.<sup>68</sup>

**147.** Mr Rycroft commented to Mr Blair:

“The military are not yet ready to make a recommendation on which if any of the three options to go for. Nor can they yet judge whether the US have a winning concept. They are continuing to work with the US military. You do not need to take decisions yet.”

**148.** The MOD advised Mr Hoon on 30 July that there was a shortfall in “essential” equipment enhancements for all three packages in respect of protection against an Iraqi biological attack. It had “low confidence” that those shortfalls could be addressed within six months.

**149.** The MOD sought approval to engage more widely to refine its work on lead times but Mr Hoon decided that would be premature.

**150.** On 30 July, an MOD official provided Mr Hoon with a “best estimate” of the equipment enhancements that might be necessary in order to deliver the potential UK force packages.<sup>69</sup>

**151.** In an attached annex, the enhancements had been categorised as either “essential now”, “full operational capability enhancers”, or “follow-on enhancements”.

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<sup>68</sup> Minute Rycroft to Prime Minister, 31 July 2002, ‘Iraq: Background Papers’.

<sup>69</sup> [Minute Sec\(O\)1a to PS/SofS \[MOD\], 30 July 2002, ‘Iraq – Enhancements Required For Potential UK Contribution’.](#)

**152.** The shortfall of essential items for Packages 1 and 2 was for NBC equipment that would be required to treat casualties in the event of an Iraqi biological attack. The MOD had “low confidence” that it could be obtained within six months. It could take “up to nine months” to procure certain stocks from industry but further work was needed to identify other possible sources.

**153.** For enhancements required to achieve full operational capability, the MOD had “a high degree of confidence” that work could be completed “within six months” for Packages 1 and 2. For those packages, “none of the enhancement items appear to be a showstopper”.

**154.** For Package 3, the MOD had “lower confidence” in the ability to deliver desertisation for tanks “for the fully sustained war-fighting role”, which it judged “would take around ten months”. There would also be a shortfall in NBC protection and biological detectors if Package 3 were to be adopted. Further work was being done to see how quickly this could be acquired.

**155.** The purchase of ammunition and spares for land forces and support helicopters was listed in the annex of equipment which was “essential now” to sustain operations if Package 3 were to be adopted.

**156.** The official wrote that “the earlier decisions are taken to start Urgent Operational Requirements (UOR) and sustainability acquisition, the greater the UK’s preparedness and choice”.

**157.** The MOD official requested approval to engage the Front Line Commands, the DPA and the DLO to “refine” the MOD’s work on lead times. This was “most pressing” where the MOD had “low confidence that activity or procurement deemed essential to the UK force packages” could be achieved within six months.

**158.** The official would seek further approval before the MOD made “any contact with industry to determine the actual lead-times” for procuring equipment.

**159.** On funding, Mr Hoon was advised that, as any UORs for a campaign in Iraq would fall outside the MOD’s budget, it would need agreement from the Treasury to call on the Reserve and to secure funding for the UOR equipment and enhancement measures.

**160.** The Reserve is a fund held by the Treasury intended for genuinely unforeseen contingencies which departments cannot manage from their own resources and was used to pay for the net additional costs of military operations (NACMO). The NACMO included both UOR and non-UOR expenditure associated with operations in Iraq. The process behind this is explained in Section 13.1, where MOD’s negotiations with the Treasury are also examined.

**161.** Mr Watkins replied on 31 July, explaining that Mr Hoon had decided “it would be premature to widen the net of knowledge”; and that:

“... no costs should be incurred on UORs and sustainability enhancements for the purposes of a campaign in Iraq ... No estimates should be submitted to Treasury Officials.”<sup>70</sup>

**162.** Mr Bowen wrote to Mr Watkins on 1 August, acknowledging Mr Hoon’s clear directions but pressing “urgently” to take forward work on antitoxin<sup>71</sup> by widening the MOD planning circle.<sup>72</sup> Antitoxin was identified as an “essential” element in all three packages under consideration, “about whose potential availability we do not know nearly enough at present”. Mr Bowen wrote:

“In the event of any deployment, the proper preparations to enable British Forces to deal with the possible biological and chemical release would be essential ... It seems likely that decisions on the acquisition of antitoxin, when they come to be made, will be on the critical path for the deployment of a war fighting capability.”

**163.** Mr Bowen recommended “strongly” that Mr Hoon should agree that “on a very limited, need-to-know basis further staffing should be conducted with the inclusion of nominated NBC and Porton Down<sup>73</sup> staff”.

**164.** Mr Adam Ingram, Minister for the Armed Forces, responded on 7 August that, “exceptionally”, staffing could be widened “on a strict need to know basis”, including NBC and Porton Down staff as requested.<sup>74</sup>

#### DETAILED PLANNING FOR UORS BEGINS

**165.** The MOD had defined essential equipment needed “now” for potential operations in Iraq as “showstoppers”. That became the benchmark for determining whether the unavailability of an item should halt the deployment of UK forces.

**166.** On 9 August, Lt Gen Pigott published lists of individuals within the MOD (the “Centurion” group) and PJHQ (the “Warrior” group) who were authorised to receive “the most sensitive material relating to US planning and UK scoping on Iraq” during the summer.<sup>75</sup> That is described in Section 6.1.

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<sup>70</sup> Minute PS/SofS [MOD] to Sec(O)1a, 31 July 2002, ‘Iraq – Enhancements Required For Potential UK Contribution’.

<sup>71</sup> An antibody with the ability to neutralise a particular toxin; used as a countermeasure in the event of chemical or biological attack.

<sup>72</sup> Minute DG Op Pol to PS/SofS [MOD], 1 August 2002, ‘Iraq – Enhancements Required For Possible UK Contribution’.

<sup>73</sup> The headquarters for the Defence Science and Technology Laboratory (DSTL).

<sup>74</sup> Minute PS/Min(AF) to DG Op Pol, 7 August 2002, ‘Iraq – Enhancements For Possible UK Contribution – Antitoxin’.

<sup>75</sup> Minute MA2/DCDS(C), 9 August 2002, ‘Centurion Group’.

**167.** Air Vice Marshal Clive Loader, Assistant Chief of the Defence Staff (Operations), told Mr Bowen on 16 August that he had been directed to “drill down” on equipment issues in the planning phase and was setting up an Equipment and Sustainability Working Group.<sup>76</sup> Draft Terms of Reference for the Group were attached.

**168.** AVM Loader wrote that, in accordance with directions from Mr Hoon’s Private Office, consultation would “be strictly limited to those on the Centurion and Warrior lists”.

**169.** The Terms of Reference described the Working Group’s purpose as “taking forward the analysis of equipment and sustainability issues” with a “particular emphasis” on equipment availability and support. Work would be based on all three possible packages. The Working Group would gather “all internal data” to place itself “in the best position to take these issues forward” when clearance was granted.

**170.** The Working Group’s scope would be “medical equipment and sustainability issues”, including the issue of antitoxins. Consultation would be limited to the Centurion Group, “though outsiders may be approached for specific detail in response to specific questions where no connection to specific planning for operations against Iraq within a defined timescale is inferred”.

**171.** The Working Group would consider which force elements could be delivered in either two or four months, aligning to “potential key dates on the US timescale”, from September 2002. Where it was not possible to deliver the force element, the Working Group would consider the implications upon force packages. That would “allow those firming up the package” to identify what the UK could provide and where any shortfalls lay.

**172.** “Single Service sustainability work” would be checked by the DLO to ensure that centrally provided commodities, such as fuel and rations, were included for the entire force package.

**173.** The Terms of Reference categorised equipment under the same headings provided in the MOD advice to Mr Hoon on 30 July. Those were defined as:

- “Essential now”: items “without which the force cannot deploy – they are showstoppers”.
- “Full operational capability enhancers”: required to give the force “a fully generated operational capability for up to 30 days of combat”.
- “Follow-on enhancements”: items beyond the minimum required for up to 30 days of combat and those that would “achieve a substantial measure of risk reduction”.

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<sup>76</sup> Minute ACDS (Ops) to DG Op Pol, 16 August 2002, ‘Equipment and Sustainability Working Group’ attaching Paper, 16 August 2002, ‘Equipment and Sustainability Working Group Terms of Reference’.

**174.** The questions for the Group to consider included:

- the equipment requirement – such as the effects required from each package, quantities, enhancements for particular geographical locations and an understanding of priorities;
- the justification for it – such as what would “the operational penalties” be for not providing the item and were there any “operational lessons” that reinforced the case, for example from the 1990/91 Gulf Conflict;
- alternative solutions;
- the management and timing of the requirement;
- potential risks and wider implications; and
- visibility and presentation – how to “cover” preparing or acquiring the requirement.

**175.** Detailed planning for UORs for potential operations against Iraq began on 22 August with the first weekly Equipment and Sustainability Working Group meeting.<sup>77</sup>

**176.** On 5 September, Mr Hoon requested detailed advice from Mr Ian Lee, who had replaced Mr Bowen as MOD Director General Operational Policy, on the UORs assumed within the “preparation cost figures” for the three packages, “covering the ‘what’, ‘why’ and ‘when’ for each UOR”.<sup>78</sup>

**177. Mr Blair and Mr Hoon agreed on 8 September that the UK should plan on the basis of a medium scale land contribution but there should be no visible preparations.**

**178.** Mr Blair met President Bush at Camp David on 7 September. That meeting is described in Section 3.4. Before the meeting, Mr Watkins wrote to Sir David Manning on 6 September with an update on US military planning and “the factors informing decisions on any UK military contribution”.<sup>79</sup> For Package 2, he wrote that “some” UORs would need to be raised at additional cost to the Reserve.

**179.** For Package 3, Mr Watkins stated that “even were [Operation] FRESCO<sup>80</sup> to end soon, we could not provide a self-standing division within US timescales”. He continued:

“There would simply not be enough time to carry out the preparations we would need to make. We would not have enough time to engage industry in order to improve sustainability (ammunition, etc) and implement UORs to optimise forces for the theatre and interoperability with the US.”

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<sup>77</sup> Minute DCDS(EC) to PS/Minister(DP), 24 January 2003, ‘Iraq: OP TELIC UORs’.

<sup>78</sup> Minute Watkins to DG Op Pol, 5 September 2002, ‘Iraq’.

<sup>79</sup> [Letter Watkins to Manning, 6 September 2002, ‘Iraq: Military Planning’.](#)

<sup>80</sup> The operation to address the fire fighters’ strike.

**180.** The Chiefs of Staff were considering what the “maximum effort” UK contribution could be for a UK ground force operating as part of a larger US force in northern Iraq. The “illustrative” force package consisted of a divisional HQ, an armoured brigade, an air assault brigade and a logistics brigade. A decision to commit all those elements would comprise some 40,000 personnel (including up to 10,000 Reservists).<sup>81</sup>

**181.** Mr Hoon’s Private Office wrote to Mr Lee on 9 September, reporting that Mr Hoon had spoken to Mr Blair on the evening of 8 September following Mr Blair’s return from Camp David:

“It was agreed that a full UK Divisional contribution was impracticable and the UK should play down our ability to take on an overall leadership role in the North. The UK should, however, remain involved, developing the enhanced support package with the addition of a land medium scale contribution.”<sup>82</sup>

**182.** Mr Hoon requested that planning should continue. His Private Office added: “For now actions must remain invisible ... and this situation is likely to last for about a month.”

**183. MOD officials continued to push for agreement to discuss UORs with a wider set of colleagues and the Treasury.**

**184. The MOD sought approval from Mr Hoon to progress 16 “showstoppers” but highlighted that there was also a number of urgent UORs that were necessary to bring a UK force up to full operational capacity.**

**185.** On 4 September, in advance of a planned meeting with Mr Hoon, Mr William Nye, Head of the Treasury Defence, Diplomacy and Intelligence Team, briefed Mr Gordon Brown, Chancellor of the Exchequer, that MOD officials had done little work to refine the cost estimates for preparing a medium and large scale force, as they were under no pressure from Ministers to do so.<sup>83</sup> Neither had the MOD done any work to assess the cost of the campaign itself. Mr Nye said that it would be useful for Mr Brown to emphasise that the Treasury needed to be involved in some of the discussions on military planning, to enable it “to be kept informed of the context of financial and strategic decisions”.

**186.** The Treasury informed the Inquiry that the meeting between Mr Brown and Mr Hoon was one-to-one and no record was taken.<sup>84</sup>

**187.** A minute from Mr Watkins to Mr Lee on 5 September summarised a series of discussions that Mr Hoon had had earlier that day.<sup>85</sup> In a meeting with Mr Brown,

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<sup>81</sup> [Letter Watkins to Manning, 6 September 2002, ‘Iraq: Military Planning’.](#)

<sup>82</sup> Minute APS/SofS [MOD] to DG Op Pol, 9 September 2002, ‘Iraq – Defence Secretary’s Conversation with the Prime Minister’.

<sup>83</sup> Minute Nye to Bowman, 4 September 2002, ‘Meeting with Geoff Hoon: Iraq’.

<sup>84</sup> Email Treasury to Iraq Inquiry Secretariat, 26 February 2010, [untitled].

<sup>85</sup> Minute Watkins to DG Op Pol, 5 September 2002, ‘Iraq’.

Mr Hoon had “again” run through the three options and “alerted Mr Brown to the likely broad order costs of Package 2”.

**188.** Mr Hoon and Mr Brown had also agreed to “meet periodically thereafter so that Mr Hoon could keep Mr Brown in touch with our emerging thinking on the options for UK involvement in any military action and the implications for UORs”.<sup>86</sup>

**189.** On 13 September, Dr Simon Cholerton, a junior official in Secretariat (Overseas) (Sec(O)), advised Mr Hoon on “the need to take forward essential UOR work” for potential operations in Iraq.<sup>87</sup> Mr Hoon was asked to:

- Note “that we have got as far as we can in defining urgent equipment and sustainability measures without consulting more widely” and the “very limited nature of our consultation and the broad scope of the packages on the table” meant that “we cannot have high confidence in the judgements we have made”.
- Agree that the MOD should take forward “a limited package of ‘ambiguous’ tasks on 16 essential UORs” aimed at remaining “invisible” but with enough information to approach the Treasury.
- Note that “these tasks do not cover the full range of capability shortfalls which have been identified” and work was needed on a wider set of UORs “as soon as the ‘invisibility’ constraint was lifted” to inform the Treasury. It would require “a limited expansion” of the Centurion Group.

**190.** The 16 essential UOR “showstoppers” covered all three packages. That included NBC protection where there was a requirement to “improve” Individual Protective Equipment, Collective Protection (COLPRO) and NBC detection. Dr Cholerton explained that, for all three Services, the issue was “not so much that we do not hold equipment (capability exists), but whether we hold sufficient in the face of the risk”.

**191.** Dr Cholerton wrote that six measures were essential for the land component, notwithstanding the uncertainty over which package would be adopted. That included desertisation of armoured vehicles and the procurement of additional Enhanced Combat Body Armour (ECBA), of which only 13,345 sets were available against a potential deployment of 47,000 personnel. Existing ECBA stocks would be sufficient to equip only the front line fighting troops. That would “leave support staff – who will nevertheless potentially face a high risk environment – less well protected”.

**192.** On 16 September, Mr Hoon received advice on preparatory work to take forward “a small number of time-critical” UORs for Special Forces.<sup>88</sup>

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<sup>86</sup> Minute Watkins to DG RP, 18 September 2002, ‘Iraq: Meeting with the Chancellor: 23 September’.

<sup>87</sup> Minute Cholerton to PS/SofS [MOD], 13 September 2002, ‘Iraq – Urgent Operational Requirements (UORs)’.

<sup>88</sup> Minute Sec(HSF)2 to PS/SofS [MOD], 16 September 2002, ‘OP ROW: SF Urgent Operational Requirements’.

**193.** The MOD suggested it could use the cover of operations in Afghanistan “to handle these UORs in a discreet fashion”, with costs being attributed to the same “ticket”. Alternatively, there could be “some reprioritisation” of in-year resources: “Costs would then be claimed back retrospectively once a more general agreement has been reached with the Treasury on how to deal with the additional costs of any Iraq operations.”

**194.** On 18 September, Mr McKane, now MOD DGRP, wrote he was “distinctly uneasy” about both options.<sup>89</sup> He proposed to either:

- urgently press for agreement to open up a dialogue with Treasury officials so that the funding of Iraq-related UORs was put “on to a sound footing”; or
- if AM Stirrup deemed the Special Forces’ UORs “to be of such a high priority that he can re-prioritise the Equipment Plan, then he should do so”. The Defence budget would have to absorb the costs.

**195.** On 19 September, Sir Kevin Tebbit’s Private Office replied, agreeing with Mr McKane’s advice that it would be “improper” to use the Afghanistan budget for Iraq and that it would, “in any case, be evident to Treasury in view of the ‘item by item’ requirement for scrutiny”.<sup>90</sup>

**196.** Sir Kevin did not, however, agree Mr McKane’s suggestion that the UORs could be met from the equipment budget through re-prioritisation “in view of the precedent this could set”. Sir Kevin advised Mr Hoon to discuss the issue with Mr Brown “as soon as possible”, which would be at their meeting scheduled for 23 September. Once that agreement was in place, the MOD could proceed, “either invisibly or otherwise”.

**197.** Mr Hoon’s Private Office decided not to show him the note from 16 September as a result of the comments from Mr McKane and Sir Kevin.<sup>91</sup> It requested further advice, “when appropriate”.

**198.** Having seen Dr Cholerton’s minute of 13 September, Air Chief Marshal Sir Peter Squire, Chief of the Air Staff, wrote to Adm Boyce on 16 September.<sup>92</sup> He believed that the situation had changed “considerably” since the Chiefs of Staff last discussed UORs. He wrote:

“Political statements from both London and Washington have confirmed that a UN resolution will, in the first instance be pursued but that, if this fails military action will follow. Under these circumstances, contingency action to prepare for the eventuality that the UN resolution is not effective would seem entirely appropriate.”

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<sup>89</sup> Minute McKane to Sec(HSF)2, 18 September 2002, ‘Op ROW: SF Urgent Operational Requirements (UORs)’.

<sup>90</sup> Minute APS/PUS [MOD] to Sec(HSF)2, 18 September 2002, ‘Op ROW: SF Urgent Operational Requirements (UORs)’. The MOD has confirmed that the date provided on the paper, 18 September, is incorrect and is content for the Inquiry to use 19 September.

<sup>91</sup> Minute APS/Secretary of State [MOD] to Sec(HSF)2, 18 September, ‘Op ROW: SF Urgent Operational Requirements (UORs)’.

<sup>92</sup> Minute CAS to CDS, 16 September 2002, ‘Iraq – Urgent Operational Requirements’.

**199.** ACM Squire wished to proceed with “not only those UORs classified as ‘showstoppers’ but also those that will secure within an appropriate timescale a significant enhancement to operational capability”.

**200.** In response to ACM Squire’s minute, Sir Kevin Tebbit wrote to Adm Boyce that he fully understood “the difficulty of possible timelines for military action, as long as the ban on overt preparations, including for UORs, has to remain in place”.<sup>93</sup>

**201.** Sir Kevin added:

“I do not think the political situation has yet evolved sufficiently to be able to recommend to the Secretary of State that visible steps for contingency work or procurement action can go forward.”

**202.** Sir Kevin concluded:

“I fear for the time being that we are still in a position of preparing and developing our UOR cases in readiness for detailed engagement with the Treasury, but stopping short of visible measures, or indeed, implementation, pending the political decision from the Secretary of State.”

**203.** Mr Hoon’s Private Office wrote to Dr Cholerton on 17 September.<sup>94</sup> Mr Hoon was content for work to “proceed on some of the UORs” identified in Dr Cholerton’s minute, but “the potential profile of the remainder would be problematic at the present time”. Mr Hoon would, “however, be willing to accept further advice in due course”. In the meantime, “no funds should be committed to Iraq-related UORs” until the Treasury’s agreement was secured.

**204.** An annex stated that Mr Hoon was content for MOD officials to proceed with 12 of Dr Cholerton’s UORs, but the remaining four required further advice, including the desertisation of armoured vehicles and ECBA.

**205.** Mr Hoon was content for the Centurion Group to be expanded as requested, which he understood would be “an approximately 10 percent increase in the community aware of contingency planning work”.

**206.** On 18 September, Lt Gen Pigott circulated draft advice for Mr Hoon on the UK’s potential contribution for discussion at an operational Chiefs of Staff meeting the following day.<sup>95</sup> He stated:

“As Secretary of State is aware six essential equipment measures (Challenger II desertisation, fuel and water bowsers, enhanced combat body armour, SA80 and

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<sup>93</sup> Minute PUS [MOD] to CDS, 17 September 2002, ‘Iraq – UORs’.

<sup>94</sup> Minute APS/SofS [MOD] to Sec(O)1, 17 September 2002, ‘Iraq – Urgent Operational Requirements’.

<sup>95</sup> Minute Warrior CPT Leader [junior officer] to MA/CJO, 19 September 2002, ‘Warrior CPT – Update on planning’ attaching Minute DCDS(C) to PS/Secretary of State [MOD], September 2002, ‘Iraq: Potential UK contribution to US-led action’.

logistic vehicles) need to be taken forward. If we are to keep open our options on engaging, at or about the same time as the earliest potential US deployment in the North, work on *all* of these UORs plus others would need to be taken forward with the commitment of additional resources, and publicly visible placing of orders in early October.”

**207.** The record of the Chiefs of Staff discussion on 19 September shows that Adm Boyce stated “there was still an embargo on discussing UORs with industry, and the issues could still not be discussed with a wider audience”.<sup>96</sup>

**208.** The minutes from the meeting also recorded that Lt Gen Pigott’s draft advice to Ministers was to be rewritten to include an explanation of the impact on future operations.

**209.** A note from Mr Watkins on 19 September stated that the draft advice was shown to Mr Hoon and Lord Bach, Parliamentary Under Secretary and Minister of State for Defence Procurement, that day.<sup>97</sup>

**210.** Lt Gen Pigott produced further advice on 26 September that did not contain the same level of detail on UORs.<sup>98</sup> The only reference to them stated:

“In MOD and PJHQ there is detailed work in hand on a range of force preparation issues. Those relating to the call-out of Reservists, training and Urgent Operational Requirements are the most pressing. The implications of this work will bear on our force options so we need to retain the necessary flexibility, until all this is clearer.”

**211.** On 20 September, No.10 was informed that Package 2 comprised 13,000 personnel (Special Forces, Air and Maritime).<sup>99</sup> Consideration was also being given to including a Commando group of 1,700 Royal Marines personnel. Package 3 (comprising a Divisional HQ and an armoured brigade plus supporting elements), would comprise a further 28,000 personnel.

**212. Mr Brown agreed proposals, in principle, for funding UORs on 23 September. The arrangements were confirmed on 4 October.**

**213.** On 23 September, Mr Blair agreed with Mr Hoon that Package 2 could be offered as a potential UK contribution but there was a misunderstanding over whether the US should be informed that the UK was still considering a land option (Package 3). That issue is detailed in Section 6.1.

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<sup>96</sup> Minutes, 19 September 2002, Chiefs of Staff (Operations) meeting.

<sup>97</sup> [Minute Watkins to PSO/CDS, 19 September 2002, ‘Iraq: Potential UK Contribution to Any US-led Action’.](#)

<sup>98</sup> Minute DCDS(C) to CJO, 26 September 2002, ‘Iraq – Potential Scale of UK Force Contribution For Use in UK/US Contingency Planning’.

<sup>99</sup> [Minute Watkins to Manning, 20 September 2002, ‘Iraq: Potential UK Contribution to any Military Action’.](#)

**214.** Mr Brown and Mr Hoon met separately on 23 September to agree the process for funding UORs.<sup>100</sup> Mr Brown agreed the MOD's proposal to adopt a similar approach for managing Iraq UORs to that already in place for Afghanistan UORs, with an initial ceiling of £150m.

**215.** Mr Hoon undertook to provide "a broad breakdown of this sum", which he set out in a letter to Mr Brown on 25 September.<sup>101</sup> While he highlighted that "requirements and priorities may of course change" as US planning developed, Mr Hoon wrote that the first tranche of measures might include:

- strategic and theatre communications (approximately £25m to £35m);
- Special Forces, including communications and air support (approximately £40m to £60m);
- force protection measures, including items such as defensive aids for aircraft and NBC equipment (approximately £20m to £40m); and
- initial logistic support, campaign infrastructure and spares (£50m to £100m).

**216.** MOD and Treasury officials were tasked to work out the detailed arrangements. Mr Brown would write to Mr Hoon with proposals for handling UORs above the £150m ceiling.

**217.** On 26 September, Mr McKane met Mr Jonathan Stephens, Treasury Director Public Services, "to follow up" the meeting between Mr Hoon and Mr Brown.<sup>102</sup>

**218.** Mr McKane explained that the total volume of UORs was likely to cost more than £150m but the MOD was not yet in a position to say by how much.

**219.** Mr McKane also explained that the MOD might wish to use the £150m for "items that were not strictly speaking UORs" such as force generation costs.

**220.** The Treasury "did not demur" on either point.

**221.** Mr McKane reported that the Treasury asked when Mr Hoon:

"... was likely to come forward with a firm recommendation on the overall scale of the British contribution. I said that this was likely to be within the next few weeks and that obviously the financial cost of the options would be one of the factors to be weighed in the balance."

**222.** Mr David Williams, MOD Director, Directorate Capabilities, Resources and Scrutiny (DCRS), wrote to the Treasury on 2 October, proposing a set of criteria for agreeing UORs against the Reserve.<sup>103</sup>

<sup>100</sup> Letter Hoon to Brown, 25 September 2002, 'Iraq: Urgent Operational Requirements'.

<sup>101</sup> Letter Hoon to Brown, 25 September 2002, 'Iraq: Urgent Operational Requirements'.

<sup>102</sup> Minute DG RP to Finance Director, 26 September 2002, 'Iraq: Urgent Operational Requirements'.

<sup>103</sup> [Letter Williams to Treasury \[junior official\], 2 October 2002, 'UOR Criteria'](#).

**223.** On 4 October, Mr Williams advised Mr Hoon that the MOD had reached agreement with the Treasury on the UOR arrangements.<sup>104</sup> Work was “in hand” to prioritise the list of UORs, and to produce business cases for a range of “showstopper” UORs. He sought Mr Hoon’s agreement for work to “now begin” on a wider range of UORs, “including discreet consultation with industry”, and for resources to be committed as business cases were approved.

**224.** Mr Williams explained that Ministers were “not normally invited to approve individual UORs” unless project costs exceeded £400m; all UORs in this instance would cost less than £100m and fall “well within” the approval authority delegated to one-star officials.<sup>105</sup> Officials would, however, consult Mr Hoon separately where UORs could not be covered by the ambiguity of operations in Afghanistan, and on the four items where Mr Hoon had requested further advice in his 17 September note.

**225.** Mr Hoon’s Assistant Private Secretary wrote a summary of the points on the minute, stating: “I believe this is now practical and appropriate. OK?”<sup>106</sup>

**226.** Mr Hoon replied: “I would like to see all of them first.”<sup>107</sup>

**227.** Mr Hoon’s Private Office replied to Mr Williams on 7 October:

“Before agreeing to the implementation process described in your minute ... Mr Hoon wishes to see the UOR priority lists following consideration by the Chiefs of Staff.”<sup>108</sup>

**228. As work on UORs progressed, the capability shortfalls identified by Dr Cholerton on 13 September proved problematic.**

**229.** On 8 October, Lt Gen Pigott prepared an update on the progress of UORs for the Chiefs of Staff to consider the following day.<sup>109</sup> It separated UORs into two tranches:

- Tranche 1 to “be implemented forthwith”, funded from the first £150m agreed by the Treasury; and
- Tranche 2, which would “continue to be updated”.

**230.** Lt Gen Pigott explained that the prioritisation had been governed by:

- “the need to provide individual and force protection”;

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<sup>104</sup> Minute DCRS to APS/SofS [MOD], 4 October 2002, ‘Iraq: UORs – Update’.

<sup>105</sup> Brigadier or equivalent in the Armed Forces and Senior Civil Servant Level 1 for civilians.

<sup>106</sup> Manuscript comment MOD [junior official] on Minute DCRS to APS/SofS [MOD], 4 October 2002, ‘Iraq: UORs – Update’.

<sup>107</sup> Manuscript comment Hoon on Minute DCRS to APS/SofS [MOD], 4 October 2002, ‘Iraq: UORs – Update’.

<sup>108</sup> Minute APS/Secretary of State [MOD] to DCRS, 7 October 2002, ‘Iraq: UORs – Update’.

<sup>109</sup> Minute DCDS(C) to PSO/CDS, 8 October 2002, ‘Iraq Contingency Planning – Urgent Operational Requirements’.

- “the requirement to achieve maximum military effect at the strategic, operational and tactical levels”;
- costs – including a consideration of whether the relative capability of a small number of more expensive enhancements was more valuable than a larger number of cheaper ones; and
- equipment lead times – those with long lead times had been given priority.

**231.** The difficulties of planning covertly and without wider consultation were reiterated. Lt Gen Pigott said that meant that there were “a number of particularly problematic capabilities” which were being addressed urgently by the MOD but “need to be drawn to the attention of COS and in some cases would benefit from higher level direction”. Those included:

- NBC COLPRO – the majority of in-service equipment had been purchased for the 1991 Gulf Conflict but had not been fully taken into service, nor had its support been fully funded “so its effectiveness for future operations” was still to be determined.
- Antitoxin – work to address the current shortfall was “unlikely to meet the requirement in less than 6 to 8 months”.
- ECBA – there were “about 20,000 complete sets of ECBA in-service which would be “sufficient to equip the Fighting Echelon of the Land Component, but not the whole Joint Force”. The time taken to produce the shortfall could not be determined until industry was consulted but their current judgement was that “it may be very difficult to manufacture the amount of Kevlar armour plates in the amount required in time”.

**232.** On visibility, Lt Gen Pigott wrote:

“... there will come a point where the presentational challenge will be not so much to ensure that UOR work remains veiled, but rather to demonstrate that we are taking action to address perceived capability shortfalls.”

**233.** Lt Gen Pigott wrote that would include issues highlighted in recent NAO reports<sup>110</sup> on desertisation of armoured vehicles, Combat ID and Saif Sareea II.

**234.** When the Chiefs of Staff discussed the list of UORs on 9 October, it was advised that the Directorates of Equipment Capability (DECs) and Front Line Commands “were now engaged in the staffing of UORs”.<sup>111</sup>

**235.** The minutes do not record any reference to specific UORs or equipment capabilities raised by Lt Gen Pigott.

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<sup>110</sup> Looking at the NAO publications around this period, it appears that Lt Gen Pigott was referring to one report: the Saif Sareea report published on 1 August 2002 that dealt with all of the points to which he refers and that is detailed earlier in this Section.

<sup>111</sup> Minutes, 9 October 2002, Chiefs of Staff meeting.

**236.** Mr Williams wrote to Mr Hoon on the same day, informing him that the Chiefs of Staff had now endorsed the prioritised list of UORs for Iraq as requested.<sup>112</sup> He attached the list and asked Mr Hoon to agree that work should now be taken forward as recommended in his minute of 4 October.

**237.** Mr Williams added that Treasury officials had confirmed that the MOD's interpretation of access to the Reserve was shared by Mr Brown and they were ready to agree the commitment of resources.

**238.** The list of UORs covered all three Packages and included:

- communications equipment;
- force protection measures, including NBC equipment and defensive aid suites; and
- desertisation measures including clothing, hydration systems and sand filters.

**239.** Mr Hoon's Private Office commented:

"I suggest we have a system whereby we see the papers in parallel and draw any dodgy looking ones to your attention."<sup>113</sup>

**240.** Before agreeing Mr Williams' advice, Mr Hoon's Private Office wrote to Sir David Manning on 11 October with an update on the UOR process, explaining the approvals process and that wider consultation was necessary to ensure that cost information was "soundly based":

"This consultation will be carefully controlled but will inevitably increase the risk of wider disclosure. In the majority of cases, this is unlikely to excite public interest. But the nature of the work involved with some of the essential requirements ... will inevitably lead to comment and speculation that they are linked to preparation for Iraq. The Defence Secretary judges nevertheless that it is necessary to initiate this work now to meet likely timescales and has therefore authorised it to proceed".<sup>114</sup>

**241.** On 15 October, Mr Hoon's Private Office wrote to Mr Williams, agreeing that the necessary work should now be undertaken to progress the full range of the prioritised (Tranche 1) UORs.<sup>115</sup> Mr Hoon had asked for a copy of all approvals paperwork so that he could "maintain an awareness of progress, and be forewarned of any particularly contentious items". It would also be useful for Mr Williams to provide "the weekly summary of progress" he was understood to be producing.

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<sup>112</sup> Minute DCRS to APS2/Secretary of State [MOD], 9 October 2002, 'Iraq: UORs'.

<sup>113</sup> Manuscript comment MOD [junior official] on Minute DCRS to APS2/Secretary of State [MOD], 9 October 2002, 'Iraq: UORs'.

<sup>114</sup> Letter Williams to Manning, 11 October 2002, 'Iraq: Potential UK Contributions – Urgent Operational Requirements'.

<sup>115</sup> Minute APS/SofS [MOD] to DCRS, 15 October 2002, 'Iraq: UORs'.

**242.** Lt Gen Pigott produced an update on UORs for the Chiefs of Staff on 21 October.<sup>116</sup> Tranche 1 UORs were being implemented: two UORs had been approved so far and a further 64 USURs<sup>117</sup> had been formally endorsed by PJHQ and the Director of Special Forces (DSF).

**243.** Lt Gen Pigott wrote that a working group had been established to inform the Chiefs on the risks associated of operating in a CBRN environment. The provision of COLPRO was being reviewed but detailed checks on armoured vehicle NBC filter packs was not possible under the current visibility guidelines. Routine appraisals were being carried out and checks were being incorporated into those.

**244.** Where there was no ambiguity about the purpose of the requirement, Mr Hoon was to be consulted before industry was approached. The measures that fell into this category included:

- weapons stocks;
- satellite communications technology;
- fuel distribution and water carriage systems;
- ECBA;
- COLPRO for NBC attacks, including antibiotics for all personnel which was considered essential; and
- desert clothing.

**245.** The Chiefs of Staff approved Lt Gen Pigott's paper at their meeting on 28 October and ACM Bagnall was directed to "take the work forward".<sup>118</sup>

**246.** The minutes do not record any reference to specific UORs or equipment capabilities raised in Lt Gen Pigott's minute.

**247.** On 29 October, Major General David Richards, Assistant Chief of the General Staff (ACGS), wrote to Lt Gen Pigott about his paper of 21 October, stating that he was:

"... content to endorse the recommendations within the paper subject to the requirement to increase the pace at which we address the UORs concerning NBC COLPRO and decontamination. There is a significant delta between current UORs and our anticipated requirement which needs urgent work."<sup>119</sup>

**248. Between 31 October and the middle of December 2002, Ministerial decisions and military planning and preparations were based on advice that the deployment**

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<sup>116</sup> Minute DCDS(C) to COS, 21 October 2002, 'Iraq Contingency Planning – Urgent Operational Requirements and Related Funding Issues'.

<sup>117</sup> Urgent Statement of User Requests (USURs) are raised when there is a capability gap that needs addressing by the procurement of new equipment. That process is explained in detail in Section 14.1.

<sup>118</sup> Minutes, 28 October 2002, Chiefs of Staff meeting.

<sup>119</sup> Minute ACGS to MA1/DCDS(C), 29 October 2002, 'Iraq Contingency Planning – Urgent Operational Requirements and Related Funding Issues'.

of a divisional headquarters and a single combat brigade, with four battalions, in a northern option, and the possible deployment of a Royal Marines Commando Group to southern Iraq, were the maximum which could be deployed given the requirements of Op FRESCO and the timescale for military operations envisaged by the US.

**249.** The process for approving UORs continued against a deadline of the end of February for Packages 1 and 2, and the end of March for Package 3.

**250.** The difficulties surrounding desertisation measures, clothing, ECBA and NBC protection continued.

**251.** On 30 October, Mr Hoon's Private Office wrote to a DCRS official with a query raised by Mr Hoon while reading the UOR for Challenger 2 modifications:

"He noted that the business case used a latest acceptable in-service date of April 2003. He wonders what in-service dates are currently being considered appropriate, given what we know of US planning."<sup>120</sup>

**252.** The DCRS official replied on 12 November.<sup>121</sup> He stated that the Challenger 2 In Service Date (ISD) was "used with 90% confidence" and would "almost certainly be brought forward". His understanding was that modifications would "be complete by early March" and did not require the vehicles to be returned to the factory; the modifications could be carried out in theatre "if necessary".

**253.** The official added that it was "not easy to align equipment ISDs with an operation, when the timing of the latter is moving constantly" but "rough timeframes" were necessary to negotiate delivery times and costs with industry, with the caveat that they were liable to change.

**254.** Adm Boyce's office added:

"While this could add further flexibility to the time required for modifications, we should not lose sight of the implications for tank crewmen ... Our experience in 1991 was that such modifications ... were time-consuming and manpower-intensive. Planning should take account of this."<sup>122</sup>

**255.** Section 6.1 addresses Mr Blair's decision on 31 October that the MOD could offer Package 3 to the US for planning purposes.

**256.** Mr Hoon was advised on 1 November by a DCRS official that 88 USURs had been sent to DCRS, having been endorsed by PJHQ and DSF.<sup>123</sup> He wrote that 10 UOR

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<sup>120</sup> Minute APS/SofS [MOD] to DCRS 1, 30 October 2002, 'Iraq: UORs'.

<sup>121</sup> Minute DCRS1 to APS/SofS [MOD], 12 November 2002, 'Iraq: UORs'.

<sup>122</sup> Minute PSO/CDS to DCRS 1, 19 November 2002, 'Iraq: UORs Challenger 2'.

<sup>123</sup> Minute DCRS 1 to APS/SofS [MOD], 1 November 2002, 'Possible Operations against Iraq UOR List, 1 November 2002'.

business cases had been approved internally and that Treasury officials were “actively considering” the AS90<sup>124</sup> and Challenger 2 desertisation cases. The approved business cases amounted to £20m, £800,000 of which was in the form of running costs that would be claimed against the Reserve.

**257.** The official added:

“Most addressees will have seen the article that appeared in the Telegraph earlier this week alleging that contingency planning was being held up by HM Treasury. This assertion is entirely without foundation and serves only to complicate unnecessarily our excellent relationship with them.”

**258.** On 6 November, the Chiefs of Staff considered a paper from Lieutenant General John Reith, Chief of Joint Operations (CJO), about the impact of “very hot weather” on the UK’s war-fighting ability.<sup>125</sup> The points raised included:

- It was “well recognised” that weapon systems could be “degraded in hot weather”.
- Ammunition storage was difficult and high risk.
- “Most” land vehicles required UOR action “to enable them to operate effectively in hot weather”, some of which were “in hand”. The lead time for modifications varied from one to 12 months.

**259.** The Chiefs of Staff noted the paper, which was to be revised and re-submitted “within one month”.

**260.** On 12 November, a DCRS official sought Mr Hoon’s approval to initiate discussions with industry for five equipment measures that would raise the visibility of planning for an invasion of Iraq:

- desert combat boots – an estimated 20,000 were required in particular sizes with a critical lead time of three to six months;
- ECBA – there was currently only sufficient stock for 15,000 personnel;
- water and fuel distribution; and
- medical equipment, including battlefield ambulance upgrades, COLPRO and field hospital infrastructure.<sup>126</sup>

**261.** Mr Hoon approved the request on the following day.<sup>127</sup>

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<sup>124</sup> The AS90 is a self-propelled gun.

<sup>125</sup> Minute Reith to PSO/CDS and SECCOS, 5 November 2002, ‘Warfighting in Iraq in the Summer’; Minutes, 6 November 2002, Chiefs of Staff meeting.

<sup>126</sup> Minute DCRS 1 to APS/SofS [MOD], 12 November 2002, ‘Potential Operations in Iraq: Requirement to discuss Equipment Procurement with Industry’.

<sup>127</sup> Minute PS/SofS [MOD] to DCRS 1, 13 November 02, ‘Potential Operations in Iraq: Discussions with Industry’.

**262.** The Chiefs of Staff had also considered a “CBRN Risk Paper” on 6 November and the key equipment issues arising were covered in Lt Gen Pigott’s UOR update on 18 November.<sup>128</sup> The time needed to procure additional COLPRO under UOR action was “directly related to the amount of equipment required” and it was possible that the quantity which could be procured and fielded against “the most demanding timeframe may be insufficient to meet the full requirement”. That could have an impact upon the UK’s concept of operations (CONOPS). Options would be presented to the Chiefs of Staff “once the extent of the likely shortfall” was confirmed.

**263.** Lt Gen Pigott reported that 20 UORs had been approved to date, and a further 137 USURs endorsed. The latest ISD being used to gauge the delivery of UORs was the end of February for Packages 1 and 2 and the end of March for Package 3.

**264.** There were some key equipment gaps “that may not be fully addressed by the UOR process and for which Chiefs of Staff’s direction on prioritisation and risk may be required”, including:

- ECBA – “ ... it is possible we may not be able to procure sufficient numbers within the timeframe; this may necessitate differential levels of force protection”.
- Desert clothing and boots – “It is likely that the numbers required will exceed the UK’s manufacturing capability. There are operational, force health and presentational implications in not providing troops with appropriate clothing.”

**265.** Options would be presented to the Chiefs of Staff once procurement timelines had been confirmed with industry.

**266.** Maj Gen Fry advised Adm Boyce on 22 November that it would take some four months from the order to deploy for the northern option (whether Package 2 or 3), and more than five months for the southern option.<sup>129</sup>

**267.** A DCRS official informed Mr Hoon on 22 November that contracts were shortly to be let for clothing, combat boots and body armour, and the procurement of these items would be highly visible.<sup>130</sup> The official wrote that the “continuing uncertainty over the size of the operation” meant that, initially, the procurement figures would be:

- clothing for 15,000 personnel;
- 20,000 pairs of desert boots; and
- 50,000 body armour plates.

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<sup>128</sup> Minute DCDS(C) to COS, 18 November 2002, ‘Iraq Contingency Planning – Urgent Operational Requirements and Related Issues’.

<sup>129</sup> Minute DCJO(Ops) to PSO/CDS, 22 November 2002, ‘Potential Operations in Iraq – Northern and Southern Timelines’.

<sup>130</sup> Report DCRS 1 to APS/SofS [MOD], 22 November 2002, ‘Potential Operations in Iraq: Letting of Contracts for Combat Clothing/Body Armour’.

**268.** On 29 November, a DCRS official provided a UOR update for Ministers, the Chiefs of Staff and various other senior personnel, recording that 35 UORs and 162 USURs had been approved.<sup>131</sup> Those included desert clothing, AS90 environmental enhancements, Challenger 2 dust mitigation and enhanced armour protection, battlefield ambulance upgrades and field hospital upgrades.

**269.** The combined cost of the 35 UORs was £115m, against the initial £150m allocated by the Treasury.

**270.** The same day, the DCRS official sought permission from Mr Hoon for the MOD to commence discussions with industry on the procurement of desert clothing, ECBA, water and fuel distribution and medical equipment.<sup>132</sup> The official explained that, although Mr Hoon had already given that permission on 13 November:

“... there is a perception in other areas (including the DLO) that restrictions on consulting industry remain in place and the uncertainty needs to be removed.”

**271.** The areas where “some concern had been expressed” included the build-up of sustainability commodities related to land forces and COLPRO.

**272.** Mr Hoon’s Private Office replied on 2 December, agreeing that the MOD could discuss “any items of equipment relating to operations in Iraq” with industry “at the appropriate stage in the UOR process”.<sup>133</sup> That was “on the understanding that appropriate confidentiality will be observed”.

**273. In December 2002, the MOD and the Treasury agreed how the MOD would claim the cost of military operations against Iraq from the Reserve.**

**274.** On 28 November, Mr Hoon wrote to Mr Brown to request an increase in the UOR ceiling from £150m to £300m and to secure agreement that the MOD should begin to capture all non-UOR additional costs, with a view to repayment from the Reserve in due course.<sup>134</sup> He stated that the current UOR process was “working well”.

**275.** Mr Blair agreed on 9 December that the MOD should plan on the basis that a political decision to commit land forces could be taken as early as 15 February 2003 (see Section 6.1).

**276.** A copy of the letter recording Mr Blair’s decision was sent to Mr Mark Bowman, Mr Brown’s Private Secretary.

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<sup>131</sup> Minute DCRS 1 to APS/SofS [MOD], 29 November 2002, ‘Possible Operations Against Iraq UOR List, 29 November 2002’.

<sup>132</sup> Minute DCRS 1 to APS/SofS [MOD], 29 November 2002, ‘Potential Operations in Iraq: Requirement to Discuss Equipment Procurement with Industry’.

<sup>133</sup> Minute APS/SofS [MOD] to DCRS 1, 2 December 2002, ‘Potential Operations in Iraq: Requirement to Discuss Equipment Procurement with Industry’.

<sup>134</sup> Letter Hoon to Brown, 28 November 2002, ‘Iraq: Urgent Operational Requirements’.

**277.** Mr Brown agreed on the same day to increase the ceiling for UORs and that the MOD should begin to capture NACMO, but said that all such costs should be contained within the UOR ceiling “until any operation is initiated”.<sup>135</sup>

**278.** On 11 December, Mr Rycroft confirmed that Mr Blair was “content that military preparations from January would become increasingly visible”.<sup>136</sup>

**279.** Mr Hoon wrote to Mr Brown on 13 December, warning him that Mr Blair’s decision on 9 December would increase the rate at which the MOD incurred additional costs.<sup>137</sup>

**280.** The recently agreed £150m tranche was “likely to be exhausted by 20 December”. Mr Hoon requested an additional £200m for UORs, bringing the UOR total to £500m.

**281.** Mr Paul Boateng, Chief Secretary to the Treasury, agreed the request on 23 December.<sup>138</sup>

**282.** The discussions leading up to that decision are set out in greater detail in Section 13.1 which shows that the arrangement for reclaiming the NACMO worked as intended and did not constrain the military’s ability to conduct operations against Iraq.

**283. There was no delay or obstruction on the part of the Treasury that stifled the progress of UORs.**

**284.** Mr McKane told the Inquiry that there had been no major obstacles to the preparations with the Treasury, although the need to return to the Treasury to increase the tranches of money available had been frustrating to some:

“Inevitably in these kind of circumstances there is an anxiety and a concern on the part of the Ministry of Defence to get on with things and the – and it did take a month or so after my first engagement in this for the agreements to be reached to start to commit money to these Urgent Operational Requirements. But thereafter, the process operated smoothly. There were some, I think, who were probably frustrated at the fact that ... we were given tranches of money ... and I can remember that we would get quite quickly to the point where we had exhausted the first tranche and were then involved in the preparation of ministerial correspondence to secure the release of the next tranche, but I think ... that was understandable in the circumstances.”<sup>139</sup>

**285.** Lt Gen Pigott’s UOR update for the Chiefs of Staff on 20 December stated that 79 UORs had been approved at a cost of £283m, 48 from Tranche 1 and 31 from

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<sup>135</sup> Letter Brown to Hoon, 9 December 2002, ‘Iraq: Urgent Operational Requirements’.

<sup>136</sup> [Letter Rycroft to Watkins, 11 December 2002, ‘Iraq: Military Preparations’.](#)

<sup>137</sup> Letter Hoon to Brown, 13 December 2002, ‘Iraq: Costs’.

<sup>138</sup> Letter Boateng to Hoon, 23 December 2002, ‘Iraq: Costs’.

<sup>139</sup> Public hearing, 2 July 2010, pages 35-36.

Tranche 2.<sup>140</sup> There were nine Tranche 1 UORs outstanding. Additional sustainability measures of £44.75m had been approved.

**286.** The key issues included:

- Fuel and water distribution.
- COLPRO – the DLO was finalising its assessment of the consolidated requirement against serviceable holdings and was initiating UOR action for the balance. Early indications suggested “an initial delivery date of late Feb/Mar 03” although there may be a longer lead time for some components. As its delivery could affect the UK’s ability to “field the required capability in the anticipated timescale”, options for the prioritisation of the available equipment would continue to be refined.
- ECBA – contracts for an additional 37,400 ECBA plates were to be let the following week, to augment the 30,000 in stock. It was expected that the requirement would be “met in full by the end of March”.
- Desert clothing – 10,000 sets of desert clothing were in stock and contracts had been placed for an additional 15,000 sets and 20,000 pairs of boots. Those would be available by the end of March. The MOD intended to procure a further 15,000 sets of clothing and 10,000 sets of boots but it would not be possible to confirm whether those would be available by the end of March until the contracts had been placed.

**287.** The difficulties in providing Combat ID were also highlighted. That is addressed later in this Section.

**288.** By 3 January 2003, a total of 242 USURs had been endorsed and 118 UOR business cases approved, totalling £340m.<sup>141</sup>

## **The decision to deploy ground forces to the South and its implications**

**289.** Between mid-December 2002 and mid-January 2003, the force to be deployed recommended by the MOD increased from an armoured brigade and a Commando Group to an armoured brigade and two light brigades.

**290.** The military recommendation to offer ground forces at large scale and to deploy for potential operations in southern Iraq was formally endorsed on 17 January, only two months before the possible start of military operations.

**291.** The only reference in the papers put to Mr Hoon and Mr Blair of the risks associated with deploying three combat brigades and committing them to earlier

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<sup>140</sup> Minute DCDS(C) to COS, 20 December 2002, ‘Iraq Contingency Planning – Urgent Operational Requirements and Related Issues’.

<sup>141</sup> Minute from DCRS1d to APS/SofS [MOD], 3 January 2003, ‘Possible Operations Against Iraq UOR List, 3 January 2003’.

operations was that some risk would have to be taken on fitting UOR equipment, but that risk was “considered acceptable”.

**292.** The risk that some equipment might not be delivered in time for the start of operations does not appear to have been drawn to Ministers’ attention or discussed.

**293.** The development of the military options between mid-December 2002 and mid-January 2003, the decision to offer 3 Commando Brigade for the amphibious assault, and the decision on 17 January to deploy two brigades for operations in southern Iraq rather than one brigade for the northern option, are addressed in detail in Sections 6.1 and 6.2.

**294.** Mr Hoon wrote to Mr Blair on 16 January seeking agreement to the “key role in southern Iraq” proposed by the US for the UK.<sup>142</sup>

**295.** Mr Hoon stated that the timescales for possible action would mean that some risk would have to be taken on the fitting of UOR equipment, but that risk was “considered acceptable”.

**296.** Following a telephone conversation, Sir David Manning replied to Mr Watkins on 17 January that Mr Blair was “content to proceed on the basis of the Defence Secretary’s recommendations”.<sup>143</sup> The UK would proceed with Package 3.

**297.** Mr Hoon made a statement in Parliament on 20 January announcing that the Government had “reached a view” of the composition and deployment of a land force package for potential military action in Iraq.<sup>144</sup> That would include the Headquarters of 1st (UK) Armoured Division, comprising 7 Armoured Brigade, 16 Air Assault Brigade and 102 Logistics Brigade.

**298.** The total number of personnel would be “approximately 26,000 personnel” which was in addition to the “around 4,000 personnel” already being deployed with 3 Commando Brigade Royal Marines.

**299.** As Section 6.2 shows, it was envisaged that 3 Commando Brigade Royal Marines would have a combat role at the start of the land campaign in mid-March. The roles to be played by 16 Air Assault Brigade and 7 Armoured Brigade were less defined. It was envisaged that 16 Air Assault Brigade would relieve US forces in an area south of Basra approximately 10 days after the start of operations. 7 Armoured Brigade would protect the US flank.

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<sup>142</sup> [Letter Hoon to Blair, 16 January 2003, ‘Iraq: UK Land Contribution’.](#)

<sup>143</sup> [Letter Manning to Watkins, 17 January 2003, ‘Iraq: UK Land Contribution’.](#)

<sup>144</sup> House of Commons, *Official Report*, 20 January 2003, columns 34-46.

**300.** To conduct those operations, 16 Air Assault Brigade would need to be deployed and ready in Kuwait by the beginning of March and 7 Armoured Brigade by mid-March. For the northern option, the UK had been planning for ground combat operations beginning in mid-April.

**301.** The implications for equipping three combat brigades and the plans for earlier operations were not explicitly acknowledged until late January.

**302.** Ministers were advised that there were “no showstoppers”, but there is no record of formal advice on how the military had defined that term or the level of risk it entailed.

**303.** Following his statement on 20 January, Mr Hoon was asked by Mr Bernard Jenkin for an assurance that troops were “fully trained and fully equipped for whatever they may be asked to do”.

**304.** Mr Hoon replied:

“As for preparations, I do not doubt that our forces are fully and thoroughly prepared to face this kind of operation. Indeed, the training exercise conducted in similar conditions in Oman just over a year ago was obvious preparation for this kind of deployment.”

**305.** Lord Bach announced the composition and deployment of the UK’s land force package in the House of Lords on 20 January.<sup>145</sup>

**306.** Asked whether the Challenger 2 tanks had now been desertised, if the lessons from Saif Sareea had been rectified, and if there was sufficient desert clothing for troops to be deployed, Lord Bach replied:

“As regards Challenger 2 and AS90 ... work is being carried out now to ensure that they are desertised sufficiently. That work is ongoing and will continue when forces are in transit and in theatre as required. I give the noble Lord the assurance he seeks as regards clothing ... We continue to work to ensure that our personnel are properly equipped to cope with the environmental conditions in which they may operate.”

**307.** Pressed by Lord Elton for reassurance that “the work now being done will be completed before there is any question of any armoured vehicle moving in the desert – that they will be desertised before they are deployed”, Lord Bach replied: “Of course the vehicles will be desertised by the time they are deployed.”<sup>146</sup>

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<sup>145</sup> House of Lords, *Official Report*, 20 January 2003, columns 492-497.

<sup>146</sup> House of Lords, *Official Report*, 20 January 2003, columns 499-500.

**308.** On 21 January, Gen Walker was advised that the delivery times for UORs had been refined to reflect the compressed timeframes and there were risks associated with the inability to deliver some key UORs within those.<sup>147</sup> Allowance had now been made to integrate UORs but no allowance had been made for any additional training required, or any delays in loading or transit to theatre. The tactical implications of the delivery shortfalls were “not yet well understood”.

**309.** Gen Walker was advised that:

- The US commitment to loan Combat ID capability had so far proved inconclusive and there would be “**no guarantee of US support**”.
- The DEC was “increasingly optimistic” they would have “full Target ID capability”, but the necessary measures would have to be fitted in theatre.
- Confidence in the delivery of NBC protection was decreasing.
- The full capability of the Challenger 2 tank’s dust mitigation and AS90’s environmental enhancement were unlikely to be available until after 31 March and would have to be fitted in theatre.
- The fitting of ballistic protection enhancements for Combat Vehicle Reconnaissance (Tracked) vehicles<sup>148</sup> “may have to take place in theatre”.
- There was “little visibility” of the amount of desert clothing “in the hands of soldiers” and the allocation of clothing had already been reduced from three sets per man to two sets per man to “try and prevent a shortfall at the start of operations”. It was necessary to airlift clothing into theatre to meet operational timelines and “to have a favourable delivery of sizes”. If both of these were achieved, it was “possible that all troops will have desert clothing and boots in time for the start of operations”.
- 75 percent of the required unhardened COLPRO would be ready by the start of March, with the full requirement being met in theatre by 31 March.
- There was “insufficient stock” of COLPRO seals for Armoured Fighting Vehicles (AFVs) and more could not be procured in time. The lead time to procure seals was 12 to 36 months.
- The situation had improved “markedly” on ECBA, and Gen Walker could “be confident” that it would be delivered “to all troops in time for the committal of any ground troops”.
- The full requirement for battlefield ambulances, however, would not be upgraded in time for the anticipated start of operations.
- The availability of sand filters for Lynx helicopters was driving the number of helicopters to be deployed.

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<sup>147</sup> Minute DMO MO3 to MA1/CGS, 21 January 2003, ‘Op TELIC UOR Delivery and Risks – Information Brief’.

<sup>148</sup> A type of Armoured Fighting Vehicle (AFV).

**310.** On 21 January, Lord Bach’s Private Office wrote to AM Stirrup’s Private Office, explaining that Lord Bach would be reviewing the progress of UORs, “with a view to highlighting potential risks and focusing on means of addressing them”.<sup>149</sup> That was because, while Ministers were aware which UORs had been approved, they had less visibility of:

- how confident officials remained that equipment could be procured in the required timeframe; and
- the extent to which outstanding areas of concern about equipment capabilities were assessed as being “incapable of resolution” in the required timeframe.

**311.** Lord Bach agreed that the first step was to hold a meeting with key stakeholders to take stock of the position across all packages but he listed areas that were likely to be of particular concern, including desertisation of armoured vehicles, Combat ID, NBC capabilities and clothing and personal equipment. A short paper setting out the “key areas of shortfall or predicted risk” to assist discussions was requested.

**312.** The minutes from the Chiefs of Staff meeting on 22 January recorded that “unhelpful media coverage had exposed a UOR problem and it was clear that shortfalls would mean that FOC [Full Operating Capability] by some UK troops might not be achieved until 31 March”.<sup>150</sup>

**313.** Adm Boyce directed that “immediate action” should be taken and for commands to be informed that “urgent action was underway”. That included addressing “bad press” equipment stories and that UORs were to become a standing item on the agenda for operational Chiefs of Staff meetings.

**314.** On the same day, and in light of the brief provided to Gen Walker about equipment shortfalls, ACM Bagnall wrote to Lt Gen Pigott and AM Stirrup about Lord Bach’s request.<sup>151</sup> He wrote:

“I have confirmed that DCDS(EC) [AM Stirrup] already has work in hand to respond. Clearly, this needs to include an operational assessment of the likely impact of any delays to particular UORs. It may be helpful to categorise UORs as low, medium, high and ‘show stopper’ under this heading, and I have asked DCDS(C) [Lt Gen Pigott] to provide the advice. There will also be a need to highlight any measures (for example a lack of camouflage paint) which may have a low operational impact but which would carry a very significant presentational and morale cost.

“As you are aware, CDS has asked me to retain oversight of the UOR process, and I would be grateful if your combined response to Min(DP) [Lord Bach] could be

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<sup>149</sup> Minute PS/Min(DP) to MA/DCDS(EC), 21 January 2003, ‘Iraq: Op TELIC – UORs’.

<sup>150</sup> Minutes, 22 January 2003, Chiefs of Staff meeting.

<sup>151</sup> Minute VCDS to DCDS(C) and DCDS(EC), 22 January 2003, ‘Iraq: Op TELIC – UORs’.

copied to me. I would also intend, diaries permitting, to join any meeting which Min(DP) intends to hold on this topic.”

**315.** In his witness statement ACM Bagnall told the Inquiry that Mr Hoon had asked Lord Bach:

“ ... to be his lead Minister for UORs and for DCDS(EC) to act as Senior Responsible Owner (SRO) for UORs. This led to regular and increasingly frequent meetings between the then Minister and his staffs and the then DCDS(EC) and his experts. For my part I monitored the UOR process on CDS’ behalf and intervened if and when required.”<sup>152</sup>

**316.** Lord Bach told the Inquiry:

“I was asked by the Secretary of State, in the second half of January 2003, to take temporary responsibility for UORs. This involved being briefed by DCDS(EC) [AM Stirrup] in writing, before chairing (for the most part) weekly meetings with senior officials in order to look at progress of UORs that had already been agreed between MOD and HMT. I played no part in determining what UORs should or should not be proceeded with. Those decisions were taken at a stage well before their progress was looked at by the Committee I chaired. I had played no role before the request in Jan 2003, nor should I have. UORs were not the responsibility of Min DP: they and the Defence Logistics Organisation were in the portfolio of Min AF [Mr Ingram].”<sup>153</sup>

**317.** Following his statement to the House of Lords on 20 January, Lord Bach was advised on 22 January by Mr Williams that there was “not only no need for him to clarify the statement made earlier this week about ‘desertisation’ but actual disadvantage in seeking to do so”.<sup>154</sup>

**318.** Mr Williams confirmed that only one, “relatively minor”, modification would be completed before the vehicles deployed. He stated:

“On that basis, if by ‘deployed’ the Minister meant the formal point at which units begin to leave their main bases and embark for the Gulf, then his statement on Monday would be misleading. I suspect, however, that Lord Bach meant the point at which UK forces were likely to become engaged on offensive operations. Given the context of the question and the fact that many Lords/MPs would not pick up on the formal military interpretation of the term ‘deployed’, that is probably a reasonable position to take. If that is the case, I do not judge that a public clarification of the use of the word ‘deployed’ is either necessary or would add much value.”

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<sup>152</sup> Statement, 6 January 2011, page 3.

<sup>153</sup> Statement, 22 December 2010, page 1.

<sup>154</sup> Minute Williams to PS/Minister(DP), 22 January 2003, ‘Op TELIC – Challenge 2 ‘Desertisation’ UOR Activity’.

**319.** In describing the modifications that the Challenger 2 was undergoing for Iraq, Mr Williams wrote that Lord Bach’s comments were “reasonable: although the full planned upgrade may not be completed in time, Challenger 2s’ desert performance should have been enhanced to a useful degree in the right timeframe”.

**320.** Mr Williams added that, more generally, it was also “important to try and dampen down speculation” on when equipment modifications were likely to be completed because:

- the MOD’s “general line” was that decisions about military action had “not yet been taken”, and providing indications that it was “working to a hard and fast deadline” would “undermine that overall public position on the timing of possible action”;
- the timeframes for delivery from industry were subject to change; and
- the MOD’s own assumptions about the timeframe “may again change”.

**321.** Mr Williams suggested that should be considered in light of the broader advice Lord Bach was expecting later that week.

**322.** Lord Bach received the advice, submitted on behalf of AM Stirrup, on 24 January.<sup>155</sup> He was invited to note that:

- 137 equipment UORs and 108 sustainability UORs had been approved, the “vast majority” of which remained “on track to deliver to the Front Line Commands in accordance with planned ISDs”.
- “The compression of timescales for the Land Component, coupled with the late addition of 16 AA Bde [16 Air Assault Brigade] and the increase in the Amphibious Task Group to a Brigade(-) has meant that a number of UORs will not be delivered in full prior to the potential start date of operations.”
- “None of the shortfalls is deemed to be a ‘showstopper’ and solutions for mitigating the potential operational risks involved are being developed by PJHQ and Front Line Commands.”
- “Heavy pressure” would be placed on the supply and equipment support chains and advanced deployment dates had “added to the weight of UOR items which were always intended to be fitted in theatre”.

**323.** The advice explained that the majority of UOR shortfalls affected ground forces. The key areas of concerns were the Challenger 2 desertisation, Combat ID and in-service stock items that could not be procured through UOR action, such as COLPRO filters for AFVs.

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<sup>155</sup> Minute DCDS(EC) to PS/Minister(DP), 24 January 2003, ‘Iraq: Op TELIC UORs’.

**324.** Lord Bach was advised:

“Whilst there are no showstoppers it should be understood that lack of some UOR capabilities ... could require Commanders to make choices they might not otherwise have to make and could reduce operational effectiveness. Equally, delivery of the UOR capability cannot remove risks completely. The overall operational impact may be to constrain commanders’ options, reduce the tempo of operations and risk the ability to operate in close conjunction with US forces.”

**325.** In response to the high level of media and Parliamentary interest in the availability of equipment, as a general guideline, one of the points to emphasise was that:

“Our forces will have the equipment they need to undertake any tasks assigned to them as part of possible operations. The safety and well-being of our Service personnel are of paramount importance. Where appropriate, we should look to compare capabilities to those available in the 1991 Gulf War.”

**326.** Details of the key shortfalls were provided in an annex, which largely reflected the advice to Gen Walker of 21 January. Additional information included:

- As 3 Commando Brigade and deploying RAF personnel had been fully equipped with desert clothing, there were “no remaining stocks”. An additional 32,500 sets would be delivered on 7 March and the full requirement would be available on 28 March. It would need to be airlifted into theatre.
- Sufficient ECBA plates would be available “to equip the entire force” by 7 March and there was confidence that “the full ECBA capability” could be delivered “before the committal of any ground troops”.
- The unavailability of COLPRO for AFVs remained the same, although the Defence Science and Technology Laboratory (DSTL) had provided advice that reduced the number of filter changes required “while maintaining sufficient protection for the crew”. Even the reduced number could not be resourced and “the limited in-service stocks” would “therefore require prioritisation”.

**327.** On the same day, as instructed at the Chiefs of Staff meeting on 22 January, Air Chief Marshal Sir Malcolm Pledger, Chief of Defence Logistics (CDL), wrote to Adm Boyce about which capability and sustainability UORs were unavailable within current timelines.<sup>156</sup> Those were listed in an annex which was consistent with other briefings on the shortfalls.

**328.** Referring to the inability to approach industry earlier and the constraint placed upon funds while arrangements were agreed with the Treasury, ACM Pledger stated that Adm Boyce should be aware of “the relative success” that had been achieved by the DLO.

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<sup>156</sup> Minute CDL to PSO/CDS, 24 January 2003, ‘UOR/Operational Sustainability Issues’.

**329.** ACM Pledger wrote:

“No strategic issues, that would deny UK the option to conduct a military campaign, arose within the UOR/Operational Sustainability staffing, hence it has not been raised at COS(O) by CDL or DCDS(EC). However, regular briefing has occurred through the established DCMO [Defence Crisis Management Organisation] process (Iraq Stocktakes and through SPG); PJHQ briefings (both at CJO’s Jt Comd’s Seminars and through the range of staff level planning meetings, which includes FLC representation). These briefings repeatedly flagged the consequences of defining force packages without the full knowledge of the impact of the associated logistic and capability enhancements on the basic plan.”

**330.** ACM Pledger added that Adm Boyce “should feel assured” that the DLO was “wholly focused” on its delivery of UORs and would “continue to make every effort to synchronise the delivery of these equipments to theatre in a timely manner”.

**331.** Lord Bach chaired his first meeting about UORs on 27 January.<sup>157</sup> The points recorded from the introductory discussion included:

- Given that “authority fully to engage industry had only been received on 2nd December, the time scales were challenging.”
- The high priority requirements for Packages 0-2 were “capable of being met by 28th February”. The “key risks” were now the UK’s ability to “deliver, fit and train on UOR equipment whilst the force was deploying to or in theatre”. In respect to Packages 0-2, these risks were considered “manageable”.
- The compression of timescales and expansion of Package 3 meant an “increased risk that package 3 UORs would not be delivered before operations commenced”. None of the resultant shortfalls were assessed as being a “showstopper” but “we would only be clear of the operational implications once detailed plans had been worked up”.
- “[W]hatever the operational significance of delays in delivering UORs”, it was expected that media would focus on “equipment shortcomings”; being well prepared to win the “presentational argument was vital”. That was not just to preserve the MOD’s reputation, but was “a key aspect of securing and preserving public support for the whole enterprise”.
- A “key question for the future” was why the forces “were not better prepared for the kind of operations now in prospect”, given the conclusions of the SDR about the likelihood of operations in the Middle East. The UK “needed to be more intelligent” about its holdings of certain long-term lead items such as desert clothing, NBC filters and COLPRO, and about “the extent to which equipment was capable of operating at a range of environmental conditions”.

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<sup>157</sup> Minute PS/Minister(DP) to MA/DCDS(EC), 27 January 2003, ‘Iraq: Op TELIC UORs’.

**332.** The meeting discussed particular shortfalls, including:

- There was a need to “find a better way of explaining the improvements” being made to Challenger 2 tanks.
- There was still no assurance that the US would loan Combat ID assets – Lt Gen Reith was being briefed “to raise this personally” with General Tommy Franks, Commander US Central Command (CENTCOM).
- “...[I]nnovative measures were in place to acquire sufficient stocks of desert clothing and boots for at least two sets to be provided to all personnel in theatre by mid-March” and Lord Bach asked officials to review with industry the practicality of extending the number of personnel issued with three sets to cover all those deploying.
- There remained concerns about NBC capabilities – Lord Bach requested further advice on the operational risk within three days.

**333.** On 28 January, Mr Hoon asked Adm Boyce for “a clear recommendation from the Chiefs of Staff” as to whether UK forces could “participate in the operational plan as currently understood, particularly the potential start of major ground operations on 3 March”.<sup>158</sup>

**334.** If this was not possible, Adm Boyce was asked on what date land forces could participate and what date would be the “implied start of initial combat operations”. The advice was requested by 3pm the following day.

**335.** ACM Bagnall’s Private Office replied on 29 January, stating:

“There are, in absolute terms, no showstoppers. In the case of maritime forces, all UORs should be in place by 28 February. Some contractual risk remains, but the systems involved carry a low operational risk. In the air environment, the force will be ready for operation by 28 February ...

“The land environment carries the greatest risk in two areas: Challenger 2 and Combat Identification.”<sup>159</sup>

**336.** The work in hand for Challenger 2 vehicles suggested that their availability and serviceability would “improve significantly” by 18 March when certain modifications were due to be completed. The situation would improve again after 7 April when new filters were fitted.

**337.** For Combat ID, systems to improve situational awareness within the UK and US forces were currently being evaluated in Germany. It was “not yet clear” whether they could “be integrated into a UK vehicle in the time available” but early indications were that the work was “proceeding well”.

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<sup>158</sup> [Minute APS/SofS \[MOD\] to PSO/CDS, 28 January 2003, ‘Iraq: UORs’.](#)

<sup>159</sup> Minute MAVCDS to PS/SofS [MOD], 29 January 2003, ‘Iraq – UORs’.

**338.** ACM Bagnall’s Private Office concluded:

“In sum, if the start date for land operations is delayed, there will be greater time to embody the required land UORs. However, as I have noted earlier, there are no showstoppers.”

**339.** The minutes of the Chiefs of Staff meeting on 29 January recorded that the “focus had shifted to what equipment was being delivered rather than what was being procured”.<sup>160</sup> It was important that “all measures were taken” to ensure that equipment was fitted and not just made available. A “coherent plan was required with clear guidance on the division of responsibilities for ensuring equipment was available to units in theatre”.

**340.** There was “a concern over the availability of desertised Challenger 2s” and, although the Land Component Commander was content with the current position, Adm Boyce “noted that it would clearly be better if availability was improved as a result of any slip in campaign timelines that allowed extra UOR work to be completed”.

#### CONCERNS ABOUT COMBAT ID

**341. Concerns about the provision of Combat ID and whether previous lessons had been learned were raised in both Houses of Parliament.**

**342.** On 18 December 2002, Mr Hoon made a statement in the House of Commons on contingency preparations for possible military action in Iraq.<sup>161</sup>

**343.** Mr Hoon was asked by Mr Mark Prisk for an assurance that, “given the recent tragic incidents of friendly fire in different theatres of war”, all deployed UK service personnel would have the equipment “they need to communicate speedily and effectively with friendly units”.<sup>162</sup>

**344.** Mr Hoon replied:

“I thank the hon. Gentleman for raising a serious and important point. I assure him that efforts are being made to ensure that that is the case.”

**345.** Combat ID was raised as an issue on 20 December in Lt Gen Pigott’s UOR update.<sup>163</sup> He stated that it was:

“... a vulnerable issue in presentational terms, particularly following the NAO report, but it is an issue that has not moved forward recently. Resolution has been thwarted while the UK awaits the formulation of US policy by CENTCOM.”

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<sup>160</sup> Minutes, 29 January 2003, Chiefs of Staff meeting.

<sup>161</sup> House of Commons, *Official Report*, 18 December 2002, columns 845-846.

<sup>162</sup> House of Commons, *Official Report*, 18 December 2002, column 854.

<sup>163</sup> Minute DCDS(C) to PSO/CDS, 20 December 2002, ‘Iraq Contingency Planning – Urgent Operational Requirements and Related Issues’.

**346.** Gen Walker responded to Lt Gen Pigott the same day, stating that he remained “uneasy over Combat ID”.<sup>164</sup> He continued:

“I understand that we are currently awaiting the formulation of coherent US policy ... I am conscious that significant effort has been made at various levels to press this issue with CENTCOM but that, in the main, the bottom up approach has been adopted. Given the operational implication of not developing a coherent coalition policy and the presentational aspects of Combat ID, I believe that we can no longer afford to prevaricate. The issue now needs to be aired at the highest levels within CENTCOM.”

**347.** Mr Watkins wrote on Mr Hoon’s copy of the note: “He is right to focus on the presentational risks: this issue was raised in the House on Wednesday.”<sup>165</sup>

**348.** On 7 January 2003, Mr Hoon was asked in the House of Commons what lessons had been learned from the past to ensure that British forces were equipped against the risk of friendly fire.<sup>166</sup> He replied:

“... we are engaged in a process of ensuring that combat identification is dealt with satisfactorily. There is no single technical solution to that difficult problem, but we will acquire new equipment that will be available in time for any potential conflict in the Gulf ... I can assure the House that British troops will be able to work alongside American forces entirely safely and satisfactorily.”

**349.** A junior MOD officer provided a DCRS official with a Combat ID update on the same day.<sup>167</sup> He first gave an overview of the work being done in NATO’s development of a BTID which set “a basic technical requirement to be able to identify ‘friend’ or ‘unknown’ on the battlefield” and which had been endorsed by eight countries.

**350.** On Iraq, the officer stated that the Combat ID UOR was “still being scoped” and summarised what the requirement was likely to encompass.

**351.** A UOR was being developed to mirror “ad-hoc” US measures being considered for forthcoming operations:

“The UK has been anything but dilatory in developing a technological Combat ID capability. We have actually been a leading light in this area. That no solution is yet available anywhere in the world reflects merely the complexity of achieving a satisfactory technical solution to an extremely challenging requirement. The complexity is exacerbated by the need for international consensus on any solution.

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<sup>164</sup> Minute CGS to DCDS(C), 20 December 2002, ‘Combat ID’.

<sup>165</sup> Manuscript comment Watkins on Minute CGS to DCDS(C), 20 December 2002, ‘Combat ID’.

<sup>166</sup> House of Commons, *Official Report*, 7 January 2003, columns 23-25.

<sup>167</sup> Minute MOD [junior officer] to DCRS 1, 7 January 2003, ‘Combat Identification (CID)’.

“To meet the requirement in the short term, current UOR action will give the UK an identical Combat ID solution to that deployed by the US. In the circumstances, this is as close to the ideal as we could have hoped to achieve.”

**352.** AVM Loader provided a summary note of work in progress on Combat ID for ACM Bagnall, recording that, “contrary to press speculation, progress continues to be made since the conflict in the Gulf”, but that “notwithstanding any measures taken or currently under consideration, fratricide will always remain a real risk in the heat of conflict”.<sup>168</sup>

**353.** AVM Loader explained that work continued but progress had been slow because measures could not be developed in isolation. The alignment of UK measures with those in the US had “been hampered by the lack of a coherent policy” but, to ensure that some capability could be delivered in time, UORs had been based upon assumptions agreed with key stakeholders and US Department of Defense and Army staff.

**354.** At the request of ACM Bagnall, the update was circulated to MOD Ministers and the Chiefs of Staff.

**355.** In the House of Lords on 9 January, Lord Bach was asked about the availability of satisfactory Combat ID equipment for British troops in any potential Gulf conflict.<sup>169</sup> He replied:

“... we take combat identification and the risk of friendly fire extremely seriously ... Lives depend on it. We believe that our combat identification procedures are effective. We have deployed successfully as a country on many operations since the tragedies in this field during the Gulf conflict. There have been no reported incidents of fratricide, or blue on blue, involving UK forces. I say that with caution because whatever technology one puts in, and however sophisticated it may be, these things sometimes happen.

“In the event of military action, British troops will be fully interoperable with United States troops for combat identification. That capability, including new equipment options, are [sic] currently being procured.”

**356.** One of the questions put to Mr Hoon by Mr Jenkin in the House of Commons on 20 January (referred to earlier in this Section) was whether British troops would have access to electronic identification equipment, already fitted to US tanks and armour, to prevent the risk of fratricide.<sup>170</sup> Mr Hoon replied:

“... a question I dealt with when I made my last statement, action is in hand to procure the necessary equipment to ensure that the equipment used by our forces is in every way compatible with the equipment that the United States is using.”

<sup>168</sup> Minute MA/VCDS to PS/SofS [MOD], 9 January 2003, ‘Combat Identification’ attaching Minute ACDS(Ops) to MA/VCDS, 8 January, ‘Combat Identification’.

<sup>169</sup> House of Lords, *Official Report*, 9 January 2003, columns 1144-1145.

<sup>170</sup> House of Commons, *Official Report*, 20 January 2003, columns 35-37.

**357.** Combat ID was raised at the House of Commons Liaison Committee by Mr Michael Mates on 21 January.<sup>171</sup> When asked by Mr Mates whether he was “happy” that British soldiers were most likely to be killed by “our own people rather than the enemy”, Mr Blair answered:

“We are looking at everything we can do for combat identification. I think the procedures are far better now than those that were in place at the time of the Gulf War. I have asked for discussions on this very issue so we can make sure we are doing everything we possibly and conceivably can. From previous conflicts we know it is a risk and we have got to do everything we can to provide against it. I know there has been a lot of work done on this and there have been joint operations carried out in order to test the effectiveness of it. Obviously it is something we have to carry on looking at carefully.”

**358.** When pushed for further details by Mr Mates, Mr Blair added that the capability was:

“... in a significantly better shape than it was back at the Gulf War ten years ago. The very reason I have asked to be kept closely informed as to what is happening on it is because this is one of the things we need to make sure of.”

**359.** PJHQ confirmed on 29 January that the US had agreed to the loan of 43 Combat ID systems for use by British forces.<sup>172</sup>

## PROGRESS ON UORS

**360.** As concerns over equipment shortfalls persisted, Ministers asked for industry “to be pressed again” on whether they could work faster to meet requirements.

**361.** They were told that industry was working to capacity and “any significant improvement” in delivery profiles should not be anticipated.

**362.** The risk of CW attacks was assessed as low, but the UK’s NBC protective capability would be “initially fragile”.

**363.** The update on UORs on 31 January informed Lord Bach that:

- 143 equipment UORs, at a value of £437m, and 108 sustainability UORs had been approved. A further 18 USURs had been endorsed by PJHQ and business cases were being developed.
- All personnel would be issued with three sets of desert clothing by the end of March and follow-on orders were being investigated to procure sustainment

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<sup>171</sup> Select Committee on Liaison, *Official Report*, 21 January 2003, questions 82-83.

<sup>172</sup> Minute PJHQ to PS/Minister(DP), 29 January 2003, ‘Iraq: Op TELIC – Combat Identification UOR’.

stocks for the summer. It was forecast that desert boots would be available for the whole force by “mid-March”.

- The risks associated with a 30 percent shortfall in COLPRO filters for AFVs were being assessed.<sup>173</sup>

**364.** Lord Bach chaired a second UOR meeting on 3 February.<sup>174</sup> In addition to the points in the 31 January update, the record of the meeting stated:

- Lord Bach asked for the pressure on industry “to be kept up” on the delivery of desert clothing and had “stressed the need to work hard to rebut the idea” that troops were “ill-equipped” for the environmental conditions.
- The risk assessment for the shortfall of COLPRO filters “against the worst case requirement” was ongoing and expected by the end of the week; Lord Bach “**would be grateful for urgent sight of the headlines from this work, together with advice on the operational penalties**”.
- Based upon the current shipping plan of filters, a “two fold increase in the capability” of all deployed Challenger 2 tanks was expected by 18 March and a “four fold increase” by 7 April. Lord Bach sought confirmation that that remained the case.
- Concerns remained about “the ability of AS90 to operate in hot and dusty conditions”. The necessary modifications were not expected to be delivered into theatre until the end of March and “would each take 63 man-hours to fit”. Lord Bach asked for industry “to be pressed again on whether they cannot work faster to meet the requirement” and welcomed advice on the operational implications.
- The US was “being helpful” and the loan of Combat ID systems had been agreed with “the issue now being how they will be deployed”.
- Aside from the timing of completing outstanding UORs (“which was tight”), the “key residual concerns related to Combat ID and NBC protection”.

**365.** On 7 February, AM Stirrup advised Lord Bach that 156 business cases for equipment UORs and 108 sustainability UORs had been approved.<sup>175</sup>

**366.** AM Stirrup wrote that the operational risk associated with the lack of NBC filters for AFVs had been assessed as “minimal”. The Directorate of Joint Warfare (DJW) had assessed the probability of a CW attack on all deployed AFVs as “low” and that filters could therefore “be managed on a theatre-wide basis”. The UK’s NBC capability would be “initially fragile” but would become “more robust by mid-March” as UORs were delivered, in-service equipment was refurbished and surge training completed.

**367.** There were “no major concerns” regarding the availability of desertisation filters for the Challenger 2 tanks but it was unlikely that industry would be able to advance the

<sup>173</sup> Minute DCDS(EC) to PS/Minister(DP), 31 January 2003, ‘Iraq: Op TELIC UORs’.

<sup>174</sup> Minute PS/Min(DP) to MA/DCDS(EC), 3 February 2003, ‘Iraq – Op TELIC – UORs’.

<sup>175</sup> Minute DCDS(EC) to PS/Minister(DP), 7 February 2003, ‘Iraq: Op TELIC UORs’.

delivery of measures for the AS90. The level of operational risk would be determined by weather conditions but was “not deemed to be significant”.

**368.** The Senior British Liaison Officer in theatre was examining when Combat ID systems would become available and was in discussions with the US. An initial operating capability for light forces was expected by late February, with a full operating capability “available not later than 18 March”.

**369.** On the same day, Lt Gen Reith received a letter from Sir Robert Walmsley, the Chief of Defence Procurement, about the challenges created by an increase in the quantities of equipment to be delivered by air and sea as a result of the compressed timescales before military action.<sup>176</sup> He believed the DPA could deliver what was required and that those capabilities would reach the front line. He added:

“We continue to press Industry whom I am confident are doing all that they can to achieve early delivery. Industry is, however, now working to capacity and I would not anticipate any significant improvement in the currently projected delivery profiles.”

**370.** In discussing AM Stirrup’s update, Lord Bach’s meeting on 10 February noted that while the UK’s NBC capability was judged to be fragile:

“... all that could be done to improve NBC protection capabilities was being done ... The bottom line was if the Iraqis launched repeated mass attacks, operational effectiveness would be impaired; but we did not believe that they could do so.”<sup>177</sup>

**371.** The record of the meeting also stated:

“... it was noteworthy that a number of deficiencies with which we were currently grappling (Combat ID, DAS [Defensive Aid Suites] for transport aircraft, equipment readiness, desertisation) had been identified in post-GRANBY lessons learned reports ...”

### Reporting equipment issues from theatre

On 11 February 2003, Lord Bach requested advice by the end of that week on whether a direct link from theatre for reporting equipment issues should be established, and how the reporting might work.<sup>178</sup>

The advice had not been received by 17 February.<sup>179</sup> The record of the meeting stated:

“The Minister attached real importance to this and would like advice on what mechanism might be devised – presumably through the ECC [Equipment Capability Customer] organisation – for making it happen.”

<sup>176</sup> Letter CDP to CJO, 7 February 2003, ‘Op TELIC UOR Progress’.

<sup>177</sup> Minute PS/Min(DP) to MA/DCDS(EC), 11 February 2003, ‘Iraq: Op TELIC – UORs’.

<sup>178</sup> Minute PS/Min(DP) to MA/DCDS(EC), 11 February 2003, ‘Iraq: Op TELIC – UORs’.

<sup>179</sup> [Minute PS/Min \(DP\) to MA/DCDS\(EC\), 17 February 2003, ‘Iraq: Op TELIC UORs’.](#)

ACM Bagnall replied on 21 February:

“... there is a need to avoid cutting across established and well understood command chains from theatre, through CJO, to CDS. Beyond that, given the large number of people who are at geographically remote locations in theatre – some of whom are still en route and many are in the process of acclimatisation and preparation for possible operations – it would be very difficult for an agent outside the command chain to keep an eye on the many equipment issues which may arise.”<sup>180</sup>

ACM Bagnall acknowledged “fully” the need for “a rapid and timely information flow” that could quickly alert Ministers to potential equipment issues and facilitate a swift response. He wrote that Lt Gen Reith had “taken steps to alert DCDS(EC) as a matter of urgency to any matters which require his attention” and similar arrangements were in place in terms of the interface with the DLO.

A handwritten note on ACM Bagnall’s minute from Lord Bach’s Private Office stated:

“Minister the predictable answer: VCDS agreed with Jock [Stirrup] but the COS wouldn’t wear it. So I think we’ll have to live with this.”<sup>181</sup>

**372.** On 14 February, AM Stirrup reported that 161 equipment UORs, at a value of “some £472m”, and 110 sustainability UORs at a value of £310m had been approved.<sup>182</sup> He stated:

- Combat ID equipment trials had been successful.
- There were “currently no major concerns regarding the availability of desert clothing”.

**373.** At the meeting on 17 February, Lord Bach was advised that “the suite of Combat ID equipment had been delivered to contract” and would be fitted in theatre.<sup>183</sup>

**374.** It was also reported that there was “increased confidence in the DLO in the robustness of the timetable for the delivery of desert clothing to those that need it”.

**375.** On NBC capabilities, the record stated:

“... concerns remain about the availability of various NBC consumables, on which advice will be submitted next week. Aside from operational implications, the Minister believes that we need very carefully to handle presentational aspects of this. He was particularly concerned to hear that stocks of time expired ComboPens<sup>184</sup> have recently re-lifed (following testing at Porton Down) and are being issued with revised

<sup>180</sup> [Minute VCDS to MA/Min\(DP\), 21 February 2003, ‘Operation TELIC – UORs’.](#)

<sup>181</sup> [Manuscript comment PS/Min\(DP\) on Minute VCDS to MA/Min\(DP\), 21 February 2003, ‘Operation TELIC – UORs’.](#)

<sup>182</sup> Minute DCDS(EC) to PS/Minister(DP), 14 February 2003, ‘Iraq: Op TELIC UORs’.

<sup>183</sup> [Minute PS/Min \(DP\) to MA/DCDS\(EC\), 17 February 2003, ‘Iraq: Op TELIC UORs’.](#)

<sup>184</sup> ComboPens are syringes containing an antidote to improve the chances of surviving a chemical attack.

documentation making clear that they are now assessed as being useable up until 2004.”

**376.** The Chiefs of Staff meeting on 19 February was advised that:

“... the US definition of FOC [Full Operating Capability] was when a unit achieved 80% readiness. 7 Armd Bde would therefore be declared at FOC without its full suite of UORs. CDS directed that Ministers be informed of this interpretation of FOC so that they were not caught out on UOR issues.”<sup>185</sup>

**377. In mid-February, the MOD told Mr Blair that British troops would be adequately protected in the event of a BW or CW attack.**

**378.** A Joint Intelligence Committee (JIC) Assessment on 19 February judged that southern Iraq was “the most likely area for the first use of CBW against both Coalition Forces and the local population” in the event of coalition military action.<sup>186</sup> It did not address the likelihood of a CBW attack.

**379.** On 20 February, Mr Blair asked the MOD for advice on a number of detailed questions following the publication of a report on Iraq by the International Institute of Strategic Studies.<sup>187</sup> That paper is addressed in detail in Section 6.5.

**380.** One question asked by Mr Blair was: “What is the prospect of a pre-emptive BW or CW attack on our troops in Kuwait, and are we certain we are adequately prepared and our troops protected?”

**381.** The MOD replied that Iraq retained the capability “(through a variety of means) to pre-emptively deliver CBW against Coalition Forces in Kuwait”.<sup>188</sup> The question was “one of intent”. In the MOD’s view it remained “highly unlikely whilst Saddam believes war can be averted”. If he was convinced that war was “inevitable and imminent” that “might make a pre-emptive move more attractive” but it was “more likely that Saddam would deploy CBW after the onset of the campaign”.

**382.** The planned levels of NBC defence equipment “should enable all troops to withstand initial BW or CW attack”.

**383.** The UOR update on 21 February informed Lord Bach that 167 business cases had been approved, accounting for “some £478m” of the £500m allocated by the Treasury.<sup>189</sup> Sustainability UORs, at a total cost of £318m, had also been approved.

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<sup>185</sup> Minutes, 19 February 2003, Chiefs of Staff meeting.

<sup>186</sup> [JIC Assessment, 19 February 2003, ‘Southern Iraq: What’s in Store?’](#).

<sup>187</sup> Dodge T & Simon S (eds). *Iraq at the Crossroads: State and Society in the Shadow of Regime Change*. Adelphi Paper 354 IIS Oxford University Press January, 2003; Minute Rycroft to McDonald, 20 February 2003, ‘Iraq: Political and Military Questions’.

<sup>188</sup> [Letter Watkins to Rycroft, 24 February 2003, ‘Iraq: Political and Military Questions’](#).

<sup>189</sup> Minute CM(SD) to PS/Minister(DP), 21 February 2003, ‘Iraq: Op TELIC UORs’.

**384.** The update also stated:

- Further to ACM Bagnall's note earlier that day, PJHQ had set up a "comprehensive system to review, prioritise and then move UOR equipment into theatre" once delivery dates were known by industry.
- New respirator testing procedures had been introduced to ensure that deployed personnel would "be adequately protected" after trials found that a proportion of respirators did not fit properly.
- There was a shortfall of 15,000 ComboPens out of a total requirement for 135,000, but "every effort" was being made to procure more and "re-life existing stock".
- 1,000 additional Challenger 2 filters were being procured to support predicted operation activity.
- A plan had been produced for the installation of Combat ID equipment into selected vehicles.
- The 96 fully modified battlefield ambulances were expected to be available for shipping by "13/14 March". There were currently only 24 air conditioned ambulances in theatre.
- The delivery of desert clothing, including ECBA covers, was progressing well.

**385.** By the end of February, there were "significant" and "severe" shortfalls in parts of the UK's NBC protective capability.

**386.** The Chiefs of Staff were told that that reflected the compressed timescales for planning.

**387.** The Chiefs of Staff received an update on access to CBRN equipment and NBC protection on 28 February.<sup>190</sup> The paper reported "significant" and "severe" shortfalls in a number of NBC areas including the availability of Nerve Agent Immobilised Enzyme Alarm Detectors (NAIAD), Residual Vapour Detectors (RVD) and NBC water bottle tops. There was, however, a "marked improvement" in ComboPen availability.

**388.** The paper stated:

"The compressed timescales available to procure UORs necessarily introduced risk in achieving earliest possible delivery of all equipments ... some shortfalls are now being exposed."

**389.** Lord Bach received the latest equipment update on the same day, reporting that 173 equipment UORs (totalling "some £487m") and £320m of operational sustainability requirements had been approved.<sup>191</sup>

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<sup>190</sup> Minute DJW/NBC1 to COSSEC, 28 February 2003, 'Iraq Contingency Planning – Equipment Issues'.

<sup>191</sup> Minute DCDS(EC) to PS/Minister(DP), 28 February 2003, 'Iraq: Op TELIC UORs'.

**390.** On “CBRN Risks”:

- The “most significant issue” was that the majority of RVDs had been found to be unserviceable, but that a “workaround” solution had been found. It had been agreed with DJW and PJHQ that this was “not a showstopper” although it would “impose a degree of operational degradation” which would increase as temperatures in theatre rose.
- New respirators were being procured and it was expected that this delivery would “enable 99.5% of personnel” to have a respirator that would fit them.
- Further investigation had revealed there were sufficient stocks of ComboPens.
- Further briefing would be provided to the Chiefs of Staff the following week.

**391.** An attached annex on the overall sustainability assessment of equipment stated that helicopter support remained fragile, despite a reduction in flying hours. That was attributed to long lead times for spare parts, and “historic levels of STP [Short Term Plan] funding”.

**392.** On 3 March, Adm Boyce was advised by Lt Gen Reith that equipment procured through UORs was being prioritised for fitting and being carefully monitored, but it was “probable” that some equipment would not be in service as the UK crossed “the line of departure”.<sup>192</sup> The “some” was referenced with a footnote stating: “The original RDD [Required Delivery Date] for the UORs was 31 March 03.”

**393.** Priorities had been set by PJHQ based on four categories:

- Priority 1: “UORs with the potential to delay the start of operations”, including Combat ID, Challenger 2 desertisation measures, NBC equipment and battlefield ambulances.
- Priority 2: UORs that enhance combat operations.
- Priority 3: “enablers” for aftermath operations.
- Priority 4: “Others”.

**394.** Lt Gen Reith wrote that the late delivery of some UORs meant that deployment and prioritisation issues would become “more acute” as the date for operations approached. He added: “Any decision not to fit a UOR will be based on operational advice by theatre and recorded.”

**395.** The record of Lord Bach’s meeting on 3 March stated:

“... the major remaining area of concern was in NBC. Although things were not as bad as had been feared, with the respirator and ComboPen issues – for the time being – resolved, there were still outstanding concerns about some aspects of our CBRN ‘layered defence.’”<sup>193</sup>

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<sup>192</sup> Minute CJO to CDS, 3 March 2003, ‘Fitting of Op TELIC Urgent Operational Requirements (UORs)’.

<sup>193</sup> Minute APS/Minister(DP) to MA/DCDS(EC), 3 March 2003, ‘Iraq – Op TELIC – UORs’.

**396.** Those included NAIADS, RVDs and NBC water bottle tops. The replacement to NAIADS would not be available before April, RVDs should be delivered into theatre by 14 March and “industry was working flat out” to try and overcome the problem of water bottle tops. The Chiefs of Staff would discuss NBC at their next meeting.

**397.** The meeting also noted that the sustainability of helicopters was “a concern, including sand filters for Lynx” aircraft.

**398.** A ‘CBRN Risk Overview’ was circulated to the Chiefs of Staff on 3 March.<sup>194</sup> It stated:

“For operations launched at 15th March 03 we believe that our overall CBRN defence remains fragile against a sustained CBRN attack ... Against the more likely scenario of occasional limited short range attacks our defences are less fragile. The fragile assessment is based on a combination of the quality and quantity of some key equipment, the lack of priority to deploy equipment via AT [Air Transport] (PJHQ assessment is that these items are low priority assets) to front line personnel and on the estimated CBRN training state. Further equipment improvements will be limited even as at 15th April.”

**399.** On 4 March, Lord Bach and Dr Lewis Moonie, Parliamentary Under Secretary of State for Defence and Minister for Veterans’ Affairs, received a briefing about “a number of CBRN issues currently running” in the media.<sup>195</sup> It stated that, “given the WMD context of our case for confronting Saddam Hussein”, it was important to “first emphasise our overall confidence in our NBC defence against any perceived threat”.

**400.** If the UK’s assessment that CBRN defences were fragile became more widely known, Ministers should adopt the line that they were not prepared to comment and that “the protection of our people is our top priority”.

**401.** Internally, it was “imperative” that personnel had confidence in the CBRN protective measures in place and an “open and honest dialogue” about any shortfalls should be adopted, reassuring them about “the robustness of the overall system”. The areas where progress had been made should be stressed.

**402.** A separate annex provided lines to take against each of the NBC equipment items that could raise concerns.

**403.** At the Chiefs of Staff meeting on 5 March, Rear Admiral Charles Style, Capability Manager (Strategic Development), said that CBRN risks were “attracting Ministerial attention”.<sup>196</sup> Lord Bach had asked that “CBRN issues” be given priority for air transport, which was being done in conjunction with the Operational Command’s priorities.

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<sup>194</sup> Minute DJW and D CBW Pol to COSSEC, 3 March 2003, ‘Iraq Contingency Planning – 4th CBRN Risk Overview’.

<sup>195</sup> Minute Howard to PS/Min(DP), 4 March 2003, ‘Presentation Aspects of CBRN’.

<sup>196</sup> Minutes, Chiefs of Staff meeting, 5 March 2003.

**404.** Adm Boyce stated that “the provision of correctly fitted respirators continued to cause him considerable concern”.

**405.** Maj Gen Fry reported that “there would be as few as 200 personnel who could not satisfactorily be protected through existing arrangements”. Relocating those individuals “could ameliorate the problem, but there was a presentational issue”.

**406.** ACM Bagnall was directed to lead on the issues and to ensure that Mr Tony Pawson, MOD Director General Corporate Communications, was engaged.

**407.** RAdm Style wrote to ACM Bagnall later that day reporting:

“Sufficient equipment (the Respirator Test System and additional Respirators) and necessary support are available ... DCJO(Ops) has reported that he anticipates the majority of testing to be complete by about 10 March. I shall seek confirmation of their arrival and the expected testing timetable in time for Friday’s Ministerial brief.”<sup>197</sup>

**408.** ACM Bagnall wrote to the Directorate of Operational Capability (DOC), explaining that he was progressing the respirator issues as “a matter of urgency” but there was also a need to note the CBRN shortfalls in the wider Operation TELIC lesson process to “be clear about why we have got into this situation”.<sup>198</sup> He raised several questions to illustrate his point including:

- “who is responsible for what aspects of the CBRN defence spectrum”; and
- “who is responsible for ensuring that individual units, ships etc are in date and properly equipped to operate in an NBC environment?”

**409.** A paper was circulated to the Chiefs of Staff on 7 March about respirator fit testing by the DJW, highlighting that it had raised issues “both in policy terms and dealing with the impact on the individual as the results are exposed”.<sup>199</sup>

**410.** The DJW recommended the Chiefs of Staff agree that:

- Individuals who did not attain an optimum fit after testing were provided with the respirator that afforded “the best attainable level of protection, i.e. *‘best fit’*”.
- Solutions for the residual 0.5 percent of individuals were being pursued: “At this stage it is impossible to predict whether a solution will be found in the time available.”
- Advice to the Combined Joint Task Force should be “that individuals who cannot achieve an optimum fit should, where possible, only be deployed in areas where the NBC risk is assessed as lower”.

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<sup>197</sup> Minute Style to MA/VCDS, 5 March 2003, ‘NBC Respirators’.

<sup>198</sup> Minute VCDS to DOC, 5 March 2003, ‘Operation TELIC – CBRN Lessons Learned’ attaching Minute Howard to PS/Min(DP), ‘Presentation Aspects of CBRN’.

<sup>199</sup> Minute DJW and D CBW POL to COSSEC, 7 March 2003, ‘Op TELIC – NBC Respirator Best Fit Policy’.

**411.** The UOR update for Lord Bach on 7 March highlighted:

- 176 business cases for equipment capability UORs had been approved at a cost of “some £488m”.
- The list of UORs for the post-conflict phase, Phase IV, continued to be “urgently developed in parallel with the ongoing work” to develop more detailed planning guidance and CONOPS. It was likely to focus on potential shortfalls relating to force protection, infrastructure requirements and Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR).
- Agreement was being sought from the Treasury to increase the total UOR funding for Phase III by a further £60m. The funding for Phase IV had been discussed at official level.<sup>200</sup>

**412.** The update stated that the Integrated Project Team (IPT)<sup>201</sup> was “actively assessing” another source to assist in the production of desert pattern NBC suits. There was a requirement for 94,000 suits, but the contracted supplier could only produce 1,000 a week from the beginning of April (when the cloth to make the suits became available), and 4,000 plus a week by mid-June.

**413.** The DLO had issued sufficient ComboPens for the number of personnel deployed but “the precise location in theatre of approximately 4,000 [wa]s unconfirmed”. Stocks had been withdrawn from UK-based warships to mitigate the risk. There would be sufficient water bottle tops to satisfy all demands by 10 March “and leave a reserve”.

**414.** Two UOR sets of sand filters for Lynx helicopters would be delivered by 21 March with a further three refurbished sets. Further spares would be available from 31 March and the supplier was producing an additional four sets “at risk” which would be available from mid-April at a rate of one every two weeks. The MOD was not yet committed to a contract for these sets but the requirement was likely to be a “high priority” for Phase IV.

**415.** At a Chiefs of Staff meeting on 10 March, Lt Gen Reith reported that:

“A full check of in-theatre NBC equipment and redistribution had been completed, but respirator fitting had been slower than anticipated and was now expected to complete on 18 Mar.”<sup>202</sup>

**416.** The record of Lord Bach’s meeting on 10 March stated:

“CBRN was in a better position than thought last week ... by 17 March all personnel would have their optimum fit of respirator. The testing was the most advanced in the world – *all* personnel had successfully been through the CS gas chamber in their respirator – we were now providing better still protection. The Commander in theatre

<sup>200</sup> Minute CM(SD) to PS/Minister(DP), 7 March 2003, ‘Iraq: Op TELIC UORs’.

<sup>201</sup> Teams focused on delivering individual equipment programmes and projects. Their role is explained further in Section 14.1.

<sup>202</sup> Minutes, 10 March 2003, Chiefs of Staff meeting.

would have to decide how best to employ the 0.5% who did not have a perfect fit ... NBC clothing and canisters were also no longer problem areas, although desert camouflage NBC suits were not yet available (but this was only a matter of their colour, not the materials). COLPRO was not being raised in theatre as a significant problem. The only outstanding issue on ComboPens was providing 600 to the BBC ...”<sup>203</sup>

**417.** An updated paper on NBC respirator policy was sent to the Chiefs of Staff on 11 March.<sup>204</sup> It stated that alternative solutions to the fitting problem and the expected 0.5 percent of individuals who failed to achieve an optimum fit had been, and continued to be, “vigorously pursued” with DSTL and industry. Three possible solutions had emerged but it was impossible to predict whether or when these could be fielded, “but certainly not before 17th March”.

**418.** The DJW intended to provide “a field commander’s risk guide” to Lt Gen Reith by 13 March on deploying individuals who could not achieve an optimum fit.

**419.** The guide was circulated on 12 March.<sup>205</sup>

**420.** In his report following a visit to see the forces preparing for operations in Kuwait, General Sir Mike Jackson, Chief of the General Staff from February 2003 to August 2006, wrote on 10 March:

“The one area of the media feeding frenzy that has some justification lies in the readiness of stocks for expeditionary operations. The introduction of resource accounting has created an imperative to drive down stockholdings. As a result, in the name of accounting orthodoxy we lack basic items such as desert clothing. I am unsure whether the cost of storing such items would really have been more than the inflated price we have no doubt paid by procurement under UOR action, but I am certain of the negative impact on the moral component that failure to provide these items has had.”<sup>206</sup>

**421.** Gen Jackson wrote that the root of the problem was “partly financial, but also systemic” and there was no mechanism “within the Central Staff to safeguard the operational logistic interest”. This had led to “a consistent lack of visibility” of the state of UK holdings.

## The situation in the week before the invasion

**422. Adm Boyce assured Mr Blair that there were “no serious equipment problems” on 13 March.**

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<sup>203</sup> Minute APS/Minister(DP) to CM(SD), 10 March 2003, ‘Iraq: Op TELIC – UORs’.

<sup>204</sup> Minute DJW to COSSEC, 11 March 2003, ‘OP TELIC – NBC Respirator Policy’.

<sup>205</sup> Minute DJW, 12 March 2003, ‘Commanders’ Guide to Respirator Best Fit Risk Assessment’.

<sup>206</sup> [Minute CGS to CDS, 10 March 2003, ‘CGS Visit to Op TELIC’.](#)

**423.** Mr Blair held a meeting to discuss the military plan and timetable with Mr John Prescott, the Deputy Prime Minister, Mr Jack Straw, the Foreign Secretary, Mr Hoon and Adm Boyce on 13 March.<sup>207</sup> At the meeting, Adm Boyce “assured the Prime Minister that the Armed Forces faced no serious equipment problems”.<sup>208</sup>

**424.** On 14 March, RAdm Style reported to Lord Bach that:

- 178 equipment UOR business cases had now been approved at a cost of “some £494m”;
- 9 UORs had been accepted into service over the previous week;
- the manufacturer of desert NBC suits had revealed that production for the suits could not start “as early as we had hoped and will not deliver the first items until mid-April, a delay of 2 weeks”;
- the delivery of RVD tickets to theatre had been delayed, and was expected to be complete by 19 March; and
- while the DLO was confident that sufficient ComboPens had been delivered to theatre, this could not be confirmed until the re-allocation exercise currently under way had been completed.<sup>209</sup>

**425.** On desert clothing, RAdm Style wrote:

“Sufficient desert clothing for the entire force was ordered in Dec 02 with an ISD of 31 March 03, with a small in-service reserve being available as a result of 3 Cdo Bde and 16 Air Asslt Bde personnel retaining their clothing from Op JACANA. Although pressed to advance their production and delivery schedules, few contractors have been successful ... Across the desert clothing range, at least 70% of all deliveries are complete and in theatre, broadly equivalent to 2 sets per man, not counting those personnel already equipped before deployment. Providing contractor delivery profiles are met, we expect all outstanding demands to reach depots by 19 March and to be with personnel by the end of the month. There are some exceptions; desert helmet covers ... and floppy hats ... will not be delivered to depots until nearer the end of the month.”

**426.** Lt Gen Reith provided Adm Boyce with an update on the redistribution of NBC equipment in theatre on the same day.<sup>210</sup> He wrote that “sufficient” NBC Individual Protective Equipment had been deployed, but “some stocks required redistribution to ensure that all personnel had their initial allocation of 3 suits”. The redistribution of the maritime component was 100 percent complete, the land contingent 97 percent, and the air contingent 70 percent complete.

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<sup>207</sup> [Letter Manning to Watkins, 14 March 2003, ‘Iraq: The Military Plan’.](#)

<sup>208</sup> [Minute Rycroft to Watkins, 13 March 2003, ‘Iraq: Military Planning’.](#)

<sup>209</sup> Minute CM(SD) to PS/Minister(DP), 14 March 2003, ‘Iraq: Op TELIC UORs’.

<sup>210</sup> Minute Reith to PSO/CDS, 14 March 2003, ‘Redistribution of NBC IPE and Respirator Testing’.

**427.** As part of the final battle preparations, the contingent was completing NBC respirator testing but, because 1 (UK) Div needed to move forward to assembly areas, its General Officer Commanding (GOC), Major General Robin Brims, had decided to suspend that process. Lt Gen Reith “strongly” supported this decision from an operational perspective and said he could restart the process of testing “if time allows”. He added:

“In terms of risk, his manoeuvre units would prove difficult targets, once battle begins. However the more static units in the Divisional Support Group and Joint Force Logistic Component would be at greater risk and thus I have directed that testing should continue for them. The Maritime and Air contingents will also complete the process.”

**428.** Lt Gen Reith added: “Clearly Ministers will need to be informed.”

**429.** In the record of Lord Bach’s meeting on 17 March, the key points included:

- other than “the ongoing work on Phase IV”, there were “no major outstanding UOR issues”;
- a flexible approach was needed on whether to continue with undelivered UORs “as circumstances develop”;
- there was “a 100 tonne backlog of equipment” waiting to be delivered to theatre;
- there were now “no significant outstanding NBC issues except on delivery of RVD tickets into theatre”; and
- “notwithstanding helmet covers and floppy hats, which were taking slightly longer than hoped for, 80% of clothing and boots ordered had been delivered and prioritised in theatre. The overall figure of ‘desertised personnel’ was higher, as it included those who had already been issued with desert kit for Op JACANA.”<sup>211</sup>

**430.** At the Chiefs of Staff meeting on 19 March, it was reported that only 3 percent of the land component’s respirators had been checked, “the work having been overtaken by other events in-theatre”.<sup>212</sup>

**431.** On 21 March, AM Stirrup reported to Lord Bach that 183 business cases for UORs had been approved at a cost of £497m.<sup>213</sup>

**432.** Desertisation measures for the Challenger 2 vehicles had been delivered to theatre in the past week (the fitting process of which was ongoing), along with Combat ID equipment for all vehicles and ECBA, meaning that all unit demands for the latter had been met.

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<sup>211</sup> Minute APS/Minister(DP) to MA/DCDS(EC), 17 March 2003, ‘Iraq: Op TELIC – UORs’.

<sup>212</sup> [Minutes, 19 March 2003, Chiefs of Staff meeting.](#)

<sup>213</sup> Minute DCDS(EC) to PS/Minister(DP), 21 March 2003, ‘Iraq: Op TELIC UORs’.

**433.** AM Stirrup also reported that “a problem with packaging” had led to a “small delay” in the provision of new books of RVD tickets. The last 450 were received on 20 March and should arrive in theatre that day.

## Issues that emerged post-invasion

**434.** After the invasion began, it became clear that some personnel had not been equipped with desert clothing and body armour, there were difficulties with NBC equipment, and there were shortages of ammunition.

**435.** Lord Bach complained that he did not have visibility of equipment issues at the front line.

**436.** The reasons for the problems were not identified until 9 May.

**437.** On 4 April, Lt Gen Reith wrote to ACM Bagnall:

“I can assure DCDS(EC) that the chain of command is working well and that an embedded DPA LO [Liaison Officer] in theatre would have made no difference to the current situation. My staff monitor equipment availability on a daily basis and the DLO LO embedded in my Headquarters liaises regularly with relevant IPTs and other agencies concerning the flow of UORs from industry into theatre.”<sup>214</sup>

**438.** On 8 April, Lord Bach’s Private Office wrote to Brigadier Derek Jeffrey, MOD Director of Logistics Operations,<sup>215</sup> seeking clarity on the reliability of AFVs following a negative press article.<sup>216</sup>

**439.** The article had also suggested that there was a shortage of desert clothing and boots which sat “a little oddly with the assurances that the Minister has repeatedly been given about the availability of clothing and the arrangements for distributing it in theatre”.

**440.** Lord Bach’s Private Office wrote:

“The fact that there are continued rumblings about such basic requirements as this begs a wider question: are there other items that have been delivered by industry to the department but have yet to be distributed to all those that need them in theatre? Lord Bach has been briefed over recent weeks on the acceptance into service of a range of UORs. But he has very little visibility of the extent to which such items have actually reached the front line.”

**441.** Brig Jeffrey replied on 10 April.<sup>217</sup>

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<sup>214</sup> Minute CJO to MA/VCDS, 4 April 2003, ‘Combat ID and ECBA’.

<sup>215</sup> Brigadier Jeffrey’s name does not appear in the document but MOD has confirmed to the Inquiry that he was the post holder at that time.

<sup>216</sup> Minute PS/Minister(DP) to D Log Ops, 8 April 2003, ‘Iraq: Op TELIC UORs – Delivery’.

<sup>217</sup> Minute D Logs Ops to PS/Minister(DP), 10 April 2003 ‘IRAQ: Op TELIC UORs – Delivery’.

**442.** Lord Bach was informed that there were “some unsatisfied demands due to sizing issues but new stock from contractors should clear these in the very near future”. The full requirement for boots was “the greatest concern and may not be fully met until the end of April”.

**443.** Brig Jeffrey added:

“Notwithstanding that sufficient clothing is now in theatre to meet demands ... some individuals have not received any clothing. There are a number of reasons for this ranging from unit ordering errors to consignments being mis-located or being pushed down the priority list in theatre. The DLO in the UK and the JFLogC [Joint Force Logistic Component] in theatre are urgently carrying out an audit and progressively the problem is being ameliorated.”

**444.** Brig Jeffrey wrote that the DLO, DPA, PJHQ, and National Contingent Headquarters (NCHQ) did “not have good visibility of the fast moving situation in the Division with regards to UOR fitting”. That had meant “information on exactly what UORs had been fully fitted was not always available, nor was it prudent to press the Divisional staffs for this information at the height of battle”.

**445.** Lord Bach’s Private Office replied on 11 April, acknowledging the points raised and adding:

“But I think he [Lord Bach] will be interested to understand exactly which of the UORs on which he has been briefed over recent months were not in the event fitted despite having been available in theatre.”<sup>218</sup>

**446.** The record of Lord Bach’s meeting on 14 April highlighted his concern that he did not have “the visibility of equipment issues at the front line that he expected (and which he was reassured would be provided through the chain of command)”.<sup>219</sup> His Private Office wrote:

“An example of the ad hoc nature of this reporting is on Combat ID: the first time Minister(DP) was made aware that CR2s [Challenger 2s] without it were being used operationally was following the blue on blue incident on 25 March. The presentational and moral repercussions had the CR2s in question not been fitted with Combat ID cannot be overstated.”

**447.** Lord Bach sought advice on:

**“(i) the extent to which shortfalls of key items (such as desert clothing) remain in theatre and what action is planned to ameliorate them; (ii) which UORs have been delivered to theatre but not – for whatever reason – passed on to the**

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<sup>218</sup> Minute PS/Minister(DP) to D Log Ops, 11 April 2003 ‘Iraq: Op TELIC UORs – Delivery’.

<sup>219</sup> Minute APS/Min(DP) to MA/DCDS(EC), 14 April 2003, ‘Iraq: Op TELIC – UORs’.

**front line – either in part or in total; and (iii) how the flow of information can be improved so that in future Ministers receive timely and accurate advice on these issues.”**

**448.** On 17 April, Maj Gen Fry replied to Lord Bach’s request, on behalf of Lt Gen Reith, reporting that “other than the continuing saga of desert combat clothing, there [we]re no other key equipment shortfalls” in theatre.<sup>220</sup> As of 13 April, the “shortfall amounted to 18,300 suits and 12,500 boots”. Additional clothing would arrive in theatre by 18 April, meeting the requirement for boots, and reducing the shortfall of suits to 3,275.

**449.** Maj Gen Fry confirmed that all UORs delivered to theatre were “forwarded to the front line”. On Combat ID, he wrote that whilst its delivery into theatre was aligned with Challenger 2, “not all of it could be fitted within the compressed timeline before D-Day” because eight Challenger sets in a container “were temporarily misplaced within Kuwait”. Maj Gen Fry stated that the decision to proceed without the full range of Combat ID fitted in some Challengers was the GOC’s and implied that was necessary because of US timings.

**450.** Addressing the issues raised about the flow of information, Maj Gen Fry wrote that the weekly updates on UORs were “a significant staff burden” and that producing them “at any greater frequency would prove counter productive”.

**451.** Commenting on the note to Lord Bach, his Private Office wrote:

“This is, frankly, pretty dismissive of your concerns ... [It] offers no explanation of why the ‘desert clothing saga’ arose and no guidance on how and when the shortfalls will be addressed ... [It] contradicts the earlier advice from the DLO that some UORs had been delivered to theatre but not on to the front line.”<sup>221</sup>

**452.** At his meeting on 28 April, Lord Bach noted that no more UORs for the invasion phase had been raised in the last fortnight, no more were expected, and all were expected to be delivered by 1 May.<sup>222</sup> He therefore agreed that the monitoring of Phase III UOR implementation should cease but perceived a continuing requirement, “for the time being at least”, to keep track of the Phase IV UORs.

**453.** The “bulk of the discussion” focused on “the continuing difficulty experienced by the DLO, DPA and ECC in securing reliable information from theatre about equipment matters” and how best to present publicly what was understood to be “the generally positive news on this front”. Lord Bach remained concerned about the flow of information on equipment matters.

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<sup>220</sup> Minute Fry to PS/Min(DP), 17 April 2003, ‘Iraq: Op TELIC: UORs’.

<sup>221</sup> Manuscript comment MOD [junior official] on Minute Fry to PS/Min(DP), 17 April 2003, ‘Iraq: Op TELIC: UORs’.

<sup>222</sup> Minute PS/Minister(DP) to MA/DVCDS(EC), 28 April 2003, ‘Iraq: Op TELIC UORs’.

**454.** The record of the meeting stated that Lord Bach believed work should be set in hand urgently “to develop a better handle on the facts of equipment performance (including the extent to which UORs reached users). Identifying and being able to account for potential vulnerabilities would be “vital” to address Parliamentary Questions (PQs) and reports of shortages in desert clothing, boots, ECBA and Combat ID equipment:

“Ministers will need chapter and verse on these issues, and on any others yet to come to their attention; and they will need it whatever the conclusions of the lessons learned process.”

**455.** Specific questions on desert clothing, boots and UOR delivery were set out in an Annex, including why the desert clothing “saga” came to light “so late in the day”, given the attention it received in the run up to operations, and asking for clarification on whether all UORs delivered to theatre were fitted. Lord Bach also sought confirmation that all UORs had been received by the end user for whom they were intended. If not, he requested a list of those that had not been received, with an explanation in each case.

**456.** The record stated:

“As I have tried to articulate previously, Minister(DP) is not seeking here to second guess decisions made by commanders in theatre, which he accepts will have been made for very good operational reasons. He simply wants to understand, and be able to defend as required, the facts and the arguments pertaining to these judgements.”

**457.** Lord Bach also wanted to proactively “get the message across” publicly that, in general, equipment performance had “been impressive”. He accepted that the MOD should be prepared to acknowledge that “not everything went exactly according to plan and that lessons are, of course, being learnt” but that this should not deter the MOD from highlighting positive news.

**458.** Mr Paul Flaherty, Head of Civilian Secretariat, PJHQ, replied on 9 May that Op TELIC had been “a great success both in terms of performance of equipment and the successful delivery of an enormous amount of equipment in a very short space of time”.<sup>223</sup> He added:

“... it is also becoming clear that there were problems in theatre, of which we were not aware, in relation to the fitting of UORs and the delivery of kit. At this stage contributory factors appear to include the sheer speed and scale of the deployment, the large number of UOR equipment, the significant advance of G day,<sup>224</sup> and the absence of an in theatre asset-tracking system with the consequent mismatch of people and equipment.”

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<sup>223</sup> [Minute PJHQ Civ Sec to PS/Minister\(DP\), 9 May 2003, 'Iraq: Op TELIC UORs'](#).

<sup>224</sup> The date on which the ground operation commenced.

**459.** On the delivery of UORs to theatre Mr Flaherty wrote:

“The processes currently in place for tracking UORs only tracks them until they arrive to the original consignee in Theatre. There is therefore no means of tracking whether UORs reached the end user for whom they were intended. Work has been set in train to establish this and separate advice is being submitted by CJO to VCDS.”

**460.** Mr Flaherty also covered the issues of desert clothing and Combat ID in separate annexes which are detailed later in this Section.

**461.** On Lord Bach’s copy of the minute, his Private Secretary wrote:

“This is – at last – a serious attempt to respond to your concerns about equipment delivery/supply ... and acknowledges the importance of providing Ministers with proper advice. The story it tells ... about the flow of information from theatre which has obviously been lamentable – is pretty depressing.”<sup>225</sup>

**462.** Mr Flaherty’s note was discussed at Lord Bach’s meeting on 12 May.<sup>226</sup> Lord Bach believed the note went “a long way to addressing some of the issues he raised about the availability of equipment at the front line”. He accepted “the proffered explanation for this” but was “disappointed that a variety of factors” appeared to have undermined the efforts to equip troops as well as possible.

**463.** The note of the meeting recorded that Lord Bach:

“... regrets that – aside from the very practical consequence for our people, a number of whom might be expected to complain about having been sent into battle without relatively basic articles of key equipment – an unfortunate side effect has been that the advice provided to Ministers, albeit on the basis of advice from theatre, has turned out in retrospect to be less than wholly accurate. He agrees that these issues, particularly the lack of an effective asset tracking system, will need carefully to be examined during the lessons learned process.”

**464.** In addition to ECBA, desert clothing and Combat ID kit, Lord Bach had heard at a meeting that morning that concerns had been expressed by commanders in theatre about shortages of morphine and NBC equipment. He sought advice on those points by the end of the week.

**465.** Lt Gen Reith provided a spreadsheet detailing when UORs had been delivered to theatre and an assessment on their effectiveness for ACM Bagnall on 15 May.<sup>227</sup> He explained that there had been “some inaccuracies in earlier reporting from theatre” but those had now been corrected.

<sup>225</sup> [Manuscript comment PS/Min\(DP\) on Minute PJHQ Civ Sec to PS/Minister\(DP\), 9 May 2003, ‘Iraq: Op TELIC UORs’.](#)

<sup>226</sup> Minute APS/Minister(DP) to CM(M) and PJHQ-Civ Sec, 12 May 2003, ‘Iraq: Op TELIC – UORs’.

<sup>227</sup> Minute CJO to PS/VCDS, 15 May 2003 ‘Operation TELIC – Equipment Performance’.

**466.** Lt Gen Reith provided specific briefing that:

- Combat availability of both Challenger 2 and AS90 tanks was “very high” and the desertisation and protection measures for Challenger 2 were fitted before war-fighting. The AS90 desertisation measure was not completed until 4 May “but was not required for war-fighting, although it would have been if hostilities had continued as had been expected”.
- The supply of Combat ID was “over-taut” but 1 (UK) Div reported that “there was just enough for equipment in the direct fire zone”. The late arrival was due to distribution problems but, where it was supplied, it had been effective.
- There had been a shortfall of ComboPens that was addressed by the issue of “out-of-date pens” as a “last resort”. The shortfall was “traceable to enduring manufacturing difficulties, acknowledged in early 02”. Alternative provision was being considered but was proving problematic.
- The respirator testing kits had arrived in theatre between 24 February and 7 March “but were subject to a delay in distribution because of the large amounts of higher priority stores, such as CR2 [Challenger 2] and Combat ID UOR equipment”.

**467.** Lt Gen Reith wrote:

“I draw two valuable lessons from this work:

“(a) In future, we should try to be less reliant on UORs for operations; fitting these in the time available and in austere conditions further stretches an already over-loaded logistic organisation. Thus, there is a strong case for better resourcing and I hope this point now will be accepted where it perhaps has not been in the past.

“(b) ‘Just enough just in time’ is probably a flawed policy for military operations. SDR directed that the DLO should only hold that which could not be procured within readiness and preparation time. However, the stock levels held speak for themselves.”

**468.** Lt Gen Reith added that both points had been “exacerbated by the understandable reluctance of Ministers to go early to industry ... before formal committal to the operation”. He also wrote that the military’s commitment was, “as often happens, at a scale beyond that envisaged in the DPAs and thus not fully resourced”.

**469.** Lt Gen Reith reiterated those points on 16 May when he produced a “Top 10 Lessons Identified” document for the DOC.<sup>228</sup>

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<sup>228</sup> Minute CJO to DOC, 16 May 03, ‘Operation TELIC – “Top 10” Lessons Identified – Pre-Deployment and Deployment Phases’.

**470.** On deployment processes, Lt Gen Reith wrote that it “went well” but “we should caution against too much reliance on chartered air and shipping assets”. He stated:

“There were considerable challenges in tracking equipment, UORs, and stores particularly in theatre, because of inadequacies in the management of the deployed inventory systems, especially an ‘end to end’ tracking capability. This is an old chestnut which requires addressing urgently.”

**471.** Lt Gen Reith continued:

“Stockholdings were inadequate for this scale of operation. Understandably Ministers will be reluctant to commit to operations until very late in the day, which means we cannot approach industry early and we will also often be required to do more than envisaged in defence planning assumptions. Thus, the policy of ‘just enough just in time’ needs urgent review.”

**472.** Brigadier Shaun Cowlam, Commander of 102 Logistics Brigade, wrote in his post operational report in May 2003 that:

“Despite the success in getting the force into theatre in half the time taken for Op GRANBY, it was clear that poor personnel and equipment readiness across the force added significantly to both logistic and, subsequently, operational risk. Many personnel (particularly augmentees and Reservists) were poorly equipped and briefed for deployment, some arriving in theatre with no combat clothing, respirators, weapons or sleeping systems, and others not knowing which unit or location they were destined for ... The lesson is that units should be equipped on deployment to the necessary scales. The argument that in many cases, broken readiness and preparation times explain the shortcomings, ignores the reality that readiness is simply an assumption. Op TELIC has shown that our current assumptions do not reflect operational reality and we are taking unseen risks that we are not managing.”<sup>229</sup>

**473.** On 27 May, ACM Bagnall advised Lord Bach that he was “keen to establish the facts (rather than early anecdotal views) relating to UORs and equipment issues”.<sup>230</sup> He wrote:

“Work on the lessons is well underway and I have taken steps to ensure that specific issues relating to UORs and equipment matters are properly captured. For now it is clear that the tight timeline from the decision to activate the UOR process; the need to properly balance the logistic push from the UK versus the Commander’s pull requirement in theatre; asset tracking ... will all feature prominently ...”

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<sup>229</sup> Report Cowlam, 12 May 2003, ‘Operation TELIC – Joint Force Logistic Component (JFLOGC) Jan – May 2003 Post Operation Report’.

<sup>230</sup> Minute VCDS to PS/Minister(DP), 27 May 2003 ‘Iraq – Operation TELIC Equipment Performance/UORs’.

**474.** On 30 May, a list of all the equipment capability UORs approved for the pre-deployment and invasion phases was produced with an analysis of how they did or did not address equipment capability gaps.<sup>231</sup> It sought to determine where UOR activity was focused, “both in terms of the capability delivered and also in terms of the relationship between UORs and the Equipment Programme”.

**475.** The capability shortfalls addressed by UORs were:

- network-enabled capability 31%;
- force protection 19%;
- force projection 12%;
- counter-terrorism/Special Forces 7%;
- precision strike 3%; and
- other 27%.

**476.** A breakdown of the UORs in terms of the relationship with capabilities being delivered in the Equipment Programme (EP) showed:

**Table 1: The relationship between UORs for the start of Op TELIC and the Equipment Programme**

Category of UOR	Number	UOR cost	% by number	% by cost
UORs to meet TELIC-specific requirements	21	£28.6m	11.5%	6%
UORs to fill a gap not previously identified	22	£28.8m	12%	6%
UORs to bring forward capability already in the EP	22	£138.5m	12%	27%
UORs providing a “patch” solution to bridge a gap until the introduction of an EP-funded solution	55	£154.9m	30%	31%
UORs to fill a previously identified capability gap not funded in the EP	63	£149.3m	34.5%	30%

**477.** A footnote set out that not all UORs “fell neatly into one of the categories and a degree of judgement was therefore required”. The example provided was of desertisation measures for the Challenger 2 vehicles: “it was categorised as an EP bring-forward but could equally have been classed as a TELIC-specific requirement”.

<sup>231</sup> Minute DEP and DCRS to DNO, 30 May 2003, ‘Op TELIC UORs from DEP and DCRS’.

**478.** A report by the House of Commons Defence Committee produced a different categorisation of UORs:

Table 2: Categories of UORs for the start of Op TELIC

Category of UOR	% by value <sup>232</sup>
UORs that hastened existing programme	33
UORs that introduced new capabilities not previously programmed	20
UORs that topped up holdings of items already on MOD's inventory	30
UORs modifying existing equipment/infrastructure	17

**479.** The MOD's assessment of UOR availability for the start of operations was:

Table 3: Availability of UORs before the invasion<sup>233</sup>

Environment	% of UORs delivered on time <sup>234</sup>	% of UORs requested by this component fitted in time <sup>235</sup>	% of UORs considered effective/highly effective
Maritime	80%	70%	100%
Land	84%	79%	85%
Air	74%	57%	95%
Joint	45%	45%	76%
Joint Communications Infrastructure (J6)	75%	75%	86%
Overall	71%	65%	88%

## Desert uniforms

**480.** Stocks for desert clothing were insufficient to support a large scale deployment in the time available.

**481.** In response to concerns raised with Adm Boyce during his visit to theatre, the DLO provided advice on desert combat clothing on 14 April.<sup>236</sup> It stated there was “an acknowledged maximum shortfall in theatre of 18,300 suits and 12,500 boots amongst the Land component, as of 13 Apr 03”.

**482.** The DLO advised that the shortfall would reduce to 3,275 suits for 1 (UK) Div units within the next 72 hours as clothing and boots were pushed forward within theatre and further deliveries were received. The remaining items for the Division would be delivered by 22 April, and the Joint Force Logistic Component units by 28 April.

<sup>232</sup> Third Report of the House of Commons Defence Committee, Session 2003-04, *Lessons of Iraq*, HC 57-1, para 170.

<sup>233</sup> Minute VCDS to PS/Minister(DP), 27 May 2003, 'Iraq – Operation TELIC Equipment Performance/UORs'.

<sup>234</sup> Delivered into theatre by 15 March.

<sup>235</sup> On time is defined as the dates units crossed the start line for operations (19/20 March).

<sup>236</sup> Minute D Ops DLO to PSO/CDS, 14 April 2003, 'Op TELIC – Desert Combat Clothing'.

**483.** Clothing issued to 3 Commando and 16 Air Assault Brigades was deteriorating, so they would require an additional 10,000 replacement suits. Those would be dispatched to theatre at the beginning of May. Other formations would also require maintenance stocks.

**484.** Adm Boyce was advised that 12 months was “a realistic minimum lead time to allow for normal contracting processes” for desert clothing. Advice had been provided in September 2002 that the decision point for ordering clothing was 1 October with the “risk of shortages increasing thereafter”. That risk had been “deemed to be acceptable” and permission was not given to approach industry until 4 December.

**485.** In Mr Flaherty’s note to Lord Bach on 9 May addressing equipment performance, he summarised the position on desert clothing and boots as:

“The shortage of desert clothing was caused primarily by the fact that the stocks held were insufficient for the speed and size of this deployment. The inability to equip even all fighting formations prior to the start of combat operations was caused by in theatre supply priorities. The weakness of the asset tracking system meant there was limited visibility outside theatre of these problems. During decisive combat operation the shortage of desert combats was not flagged up since it was not seen to have a serious operational impact. Sufficient desert combats have now been dispatched to theatre to meet previously declared shortfalls.”<sup>237</sup>

**486.** Mr Flaherty added that after combat operations ended, the shortage of clothing was having “a negative impact on morale” and had therefore been flagged as a concern. He wrote that “excess stocks” were “now held centrally in theatre” and units could call on these stocks “as required to top up holdings”.

**487.** Following the invasion, Brig Cowlam wrote:

“... the saga of desert combat clothing where the UOR failed to meet the requirement indicates that risks that had been taken could not be recovered.”<sup>238</sup>

**488.** On 31 August 2010, an analysis of the land operation in Iraq was published on behalf of the Chief of the General Staff by Brigadier Ben Barry. It was known as “the Barry Report”.<sup>239</sup>

**489.** The report stated: “Desert boots, desert uniforms and body armour were all in short supply.”

**490.** The NAO’s report on 11 December 2003 stated that the procurement of desert clothing and boots was regarded as “of limited effectiveness because few troops

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<sup>237</sup> [Minute PJHQ Civ Sec to PS/Minister\(DP\), 9 May 2003, ‘Iraq: Op TELIC UORs’.](#)

<sup>238</sup> Report Cowlam, 12 May 2003, ‘Operation TELIC – Joint Force Logistic Component (JFLOGC) Jan – May 2003 Post Operation Report’.

<sup>239</sup> Report Land Command, 31 August 2010, ‘Operations in Iraq: An Analysis From a Land Perspective’.

received their full complement, and mismatches in sizing remained into the post-conflict phase of the Operation”.<sup>240</sup>

**491.** The House of Commons Defence Committee report on Op TELIC found that:

“The issue of the availability of desert clothing and boots during Operation TELIC has been both a confusing and worrying story ... MOD clearly underestimated the impact on morale of failing to provide service personnel with the clothing and boots which they required and expected. We find it unacceptable that some two weeks after the start of the combat phase 60 percent of the additional clothing requirement that had been ordered was not available in theatre.”<sup>241</sup>

**492.** In July 2003, the MOD published a *First Reflections* report on operations in Iraq.<sup>242</sup> It stated that the quantities of boots, clothing “and other personal equipment” routinely held was an area that it needed “to look at”. While there was, “under SDR planning assumptions ... sufficient personal equipment” to equip a total of 9,000 personnel for desert operations, the MOD wrote:

“In the case of this operation, the numbers deployed were significantly higher, and whilst most materials were sent out in time, difficulties with in-theatre tracking meant that there were some problems with distribution.”

**493.** The Inquiry asked the MOD for a statement on planned stockholdings of desert clothing and the actual stockholdings between July and September 2002. The MOD confirmed the planned stockholdings of desert clothing was 9,000 sets.<sup>243</sup> “Some stock” was being consumed by operations in Afghanistan over that period “but levels were being maintained by resupply from industry”.

**494.** The MOD stated that between this period it was asked to examine the possibility of equipping a force of 30,000 personnel at three sets of clothing per person:

“Identification of lead times showed that contracts would need to be placed in November-December 2002 in order to receive delivery in time. Authority was given ... and agreement was reached with suppliers to provide 96,000 sets of clothing (3 sets per person) and 40,000 pairs of desert boots. This was to be delivered in tranches between January and April 2003. Deliveries started in January 2003 and were complete by the end of February 2003 (earlier than planned), with all deliveries to units designated to receive Desert Clothing complete by March 2003.”

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<sup>240</sup> National Audit Office, *Operation TELIC – United Kingdom Military Operations in Iraq*, 11 December 2003, HC 60.

<sup>241</sup> Third Report from the Defence Committee, Session 2003-04, *Lessons of Iraq*, HC57-I, para 257.

<sup>242</sup> Ministry of Defence, *Operations in Iraq: First Reflections*, July 2003.

<sup>243</sup> Paper [MOD], 21 December 2010, ‘Equipment and Capability Issues (pre-invasion)’.

**495.** In his evidence to the Inquiry Mr Hoon stated:

“Desert combats were part of the UORs and I know some of the soldiers resented having to wear their green combats rather than their desert combats.”<sup>244</sup>

**496.** Mr Hoon later added: “Some soldiers, I’m sure, did not have the right boots.”<sup>245</sup>

**497.** ACM Stirrup told the Inquiry that extra time “would certainly have made a difference” to the provision of desert clothing and boots.<sup>246</sup> Although pressure on the manufacturers had delivered “just about sufficient sets”, that was not enough in an operational environment where “a critical issue” was to get it to the right place on time.

**498.** Major General Graham Binns, Commander of 7 Armoured Brigade during the invasion, told the Inquiry:

“There were soldiers who didn’t have desert combats, you know, we were asking them to go to war incorrectly dressed.”<sup>247</sup>

**499.** Mr Ingram told the Inquiry that part of the reason behind Ministerial visits to Iraq during the operations was to investigate what he called the “urban myths” that were being reported in the media about equipment shortages.<sup>248</sup> He gave an example:

“ ... I had one of my own constituents, a mother, on behalf of her son, complaining about the fact that her boy didn’t have size 11 boots, and this went on for weeks and weeks, until the point I said, ‘Well, is he running around barefoot?’ to her. Of course he wasn’t. He had bought his own boots, but she was annoyed that he – she was saying that he had not been issued with the size 11, and he had been.”

## Enhanced Combat Body Armour

**500.** Enough body armour was procured to equip only British fighting formations; that was insufficient to equip all British troops deployed.

**501.** Poor asset tracking meant that even fighting formations were not fully equipped, resulting in an urgent redistribution programme to the front line.

**502.** On 24 March 2003, Sergeant Steven Roberts was killed in Iraq as a result of a gunshot wound.<sup>249</sup> Sgt Roberts had been asked to relinquish his armour because of the shortfall in theatre.

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<sup>244</sup> Public hearing, 19 January 2010, page 129.

<sup>245</sup> Public hearing, 19 January 2010, page 149.

<sup>246</sup> Public hearing, 1 February 2010, page 13.

<sup>247</sup> Private hearing, 2 June 2010, page 4.

<sup>248</sup> Public hearing, 16 July 2010, pages 26-27.

<sup>249</sup> GOV.UK, 24 March 2003, *Sergeant Steven Roberts*.

**503.** On 2 April, Lt Gen Fry advised Adm Boyce on the availability of ECBA:

“Despite the allocation of an increased baggage allowance, some units that had already been issued ECBA in the UK decided to load the plates in unit freight for surface shipping. Due to poor marking some of these containers were slow in being delivered to units, resulting [in] personnel crossing the LD [line of departure] without plates.”<sup>250</sup>

**504.** Lt Gen Fry wrote that that was “mitigated by an urgent redistribution programme that ensured that forward troops were equipped at the expense of those in the rear”. Following that programme, and subsequent deliveries, the NCHQ estimated that 60 percent of 1(UK) Div had been fitted with ECBA.

**505.** Following his requests, Mr Flaherty provided Lord Bach with further advice on the supply and distribution of ECBA on 16 May.<sup>251</sup> He wrote that “the majority of troops in the fighting formations had full combat body armour at the start of combat operations” but there were “some shortages of ceramic plates which meant that some elements of 7 Armoured Brigade and up to 50% of the Joint Force Logistics did not have ceramic plates at the outset of hostilities”.

**506.** Mr Flaherty wrote that shortages were “exacerbated” by the fact that only ECBA sufficient to “equip the wartime establishment of units” had been procured. He estimated that “approximately 3,500 personnel, the majority of which were not in fighting formations, were affected by the shortage. About 500 sets of ECBA were withdrawn from rear units and redistributed to the front line”.

**507.** The DOC’s 17 October 2003 report stated that, before the invasion, the DLO “were not mandated to hold stocks of ECBA sufficient to meet the requirements of this operation”.<sup>252</sup> It stated that 36,000 sets of ECBA were deployed to theatre which were “sufficient” to meet the total requirement but “late delivery, coupled with difficulties in consignment tracking and poor unit level control, led to localised shortfalls”.

**508.** The Inquiry asked the MOD for a statement on planned stockholdings for ECBA and the actual levels of stockholdings between July and September 2002. The MOD advised that, on 1 July 2002, it had 25,754 plates in stock and by 30 September this figure was 30,482.<sup>253</sup>

**509.** The MOD’s *Lessons for the Future* report in December 2003 stated:

“The decision (a change in policy) to equip all Service personnel whose role it required with Enhanced Combat Body Armour ... posed a challenge because there were insufficient stocks to meet the needs of a large scale force. Through additional

<sup>250</sup> Minute DCJO(Ops) to PSO/CDS, 2 April 2003, ‘Combat ID and ECBA’.

<sup>251</sup> Minute PJHQ Civ Sec to PS/Minister(DP), 16 May 2003, ‘Iraq: Op TELIC UORs’.

<sup>252</sup> Report DOC, 17 October 2003, ‘Operation TELIC Lessons Study’.

<sup>253</sup> Paper [MOD], 21 December 2010, ‘Equipment and Capability Issues (pre-invasion)’.

purchases, over 38,000 complete sets of body armour were deployed to theatre. This should have met the total requirement, but late delivery against an advancing timescale, coupled with difficulties in equipment tracking and control of issue, led to localised shortfalls.”<sup>254</sup>

**510.** The NAO’s December 2003 report on Op TELIC stated:

“ ... 21,759 [desert pattern] covers and 32,581 pairs of plates were issued into the supply chain by 24 March 2003. However, the Department’s Defence Clothing Integrated Project Team estimated that approximately 200,000 sets had been issued since the Kosovo campaign in 1999, greatly exceeding the theoretical requirement, but these seem to have disappeared. The Team questioned whether items should, therefore, be issued as part of an individual’s personal entitlement for which they would be held accountable.”<sup>255</sup>

**511.** The NAO also reported that “insufficient numbers [of body armour] were distributed in theatre, largely as a result of difficulties with asset tracking and distribution.”

**512.** The House of Commons Defence Committee concluded that:

“Body armour is another example of where MOD’s in-theatre distribution and tracking led to shortages in critical equipment ... MOD should identify and implement solutions to address these shortcomings and ensure that service personnel receive the equipment they are entitled to.”<sup>256</sup>

**513.** On 7 September, Mr Martin Howard, MOD Director General Operational Policy, wrote to Mr Ingram, asking him to note that, following scrutiny in recent House of Commons Defence Committee, Public Accounts Committee and NAO reports, a new policy had been endorsed by the Chiefs of Staff in June whereby “all entitled personnel” would deploy on operations with a full set of ECBA.<sup>257</sup> This policy had already been implemented and was being monitored.

**514.** The Board of Inquiry into Sgt Roberts’ death concluded that he would not have been fatally injured if he had been wearing ECBA at the time.<sup>258</sup>

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<sup>254</sup> Ministry of Defence, *Operations in Iraq: Lessons for the Future*, December 2003.

<sup>255</sup> National Audit Office, *Operation TELIC – United Kingdom Military Operations in Iraq*, 11 December 2003, HC 60.

<sup>256</sup> Third Report from the Defence Committee, Session 2003-04, *Lessons of Iraq*, HC 57-I, para 262.

<sup>257</sup> Minute DG Op Pol to PS/Minister(AF), 7 September 2004, ‘Enhanced Combat Body Armour (ECBA) – An Update’.

<sup>258</sup> *BBC News*, 31 July 2006, *Iraq death due to kit shortage* attaching link to Report, [undated], ‘Board of Inquiry into death of Sgt Steven Roberts’.

**515.** On 18 December 2006, Mr Andrew Walker, Oxfordshire Assistant Deputy Coroner, delivered a narrative verdict:

“Sgt Roberts’ death was as a result of delay and serious failures in the acquisition and support chain that resulted in a significant shortage within his fighting unit of enhanced combat body armour, none being available for him to wear.”<sup>259</sup>

**516.** Lieutenant General Robin Brims told the Inquiry:

“I was fully aware that there was a problem with the body armour and I ordered a redistribution of body armour to those people most in need, and similarly some other forms of equipment.”<sup>260</sup>

**517.** ACM Stirrup told the Inquiry:

“... just before the start of operation, the clear message that we were receiving in the Ministry of Defence was that all unit demands for enhanced combat body armour had been met, but quite clearly not everybody who needed it in theatre got it when they needed it, and had it been – had that been two months earlier, then those sorts of issues I think could have been untangled.”<sup>261</sup>

**518.** ACM Stirrup added:

“I think the area where we could have done better is in terms of enhanced combat body armour. We didn’t have enough of that in theatre at the time, and I think, in part ... the issue was it was all being done so rapidly at the last minute no one was quite sure who had what.”

**519.** The process behind the prioritisation of the redistribution of body armour was described by Maj Gen Binns:

“We had insufficient body armour to equip all those who were likely to be coming into immediate contact with the fighting companies and squadrons and I took a decision to reallocate based on mitigating the risks to those who were most vulnerable to the dismounted troops and those who sat behind 70 tonnes of armour I was prepared to take a risk with ...”<sup>262</sup>

**520.** ACM Bagnall told the Inquiry:

“I was not aware that, in some cases, all personnel did not have access to Enhanced Body Armour at the start of operations. That said, I heard anecdotal evidence of personnel being deployed on one ship whilst their body armour plates were on another vessel which went to a different port of disembarkation. Any shortfalls

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<sup>259</sup> *BBC News*, 18 December 2006, *Kit delays led to soldier’s death*.

<sup>260</sup> Public hearing, 15 January 2010, page 21.

<sup>261</sup> Public hearing, 1 February 2010, pages 12-13.

<sup>262</sup> Private hearing, 2 June 2010, page 7.

identified would have gone from theatre to CJO and, if required, onwards to DCDS(C) or DCDS(EC) and their staffs. I do not recall any shortfalls being identified to me at the start of the campaign although issues emerged later as the operation progressed.”<sup>263</sup>

**521.** Lord Boyce told the Inquiry that he had not been told about the commanders’ decisions to redistribute body armour:

“My understanding was everybody had body armour. Whether there was a sufficient number of enhanced body armour kits was something which didn’t percolate out – and the need to redistribute such that appeared in theatre wasn’t something which percolated up to the Chiefs of Staff.”<sup>264</sup>

## Biological and chemical warfare protection

**522. Risks were taken with the levels of protection against the use of chemical or biological weapons.**

**523.** In its *Lessons for the Future* report in December 2003, the MOD stated there had been “localised shortages” of NBC equipment, such as suits, “again caused by sizing difficulties or equipment distribution and tracking problems”.<sup>265</sup> The MOD added:

“Other shortfalls were due to poor stock maintenance – for example the inspection regime for Residual Vapour Detectors had not been followed, leading to uncertainty over serviceability. Nevertheless, through a combination of purchasing spare parts and rigorous re-testing of the equipment, the operational requirement was met.”

**524.** Rear Admiral Michael Wood, MOD DLO Director General Operations, visited Iraq between 10 and 16 May to ascertain the logistic support issues that had emerged in theatre.<sup>266</sup> In his report to ACM Pledger on 20 May, he highlighted the shortage of NBC equipment:

“The one significant area of weakness and concern emphasised by all the senior Land Component commanders I met was NBC equipment and preparedness. Whilst ... the threat did not manifest itself, the lack of crucial items of detection and protection equipment and consumables undermined the confidence of those preparing to go to war.”

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<sup>263</sup> Statement, 6 January 2011, page 5.

<sup>264</sup> Public hearing, 27 January 2011, page 44.

<sup>265</sup> Ministry of Defence, *Operations in Iraq: Lessons for the Future*, December 2003.

<sup>266</sup> Minute CDL to VCDS, 27 May 2003, ‘Visit by DG Ops (DLO) to Op TELIC: 10-16 May 2003’ attaching Minute Wood to Pledger, 20 May 2003, ‘Op TELIC Trip Report – 10-16 May 2003’.

**525.** On 6 June, Mr Flaherty provided advice on the supply and delivery of NBC equipment to Lord Bach.<sup>267</sup> He stated:

“Although the UOR system did produce some NBC equipment, the issues in this case relate more to the proper maintenance of existing stocks and the ability of our systems to cope with the delivery of very large surge requirements to personnel who are unfamiliar with the equipment in question, and may not easily be able to track its onward movement.

“Although commanders will – rightly – place their priority on the out-load and delivery of battle-winning capability, and although the perceived NBC threat diminished with the collapse of the regime, there were occasions when our personnel perceived they were at high risk, due to the lack of NBC equipment.”

**526.** On NBC suits, Mr Flaherty wrote that:

“There were initially insufficient NBC suits in theatre to supply all personnel with three each at the outset of hostilities. In order to ensure all personnel had two suits each ... suits were re-distributed ... An additional 96,000 suits arrived from the UK on 19 March meaning there were sufficient suits in theatre to supply all personnel with four each. However due to a mismatch between the sizes of the suits and individuals a small number of troops crossed the Line of Departure with only one properly fitting suit ...

“Commanders assessed that the risk posed to the Force by these shortages was low ... The effect on morale was judged to be more serious than the practical impact.”

**527.** Mr Flaherty wrote that in order to alleviate shortages in NBC detectors, equipment held by 3 Commando Brigade and 16 Air Assault Brigade was redistributed, leaving them with “less than 50% of the required capability”. All available NBC detection equipment, ancillaries and consumables were then flown out, “giving theatre a 50% capability by 13 March”.

**528.** Mr Flaherty stated: “The shortage of NBC detection was assessed to pose a high risk to UK troops.” This was “not fundamentally a ‘UOR’ issue but one of maintenance and supply of in-service equipment” exacerbated by the delayed in-service introduction of a new form of equipment.

**529.** There had also been a shortage of batteries for the NBC detection sets and for their remote alarms, “aggravated by the fact that some NAIAD arrived from stores without batteries or batteries for the remote”. Commanders had assessed that this shortage “posed a high risk to UK Forces”; 1 (UK) Div had been ordered to turn off NBC detectors while in dispersal areas to preserve the batteries and to “only turn them back on if there were signs of an attack”.

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<sup>267</sup> Minute PJHQ J9 to PS/Minister(DP), 6 June 2003, ‘Iraq: Op TELIC UORs’.

**530.** Lord Bach's Private Office wrote alongside this point: "This is very serious. It will be impossible to defend this adequately."<sup>268</sup>

**531.** On the front page of Mr Flaherty's advice, Lord Bach's Private Office wrote:

"This was not flagged up through the chain of command, despite (numerous) assurances that it would be, and it runs counter to the public lines Ministers were given. These were effectively – although there are some shortfalls (because NAIAD is no longer manufactured) – we have confidence in our NBC defence against any threat posed by Saddam. In fact, the point contradicts this and has, rather fittingly in my view, been described as 'playing Russian roulette with people's lives.'"

**532.** On 3 July, Lord Bach's Private Office replied to Mr Flaherty expressing alarm that there were occasions when personnel were assessed to be at high risk due to a lack of NBC equipment:

"[Lord Bach] recalls the assessments provided before the campaign that our NBC defence was 'fragile' but that nevertheless there was complete confidence in the NBC posture of UK forces – as reflected in Lord Bach's weekly UOR meetings and the Department's public line. In particular, whilst Lord Bach fully appreciates the right of Commanders to make decisions on the ground, he is concerned that Ministers were not made aware of this fact until it came to light through media questions."<sup>269</sup>

**533.** On 3 October, an MOD report to ACM Bagnall explained that, while the 'Defence Strategic Audit and Guidance for the 2004 Equipment Programme' had suggested that NBC capabilities constituted "vital ground" to be protected in the programme, its "high impact/low probability nature" had remained "an inhibiting factor regarding resource allocation".<sup>270</sup> However, a "quick estimate on what might have happened", on operations such as in Iraq, had been carried out and the issues raised had been addressed in its report.

**534.** The report stated:

"A recurrent theme emerging from our work is the need for culture change and an improved understanding of CBRN defence from Front Line to grand strategic; attitudes remain that CBRN is unlikely, too difficult, a Cold War issue, or only a problem for specialists."

**535.** The team recommended a number of "quick wins", including policy updates, more training, and preserving CBRN capabilities and research. In the longer term, the report advocated ensuring that CBRN stock holdings met Defence Planning Assumptions,

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<sup>268</sup> Manuscript comment MOD [junior official] on Minute PJHQ J9 to PS/Minister(DP), 6 June 2003, 'Iraq: Op TELIC UORs'.

<sup>269</sup> Minute APS/Minister(DP) to PJHQ J9, 3 July 2003, 'Op TELIC UORs: NBC Equipment'.

<sup>270</sup> Minute ACNS to MA/VCDS, 3 October 2003, 'CBRN – Tiger Team Final Report'.

addressing CBRN defence capabilities for large scale deployments and ensuring wider force structure work took account of CBRN issues.

**536.** General Sir Michael Walker became Chief of the Defence Staff in May 2003. On 22 March 2004, his Private Office replied to questions from Mr Ingram about the availability of NBC filters for armoured vehicles prior to the invasion.<sup>271</sup> The advice confirmed that the distribution of NBC filter stocks was authorised on 27 January 2003, but that the filters were not dispatched until 13 March and arrived in theatre on 17 March. The operation commenced two days later and, as 1 (UK) Div was conducting its final battle preparation, the plans to move the stocks forward to units were not feasible: “NBC filters were a casualty of compressed planning and deployment timelines.”

**537.** Mr Ingram’s Private Office replied on 26 March that Mr Ingram’s view was:

“... given the prominence of the NBC threat in the run up to Op TELIC and the understandable public attention and criticism [sic] the shortage of AFV NBC filters subsequently, his view is that a worrying picture is beginning to emerge. His perception that the shortages cannot be attributed solely to poor asset tracking appears to be well founded.”<sup>272</sup>

**538. A number of post-operation tour reports and lessons learned exercises found fault with the provision of NBC equipment.**

**539.** The DOC Operation TELIC report on 17 October 2003 stated:

“Despite the lessons from Op GRANBY (the first Gulf War), much last minute work was required to achieve acceptable levels of preparedness for operations in a possible CBRN environment.”<sup>273</sup>

**540.** In the 7 Armoured Brigade post-operation tour report, Brig Binns highlighted that NBC filters for the Challenger 2 tanks “simply never arrived”.<sup>274</sup>

**541.** In an Army interview about lessons learned in Iraq on 8 January 2004, Maj Gen Brims said:

“...having to redistribute body armour and NBC kit amongst the troops... left a pretty sour taste.”<sup>275</sup>

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<sup>271</sup> Minute MA/CDS to MA/Min(AF), 22 March 2004, ‘NBC Filters for Armoured Fighting Vehicles (AFVs) on Operation TELIC’.

<sup>272</sup> Minute MA/Min(AF) to MA/CDS, 26 March 2004, ‘NBC filters for Armoured Fighting Vehicle (AFVs) on Operation TELIC’.

<sup>273</sup> Report DOC, 17 October 2003, ‘Operation TELIC: Lessons Study’.

<sup>274</sup> Report, 6 June 2003, ‘7th Armoured Brigade Post Operation Report & Lessons Report Operation TELIC’.

<sup>275</sup> Report [unattributed], 8 January 2004, ‘Interview Profoma’.

**542.** The Barry Report concluded that:

“No NBC filters for Challenger MBTs were received, leaving tanks with only six hours of NBC protection ... Insufficient NBC warning and monitoring equipment was available.”<sup>276</sup>

**543.** In his post-operation tour report, Brigadier James Dutton, Commander 3 Commando Brigade, wrote:

“If the brigade had been subjected to a CBW attack we would at best have been ‘fighting to survive’ rather than ‘surviving to fight’ ... Inadequate stocks of the NBC consumables caused concern and uncertainty.”<sup>277</sup>

**544.** In his post-operation tour report, Brig Cowlam wrote that the lack of NBC kit was “a major concern” and “unacceptable”.<sup>278</sup>

**545.** The NAO’s December 2003 Op TELIC report stated:

“Although overall protection against chemical agents was good, there was a ‘significant shortfall’ (some 40 percent) of Nerve Agent Immobilised Alarm and Detector units ... and a severe shortfall in Residual Vapour Detector kit availability ... While these shortfalls could be partially mitigated ... it made detection and therefore response to an attack inefficient.

“There were difficulties in providing Nuclear, Biological and Chemical protective suits for certain sizes in sufficient numbers. In addition ... some respirators did not fit as well as had been presumed ...

“A number of units reported shortages of necessary consumable items required for the effective operation of chemical agent detector systems ... The lack of these items prevented units from turning on these systems in order to preserve some reserve capability, amounting in some cases to between six and 24 hours worth of operation.

“ ... On Operation TELIC, the war reserve of filters was issued from central holdings and dispatched to theatre. However, we found that these vehicle filters (for both Challenger 2 and other armoured vehicles) had not been delivered to the frontline units by the time of our field visit in late June 2003 ... ”<sup>279</sup>

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<sup>276</sup> Report Land Command, 31 August 2010, ‘Operations in Iraq: An Analysis From a Land Perspective’.

<sup>277</sup> Report, 8 May 2003, ‘Operation TELIC – 3 CDO Bde RM Post Operation Report’.

<sup>278</sup> Report Cowlam, 12 May 2003, ‘Operation TELIC – Joint Force Logistic Component (JFLOGC) Jan – May 2003 Post Operation Report’.

<sup>279</sup> National Audit Office, *Operation TELIC – United Kingdom Military Operations in Iraq*, 11 December 2003, HC 60.

**546.** The House of Commons Defence Committee concluded:

“Given the potential threat posed by Iraqi armed forces, sufficient chemical warfare detection and protection were particularly important for this operation. However, there were serious shortcomings in the supply and distribution system and the required levels of detection and protection were not always available to everyone. Indeed, while MOD ideally would have liked each serviceman and woman to have had four suits available, only one suit per person was available, which MOD judged to be sufficient for this operation. Furthermore it is essential that personnel have confidence in the effectiveness of the equipment with which they are provided. It was fortuitous that service personnel did not suffer as a consequence, but had the Iraqis used chemical weapons systematically, as employed in the Iran-Iraq war, the operational consequences would have been severe. The lack of armoured vehicle filters seems to us to be a matter of the utmost seriousness. The lessons identified need to be implemented as a matter of urgency to ensure that servicemen and women serving on operations have complete and justified confidence that chemical warfare attacks will be detected in time, that their individual protection equipment will save their lives and that operational success will not be imperilled. This is particularly important given that UK service personnel are more likely to be operating in such environments in the future.”<sup>280</sup>

**547.** Mr Hoon told the Inquiry: “I have to say I have not come across anything specific to suggest that NBC protection was not available to every soldier who needed it.”<sup>281</sup>

**548.** When questioned about concerns that out-of-date kit had been issued, Mr Hoon replied:

“... I don’t recall any suggestion that any of this kit was ineffective ... I don’t know whether there was a sell-by date on the kit. There may well have been but as far as I am aware, whenever this was tested, this equipment was fit for its purpose.”

**549.** Lord Bach told the Inquiry in his witness statement that he was not aware of the level of respirator testing that was reported to the Chiefs of Staff on 19 March 2003:

“... we did not receive information that the Chiefs of Staff Committee apparently received on the eve of the invasion.”<sup>282</sup>

**550.** When asked about the report provided to the Chiefs of Staff on 19 March 2003, which said that only 3 percent of the land component’s respirators had been checked, ACM Bagnall told the Inquiry:

“I do not recognise the figure of 3 percent in relation to respirator fitting. I understood that all ground force personnel had been tested through what was described as the

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<sup>280</sup> Third Report from the Defence Committee, Session 2003-04, *Lessons of Iraq*, HC 57-I, para 281.

<sup>281</sup> Public hearing, 19 January 2010, page 157.

<sup>282</sup> Statement, 22 December 2010, page 3.

most advanced testing facility in the world. Only 0.5 percent of all the personnel tested did not have a perfect fit ...”<sup>283</sup>

**551.** Asked about respirator testing, Lord Boyce told the Inquiry that he believed only 0.5 percent of personnel had not been tested.<sup>284</sup>

**552.** Lord Boyce told the Inquiry:

“The one area of equipment which did give me concern was our ability to cope with any biological or chemical threat and therefore the right kit for that, which is basically the suit you wear, the protection equipment you wear, and also a gas mask. That’s something which did trouble me. That was our sort of worst case scenario – once we went over the line, of having chemical or biological weapons thrown at us; and a lot of effort was put into making sure those who would be going in the leading echelons did have the right IPE [Individual Protective Equipment], the right sort of protective equipment, and everybody had their gas mask checked which at the time I went out was a shortfall.”

**553.** Lord Boyce added that, by 19-20 March, he thought “we had a satisfactory level of kitting out of gas masks and IPE”.<sup>285</sup>

**554.** The Inquiry asked the MOD for further information regarding the level of stock holdings and provision of NBC clothing and equipment before the invasion and the lead times for providing additional provisions. The MOD responded:

“Sufficient stock of NBC suits and respirators were sent to theatre before the start of combat operations to provide two per person. Further deliveries to theatre increased this to four per person from 19 March 2003.”<sup>286</sup>

## **Ammunition**

**555. Supplies of ammunition were insufficient for the size and speed of the British deployment.**

**556. The problem was exacerbated by poor asset tracking.**

**557.** In analysing the options for a possible UK contribution, Mr Hoon had been advised on 25 July 2002 that an armoured division could be deployed within six months “but only with limited sustainment (eg 10 days ammunition)”.<sup>287</sup>

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<sup>283</sup> Statement, 6 January 2011, page 5.

<sup>284</sup> Public hearing, 27 January 2011, pages 42-43.

<sup>285</sup> Public hearing, 27 January 2011, page 46.

<sup>286</sup> Paper [MOD], 21 December 2010, ‘Equipment and Capability Issues (pre-invasion)’.

<sup>287</sup> Minute Bowen to PS/SofS [MOD], 25 July 2002, ‘Iraq – Potential UK Contribution’.

**558.** The Barry Report stated:

“Small arms ammunition was in such short supply that 1 DWR [Duke of Wellington’s Regiment] had only 10% of its requirement until after G-day, and some Royal Engineers started the operation with only 10 rounds per man.”<sup>288</sup>

**559.** In his post-operation report Brig Binns wrote: “Ammunition was a constant cause of concern throughout the deployment.”<sup>289</sup>

**560.** The NAO’s December 2003 Op TELIC report stated:

“Lack of consignment tracking led to inefficiencies ... There were difficulties in scheduling the delivery of some supplies due to mis-prioritisation of loading of stocks for transport. For example, the majority of the force’s flat racks (required for the movement of ammunition by specialist vehicles) were on the penultimate deployment ship, arriving in Kuwait in 17 March. This significantly limited the ability of logistic units to move ammunition to the frontline and exacerbated a perception among troops that there were ammunition shortages.”<sup>290</sup>

**561.** Brig Cowlam told the House of Commons Defence Select Committee that all units had been issued ammunition during the initial deployment to Iraq when stocks were very limited.<sup>291</sup>

**562.** The House of Commons Defence Committee concluded:

“Our examination suggests that there were problems with the supply of ammunition when the fighting echelon began operations. MOD accepts that in the very early stages there were some problems and not all service personnel had the right amount. We expect MOD to establish the scale of the problem, to investigate any specific cases identified, in particular the tragic incident involving the six Royal Military Policemen [See Section 9.2], and to implement the necessary action to avoid any re-occurrence in the future.”<sup>292</sup>

**563.** Gen Reith told the Inquiry there was “a scrabble at the end to find certain items, particularly the ceramic plates for the flak jackets, and some natures of ammunition.”<sup>293</sup>

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<sup>288</sup> Report Land Command, 31 August 2010, ‘Operations in Iraq: An Analysis From a Land Perspective’.

<sup>289</sup> Report, 6 June 2003, ‘7th Armoured Brigade Post Operation Report & Lessons Report Operation TELIC’.

<sup>290</sup> National Audit Office, *Operation TELIC – United Kingdom Military Operations in Iraq*, 11 December 2003, HC 60.

<sup>291</sup> Third Report from the Defence Committee, Session 2003–04, *Lessons of Iraq*, HC57-I, para 268.

<sup>292</sup> Third Report from the Defence Committee, Session 2003–04, *Lessons of Iraq*, HC 57-I, para 270.

<sup>293</sup> Private hearing, 15 January 2010, page 52.

**564.** Maj Gen Binns told the Inquiry that “there were some serious shortfalls” which were eventually “helped by a redistribution of ammunition across the division”.<sup>294</sup> He described a particular problem with ammunition for Warrior vehicles:

“We couldn’t find the operational ammunition for the Warrior. We knew that it had left Bicester and there was evidence that it had arrived in Kuwait, and there was a risk, a real risk, that ammunition was in such short supply that we may have fired it in training. And because the ammunition had just been taken to the range, they naturally assumed that that was the ammunition, and I thought we had fired it. So there was a risk over ammunition.”

**565.** With only four months’ preparation, equipment had, in a number of cases, arrived a month or two after the operation started.

## Combat ID

**566.** Despite the public assurances given prior to the invasion that previously identified problems had been resolved, Combat ID equipment was not fitted to all vehicles before the start of operations.

**567.** Nine blue-on-blue incidents, four of which resulted in the death<sup>295</sup> or injury of UK personnel, were reported during the combat phase of Op TELIC.<sup>296</sup>

**568.** At Lord Bach’s UOR meeting on 1 April 2003, it was reported that “the story overall on equipment was positive” but despite having the same equipment as the US, “we were going to ‘come in for a schlocking’ on Combat ID”.<sup>297</sup> The record of the meeting did not explain why.

**569.** A note from Maj Gen Fry to Adm Boyce on 2 April stated that only 1,861 sets of Combat ID had been provided for 1 (UK) Div vehicles, 30 percent of the total required.<sup>298</sup> By the date of the invasion, all vehicles had been fitted for the equipment, but “due to the mal-location of two containers two Squadrons were not fitted with the equipment”. The containers “were subsequently found and sent forward so that units could be fitted with Combat ID when an appropriate moment occurred”.

**570.** The minute from Mr Flaherty on 9 May detailed the extent of the problem:

“Three ISO containers of Combat ID were temporarily misplaced in theatre meaning 32 Challenger 2s were not fitted with combat identification prior to the start of combat operations. All tanks in the two lead battle groups, were, however, fitted with Combat ID. GOC 1 Division assessed that proceeding with the advance without

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<sup>294</sup> Private hearing, 2 June 2010, pages 4-5.

<sup>295</sup> Flight Lieutenant Kevin Barry Main, Flight Lieutenant David Rhys Williams, Corporal Stephen Allbutt, Trooper David Clarke and Lance Corporal of Horse Matty Hull were killed in these incidents.

<sup>296</sup> Report DOC, 17 October 2003, ‘Operation TELIC Lessons Study’.

<sup>297</sup> Minute APS/Minister(DP) to MA/DCDS(EC), 1 April 2003, ‘Iraq: Op TELIC – UORs’.

<sup>298</sup> Minute DCJO(Ops) to PSO/CDS, 2 April 2003, ‘Combat ID and ECBA’.

Combat ID was preferable to delaying the advance. In both the UK blue-on-blue CR2 [Challenger 2] incident and the incident involving a US A-10 firing on 2 CVR(T)s, all UK vehicles were fitted with the appropriate Combat ID.”<sup>299</sup>

**571.** The MOD’s *First Reflections* report in July 2003 stated:

“By the start of operations, MOD had deployed 1,861 vehicle-mounted and 5,000 dismounted Combat ID sets. This was sufficient to meet the full requirement, although the scale of equipment modifications required in theatre meant that some formations were still being fitted as the first units crossed the line of departure.”<sup>300</sup>

**572.** The 17 October 2003 DOC report stated that training packages, which were created to aid recognition of Coalition vehicles, arrived “too late and in too small a quantity to be made widely available” and that the packages were “inadequate for aircrew training”.<sup>301</sup>

**573.** The DOC found that there were not enough Thermal ID and Combat ID panels, which formed part of the UK’s Combat ID capability for all vehicles, and that they were not robust and proved to be inadequate aids for Coalition aircrew.

**574.** The House of Commons Defence Committee concluded that:

“We expect MOD to implement the lessons from Operation TELIC on Combat ID. MOD should push forward with the work with its allies to agree on a single system ... We note MOD’s view that the opportunities for fratricide in an increasingly complex battle space are likely to increase, but look to MOD to identify the required action and make the necessary investment to ensure that such incidents are reduced to a minimum.”<sup>302</sup>

## Asset tracking

**575.** The failures in asset tracking identified in the 1991 Gulf Conflict had not been rectified in 2003.

**576.** Until January 2003, the UK military plan was to enter Iraq through Turkey. The US, which was to manage the entry route, stipulated that UK forces should have an asset tracking system that was compatible with that in use by US forces.<sup>303</sup> As a result, the MOD approved a UOR for the purchase of a US asset tracking system, known as Total Asset Visibility (TAV). The new system was not in place until the end of February 2003; too late to be used in the early stages of the deployment.

<sup>299</sup> Minute PJHQ Civ Sec to PS/Minister(DP), 9 May 2003, ‘Iraq: Op TELIC UORs’.

<sup>300</sup> Report Ministry of Defence, *Operations in Iraq: First Reflections*, July 2003.

<sup>301</sup> Report DOC, 17 October 2003, ‘Operation TELIC Lessons Study’.

<sup>302</sup> Third Report from the Defence Committee, Session 2003-04, *Lessons of Iraq*, HC 57-I, para 233.

<sup>303</sup> National Audit Office, *Operation TELIC – United Kingdom Military Operations in Iraq*, 11 December 2003, HC 60.

**577.** On 31 January, Lt Gen Reith wrote to Adm Boyce that one of the areas that “may cause difficulty” as Op TELIC developed was asset tracking.<sup>304</sup> He wrote:

“All that can be achieved in the time available is being progressed. The integration of the current system (VITAL ... ) and UOR provision of TAV (Total Asset Visibility, a US System) offers considerable improvement, but is nonetheless a ‘quick fix’ which does not fully address the capability gap. Medium term work by DLO is in hand.”

**578.** In his post-operation report, Brig Binns stated:

“An inability to track items ... all contributed to a serious impact upon the morale of soldiers about to conduct operations.”<sup>305</sup>

**579.** When Maj Gen Fry was interviewed by the NAO on 7 August, the report of the interview sent to Mr Lee stated he had cited poor asset tracking as a “negative aspect” of Op TELIC.<sup>306</sup> It “compounded the lack of availability of certain scarce resources” and was quoted as saying “we had it but couldn’t find it!”

**580.** The MOD DOC report on 17 October 2003 stated:

“During Operation TELIC, the flow of logistic information up and down the supply chain and between all stakeholders was poor. For example it was difficult to track UORs through to the end user in order to match the equipment with relevant training packages ...”<sup>307</sup>

**581.** On asset tracking it stated:

“Large amounts of equipment, stores and supplies were reportedly ‘lost’ in theatre, including ammunition, ECBA & NBC Defence equipment ... It was not possible to track down high priority equipment that was arriving simultaneously with the sustainment flow. As a result UORs and other priority equipment could not be targeted for rapid processing. This inability to identify the exact location of equipment resulted in the degradation of operational capability.”

**582.** In its *Lessons for the Future* report in December 2003, the MOD stated:

“... the flow of logistics information between theatre and the UK was poor, particularly affecting the tracking of UORs into theatre. It was difficult to monitor the rates at which supplies were consumed, making it hard to determine when re-supply would be required. The lack of available information also reduced commanders’ confidence in the logistics system, causing units to over-prioritise their requests

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<sup>304</sup> Minute CJO to PSO/CDS, 31 January 2003 ‘OP JACANA Lessons for Op TELIC’.

<sup>305</sup> Report, 6 June 2003, ‘7th Armoured Brigade Post Operation Report & Lessons Report – Operation TELIC’.

<sup>306</sup> Minute DCJO to DG Op Pol, 7 August 2003, ‘Readout of NAO Interview with DCJO(Ops) – 7 Aug 03’.

<sup>307</sup> Report DOC, 17 October 2003, ‘Operation TELIC Lessons Study’.

and re-order equipment already en route. This added to the burden on the already over-stretched system.”<sup>308</sup>

**583.** The MOD stated that “these problems were caused by the continuing lack of a robust tri-Service inventory system, the ability to track equipment into and through theatre, and an information system capable of supporting this technology.”

**584.** The NAO recommended in December 2003 that:

“The Department should, as a matter of urgency, continue to work to develop appropriate logistics systems to track materiel to theatre and ensure its timely delivery to frontline units.”<sup>309</sup>

**585.** On 30 January 2004, Mr Hoon’s Private Secretary wrote to No.10 with a summary of lessons learned from Op TELIC, drawing “heavily” on the lines Mr Hoon intended to use before the House of Commons Defence Committee the following week.<sup>310</sup> He wrote:

“We have consistently acknowledged that some things did not go as well as we would have wished. In evidence to HCDC last May Mr Hoon acknowledged that there were bound to be some problems in a logistics operation of this size, and that some of our personnel may have experienced shortages of equipment. Our subsequent work and that of the NAO has shown that these shortages were more widespread and in some respects more serious than we believed to be the case at that time.

“In general this was not the result of a failure to obtain and deploy the equipment required. There is room for debate about the balance between routinely holding items in our inventory and relying on our ability to generate operation-specific equipment in short timescales. But a major problem, in our analysis, was that there were serious shortcomings in our ability to track consignments and assets through theatre, and to distribute them in a timely fashion to the front line.”

**586.** Mr Hoon’s Private Secretary wrote that the MOD had “identified numerous other areas for further work” and had, for example, increased its stockholdings of desert clothing and boots and NBC Individual Protective Equipment sets by an additional 32,000.

**587.** The House of Commons Defence Committee concluded that:

“We are in no doubt that one of the key lessons to emerge from Operation TELIC concerns operational logistic support and specifically, the requirement for a robust

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<sup>308</sup> Ministry of Defence, *Operations in Iraq: Lessons for the Future*, December 2003.

<sup>309</sup> National Audit Office, *Operation TELIC – United Kingdom Military Operations in Iraq*, 11 December 2003, HC 60.

<sup>310</sup> Minute PS/SofS [MOD] to No.10, 30 January 2004, ‘Op TELIC – Readiness, Equipment, Logistics & Lessons Learned’.

system to track stock and equipment both into and within theatre – a requirement which was identified in the 1991 Gulf War.”<sup>311</sup>

**588.** In May 2009, the NAO recognised that the MOD had “made a number of important changes” to its logistic support process since the end of combat operations in Iraq.<sup>312</sup>

**589.** The MOD’s existing systems only provided “a limited tracking capability: a consignment is only visible once it passes through a specific point in the logistics chain, but cannot be tracked at all points along the course of its journey”. The NAO stated that was “nonetheless” an improvement compared to the systems in place in 2003.

**590.** The NAO recommended that the MOD should:

“... further improve and integrate its logistics information systems, including consignment and asset tracking, so users on operations have visibility over the stock already available at different locations in theatre, can track the progress of deliveries throughout the supply pipeline and see stock availability back in the United Kingdom.”

**591.** Sir Kevin Tebbit told the Inquiry:

“... I think the biggest problem we had was with the tracking systems to actually ensure we knew exactly what was where, when; and that consignments that were sent actually arrived in time to be fielded properly. That system was not fully effective.”<sup>313</sup>

**592.** Gen Reith told the Inquiry:

“There wasn’t a shortage of equipment in the end. What there was, was an inability to track it. We knew it was in theatre, but some of it we couldn’t find.”<sup>314</sup>

**593.** ACM Stirrup told the Inquiry:

“... I think it was clear that lack of visibility on what was actually happening in theatre was hampering us, but, of course, even if you have that visibility, you have got to identify what are the real substantive problems, and the real substantive problems were very much to do with asset tracking with knowing where things were, so you could get them to the right place at the right time. In a number of instances, the necessary equipment was in theatre, it just wasn’t in the right place, and in some instances, people didn’t know where it was in theatre.”<sup>315</sup>

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<sup>311</sup> Third Report from the Defence Committee, Session 2003-04, *Lessons of Iraq*, HC57-I, para 291.

<sup>312</sup> National Audit Office, *Support to High Intensity Operations*, 14 May 2009, HC 508.

<sup>313</sup> Public hearing, 3 December 2009, page 73.

<sup>314</sup> Private hearing, 15 January 2010, page 52.

<sup>315</sup> Public hearing, 1 February 2010, page 14.

**594.** ACM Stirrup also described the impact of the difficulties with asset tracking on the delivery of UORs:

“I was clear in my own mind that the Urgent Operational Requirement process was only complete when the particular item of equipment was in the hands of those in theatre who needed it and they were satisfied with it. I actually tried to get some of my senior staff deployed into theatre to check those specific issues, but it was decided that we shouldn’t do that and that we should rely on the chain of command. That, I think, turned out to be the wrong decision and now we routinely have people deployed for those purposes.”

**595.** Maj Gen Binns told the Inquiry that, in 2003, he had “one of those moments with my commanding officers in early March when they were saying, ‘I don’t think we can be ready’”.<sup>316</sup> One of the examples he gave as to why they were saying that alluded to asset tracking:

“We lost a company of Warriors at one stage. We knew that it had been offloaded from the boats, but I didn’t know where it was. There were a quarter of a million men in the desert and we couldn’t find this company of Warriors – empty vehicles that had been taken off lowloaders.”

**596.** In his statement, ACM Bagnall told the Inquiry that:

“The information which I saw indicated that equipments had arrived in theatre. I did not see (or at least I do not recall seeing) what became known as ‘the final mile’ once a particular bit of kit had been unloaded in theatre and moved to where it was needed. Indeed, this is arguably not information which is required in MOD unless problems were identified which could not be resolved in theatre by CJO and his staffs or by the staffs in MOD.”<sup>317</sup>

**597.** When asked what steps he had taken to assure himself that the forces deployed had access to sufficient kit and equipment including whether he ever discussed the matter with Lt Gen Reith or Air Chief Marshal Sir Brian Burridge, Deputy Commander in Chief Strike Command and UK National Contingent Commander during the invasion of Iraq, or any other commander in the field, ACM Bagnall told the Inquiry:

“... it was CDS who would routinely contact CJO, the national component commanders, Tampa and others, and I was aware that he was doing so. I did not have any discussions with them other than on the occasions when I filled the role of Acting CDS.”

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<sup>316</sup> Private hearing, 2 June 2010, page 5.

<sup>317</sup> Statement, 6 January 2011, pages 4-5.

**598.** ACM Bagnall told the Inquiry:

“I was not aware of any concerns which were raised before the invasion about the quality and the accuracy of information available in MOD about equipment delivery to Iraq. I was subsequently told (I think by DCDS(EC)) about concerns relating to the availability of equipment delivered under the UOR process, and I recall that he asked for agreement to send some of his people into theatre to monitor progress. I also recall that I supported this request, but for reasons I cannot remember, the request was denied. What I was aware of were concerns relating to asset tracking. This was not a new issue, and it was a topic which we had been working on for some time.”<sup>318</sup>

**599.** In his evidence to the Inquiry, Lord Boyce stated that he could not recall whether Ministers had ever been advised of the known weaknesses in asset tracking or the risks this entailed.<sup>319</sup>

**600.** Lord Boyce stated:

“It was absolutely correct that a lot of our stores problems in theatre come 2003 were as a result of poor asset tracking – and I wonder what the situation is today if we were to go and ask.”

**601. Problems with logistic support were identified soon after the campaign.**

**602.** RAdm Wood’s findings in his report to ACM Pledger on 20 May included:

“A combination of OP SEC and late definition of force elements and operational plans all exposed Defence’s growing dependence on industry as a materiel provider as well as the fragility of some key planning assumptions. This was exacerbated by some less than adequate personnel and equipment readiness. In the event, this inevitably manifested itself as significant logistic risk which imposed operational risk.”<sup>320</sup>

**603.** RAdm Wood also specified that he considered:

- “Inadequate asset tracking and visibility hindered material preparation for war.”
- An “urgent review” of the provisioning policy, processes and requirements for land units was required because the supply chain was “under extreme strain and, at times, unable to cope” trying to meet equipment requirements.

**604.** In his post-operation report on 6 October 2003, Major General Peter Wall, GOC 1 (UK) Div May 2003 to January 2005, wrote that one of the “key areas” to note

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<sup>318</sup> Statement, 6 January 2011, page 4.

<sup>319</sup> Public hearing, 27 January 2011, pages 40-41.

<sup>320</sup> Minute CDL to VCDS, 27 May 2003, ‘Visit by DG Ops (DLO) to Op TELIC: 10-16 May 2003’ attaching Minute Wood to Pledger, 20 May 2003, ‘Op TELIC Trip Report – 10-16 May 2003’.

was “the breaking of LAND mandated and resourced readiness states and training in readiness assumptions”.<sup>321</sup> He added:

“OP TELIC demonstrated clearly that current readiness states are not in line with strategic reality ... The time given for deployment was significantly shorter than that defined in the Defence Planning Assumptions. This had many impacts in the manning, equipping and building the ... sustainability of the force.”

## **MOD reflections on equipping the forces deployed for the conflict**

**605. Reports published in 2003 after the conflict suggested that land equipment performed well during the combat phase of operations.**

**606.** In the MOD’s *First Reflections* report on operations in Iraq in July 2003, it stated that the “success of operations in Iraq demonstrated the effectiveness and extensive capability of the modern equipment and logistics support available to our Armed Forces”.<sup>322</sup>

**607.** The MOD’s second report, *Lessons for the Future*, assessed that:

“Overall, land equipment performed well and reliability levels were often exceptionally high despite the challenges of a very demanding environment.”<sup>323</sup>

**608.** The DOC stated that during the deployment and invasion phases of Op TELIC, “UK equipment and maintenance regimes coped well with the environment and manoeuvre demands placed upon them”.<sup>324</sup>

**609.** The NAO concluded in its report on 11 December 2003 that:

“Throughout the war-fighting phase of Operation TELIC a number of both new and in service equipments operated effectively in the austere environment of Iraq.”<sup>325</sup>

**610. The late delivery of some UORs, however, meant that soldiers were not always able to be trained on equipment before its use.**

**611.** The DOC report on 17 October 2003 stated:

“A consequence of the compressed timescales for UOR delivery was that personnel did not always have time to train or become properly familiar with equipment, either before deployment or in theatre ... This undermined the rationale for delivering UOR equipment to improve operational effectiveness. Users did not have complete confidence in their ability to use equipment, and commanders were not always able

<sup>321</sup> Report Wall to HQ 3 Cdo Bde, 6 October 2003, ‘Post Operation Report – Version 2 Operation TELIC’.

<sup>322</sup> Ministry of Defence, *Operations in Iraq: First Reflections*, July 2003.

<sup>323</sup> Ministry of Defence, *Operations in Iraq: Lessons for the Future*, December 2003.

<sup>324</sup> Report DOC, 17 October 2003, ‘Operation TELIC Lessons Study’.

<sup>325</sup> National Audit Office, *Operation TELIC – United Kingdom Military Operations in Iraq*, 11 December 2003, HC 60.

to gain full appreciation of the additional capabilities available and how they might be used in combination to deliver an effect.”<sup>326</sup>

**612.** The Barry Report published in August 2010 stated:

“The UOR process did not produce enough equipment to meet the training requirements. So some troops first encountered new equipments in theatre and commanders assessed that casualties resulted, particularly in the period immediately after a brigade relief in place.”<sup>327</sup>

**613.** Lord Boyce told the Inquiry:

“There is no point being told ‘Here is a UOR for a nice gizmo, a nice new piece of kit which you can only have, by the way, in theatre’, if the person operating that kit doesn’t see it for the first time until he actually gets to theatre, because he will die trying to learn how to use it.”<sup>328</sup>

### Training on equipment post-conflict

Before 2006, it was not possible to purchase equipment with a training margin with a UOR. One of the results of this was consistent reports from the field about the difficulties presented by the lack of training on equipment that personnel would use once deployed.

A DOC report in September 2007 stated:

“Combat Body Armour (CBA), protected vehicles, comms and ECM(FP) (Electronic Counter Measure Force Protection) equipment, particularly UOR procured equipment, were regularly unavailable for training/familiarisation at PDT [Pre-Deployment Training].”<sup>329</sup>

Major General William Rollo, GOC MND(SE) from July 2004 to December 2004, wrote in his post-operation tour report:

“More training on Snatch and other UOR equipments ... must be factored into pre-deployment preparation.”<sup>330</sup>

That point was reiterated in post-operation tour reports from the following two successors to his role, Major General Jonathon Riley and Major General James Dutton.<sup>331</sup>

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<sup>326</sup> Report DOC, 17 October 2003, ‘Operation TELIC Lessons Study’.

<sup>327</sup> Report Land Command, 31 August 2010, ‘Operations in Iraq: An Analysis From a Land Perspective’.

<sup>328</sup> Public hearing, 27 January 2011, page 102.

<sup>329</sup> Report DOC, September 2007, ‘Protection of the Deployed Force Operational Audit Report 1/07’.

<sup>330</sup> Report HQ MND(SE), 4 December 2004, ‘Post Operation Report Operation TELIC 4/5 – 14 July – 1 December 2004’.

<sup>331</sup> Report HQ MND(SE), 10 June 2005, ‘Progress Report – Operation TELIC’; Report HQ MND(SE), 18 January 2006, ‘Progress Report – Operation TELIC’.

The UOR rules were changed to include a training margin in 2006.<sup>332</sup> The September 2007 DOC report stated:

“The recent Treasury decision to permit UOR procured equipment to include an allocation for training is already having an effect...”

Lieutenant General Andrew Figgures, Deputy Chief of Defence Staff (Equipment Capability) from June 2006, told the Inquiry that decision was “an important step forward”.<sup>333</sup>

**614. The restrictions until 15 October 2002 on discussions with industry about potential operations in Iraq did prevent early conversations with industry about the provision of equipment.**

**615. But it is clear that the most senior military officers and officials understood the reasons for that decision.**

**616.** Sir Kevin Tebbit told the Inquiry:

“... some very contingent UOR work was authorised by Mr Hoon at the time under CDS’ pressure ... but those were very much ones which could be done invisibly.”<sup>334</sup>

**617.** Asked if he had sensed some reluctance in the Government to agree preparatory steps, Maj Gen Fry replied that he thought there was, but that had to be qualified to reflect the fact that what he saw was determined by his role in the PJHQ. In his view it was understandable if Ministers had been “trying to reserve their positions for as long as they could”.<sup>335</sup>

**618.** Mr Hoon told the Inquiry:

“All I know is that Mike [Boyce] and I went to meetings in September, where we argued the case and that we were both made very well aware of the attitude in Downing Street towards the requirement for minimising publicity and for avoiding the visibility of preparations. We were both there at these meetings. So there was no doubt of the fact that we could not go out, either of us, and overtly prepare, which is why we had to approach some of the UORs in a particular way ...

“I think the judgement that I had to make and he had to make was the extent to which we could go on with preparations without affecting that diplomatic process in the United Nations.”<sup>336</sup>

<sup>332</sup> Report DOC, September 2007, ‘Protection of the Deployed Force Operational Audit Report 1/07’.

<sup>333</sup> Public hearing, 27 July 2010, page 43.

<sup>334</sup> Public hearing, 3 December 2009, page 36.

<sup>335</sup> Public hearing, 16 December 2009, pages 11-13.

<sup>336</sup> Public hearing, 19 January 2010, page 136.

**619. The evidence given to the Inquiry demonstrates that senior military officers and officials in the MOD fully understood the limitations on the size and readiness of the forces available for deployment on expeditionary operations agreed in the 1998 Strategic Defence Review and set out in the Defence Planning Assumptions (DPAs).**

**620.** Sir Kevin Tebbit stated that the scale of the deployment was consistent with the DPAs, and that: “It was the type of operation that we expected from time to time to be able to mount.”<sup>337</sup>

**621.** Sir Kevin Tebbit was later asked what lessons had been learned from the earlier experience in Iraq.<sup>338</sup> One lesson he cited was:

“... we assumed that we would have stocks for six months, and that when we came to a major operation we would have preparation time to conduct a large scale operation by building up stocks in that period.

“... if we wanted to go for a large scale, we would need six months in order to acquire the necessary extra equipment, stores, personnel, clothing, ammunition, things like that.”

**622.** On the SDR, Sir Kevin Tebbit told the Inquiry:

“... when we said that the SDR did involve the ability to move up to large scale from time to time, we hadn’t got a precise view, but we were looking at once every 10 years we could gravitate up to large scale.”<sup>339</sup>

**623.** Gen Jackson told the Inquiry that:

“... the Defence Planning Assumptions which had emerged from the Strategic Defence Review of 1997/98 allowed for, from time to time, a large commitment, which in land force terms was at the divisional level, this was not regarded as anything we could contemplate on an enduring basis, a one-off from time to time ...

“More germanely we would be able to maintain a medium-sized commitment, i.e. brigade level, indefinitely and we could on a one-off basis add a second medium scale commitment.

“There was some small print about a small scale ... but I think it is within the ability to produce a second brigade on a short-term basis.”<sup>340</sup>

**624. The MOD also understood that the deployment could not be sustained for more than six months.**

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<sup>337</sup> Public hearing, 3 February 2010, page 24.

<sup>338</sup> Private hearing, 6 May 2010, pages 48-49.

<sup>339</sup> Private hearing, 6 May 2010, page 51.

<sup>340</sup> Public hearing, 28 July 2010, page 7.

**625. The impact on the UK’s ability to continue to conduct military operations after the conflict phase of operations was never fully considered.**

**626.** Lord Boyce told the Inquiry:

“The theoretical planning against the Defence Planning Assumptions is you don’t do this sort of operation for an extended period longer than about six months. But it never seemed to me very likely that we would be out [of] there [Iraq] in six months.”<sup>341</sup>

**627.** Sir Kevin later said: “Our assumptions never involve more than six months at that level.”<sup>342</sup>

**628.** With regard to large scale deployments, Gen Jackson stated:

“... the large scale concept, in land component terms we are talking around 30,000 or 25,000 certainly, the concept is you put in that large commitment on a one-off basis and then you must downsize, because the Army cannot sustain a deployment of 25,000 to 30,000 indefinitely.”<sup>343</sup>

**629. The Inquiry was offered different perspectives on the degree to which exceeding the Planning Assumptions had put a strain on the system that it was not able to meet.**

**630.** Lt Gen Fry told the Inquiry that:

“Over time the scale of ambition got larger and larger, so at the end of it we were looking at something which involved a full deployed joint force with ... land, air and maritime forces, and in addition to that, special forces and logistic forces as well.”<sup>344</sup>

**631.** Asked if he had thought there was sufficient time to prepare the force for battle, Lt Gen Fry stated that it was “a bit of a rush and there were inherent risks involved”.<sup>345</sup>

**632.** Gen Reith told the Inquiry that he was “quite happy” in terms of readiness and training.<sup>346</sup> He said that 7 Armoured Brigade had been selected because it was “the most highly trained of all the armoured brigades”. In addition, 3 Commando Brigade and 16 Air Assault Brigade were both part of the Joint Rapid Reaction Force and, therefore, “maintained a high standard of training and readiness on a permanent basis”.

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<sup>341</sup> Public hearing, 3 December 2009, page 101.

<sup>342</sup> Private hearing, 6 May 2010, page 53.

<sup>343</sup> Public hearing, 28 July 2010, page 42.

<sup>344</sup> Public hearing, 16 December 2009, page 5.

<sup>345</sup> Public hearing, 16 December 2009, page 40.

<sup>346</sup> Private hearing, 15 January 2010, page 50.

**633.** ACM Stirrup told the Inquiry:

“... we simply did not have enough time ... to do everything that we needed to before the operation started.”<sup>347</sup>

**634.** Sir Kevin Tebbit stated that:

“The timescale was slightly compressed, more than we would have wished, which we made very clear, so that we didn’t have everything that we would have wanted at the right moment, but the shortfall was not operationally significant ...”<sup>348</sup>

**635.** Sir Kevin Tebbit subsequently told the Inquiry that the switch to the South:

“ ... was not as difficult as I thought it was going to be ... I think it was a great achievement ... which surprised me ... [T]he quality of the military effort was tremendous ... because it wasn’t just a question of moving to a different host nation support arrangements, it’s a question of a differently configured force ...

“I think the military had been running a slightly parallel option for a bit of time during December, actually.”<sup>349</sup>

**636.** Sir Kevin Tebbit added:

“I think that to the extent that there were pressures and problems with the operation itself ... those were more about the amount of time available to do the planning of the actual build-up itself, warning time, the switch from one area to another, the difficulty of doing overt military preparations as early as they needed to be done because of the desire not to disrupt the UN track.

“Those were the bigger problems in ensuring that we got the force structure ready when eventually the time came, and the fact that we would have preferred another month, in ideal circumstances, to do that build-up.”<sup>350</sup>

**637.** Gen Jackson told the Inquiry that the “whole order of battle” had been “in a state of flux” until early 2003.<sup>351</sup> But he confirmed that he had been confident the UK could put a division into the field.

**638.** Gen Jackson subsequently described the forces deployed as “a very interesting divisional construct” which he did not think had been done before: “but it was the right construct for the task which confronted 1 (UK) Armoured Division.”<sup>352</sup>

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<sup>347</sup> Public hearing, 1 February 2010, page 11.

<sup>348</sup> Public hearing, 3 February 2010, page 28.

<sup>349</sup> Private hearing, 6 May 2010, page 19.

<sup>350</sup> Private hearing, 6 May 2010, pages 38-39.

<sup>351</sup> Public hearing, 28 July 2010, page 9.

<sup>352</sup> Public hearing, 28 July 2010, page 13.

**639.** Asked when the UK started looking at the South as an alternative, Lord Boyce told the Inquiry that the process had started “at least in December 2002”.<sup>353</sup> He acknowledged that December was “quite late in the day” to start looking at options in the South.

**640.** The Inquiry asked Lord Boyce whether, as a result of the late changes to the military package, British troops had the necessary equipment.<sup>354</sup> Lord Boyce replied that while it “left us with some very short timelines”, he was “confident” that the “front of the front line” were properly equipped on 20 March.

**641.** When asked whether he would have ideally deployed the land force sooner to allow for more training and time to acclimatise, or to ensure it had the right equipment, Lord Boyce replied:

“My advice was that they had had sufficient time to make themselves ready.”<sup>355</sup>

**642.** In his later statement to the Inquiry, Lord Boyce wrote that the land forces for the South:

“... were largely based on what were already being prepared for the northern option. However, because of the change in plan, the US agreed to assist with some enabling and logistics assets in the south. Maritime (including amphibious) and air force levels were much the same. The thinking about a possible southern option had started in late autumn 2002 and so the concept was already well developed by the time the northern option was abandoned.”<sup>356</sup>

**643.** Lord Boyce added:

“...the equipment being procured for the land forces previously designated for the northern option largely serviced them when they were re-roled south, although there was a need to recognise the more extensive desert environment.”

**644.** Lord Boyce subsequently told the Inquiry:

“Although the final switch did happen around mid-January, really our minds in terms of planning and thinking about it and looking at all the potential pitfalls or difficulties or whatever had started, as you say, probably as far back as October; but during the course of December we really thought that was possibly where we were going to finish up ...

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<sup>353</sup> Public hearing, 3 December 2009, page 55.

<sup>354</sup> Public hearing, 3 December 2009, pages 64-68.

<sup>355</sup> Public hearing, 3 December 2009, page 69.

<sup>356</sup> Statement, 7 January 2011, page 1.

“... we could afford to take the decision quite late. It wasn't starting with a fresh plan in the middle of January. The southern plan was pretty well developed, in fact almost entirely developed, by then.”<sup>357</sup>

**645.** Asked about the impact of the reduction in preparation time, Lord Boyce stated:

“... it meant everything was being done at a rush ... some aspects of the full operational capability weren't achieved until literally the nth hour ... I don't believe ... that our capability at the end of the day was in any sense seriously degraded ... but nonetheless it did make it a tight run thing.”<sup>358</sup>

**646.** Describing the thinking which had led to the UK's original offer in Package 3 in October of a brigade and divisional headquarters, Lord Boyce stated that it was “not a huge move then ... into a division minus, which is what we actually finished up with”.<sup>359</sup>

**647.** Asked whether, when he had visited UK forces just before the start of operations, he had been given any indications that they were lacking equipment such as body armour and ammunition, Lord Boyce replied: “No”. But he added that he had been concerned about the “ability to cope with any biological or chemical threat”, and at the time of his visit, a “very small percentage” of the force had not had their gas masks checked.

## Conclusions

**648.** The achievements of the MOD and the Armed Forces in preparing the forces deployed for combat operations in Iraq against tight deadlines were very considerable.

**649.** But the evidence set out in this Section of the Report demonstrates that significant risks were taken as a result of decisions made in mid-January to deploy a larger combat force in a very compressed timescale. The difficulties were exacerbated by the absence of systems which could accurately track and report the situation on the ground.

**650.** The provision of additional funding from the Reserve for UORs worked well and there is no evidence of any delay or obstruction on the part of the Treasury.

**651.** A number of witnesses to the Inquiry stated, or implied, that the serious shortfalls of some equipment could have been mitigated if permission to discuss procurement with industry had been given earlier.

**652.** That claim is impossible to determine. It is clear that the restrictions on discussions with industry before 15 October did hinder planning and preparations and cause anxiety.

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<sup>357</sup> Public hearing, 27 January 2011, pages 17-18.

<sup>358</sup> Public hearing, 27 January 2011, page 28.

<sup>359</sup> Public hearing, 27 January 2011, page 30.

**653.** However, the most senior military officers and officials understood the political and diplomatic reasons for that decision and Ministers were not advised that the restrictions would have a direct adverse impact on capabilities.

**654.** The problems encountered by the forces deployed to Iraq in early 2003 do not appear to have been directly attributable to the absence of discussions with industry before 15 October.

**655.** The evidence suggests that most of the difficulties arose from the decisions to deploy a force more quickly than the Defence Planning Assumptions (DPAs) envisaged.

**656.** The 1998 Strategic Defence Review (SDR) and Defence Strategic Plan had set clear guidelines about the military resources required for potential operations of different scale and duration. The DPAs also set out the time likely to be necessary to adequately prepare UK forces for operations, including the time needed to procure and deploy equipment and train personnel on its use.

**657.** The DPAs determined the equipment procured for the Armed Forces and that the stocks held should be sufficient only to meet the readiness requirements specified in the DPAs.

**658.** The 1998 SDR had also concluded that the UK needed a better expeditionary capability to reflect the nature of future threats and the environments, such as the Gulf, in which the UK should plan to operate.

**659.** By 2002, when military planning for potential operations in Iraq commenced, that capability had not been fully achieved.

**660.** The policy underpinning the DPAs of relying on sufficient preparation time to procure UORs and additional stocks to meet identified shortfalls before a large scale deployment was explicitly acknowledged by the MOD in spring 2002.

**661.** In the second half of 2002, however, the MOD was already supporting two simultaneous medium scale operations, in the Balkans and Operation FRESCO, and a number of small scale operations, including in Afghanistan. The Armed Forces were thus already stretched to the maximum level envisaged under the DPAs, beyond which time would be needed to acquire additional stocks and equipment.

**662.** The decisions between mid-December 2002 and mid-January 2003, to increase the force deployed for ground operations to three combat brigades and the decisions to commit 16 Air Assault Brigade and 7 Armoured Brigade to military operations in southern Iraq in late March, had a significant impact on the scale of some UORs and compressed the time available for the provision and delivery of equipment to front line units.

**663.** The force deployed in 2003 was larger than the UK contribution in the Gulf Conflict in 1991 and the time to prepare was significantly shorter than the six to nine months assumed in the DPAs.

**664.** Lt Gen Reith acknowledged in May 2003 that the military commitment was, “as often happens, at a scale beyond that envisaged in the DPAs and thus not fully resourced”.

**665.** When decisions were made in mid-January, the inherent risks for equipping the force to be deployed and its readiness were neither properly identified nor considered.

**666.** The military advice in late January 2003 that there were “no showstoppers” disguised the fact that risks had been accepted which had not been fully exposed to Ministers.

**667.** Adm Boyce had assured Mr Blair on 13 March 2003 that the Armed Forces faced “no serious equipment problems”.

**668.** The context suggests he was referring to the invasion phase. As Section 8 shows, the US and UK did not expect Iraqi forces to be able effectively to resist Coalition Forces.

**669.** There may be circumstances in the future when a Government will feel it necessary to take decisions to commit the Armed Forces to military operations which exceed the planning assumptions on which they have been equipped and prepared. But they should not do so without an explicit acceptance of the risks being taken.

**670.** In addition, a number of lessons from previous conflicts and exercises had not been addressed before the deployment to Iraq.

**671.** In particular, poor asset tracking systems meant that an already over-burdened system was put under even greater pressure, and equipment that had been deployed to the forces in Kuwait did not reach the front line before military operations began.

**672.** ACM Stirrup accurately summarised the position when he told the Inquiry that “the issue was it was all being done so rapidly at the last minute no one was quite sure who had what”.

**673.** The MOD’s asset tracking system was still in need of improvement when the UK left Iraq in 2009.

**674.** The MOD had given assurances before the 2003 invasion that the necessary lessons had been learned since 1991. This proved not to be the case. In any future eventuality, the MOD has a responsibility to ensure that past mistakes are not repeated, and that its systems for asset tracking are robust.

**675.** The emergence after the conflict of the scale and nature of the problems encountered illuminated the extent to which Ministers had been unaware of risks being taken for which they would have been accountable. The shortfalls in individual equipment, protection against chemical and biological attack, and ammunition did not have an impact on the overall success of the invasion.

**676.** But they did have an impact on individuals.

**677.** In the case of Sgt Steven Roberts, it was judged that his death could have been prevented if he had still had his body armour.

**678.** As the evidence in this Section shows, reports about equipment shortfalls from the media and from members of the Armed Forces also had a negative impact on the perceptions of the morale of troops on the ground and on how the campaign was seen by the public and Parliament.

**679.** In addition, analysis of the events in 2003 shows that, until May, neither PJHQ nor MOD had a proper understanding of the problems with equipment that units were experiencing on the ground.

**680.** Lord Bach was right to have suggested on 11 February 2003 that a direct and robust system accurately to report on readiness and equipment issues from theatre to Ministers was needed.

**681.** During military operations, reporting to the MOD will always be constrained by the limitations of military operations and the pressures on those involved, and military commanders need the freedom to take operational decisions.

**682.** In any future operations, however, the MOD should ensure that it has robust systems in place to accurately report the situation on the ground without usurping the responsibilities of the chain of command.

