

1 Tuesday, 27th July 2010

2 (10.00 am)

3 LIEUTENANT GENERAL SIR ROBERT FULTON KBE

4 LIEUTENANT GENERAL ANDREW FIGGURES CB CBE

5 SIR JOHN CHILCOT: Good Morning.

6 LT GEN ANDREW FIGGURES: Morning.

7 LT GEN SIR ROBERT FULTON: Morning.

8 SIR JOHN CHILCOT: Good Morning, everyone. In today's

9 session this morning we have two witnesses,

10 Lieutenant General Sir Robert Fulton and

11 Lieutenant General Andrew Figgures.

12 General Fulton, you were DCDS for Equipment

13 Capability in the Ministry of Defence from August 2003

14 to 2006.

15 LT GEN SIR ROBERT FULTON: I think June 2003.

16 SIR JOHN CHILCOT: General Figgures, you were DCDS for

17 Equipment Capability in succession to General Fulton

18 I think.

19 LT GEN ANDREW FIGGURES: Yes.

20 SIR JOHN CHILCOT: Of course you appeared before the Inquiry

21 in relation to a quite different appointment when you

22 were SBMR in Iraq from 2003 to 2004.

23 LT GEN ANDREW FIGGURES: Yes.

24 SIR JOHN CHILCOT: For the information for those present and

25 for the record this afternoon we will be hearing from

1 Dr Hans Blix, the former United Nations Weapons  
2 Inspector and head of UNMOVIC.

3 I say on each occasion we recognise witnesses give  
4 evidence based on their recollection of events and we  
5 check what we hear against the papers to which we have  
6 access and which we are still receiving. I remind each  
7 witness on each occasion they will later be asked to  
8 sign a transcript of the evidence to the effect that the  
9 evidence given is truthful, fair and accurate.

10 With those preliminaries out of the way can I start  
11 the questioning about the role of DCDS (Equipment  
12 Capability).

13 We have taken evidence from Sir Jock Stirrup, your  
14 predecessor, General Fulton, I think, about his time as  
15 DCDS (EC) and he described his role as essentially  
16 two-fold. Construction of the MoD's ten-year equipment  
17 programme and the financial planning that supports it  
18 and, second, the construction of UORs or urgent  
19 operational requirements when there is an Iraq-type  
20 operation going on.

21 Is that broadly a description of your  
22 responsibilities at the time you were DCDS (EC)?

23 LT GEN SIR ROBERT FULTON: Yes. I think it is a rather bald  
24 description.

25 SIR JOHN CHILCOT: Would you like to elaborate?

1 LT GEN SIR ROBERT FULTON: Yes, I think I would, because  
2 I think also it was designed to be the customer, or to  
3 represent the customer, customer one in the jargon of  
4 the day, but to be the central customer for the Capital  
5 Equipment Programme. So not the totality of equipment  
6 in the field. Therefore as the customer, to own the  
7 requirement to the extent that you have done the  
8 balancing between competing requirements and also, in  
9 the context of constructing the ten-year equipment plan,  
10 understanding what money was available to meet that  
11 requirement and then to balance it out.

12 I think it is a balance and we might perhaps come  
13 later to what those balances are, because clearly there  
14 is not a single requirement. There are many competing  
15 requirements, and if I were to describe in rather more  
16 colloquial terms what the job is, it is actually  
17 balancing out the competition, what I would describe as  
18 a finite budget, infinite demand and a changing world.

19 SIR JOHN CHILCOT: Yes. Thank you. General Figgures, do  
20 you agree with that?

21 LT GEN ANDREW FIGGURES: I would agree with that and with the  
22 advent of the Defence Acquisition Change Programme and  
23 through Life Capability Management the responsibility  
24 developed to take into account the support for equipment  
25 in-service and the oversight of the defence lines of

1 development, the people, the training and so on, such  
2 that they all could be integrated to deliver  
3 a capability to the front line.

4 Just one point of detail there. The first four  
5 years of the programme of the equipment support were the  
6 responsibility of the front line command. So we had to  
7 work very closely with them in order to ensure that it  
8 was integrated.

9 SIR JOHN CHILCOT: Thank you. That's helpful. I have  
10 a couple of other questions on the same point, but just  
11 as a lead into those, the title of the post you both  
12 held is now simply Capability. The word "equipment"  
13 has dropped out. Is that significant or is it simply  
14 a reflection of a reality that was present in your time  
15 when you were in post, both of you?

16 LT GEN SIR ROBERT FULTON: I think there was before my time,  
17 when Smart Acquisition first generated this post,  
18 a discussion about whether the post should be called  
19 Equipment and Capability.

20 SIR JOHN CHILCOT: Yes.

21 LT GEN SIR ROBERT FULTON: And the ampersand was dropped  
22 because I think it was felt at the time that Equipment  
23 and Capability represented a totality that they were not  
24 prepared to give to that post, because clearly the  
25 Chiefs of Staff, for example, had responsibility for

1 capability within their services, and therefore  
2 I inherited the notion of equipment capability, bounding  
3 it to capital equipment and owning the requirement for  
4 that, but I think it then moved on.

5 LT GEN ANDREW FIGGURES: So it became capability in my time.  
6 That was not to usurp the position of the Chiefs of  
7 Staff. They had to deliver, but we had to create the  
8 conditions by which they could deliver such that the  
9 changes in the defence plan would enable them to do  
10 that.

11 SIR JOHN CHILCOT: Thinking about the training aspect of  
12 some new piece of equipment or equipment programme, does  
13 that fall within the capability sphere then, or indeed  
14 now? I take it part of training will be in the field,  
15 in the operational theatre or in the training thing, but  
16 does capability have to embrace the training aspect of  
17 forming a new or a different capability?

18 LT GEN SIR ROBERT FULTON: Then not. I mean in terms of  
19 formal responsibility for delivering it the delivering  
20 capability was rightly with the single services.  
21 However, there is a point at which a piece of -- a new  
22 piece of equipment is delivered into service, and it is  
23 part of the introduction into service in which the  
24 equipment capability customer played a key role to  
25 ensure that, once again in the jargon, the lines of

1 development had all been brought together. That is the  
2 training, the support, the doctrine and all the other  
3 things that would turn a piece of hardware into  
4 a capability.

5 So it was a question of understanding that all these  
6 things which were being delivered by different people  
7 were brought together at the moment it was brought into  
8 service.

9 SIR JOHN CHILCOT: Thanks. I have one perhaps rather  
10 general question, but I would be interested in what you  
11 want to say. We heard from General Sir Kevin O'Donoghue  
12 on the procurement side that in terms of acquisition  
13 they would only act once a requirement was placed on  
14 them by the equipment capability side as the customer,  
15 but we had a somewhat more nuanced account from  
16 Sir Peter Spencer, who said really there is an active  
17 feedback all the time between procurement and equipment  
18 capability. What's your own sense of it?

19 LT GEN SIR ROBERT FULTON: I think I would go for the  
20 nuanced, unhesitatingly. Once again I have to go back  
21 to the -- because I, as it were, came into the job  
22 fairly soon after this idea was established, and one of  
23 the principles of it was the engagement of industry at  
24 the earliest possible moment. Clearly the link with the  
25 Defence Procurement Agency, as it then was, is

1           absolutely fundamental, because you don't want  
2           a customer, whether the frontline commands or us,  
3           devilling around in industry without the DPA being  
4           involved as the interface.

5           So there are a number of players. The equipment  
6           customer, of course, the frontline commands, the DLO as  
7           then was, who would inherit and look after it, industry  
8           and the DPA, and the idea of capability working groups  
9           was to bring all of those people together, so that  
10          actually there would be -- nobody would go off in auto,  
11          because otherwise you would get yourself into a real  
12          muddle.

13   SIR JOHN CHILCOT: Thank you. I think, General Figgures,  
14          you have seen this from both ends, haven't you?

15   LT GEN ANDREW FIGGURES: I have had that pleasure, yes.

16   SIR JOHN CHILCOT: Anything to add to that experience?

17   LT GEN ANDREW FIGGURES: I would subscribe to the nuanced  
18          view, and I am sure in my workings with General Kevin we  
19          actually operated that way. My point would be that,  
20          yes, there is a capability requirement, but can you  
21          finance it? Is there a means of supply? If there is  
22          a means of supply, is there a commercial construct in  
23          which that supply can be delivered? Do you have the  
24          science and technology base to enable the supply to  
25          deliver it and maintain it through life?

1           So there is quite a complex discussion about this  
2           generation of a solution which requires those particular  
3           perspectives to be looked at and the customer, or the  
4           capability area, does not have sole knowledge on that  
5           matter. It is very much dependent upon the Defence  
6           Equipment and Support and the science and technology  
7           community, plus industry, to provide a solution.

8   SIR JOHN CHILCOT: Thank you. That's helpful. I would like  
9           to turn to the interaction between the equipment  
10          programme and defence policy in a broad sense. Starting  
11          with the SDR of 98, as we understand it, that SDR said  
12          that the armed forces should be prepared or should  
13          prepare for, among other things, expeditionary warfare.  
14          I wonder what this meant in terms of equipment and  
15          additional capabilities, because Jock Stirrup told us  
16          that the armed forces still had a fair way to go to be  
17          ready for expeditionary warfare. This is 2002 he is  
18          speaking about.

19          You, General Fulton, took over in 2003, in  
20          August 2003. Was there a steady rate of progress  
21          towards greater capability for expeditionary warfare or  
22          did the Iraq operation simply put a hold on it in terms  
23          of further development?

24   LT GEN SIR ROBERT FULTON: I don't think either. My take on  
25          it would be that we went to Iraq with our Cold War



1 capability, that there simply was not time between 1998  
2 and 2002 to re-orientate a Capital Equipment Programme  
3 that stretched for 20 years. The tanks, the armoured  
4 personnel carriers, the aircraft, the ships that went to  
5 Iraq in March 2003 were those that existed in 1997, give  
6 or take. I mean, the programme was rolling on, but one  
7 or two extra capabilities were delivered in the  
8 meantime.

9 What the SDR asked us to do in a nutshell was to  
10 make the armed forces flexible, deployable and  
11 sustainable. So that was what we were -- that is what  
12 people set out to do in 1998 and going on. Then, of  
13 course, 2001 and the new chapter added, I think it would  
14 be fair to say, the concept of precision strike and  
15 a greater emphasis on that, and so that simply added  
16 a question, but I think in terms of, for example,  
17 strategic enablers, we were still some way short of  
18 being flexible, deployable, sustainable. I think in  
19 terms of understanding -- well, I think we probably  
20 understood what it meant to shift from, if you like,  
21 playing our matches at home and occasionally going away  
22 to playing all our matches away. Strategic enablers,  
23 strategic communications, the sort of ISTAR we would  
24 need, the sort of interaction with allies that was not  
25 based on the north German plain, etc, etc. So I think

1 we were a long way from having the expeditionary  
2 capability that was foreseen in 1998.

3 SIR JOHN CHILCOT: Looking at what was needed to fulfil  
4 completely the SDR 1998 requirement plus the new  
5 chapter, there were several bits of experience before  
6 the Iraq invasion, weren't there? There was exercise  
7 Saif Sareea. There was what we had done in Afghanistan.  
8 We deployed 3 Commando I think in 2002.

9 Did these themselves generate either lessons for  
10 application through Telic or indeed for future policy  
11 towards expeditionary warfare capability?

12 LT GEN SIR ROBERT FULTON: I think you have heard the effect  
13 of Saif Sareea, which was fortuitously a very good --  
14 preparation would be the wrong word, because that wasn't  
15 its purpose, but in terms of understanding the  
16 requirement for, for example, sand filters, the effect  
17 of the environment, the effect of taking a capability  
18 abroad and launching it into that sort of -- at that  
19 sort of range from the United Kingdom. So yes, I think  
20 we learned a lot and yes, I think it would have been  
21 much harder if we had not had the experience of Saif  
22 Sareea.

23 SIR JOHN CHILCOT: I have one question about the defence  
24 planning assumptions, because we have had a lot of  
25 evidence, and it is not contentious, that the defence

1           planning assumptions out of SDR 98 had to be breached  
2           because of Iraq and then Afghanistan, but do the  
3           planning assumptions form part of the baseline from  
4           which the capability needs are assessed or are they  
5           something quite different?

6   LT GEN SIR ROBERT FULTON:   Yes.   I mean, in the sense that  
7           trying to get MoD approval to spend money on something  
8           that falls outside the defence planning assumptions is  
9           difficult.

10   SIR JOHN CHILCOT:   Even when one is operating outside the  
11           defence planning assumptions?

12   LT GEN ANDREW FIGGURES:   Well, you have to get yourself up to  
13           the planning assumptions in order to springboard into  
14           operating without them.

15   SIR JOHN CHILCOT:   Yes.

16   LT GEN ANDREW FIGGURES:   We I think had a very rigorous and  
17           I understand the Treasury considered it rigorous audit  
18           process, whereby we audited our defence capability  
19           against the requirement through a series of scenarios,  
20           and every planning round we would assess the priority  
21           against the gaps and that would provide the basis for  
22           the future capability requirements, which would then  
23           form the basis of the planning cycle.

24   SIR JOHN CHILCOT:   I don't know whether it is possible to  
25           ask for more clarity and definition as between, on the

1       one hand, issues of time, how soon you can generate  
2       an extra capability, if you are looking at expeditionary  
3       warfare in hot climate or high altitude, on the one  
4       hand, and money for things not yet in the programme  
5       which you can see a need for but need to get it in,  
6       because there is a sort of crossover graph, isn't there,  
7       between time and money?

8   LT GEN SIR ROBERT FULTON:  Yes.  I don't think I can --  
9       I know that I can't put, as it were, a years -- I can't  
10      calibrate it, but certainly if something is going to  
11      come into the programme something has to go out.  A very  
12      high proportion of the budget, particularly in the early  
13      years, is committed in the sense that it is on contract,  
14      and therefore with costs associated with breaking  
15      contracts.  So, therefore, if you want to bring  
16      something in, it is going to have a -- well, it cannot  
17      avoid shifting something, and therefore you have to be  
18      quite sure.  Of course, there is always the temptation  
19      to raid the uncommitted, and we might come on to the  
20      effect that that has, because the uncommitted will tend  
21      to be at the early stages of projects with the  
22      consequent effect there.

23   SIR JOHN CHILCOT:  Of pushing forward the time horizon for  
24      that --

25   LT GEN SIR ROBERT FULTON:  Either pushing forward the time

1 horizon -- well, you increase the risk. You either  
2 increase the capability risk because you have pushed  
3 back the capability or you have increased the technical  
4 risk because you have not done the de-risking at the  
5 early stage of the programme which was one of the  
6 requirements or one of the -- you know, one of the  
7 requirements of Smart Acquisition.

8 SIR JOHN CHILCOT: Do you want to add to that?

9 LT GEN ANDREW FIGGURES: Well, I suppose some evidence on how  
10 did this work in practice. I said we had this rigorous  
11 capability audit process. In, for instance, the  
12 planning round of 07, which was the first one I took  
13 part in, we had a list of shortfalls and they ranged  
14 from secure information exchange, interoperability with  
15 coalition partners, night vision equipment for ground  
16 manoeuvre units, and helicopters and organic battlegroup  
17 ISTAR. I could go on. Some of these we managed to get  
19 into the core programme for example air platform  
21 survivability, and we were able to improve the defensive  
22 aid suites on Merlin Mark III.

23 SIR JOHN CHILCOT: Can you slow down a bit?

24 LT GEN ANDREW FIGGURES: Forgive me this is meat and drink to  
25 me. We improved the defensive aid suites on Merlin Mark III.

1 We extended the life of the CVR(T) operational fleet,  
2 part of battlefield ISTAR. We upgraded secure  
3 speech. This  
4 was done, as General Fulton has said, on the basis of  
5 how we could free up money and where we could free it  
6 up, in which years, and when it was sensible to bring  
7 these particular capabilities into play.

8 Meanwhile there was the ability to call upon the  
9 Treasury to fund urgent operational requirements. To do  
10 this we  
11 would have to demonstrate that we couldn't pull money  
12 forward or, we didn't have money in the programme, for  
13 a capability that we might not have reasonably expected to  
14 have foreseen and then we could go to the Treasury and  
15 make the case.

16 SIR JOHN CHILCOT: We will do some more work on UORs through  
17 this morning I think, but just closing up my set of  
18 questions, General Fulton, you have already said, in  
19 effect: we went into the Iraq operation, into Telic,  
20 with Cold War equipment on top of which or at the back  
21 of which we added things to make it suitable for that  
22 particular requirement.

23 Now Cold War stuff is for high intensity operations.  
24 Once the actual invasion stage is past and you are into  
25 phase 4, you are either into peacekeeping or  
counterinsurgency. That generated a lot of UORs we

1       understand, but was it, as it were, a successful  
2       balance, given the reality, to be able to build a set of  
3       UORs on top of an essentially Cold War high intensity  
4       equipment programme and capability? From your  
5       expression it doesn't sound as though it felt like that.

6   LT GEN ANDREW FIGGURES: It is what you mean by successful.

7   LT GEN SIR ROBERT FULTON: Yes.

8   LT GEN ANDREW FIGGURES: The fact of the matter is if I could  
9       turn to a clean sheet of paper and sketch it out, and  
10       I do recall asking someone this question, if we had  
11       a clean sheet of paper what would we actually have,  
12       rather than the legacy and how would we build on it? It  
13       was an interesting academic question but it didn't  
14       really have much application to the realities of life.  
15       So we had to build on the legacy.

16       I think one could be critical about the speed with  
17       which we did that, because you could always -- there is  
18       always the perception you can do these things faster,  
19       but again it is this balance between requirement and  
20       supply. Can you get sufficient money at the right  
21       place? Do you have enough people to develop the  
22       requirement in order that you can make the case for the  
23       money?

24       So there are a lot of things that have to be done to  
25       build upon that legacy, but I think you could say

1 the first part of TELIC was hugely successful, and then  
2 we were faced with a developing threat and I think we  
3 could ask ourselves: did we anticipate that threat  
4 appropriately? I would confess to being surprised at  
5 the rate that it did develop.

6 SIR JOHN CHILCOT: "It" being the threat?

7 LT GEN ANDREW FIGGURES: The threat, yes.

8 LT GEN SIR ROBERT FULTON: Yes. I think I was just going to  
9 say my expression that you commented on wasn't based on  
10 doubting success, but that actually, as General Figgures  
11 has said, we were almost dealing with two -- although it  
12 has been conflated into a single operation, actually we  
13 were engaged in a sprint followed by a marathon. We  
14 were engaged in a sprint to March whatever it was with  
15 a set of UORs and a set of activities and an approach to  
16 UORs that actually had its roots in the Falklands,  
17 Kosovo, Gulf War I; in other words, things that had  
18 a start and a finish and that was it. Then over the  
19 course of sort of May 2003 forward we were actually  
20 dealing with a -- whether we knew we were starting on  
21 a marathon at that stage or whether we were still  
22 sprinting and then we found we actually needed to change  
23 to a different pace, and I don't mean a pace in terms of  
24 our intensity in delivering, but this whole point, which  
25 I am sure we will come on to, about how long is the UOR



1 going to stay in service?

2 I don't think anybody in December 2002, working on  
3 UORs, envisaged that they would be anything other than  
4 something that was brought in and would be used for the  
5 duration of the operation and would then go out of  
6 service.

7 So the thing sort of developed -- yes, the thing  
8 developed on from there, which was why I was slightly  
9 frowning about your point about success. As General  
10 Figgures has said, the definition of success changed as  
11 we went forward.

12 SIR JOHN CHILCOT: I think, as you suggested, this will come  
13 out in the course of the morning. One last point and  
14 then I will ask Baroness Prashar to pick up the  
15 questions. It is about the agility with which we  
16 responded to the change from sprint to marathon and  
17 different kinds of commitment in Iraq, particularly in  
18 the south-east. Two years of moderately, I will not say  
19 gentle peacekeeping but nonetheless it was not high  
20 intensity in another sense of that term, and then 2005/6  
21 it becomes quite different, and the response to that,  
22 the speed of response in the equipment sense, capability  
23 sense I suppose.

24 LT GEN SIR ROBERT FULTON: My sense is that yes, things were  
25 changing and it was apparent that things were changing

1           and that our approach to them developed, and I think  
2           that we with hindsight could we have foreseen that the  
3           enemy would react to what we were doing in the way that  
4           they did? As General Figgures has said, we may have  
5           been surprised at the speed with which they transitioned  
6           through what might call an insurgent capability, the  
7           speed with which they adopted techniques, but, of  
8           course, Sir Lawrence will know that history is  
9           a reaction of offence and defence and every time we  
10          introduced a defensive measure, then the enemy would  
11          find another way to counter it and so we found the  
12          counter to the counter and so life went on. That's what  
13          it felt like here.

14       SIR JOHN CHILCOT: I think Baroness Prashar is going to  
15          enquire into how rapidly and how cleverly we did that.

16       BARONESS PRASHAR: I mean, there are two areas I want to  
17          cover. One is the affordability of the equipment  
18          programme and the agility of. Because Jock Stirrup told  
19          us when he took over the job you did, he felt that some  
20          of the areas such as strategic mobility and information  
21          superiority were not getting sufficient funding within  
22          the resources available to the equipment programme.

23               We have also heard from a number of witnesses, not  
24          least from the Treasury, that all spending departments  
25          like the MoD would always want more resources.

1           During your period in office did you have sufficient  
2           resources available to fund to the extent you wanted to  
3           those items in the programme which were relevant to the  
4           current Operations in Iraq? I will start with you first  
5           and then I will come back to you.

6   LT GEN SIR ROBERT FULTON: Well, I think you have to start  
7           that question in 1998. I mean, if you want a simple  
8           answer to the question, "Was the SDR funded?", the  
9           answer in my view in my area is no. It was not possible  
10          to do -- it was not possible in the time -- I mean, of  
11          course did I not know that Iraq was coming, but it was  
12          not possible in the time that I saw it from the time  
13          I was first engaged in the equipment area to be able to  
14          turn a Cold War-equipped military into a flexible,  
15          deployable, sustainable military within the life of the  
16          equipment plan. Not least because a lot of the  
17          equipment plan contained within it what has become  
18          fashionable to call legacy equipment, but equipment that  
19          was already there, you know. Astute nuclear submarines,  
20          Typhoon and a number of other major programmes, which  
21          now -- they were running on.

22                So no is my short answer. There was not sufficient  
23                money to do everything that we wanted to do, and  
24                therefore we were left with, as it were, an equipment  
25                capability that existed within but did not fill the

1           defence planning requirement.

2   BARONESS PRASHAR:   Okay.   Thank you.   How about you?

3   LT GEN ANDREW FIGGURES:   You used the expression "you wanted

4           to".

5   BARONESS PRASHAR:   Indeed.

6   LT GEN ANDREW FIGGURES:   And I wouldn't have had the job

7           unless I had wanted to meet the requirement.   To my

8           mind, looking at it from my particular position, there

9           was insufficient money.   Of course, I read the

10          newspapers.   I understand the nation can only afford so

11          much, so it is a question of: do we make the case for

12          that particular slice of the national wealth to be

13          devoted to this particular capability?   So every waking

14          day I would get up and think about how I could get more

15          money, because someone had to make a judgment, and so

16          I appreciate, as a citizen, that a balance had to be

17          struck, but as a soldier on the defence staff, no, there

18          was insufficient money.

19   BARONESS PRASHAR:   But what are the areas of capability that

20          you were not able to invest in to the extent that you

21          wanted?

22   LT GEN ANDREW FIGGURES:   Well, I mean, I could go back to my

23          list, but I think strategic deployment.   We talked about

24          expeditionary operations.   Yes, we had a considerable

25          uplift.   We had certainly uplifted our amphibious

1 capability but, in terms of strategic lift, we had  
2 acquired heavy lift, we were going to acquire the A400M  
3 as a medium lift. We had acquired more C-130s. We went  
4 through a process both in General Fulton's time and my  
5 time of buying further C-17. We equipped them with  
6 defensive aid suites. We wanted to put a suppressant  
7 foam in the wings of the A400M and so on. We found the  
8 money for that. So all strategic deployment required  
9 more money than I think we had originally estimated.

10 I think you could go back to the original planners  
11 of SDR and say: did they anticipate a scenario whereby  
12 you would have to land heavy transport aircraft in the  
13 face of ground to air missile threat?

14 Possibly they didn't, but you can't anticipate  
15 everything and we had to react to that change.

16 We talked about the expeditionary campaign  
17 infrastructure. We had had experience of that in  
18 Kosovo, but then we were deploying lots of people and  
19 when we developed that initially, did we anticipate that  
20 we would have to counter indirect fire? So we had this  
21 huge programme in Basra of protecting the base both  
22 passively and also with counter indirect fire  
23 capability.

24 ISTAR. Did we anticipate the requirement we would  
25 need provide coverage of areas as big as southern Iraq

1 or as big as Afghanistan? No, we didn't and therefore  
2 we had to develop that.

3 So we had a view possibly in 1998/1999, but, as we  
4 discussed, the threat, the nature, the operational  
5 context changed and we had to anticipate, or where we  
6 had not anticipated, react to it, which required  
7 considerable sums of money, and I think that has all  
8 been exposed over time.

9 BARONESS PRASHAR: You have been talking mainly about  
10 transport and aircraft.

11 LT GEN ANDREW FIGGURES: But force protection, force  
12 protection for ground platforms, force protection for  
13 air platforms. About 50% of the money we have spent on  
14 UORs has been for force protection for ground platforms,  
15 ground manoeuvre.

16 BARONESS PRASHAR: We are talking about the equipment  
17 capability UORs.

18 LT GEN ANDREW FIGGURES: About 50% of the UORs have been  
19 spent on force protection of ground manoeuvre  
20 capability.

21 BARONESS PRASHAR: What action did you take to try to ensure  
22 such funding went into these areas?

23 LT GEN ANDREW FIGGURES: Well, we had a capability audit. We  
24 had the information that came from theatre. We struck  
25 a balance between what we could do now, what we could do

1 in the future, and in the equipment programme we had to  
2 strike this balance between the short, medium and  
3 long-term. I mean, you can't stop building a submarine  
4 once you have set out to build it. Once you have set  
5 out to build a class of submarines, you have to build  
6 the class, otherwise the sunk cost when you scrap the  
7 programme is just money wasted.

8 So you have this long-term programme, you might say  
9 the skeleton, which has to be sustained, but you have  
10 on the margin to also work out where you can spend  
11 money to support the operation and, where you do not  
12 have sufficient money to support the operation. You then  
13 have to go to the Treasury and make the case. We were  
14 given considerable sums of money over the period of time  
15 that I filled my appointment once we had made that case.

Whether

16 it was helicopters or protective mobility, defensive aid  
17 suites, all of those where we made the case were funded.  
18 The Treasury were very rigorous in their scrutiny  
19 of the case we put forward, and as a taxpayer you  
20 would expect that they should be. As a soldier  
21 understanding the requirement it was hard work  
22 producing the evidence to get past that scrutiny.

23 BARONESS PRASHAR: Anything you want to add, General Fulton?

24 LT GEN SIR ROBERT FULTON: No, I don't think so. I think we  
25 found ourselves constantly pushing to try to get to what

1 the policy had asked to us do, which is to create this  
2 expeditionary capability. I think we constantly -- then  
3 the new chapter which followed 9/11 emphasised this  
4 point about what in the jargon of the day was knowledge  
5 superiority, in other words, knowing about -- if we knew  
6 more, then wouldn't we be better able to either pre-empt  
7 it or deal with it? So we wanted to put money into that  
8 and I think Air Chief Marshal Stirrup mentioned that.  
9 So we were constantly trying reflect policy without  
10 derailing the skeleton of the equipment programme and  
11 adding extra cost -- the extra cost or the extra risk  
12 that would stem from it.

13 BARONESS PRASHAR: So you are saying that you were actually  
14 putting money into areas -- because of policy reasons  
15 into areas which were not directly relevant for  
16 operations in Iraq?

17 LT GEN SIR ROBERT FULTON: Sorry. Could you repeat the  
18 question?

19 BARONESS PRASHAR: You were putting money into those areas  
20 because of the policy that had been agreed, but they  
21 were not necessarily relevant to what was needed in  
22 Iraq?

23 LT GEN SIR ROBERT FULTON: Well, Iraq had not happened then.

24 BARONESS PRASHAR: I am talking about your time in --

25 LT GEN SIR ROBERT FULTON: Oh, sorry. No, no. I think the



1 balance between -- the balance between current  
2 operations -- sorry. I misunderstood your point about  
3 timing. No. It was important to provide the capability  
4 that we needed for Iraq and General Figgures has  
5 described the process by which we had to try to find the  
6 money ourselves and if we couldn't find the money then  
7 we went to the Treasury for UORs once Iraq had started.  
8 SIR JOHN CHILCOT: But at the same time the skeleton, as you  
9 describe it, the main long-term equipment programme,  
10 itself has to be adapted to changing policy needs not  
11 necessarily at all relevant to a current operation.  
12 LT GEN SIR ROBERT FULTON: And that comes back to General  
13 Figgures' point about short, medium and long, and, of  
14 course, you know, if you rob tomorrow to pay for today,  
15 there will be no tomorrow. So that's a balance, but  
16 clearly the importance attached to current operations  
17 was paramount then and is paramount today.  
18 SIR JOHN CHILCOT: Right.  
19 BARONESS PRASHAR: Can I move on to the issue of  
20 re-prioritisation, because Treasury witnesses have  
21 stressed the virtues of re-prioritising to fund the  
22 demands for Iraq and Sir Peter Spencer, whom we saw  
23 yesterday, told us that there was not an issue with  
24 funding of UORs because, he said, and I quote:  
25 "The project team would have told the sponsor how

1 much it would cost and if they had the money, we went  
2 ahead with it. If they didn't, presumably they  
3 re-prioritised. I mean, money was not inexhaustible and  
4 in any operation there is going to be more ideas than  
5 there is going to be money to fund it."

6 Did you ever reach the limits of re-prioritisation  
7 within your existing funds?

8 LT GEN ANDREW FIGGURES: Within the -- I mean, there are two  
9 tracks here, and I may be guilty of repeating myself,  
10 but within the programme, the equipment programme, there  
11 was a limit to how much you could re-prioritise, because  
12 we had committed a significant portion to the skeleton.  
13 So it was really: were we able to delay a particular  
14 programme or descope it? That had implications which  
15 again one could come on to of: it does drive cost into  
16 the programme later on. So it is another variation of  
17 the point that General Fulton made about paying for  
18 today by robbing tomorrow.

19 BARONESS PRASHAR: Uh-huh.

20 LT GEN ANDREW FIGGURES: When it came to the urgent  
21 operational requirements, if we could identify the  
22 requirement, justify it, have a reasonable idea of what  
23 it might cost, deliver it in an acceptable time-frame,  
24 then the Treasury would give us the money for it, and we  
25 got into a position whereby we were asked could we

1 estimate what the requirement might be for the next  
2 year, and we did that as best we could. Why was that?  
3 Because I suspect they needed to manage their cash and  
4 so on. It's a perfectly reasonable thing to anticipate.

5 If we had exceeded our estimate, and I suppose  
6 an example would have been later on in 2007/8 the  
7 protecting mobility package, they again as a special  
8 measure funded that.

9 So it was a question of making the case, some tough  
10 negotiation and then providing the defence equipment and  
11 support with the wherewithal to go off and meet the  
12 requirement. I wouldn't want you to think it was easy.

13 BARONESS PRASHAR: No. I wanted to come on to what were the  
14 barriers to reorganising priorities?

15 LT GEN ANDREW FIGGURES: Well, the flexibility in the  
16 programme, and I suppose an example is Astute  
17 is a good example of which we have both had experience.  
18 Could we descope the requirement for the Astute  
19 submarine? There is not a lot of requirement for  
20 submarines in Iraq and Afghanistan. Therefore there is  
21 a sensible place to go to look to see if there is some  
22 scope for re-prioritisation.

23 For instance, we looked at removing some of the  
24 ability to develop the Astute capability whilst in  
25 service. There were various things we could do which

1           would enable us to develop that capability when it was  
2           in service, but that would cost money up front, and we  
3           removed some of that money which we used to do some of  
4           the things that I rather hastily described earlier.

5           There is a limit to how much you can do there, and  
6           I think it has been suggested that various programmes  
7           were cancelled. Well, it goes back to you have to be  
8           pretty confident you are not going to need those in  
9           future and, secondly, how much freedom of action do you  
10          have to cancel them? There is a contractual, commercial  
11          dimension to it, and are you going to soak up more money  
12          doing that than you are going to release?

13 BARONESS PRASHAR: Anything you wish to add?

14 LT GEN SIR ROBERT FULTON: No.

15 BARONESS PRASHAR: That brings me to the whole question of  
16          the agility of the equipment programme because it has  
17          been described as an oil tanker that doesn't turn very  
18          easily.

19          I mean, how often was the equipment programme  
20          revised to reflect the development of the Iraq campaign?

21 LT GEN SIR ROBERT FULTON: Every year. I mean, in the  
22          programme --

23 BARONESS PRASHAR: This is something you did automatically  
24          every year?

25 LT GEN SIR ROBERT FULTON: Yes. So there is annual cycle of

1 re-costing the programme and then, because as we --  
2 going right back to the beginning, the requirement laid  
3 on us is to produce an affordable plan and therefore the  
4 Treasury want to see an affordable defence programme  
5 every year.

6 So, therefore, we had to balance the books every  
7 year. Part of that is -- in addition to UORs part of  
8 that is also: what are the new requirements that we are  
9 trying to get into the programme, into the core  
10 programme, and therefore what are the savings measures  
11 that we are going to run? We had a process whereby we  
12 identified what the new requirements were, not just for  
13 Iraq, but the totality of new requirements, a priority  
14 order for them, and then we would we would balance them  
15 against the savings measures that would be required.  
16 Then we produced a batting order.

17 In other words, is saving X more or less painful  
18 than enhancement A? So we would produce for the defence  
19 board every year a prioritised list of, "Add this in,  
20 take this out". Then the defence board can decide where  
21 they want to take it. So that's in a sense the  
22 construction of the core programme.

23 Meanwhile whilst that big wheel is turning there are  
24 101 little wheels going on which are trying identify --  
25 trying respond to new requirements that come up and: can

1           we do that? Can we do that quickly? Those would be the  
2           urgent operational requirements that are going on in the  
3           meantime. Of course in addition to that in-year you can  
4           make adjustments but then you have to bring the books  
5           back into balance at the end of the year.

6   BARONESS PRASHAR: But does this annual review mean you were  
7           just kind of dealing with the issues in the margins or  
8           was this in the light of the Iraqi operation needing  
9           some radical restructuring.

10   LT GEN SIR ROBERT FULTON: Well, did Iraq produce radical  
11           restructuring? No, I think for the reasons we have  
12           already identified the radical restructuring -- I mean,  
13           I can't remember what proportion -- at the start of each  
14           year what proportion of the equipment programme was, as  
15           it were, contractually committed, but, I mean, it is  
16           very high. It is about of the order of sort of  
17           70 per cent, 75 per cent, I would think, and therefore  
18           if you say, "Are you therefore playing around with the  
19           30 per cent in the margin," to a certain extent, yes.  
20           You know, you have to understand the implications of  
21           messing around with the 70 per cent, but you do want to  
22           have a look at the totality, not least because during  
23           the course of the year that 70 per cent, if 70 it is,  
24           will actually have changed either through inflation or  
25           because, know, the fact remains that a lot of our, what

1 I would call the problem children, when re-costed came  
2 out at a different cost to that at which they were  
3 costed the year before because of risks that had emerged  
4 or whatever it may be. It was pretty rare for those  
5 costs to go down.

6 LT GEN ANDREW FIGGURES: Yes. If I may illustrate, the first  
7 time I participated in this planning the defence board  
started it  
8 with an away day in October. This was 2006. It was  
9 quite clear what the priority was. If I refer to  
10 my notes made at the time "our principal effort in the  
11 immediate term, in conjunction with other government  
12 departments and the international community is to  
13 support Her Majesty's Government in achieving strategic  
14 success in Iraq and Afghanistan in the wider context of  
15 the global counterterrorism campaign."

16 Elegantly phrased but it was clear what we  
17 had to do. Then we went into the business of what we  
18 were going to do about meeting these priorities. From my  
19 notes capabilities such as force protection,  
20 support helicopters, ISTAR were all identified. We then  
21 produced proposals as to how we would fund it.

22 BARONESS PRASHAR: We will come back later, but there are  
23 a couple of other questions I want to just ask before  
24 I finish.

25 Why did the Public Accounts Committee question the

1 balance of investment of MoD's equipment programme and  
2 does the lack of agility explain why a large volume of  
3 UORs were used?

4 LT GEN ANDREW FIGGURES: If I can return to the question of  
5 agility. In the equipment programme say, for instance,  
6 we were going to spend 6 billion a year, something of  
7 that order, there was something called an adjustment.  
8 It is unlikely that you spend 6 billion on the things  
9 that you plan to spend it on because you may  
10 encounter technical difficulties. For instance, back to  
11 our friend Astute, which has been well covered by the  
12 Public Accounts Committee, the computer-aided design and  
13 manufacturing system did not deliver the design such  
14 that the manufacture could be delivered to the  
15 time-frame we anticipated. So we did not spend the  
16 money we had programmed to do that year. To manage this  
17 we overprogrammed. So given a budget of £6 billion  
18 add 10 per cent to that assuming there will be  
19 some slippage in the programme.  
20 Well, of course with, it could be attributed to  
21 Smart Acquisition, smart procurement, but actually  
22 we got better and industry got better at delivery.  
23 Therefore our experience was that  
24 we did not have the slippage, and we  
25 had to find a way of taking that 10 per cent out.



1           So before you could re-prioritise you had to remove this  
2           10 per cent block adjustment.

3           If you were cynical, you could say we were not  
4           particularly disciplined in living to the financial  
5           envelope we had been given, and rather than making those  
6           difficult decisions, we programmed extra things in for  
7           that block adjustment. But there are two ways of  
8           looking at that.

9   BARONESS PRASHAR: Why did the Public Accounts Committee  
10          actually question the balance?

11   LT GEN ANDREW FIGGURES: I don't know, because I was not  
12          there listening to their case for saying so.  
13          I mean, I think it is perfectly reasonable  
14          to question the balance of investment. It is  
15          a respectable question to ask, but there is also  
16          a respectable answer. You can't change a balance of  
17          investment if you signed up to doing various things  
18          without incurring financial penalties which outweigh the  
19          benefit you might have of investing the money you freed  
20          up.

21          I mean, we have -- in our personal lives we have had  
22          experience of committing to something which in  
23          retrospect perhaps we regretted doing but we can't get  
24          out of that particular contract.

25   BARONESS PRASHAR: One final question from me. We will be

1            talking about Lord Drayson's role later, but elsewhere  
2            what role have ministers played in pressing for quicker  
3            solutions to operation equipment shortages?

4    LT GEN SIR ROBERT FULTON: Well, I think they played their  
5            part to the full. Certainly the ministers of defence  
6            procurement for whom I worked were fully engaged in  
7            pushing for delivery. So I would have no qualms on that  
8            score.

9    LT GEN ANDREW FIGGURES: I would agree. I think they were  
10           hard taskmasters actually. I had to -- and the other  
11           members of the team, that's Kevin O'Donoghue, Peter  
12           Spencer and so on, we all had to work very hard to  
13           persuade them that we were actually doing everything  
14           that could possibly be done to deliver the requirement.  
15           Lord Drayson was a very good example on defensive aid  
16           suites. He said the problem had to be addressed.  
17           I think within the space of a week we had to come up  
18           with a plan. We had to report on it at a two-weekly  
19           basis. He was pretty unforgiving if we didn't make the  
20           progress we said we were going to make.

21    BARONESS PRASHAR: We will come back to that, but I am  
22           talking about other ministers.

23    LT GEN ANDREW FIGGURES: All of them were ruthless in  
24           pursuing it. I mean, it was hard work satisfying their  
25           requirements, but quite rightly they were doing the job.

1           They were energetic in pursuing these outcomes.

2   SIR JOHN CHILCOT:   Lawrence, over to you.

3   SIR LAWRENCE FREEDMAN:   Just a few brief questions relating  
4           to something that has already been mentioned, which is  
5           the vivid account you gave, General Fulton, about the  
6           measures and countermeasures in the sense of an arms  
7           race.

8           Now during the Cold War, a keen sense of an arms  
9           race and we had a technical intelligence capability that  
10          would be trying to anticipate the developing threat so  
11          we could plan against it.

12          Do you have the same sort of capability in  
13          relationship to the sort of threat that we have been  
14          facing in Iraq, and how does that feed through into the  
15          equipment programme?

16   LT GEN SIR ROBERT FULTON:   I would have said my sense is  
17          that Northern Ireland is a better model than the Cold  
18          War in the sense that during the time when -- well,  
19          I think once again I would come back actually -- sorry,  
20          if I may retrace my steps, I think I would come back to  
21          my point about there were two operations in Iraq in the  
22          sense that we wanted to know what we were going to face  
23          when we were confronting the Iraqi army, and I think  
24          that defence intelligence capability gave us a pretty  
25          good idea of what that would be like, but I think the

1 point of your question is the development thereafter,  
2 and that's my point about Northern Ireland, because we  
3 were dealing with an insurgency, we were dealing with  
4 an insurgency that in a sense held the initiative in the  
5 sense of being able to attack us at a time and place of  
6 their choosing, and they -- we had developed during our  
7 time in Northern Ireland, as people are well aware,  
8 a capability for countering improvised explosive devices  
9 and the ways in which they were initiated, and we had  
10 also developed tactics, techniques and procedures for  
11 dealing with them. Northern Ireland had proceeded on  
12 the basis of a combination of the two. My sense is that  
13 by and large with the contribution of defence  
14 intelligence, the defence science and technology  
15 laboratories and our own people we were attempting to  
16 pre-empt in the sense of knowing what the enemy was  
17 capable of doing. If your question then is from that  
18 were we able to know what the enemy was going to do,  
19 then I think no. Very often it was -- the first time  
20 that a new attack was initiated against us in  
21 a particular way was the first instance that we knew  
22 that's what we needed to produce the counter for.

23 SIR LAWRENCE FREEDMAN: We will look into IEDs in a bit more  
24 detail later. I suppose the reason I mentioned the Cold  
25 War is the question of whether there is a contrast

1       between something that moves rather slowly along very  
2       defined lines and a rather fast developing insurgency  
3       where you may be forced into a more reactive posture.  
4       The question is really: does the difficulties with  
5       intelligence put you in a more reactive posture in these  
6       sort of settings?

7   LT GEN SIR ROBERT FULTON:  My sense is that it almost has to  
8       in the sense that, as I say, you may know the range of  
9       things that the enemy are capable, or are likely to be  
10      capable of doing, because of, as it were, there is  
11      a span of commercial technology available or there is  
12      technology available from elsewhere in the world, but  
13      which ones they are going to pick up on and which ones  
14      they are going to use in order to counter whatever it is  
15      you are doing, because, of course, they will watch what  
16      you are doing, they will look for where -- if our  
17      operating patterns offer them an opportunity, and they  
18      will try that, and we will then develop a counter to it.  
19      That's my point about it then has -- so it is action and  
20      reaction on both our parts all the way through, would be  
21      my sense.

22  LT GEN ANDREW FIGGURES:  Yes, and I think we have taken the  
23      lessons of Northern Ireland.  I can recall visiting  
24      teams embedded in the Headquarters at Basra Airport who  
25      carried out the scientific and operational analysis of

1 the attacks, were constantly in contact with the defence  
2 science and technology laboratory. Work was done back  
3 in the UK to replicate these threats and what possible  
4 counters might be to them.

5 Going back to the point these developed very  
6 quickly, and the nature of their development,  
7 particularly the size of the explosive devices used,  
8 meant that to be able to just counter it with passive  
9 protection was only a partial solution. One had to  
10 think further ahead than that and start working up the  
11 opposition supply chain and preventing them, disrupt  
12 them from actually being able to deliver these devices  
13 from which they could be used.

14 SIR LAWRENCE FREEDMAN: I think we will talk about specific  
15 instances.

16 Just a final question. Were you confident that the  
17 intelligence side had the resources to do what they  
18 needed to do and were you satisfied with the interaction  
19 with the intelligence side and the defence science labs  
20 and so on to make sure that the best possible threat  
21 assessments were being given to you within the  
22 capabilities programme?

23 LT GEN SIR ROBERT FULTON: Yes, I think so. I never had  
24 cause to doubt that. Whether there were sufficient  
25 resources on the ground in Iraq I have no way of

1           knowing, but in terms of the conduit and the process by  
2           which it came to us and was incorporated into the  
3           planning by the Directors of Equipment Capability,  
4           I never had any cause for concern.

5   LT GEN ANDREW FIGGURES: I agree.

6   SIR JOHN CHILCOT: Continuing on my theme, I will ask  
7           Sir Martin Gilbert.

8   SIR MARTIN GILBERT: If I could follow up on that, could you  
9           perhaps tell us in broad terms how you received  
10          information about the equipment capability available to  
11          forces in Iraq and in particular how you received news  
12          of their concerns about it, if they had them?

13   LT GEN SIR ROBERT FULTON: The Directors of Equipment  
14          Capability, who in the main were one-star brigadiers or  
15          equivalent in the other services kept in close touch  
16          with the frontline commands, the Permanent Joint  
17          Headquarters, with theatre itself, and, of course, in  
18          many cases came directly from one of those places  
19          anyway, because one of the important constructs of the  
20          equipment capability area was that the customer should  
21          be of and from and going back to the front line rather  
22          than being acquisition or procurement professionals or  
23          engineers.

24                So -- and, of course, it was not just the Directors,  
25          but also down through their staffs were people who had

1           come from the field, from command, from one of the  
2           frontline commands, from the Permanent Joint  
3           Headquarters, and therefore not only were they getting  
4           it formally but also informally as well.

5   SIR MARTIN GILBERT:   Would you have seen things like end of  
6           tour reports, Board of Inquiry reports?

7   LT GEN SIR ROBERT FULTON:   They would have done, yes.  
8           I didn't read each one personally but they certainly  
9           did.

10   SIR MARTIN GILBERT:   How did you judge the urgency of  
11           responding to the needs that were identified?

12   LT GEN SIR ROBERT FULTON:   The Permanent Joint Headquarters  
13           was the filter for requirements coming back from  
14           theatre. Clearly they didn't do it in isolation,  
15           because the frontline commands were also gathering  
16           together, but Permanent Joint Headquarters was the  
17           prioritisation centre, if you like, and clearly they  
18           were in daily discussion not only with us but also with  
19           the -- also with the chiefs so that the Chief of Joint  
20           Operations was briefing the Chief of Defence Staff and  
21           the Chiefs of Staff.

22   SIR MARTIN GILBERT:   If I could turn specifically now, to  
23           both of you really, to the UOR questions, we have heard  
24           a great deal on, the MoD's December 2003 publication  
25           "Lessons for the Future", looking at Operation TELIC



1       noted there had been, as they put it, weakness in  
2       tracking of progress of UORs requests from the requests,  
3       as it were, through to their delivery and use in  
4       theatre.

5               Was this something on which you were able to take  
6       action?

7   LT GEN SIR ROBERT FULTON:  Yes.  I think that in a number  
8       of -- in a number of ways.  I think it would certainly  
9       be true in -- because, of course, they were very much  
10      looking at the sprint phase of this, and, therefore,  
11      I think I would recognise that the priority was speed.  
12      We only had in effect from December to the very earliest  
13      months of January, because bearing in mind that people  
14      were deploying.  So I think speed was paramount.  We  
15      knew we had to do it quickly, and I think that it was  
16      only as 2003 went on, and it was apparent that this was  
17      going to be a much longer term activity that we were  
18      able to draw breath, and I think the other dimension,  
19      which I know has been mentioned, is that it was  
20      recognised, and it was recognised from the outset, that  
21      a capability is more than the piece of equipment.  
22      Clearly the longer the timescale went on the more  
23      important it was that it was integrated.  That's not to  
24      say it was not important at the beginning, but that, for  
25      example, in many cases by the time we had gone to

1 industry in December 2002 and industry could react,  
2 however quick it was, that the force to which it needed  
3 to be applied had already deployed, and therefore it was  
4 only on arrival in theatre that the UOR and the people  
5 could be married up, and clearly that is not ideal.

6 So I think yes, I would recognise the criticism for  
7 the first phase, but I do think that we got very much  
8 better at not only tracking but also in tracking not  
9 just delivery but also its translation into full  
10 capability.

11 SIR MARTIN GILBERT: I would like to turn from the sprint to  
12 the marathon phase, because the National Audit Office  
13 observed in 2009:

14 "Weaknesses remain in the management of information  
15 available to provide everyone involved with a complete  
16 and common picture of the progress of UORs and to  
17 measure outcomes."

18 What would have been the barriers to this, to making  
19 further progress for the management of information?

20 LT GEN ANDREW FIGGURES: Well, something as  
21 prosaic as the fact that the information system used in  
22 the DPA, DAWN, was not totally compatible with the  
23 information system CHOTS in the MoD, but with the advent  
24 of the defence information infrastructure there was  
25 an ability to use a common database and give visibility

1 to those concerned.

2 So defence information infrastructure was a great  
3 step forward in a whole load of areas. With the advent  
4 of the defence information infrastructure deployed it  
5 meant that in theatre you could all work off the same  
6 database, because up until that time we had every month  
7 to produce a disk, convey it to theatre and then they  
8 looked at the disk, we had a conference, a video  
9 conference, and progress was discussed in that way.

10 So yes, once we had integrated our information  
11 systems, then we made a great step forward.

12 In terms of the people involved, all the right  
13 people were involved in my time. So provided they got  
14 to the table and provided they came with the appropriate  
15 information, then the necessary work could be done.

16 An important step forward was the case which was  
17 made that when we purchased a UOR, that we also  
18 purchased a training margin which had not been the case  
19 until I think 2006/7, so that we could then train in  
20 this country prior to deployment.

21 Then the next piece of sophistication was to  
22 sequence the UORs such that they met the appropriate  
23 formation well in advance of deployment so that the  
24 formation knew what they were going to take with them or  
25 meet in theatre and so all these capabilities could be

1 integrated and they could train with them both  
2 individually and collectively.

3 So there was I think a programme of continuous  
4 improvement. I suspect we have yet to achieve  
5 excellence. One never does in this type of environment.

6 SIR MARTIN GILBERT: That has been helpful.

7 I would like to turn back to something you touched  
8 on, General Fulton. When he gave evidence to us,  
9 General O'Donoghue says it inevitably takes time to  
10 deliver UORs to theatre after the request is received.  
11 We have heard evidence also from General Shaw and  
12 General Binns that kit was arriving in Iraq in most  
13 cases that had been requested by their predecessors.

14 Do you think that commanders recognise that for  
15 larger items the requests they make will usually be for  
16 the benefit of their successors? Is this something that  
17 was --

18 LT GEN SIR ROBERT FULTON: I think you would have to ask  
19 them. Do I have a sense that that is so? Yes, I think  
20 quite possibly, but I think that the onus is on  
21 commanders to see the campaign in its context rather  
22 than chopped up into segments that are defined by their  
23 presence.

24 I mean, I think it touches on a point that was  
25 talked about earlier, which is this great cry of

1 agility, because agility is seen as the holy grail.  
2 Well, maybe, but I would say that agility has a flip --  
3 two flip sides. One is people who change their minds  
4 and the second is people who are followed by someone  
5 else who has a different perspective.

6 So all three of those could lead to a change in  
7 requirement. The question is: which of those three is  
8 legitimate, or which are legitimate, and which takes you  
9 down expensive blind alleys? Because I think there are  
10 examples of all three around, and, you know, I am not  
11 sure you can pick the bones -- and, of course, depending  
12 on which hill you stand on, my opinion, because I am the  
13 new commander, is better than my predecessor's. So,  
14 therefore, I want something different.

15 If the equipment world reacts to that, is it being  
16 agile or is it being unwise?

17 SIR MARTIN GILBERT: So the question of the six-month tour  
18 length in a sense does affect capability development  
19 during a campaign. Is this something that concerned you  
20 at the time? Is it something that created problems?

21 LT GEN SIR ROBERT FULTON: I think that -- I mean, if you  
22 are talking about the commander, I think two things.  
23 One is I think the issue -- I think the question is  
24 a much bigger one than simply the equipment requirement,  
25 and, secondly, equipment requirements are generated, as

1           it were, many levels below that particular commander,  
2           but I think my point about agility -- I mean, you know,  
3           I think my point about agility and changing your mind  
4           and, "The next officer has a different perspective to  
5           mine", all apply no matter what level it occurs at.

6   SIR MARTIN GILBERT:  If you look at the people who were  
7           responsible for producing the overall operational  
8           strategy, what role do they or should they have in  
9           determining the equipment and capability requirements to  
10          fulfil the strategy --

11  LT GEN SIR ROBERT FULTON:  Do you mean the theatre commander  
12          or our own Chief of Joint Operations?

13  SIR MARTIN GILBERT:  At the higher level.

14  LT GEN SIR ROBERT FULTON:  As I referred earlier, the Chief  
15          of Joint Operations at Permanent Joint Headquarters  
16          certainly in my time was responsible for joining  
17          together the threads and prioritising them and making  
18          recommendations, and clearly we in the department were  
19          responsible for reacting to those and getting approvals  
20          from all the various people, but clearly the Chiefs of  
21          Staff have an influence as well.

22                So clearly that also brings into play the  
23          relationship between what you call the strategic  
24          direction by the Chiefs of Staff in this country --  
25          sorry -- Chiefs of Staff in London, Chief of Joint

1       Operations here and, of course, then the Theatre  
2       Commander, whether national, or the Theatre Commander  
3       combined.

4   LT GEN ANDREW FIGGURES:  Yes.  I think there was a formal  
5       process for ensuring everyone worked together in support  
6       of the operation.  So the Chief of Joint Operations  
7       would have an input and a very significant input into  
8       the equipment planning process.  He also, and his staff,  
9       had a very significant input into progressing of the  
10      urgent operational requirements.

11       When there was to be a change of force structure in  
12      theatre as a consequence of the need to -- of change of  
13      strategy or change of circumstance, then we had  
14      a significant contribution into the planning process.  
15      Did we require more protective mobility, more ISTAR,  
16      whatever, and how were we going to provide that?

17       So there was I think within the department and with  
18      the Permanent Joint Headquarters a good linkage formally  
19      and informally.

20       We had people -- equipment capability or capability  
21      officers embedded in the deployed Headquarters such that  
22      they could articulate the requirements and also they  
23      generated these informal links,  
24      skipecheloning, so that it didn't have to go through  
25      a tortuous staff process.  They would just get on the

1 phone and say, "Look, we have a problem with this".

2 So there was the scope for agility in that, but  
3 I would go back to General Fulton's point. There is  
4 always a danger -- if you want to get something  
5 delivered, establish the requirement, stick to it and go  
6 for broke. Get that into the hands of the troops. They  
7 will tell you whether it is good or bad and then you  
8 have the next iteration. There is nothing worse than  
9 constantly, "Change a bit of that, change a bit of that,  
10 change a bit of that". You never get anything. This is  
11 a wasteful business, because it may well be your  
12 proposed solution is not effective and you have to be  
13 prepared to be told, "Well, thank you very much indeed,  
14 but this is rubbish. It doesn't work and we need  
15 something else". It requires a bit of flexibility to do  
16 that, but they know, because they use it.

17 SIR MARTIN GILBERT: I would like to end my questioning with  
18 something which Sir Peter Spencer told us yesterday, and  
19 told us rather vigorously, when he argued for the  
20 virtues of incremental acquisition off the shelf  
21 solutions as the key, as he put it, to successful  
22 acquisition, as opposed to over-ambitious requirements  
23 setting. He put it in these words:

24 "What characterised successful UOR procurement in  
25 the main was that we were going for something which



1       already existed and may have needed to be adapted for  
2       integration purposes but we knew what the performance  
3       was. This contrasted starkly with some of the more  
4       ambitious requirements which were set in mainstream  
5       procurements."

6               Do you agree with his diagnosis?

7   LT GEN SIR ROBERT FULTON: Yes, but I think it says  
8       something about the difference between UORs and  
9       mainstream procurement. You can't UOR a nuclear  
10      submarine. You can't incrementally acquire a nuclear  
11      submarine except in the sense General Figgures referred  
12      to it earlier in terms of building the submarine and  
13      then adding a capability. The UORs by and large were  
14      additions to a basic capability, sand filters for  
15      Challenger tanks, defensive aid suites for aircraft,  
16      etc, etc. So I think it draws a very clear distinction  
17      between the core programme in the main, the core capital  
18      programme and the things that you are going to do to the  
19      capital programme to adapt it to the requirement.

20             I think my second point about buying off the shelf  
21      is the one about integration. It's a much bigger  
22      subject than you might want to touch on here, but buying  
23      something off the shelf is fine, but you risk ending up  
24      with as many stovepipes as you have bought bits of  
25      equipment, because they were not designed to work with

1 the other bit of equipment.

2 Very often you will have to decide actually the  
3 extent -- in the phrase that you quoted "and  
4 integrated". Well the issue about integrating something  
5 which was not designed to work with something else is,  
6 as I am sure Sir Peter told you, really non-trivial, and  
7 it can add -- I mean, it can add mightily to the cost.  
8 You know, there is an example, the attack helicopter.  
9 The attack helicopter was designed -- it was not quite  
10 bought off the shelf but it existed in the American  
11 inventory and was adapted. One of the key questions we  
12 had to ask is: this is going to operate with ground  
13 force, therefore of course, so the requirement says, fit  
14 Bowman into the attack helicopter. Well, don't, and we  
15 didn't, but we had to find another way of making sure  
16 that it could integrate. So, you know, the integration  
17 is non-trivial and you will have to decide, because bear  
18 in mind that one of the things that we were trying to  
19 do, and it goes back to the point that was made earlier  
20 about the aftermath of the SDR and the new chapter,  
21 which is that one of the things that fundamentally we  
22 all knew that we wanted to do was have integrated  
23 capability, not army/navy/air force capability. We  
24 didn't want the navy to have its own CCI - command,  
25 control, information system, and the army and air force

1           their own. We actually wanted to share information  
2           because we were gathering intelligence from a whole  
3           range of common sensors.

4           Now if those sensors cannot feed the information to  
5           everybody on the battlefield, then the information may  
6           not have been worth gathering in the first place. I am  
7           sorry to go on, but this issue -- integration is the big  
8           issue about buying off the shelf.

9   LT GEN ANDREW FIGGURES: I subscribe to the nuanced approach.

10   SIR JOHN CHILCOT: Thank you.

11   SIR MARTIN GILBERT: Thank you.

12   SIR JOHN CHILCOT: We would like to ask just a few questions  
13           on UORs which Sir Roderic Lyne is going to take up and  
14           then we will take a break in a few minutes' time. Rod.

15   SIR RODERIC LYNE: I think we are conscious of the fact we  
16           spent a long time on UORs, and they are not the biggest  
17           bit of the story which is the basic core programme of  
18           capability.

19           Just to finish this off, within the envelope of  
20           money that was agreed once Iraq got going with the  
21           Treasury I think on an annual basis for what could be  
22           spent on UORs and was not I think a finite envelope,  
23           because if the need arose, you could then go back and  
24           ask for more, who had the final say on whether  
25           a particular bit of equipment could be purchased as

1 a UOR or could not? Where did that lie?

2 LT GEN SIR ROBERT FULTON: Whether it was going to be  
3 purchased rested with the Ministry of Defence, but who  
4 was going to pay for it I guess was a subject of, as it  
5 were -- whether it was going to come out of the defence  
6 budget or whether it was going to come out of the  
7 Treasury was an issue between the two.

8 So I don't think there is a simple, straightforward  
9 answer to your question. We produced the requirement,  
10 as General Figgures has described earlier. There may  
11 have been arguments about whether it was justifiable.  
12 I am not aware of any occasion on which we produced  
13 a business case that did not happen because there was no  
14 money for it.

15 SIR RODERIC LYNE: So basically within the Ministry of  
16 Defence where you were dealing with a number of  
17 applications for a UOR you had your internal proceedings  
18 for deciding which ones fell within the UOR rules and  
19 you would then go ahead with that bit of kit, as I say,  
20 within this envelope of money you had, and that was  
21 a decision that would be taken at your level?

22 Am I over-simplifying it too much?

23 LT GEN SIR ROBERT FULTON: I am struggling with the idea of  
24 the envelope. If we wanted something -- sorry -- if we  
25 needed something, and there is a distinction between the

1 two, if we needed something and we made the business  
2 case, then there was, I mean, a constant dialogue  
3 between the Finance Director of the Ministry of Defence  
4 and the Treasury on, "We have exceeded that that was  
5 allowed before and we now need some more money for this  
6 purpose". So this was a constant process.

7 So, as I say, I think I am hesitating on the word  
8 "envelope".

9 SIR RODERIC LYNE: Right. Let's leave the envelope out of  
10 it. Let's simplify it a little further. The need  
11 arises from the ground for X vehicles of a particular  
12 kind to be supplied as quickly as possible. The  
13 business case for that is accepted. Who is the person  
14 who says, "Right. We now go ahead and buy X"? Is it  
15 somebody in the Treasury or is it somebody in the  
16 Ministry of Defence?

17 LT GEN ANDREW FIGGURES: It is signed off within the Ministry  
18 of Defence, and the rules for determining whether it is  
19 a UOR or not are the Treasury's rules.

20 SIR RODERIC LYNE: Yes.

21 LT GEN ANDREW FIGGURES: But provided we are compliant with  
22 those rules, then we have the delegated authority to get  
23 on with it.

24 SIR RODERIC LYNE: Yes. Right. Good. Okay. I think  
25 that's clear.

1           Just taking those rules, what sort of grounds might  
2           be applied for saying something does not comply with the  
3           rules for a UOR? What would be -- can you give us some  
4           examples of things that might be screened out where  
5           somebody had proposed that something should be brought  
6           under a UOR, but you reach a point at which you say  
7           "no". You within the Ministry of Defence say, "No, we  
8           can't do this as a UOR".

9   LT GEN ANDREW FIGGURES: I think -- and it is hard actually  
10          to remember a case where it occurred, but, for instance,  
11          it would be if we couldn't deliver it in the time-frame,  
12          and indeed the time-frame stretched. I think originally  
13          they were six months and then they went to one year and  
14          then to 18 months, because as these UORs became more  
15          complex and required integration, development and so on,  
16          then you needed more time to deliver them and it was  
17          negotiated that yes, we could have more time.

18                You then get into -- say it took three years. Well,  
19          it is then back to the re-prioritisation of the equipment  
20          programme. I think one is beginning to stretch the  
21          charity of the Treasury there.

22   SIR RODERIC LYNE: You at that point would say, "Hang on  
23          guys. This is not really a UOR at all". You would blow  
24          the whistle on it?

25   LT GEN ANDREW FIGGURES: Yes, because I think there is no

1 point in asking for something you know to which the  
answer is 'No!'

2 but there is a very good relationship -- I sat next door  
3 to the Director General of Equipment, who dealt with  
4 James Quinault at the time. They would discuss all  
5 those things. We never asked a question we didn't know  
6 the answer to.

7 SIR RODERIC LYNE: So you didn't have a lot of failed  
8 requests on UORs.

9 LT GEN ANDREW FIGGURES: No.

10 SIR RODERIC LYNE: Essentially you had a chain of people in  
11 the Ministry of Defence who would go from the theatre,  
12 through PJHQ to yourselves. Within that chain you would  
13 scrutinise these requests, decide what was sensible,  
14 reasonable, viable, deliverable and say "yes", or at  
15 some point you would say, "Hang on a second guys. This  
16 does not work for this particular reason". You would  
17 weed it out mostly yourselves. If in doubt you would  
18 ring up the Treasury. Is that right?

19 LT GEN ANDREW FIGGURES: Yes, although the manner in which  
20 you described it, and I have to be careful, because I  
21 sense that you, Sir Roderic, are implying intent.

22 SIR RODERIC LYNE: I am a layman.

23 LT GEN ANDREW FIGGURES: It is almost as if you suggest we  
24 would be over-zealous in our scrutiny. I think the  
25 judgment was pretty balanced and there was a lot of  
challenge

1 along the route.

2 A good example is Corporal Hadenough has a really  
3 good idea. Up it comes through his battle group and  
4 then goes to the Brigade Headquarters. What do the  
5 Brigade Headquarters think about it? It might not get  
6 through to battle group. It might not get through to  
7 Brigade Headquarters. Generally a good idea gets  
8 through. The danger that this just dies as it goes up  
9 the chain I think is overcome by the way we do our  
10 business. People visit and Corporal Hadenough very  
11 often gets the opportunity of saying, "I have had this  
12 really good idea. It seems to have gone nowhere".  
13 There is nothing worse than the Vice Chief coming back  
14 with, "I have heard this really good idea. What have  
15 you done about it?" That can be an advantage or you can  
16 be overwhelmed with all these good ideas.

17 So there is a balancing mechanism, but I think  
18 people have generally shown sound judgment. Where there  
19 is a good idea, a sound requirement, it has been  
20 progressed. There may well have been an occasion when  
21 it has not worked, but I think those are the exception  
22 rather than the rule.

23 SIR RODERIC LYNE: If I can just turn to one other dimension  
24 of it, which you have already touched on. General  
25 Fulton, you said a few moments ago that a capability is



1 more than a piece of equipment. That was certainly the  
2 case with UORs in that a UOR had to include the training  
3 dimension for the piece of equipment.

4 In the Iraq conflict, prolonged conflict we are  
5 looking at, did you find in practice that the UOR system  
6 provided sufficient equipment for training to be done  
7 pre-deployment or were you having to patch it into  
8 people who were already deployed in theatre so that they  
9 were learning on the job, because you didn't have enough  
10 pieces of kit or the possibility to train on them? How  
11 was that working?

12 LT GEN SIR ROBERT FULTON: I mean, certainly initially in  
13 the 190 or whatever it was, the -- you know, the big lot  
14 at the beginning, there simply was no time to integrate,  
15 as I alluded earlier, and it was arriving in theatre and  
16 in many cases fitted in theatre by contractors during  
17 the training time, and I think the NAO talked in terms  
18 of us getting, you know, two-thirds were fully there  
19 before the start of hostilities and another two-thirds  
20 were there in part but not in totality.

21 So we were running to catch up at the beginning and  
22 therefore in terms of was there enough for  
23 pre-deployment training then? No.

24 I think then as life went on --

25 SIR RODERIC LYNE: As you moved from sprint to marathon.

1 LT GEN SIR ROBERT FULTON: -- as we got into the Marathon,  
2 my image of the longer term, and I think as the UORs  
3 became more complex, then I think there were -- I think  
4 we got rather better at that. Whether in every case  
5 there was enough for everybody to be trained before  
6 deployment, actually I would doubt, but I don't know.  
7 I don't know the answer, but I think we got better and  
8 better at it as time went on. As the timescales got  
9 longer, as the pieces of equipment that were being UORed  
10 became more complex, particularly as we got into some of  
11 the protective counter-IED stuff, then clearly it became  
12 increasingly important that people should have had some  
13 experience of it before going.

14 I think the answer -- my answer to your question is  
15 "no" at the beginning and "yes" by the end and an  
16 improving pattern all the way through.

17 LT GEN ANDREW FIGGURES: Yes.

18 SIR RODERIC LYNE: In the early stage this was presumably  
19 above all a question of time that one had to do this  
20 deployment against a very short time-frame, but did you,  
21 looking at the six years as a whole, find that the UOR  
22 rules set by the Treasury, the rules of the game,  
23 allowed you a sufficient margin to have kit for training  
24 or was there a constriction there, or was it sometimes  
25 that you weren't bidding for enough where you didn't

1           have enough training kit?

2   LT GEN SIR ROBERT FULTON: From my perspective it wasn't  
3           an issue -- it wasn't a Treasury issue per se. I think  
4           I would answer in the same way as to the previous  
5           question. "No" at the beginning, "yes" at the end and  
6           a steadily improving process all the way through.

7           I think if you were to take a snapshot of the UOR  
8           process today and a snapshot of the UOR process in  
9           December 2002, you would find an immense difference in  
10          terms of the tracking, in terms of what gets under the  
11          radar, in terms of -- you know, what is allowed, in  
12          terms of the extent to which it is going to be kept  
13          in-service for a longer period, in terms of complexity.  
14          I think we are just looking at two -- we call them both  
15          UORs, but I think we are actually talking about almost  
16          two different things.

17   LT GEN ANDREW FIGGURES: Yes.

18   SIR RODERIC LYNE: My final question: General Fulton, you  
19          talked earlier about the importance of appreciating the  
20          need to integrate bits of kit. You gave -- you talked  
21          of stovepipes. You gave the example of the Apache  
22          helicopter and its communications, or was it General  
23          Figgures? Apologies. I may be taking two statements  
24          together.

25          Was the integration issue particularly difficult in

1 Iraq because of the incredible number of UORs that we  
2 were using?

3 LT GEN SIR ROBERT FULTON: Do you mean more difficult than  
4 in the world -- do you mean more difficult than --

5 SIR RODERIC LYNE: If you had a more measured pace? I mean,  
6 you were dealing with a very large number of UORs.  
7 Obviously in the core programme of equipment you have  
8 time to think through these issues. When you are  
9 dealing with UORs, they are by definition short  
10 timeline items, which by implication again to a layman  
11 would militate against integration, would mean sometimes  
12 it would be easier to have a cock-up under which you get  
13 a radio that you stick in a helicopter that doesn't  
14 actually work in a helicopter.

15 LT GEN SIR ROBERT FULTON: I was smiling because I think  
16 your premise that the rest of the core equipment  
17 programme is integrated is not one that the user would  
18 recognise, because integration tends to be where the  
19 complexity lies and it tends to be one of the things  
20 that gets traded out of the requirement at quite  
21 an early stage.

22 Setting that aside, I think that if you are buying  
23 a UOR, and once again I think if you went back to the  
24 beginning, UOR on the shelf exists, delivered in six  
25 months for the operation in progress, which is where

1 UORs were, you were not going to be able to integrate it  
2 except that -- and, for example, over the operations  
3 radios in helicopters actually in a sense had been  
4 successful to the extent that they worked for that  
5 operation because they were put in for that operation.  
6 The issue actually became: what did you do with it at  
7 the end of that operation? Because actually one of the  
8 costs involved in fitting radios into helicopters and  
9 a pan-fleet fit was actually taking out all the UOR  
10 radios that had been put in. So, for example, we  
11 started the operation, I think there were probably no  
12 two Chinooks that had the same radio fit, because they  
13 had all been used in different operations, because the  
14 UORs didn't fit the entire fleet, they only fitted those  
15 particular helicopters that had been use in that  
16 particular operation. People then said, "Let's keep  
17 that", at the end of the operation. That was one fit.  
18 Here was another helicopter that had been involved in  
19 a different operation and had a different fit.

20 So right at the beginning I think we bought what we  
21 needed for the operation and the integration was not  
22 something that people got too much involved in. I think  
23 by the end it had become much more of a concern, not  
24 least because it now has to work for longer, go on for  
25 longer and has to fit in with the rest of the programme.

1 LT GEN ANDREW FIGGURES: I think one needs to remember that  
2 Bowman-isation was underway, which was a huge change in  
3 the army, the land components capability.

4 Just to give an illustration, and we will most  
5 probably come to the IED threat, but the electronic  
6 countermeasures, for instance, that you would put on  
7 a vehicle or armoured vehicle had to be compatible with  
8 the electronic signature of Bowman. Equally the Bowman  
9 radio should not counter or conflict with the operation  
10 of the electronic countermeasures.

11 So we would have started off with, say, an ECM UOR,  
12 which was all right for the Clansman fit, but had then  
13 to be modified for the Bowman fit. There was then the  
14 requirement both to cool the Bowman fit and possibly the  
15 ECM fit. So that required air-conditioning.

16 We then got into the process of requiring more  
17 power. By the way, we were putting thermal imaging  
18 sights on for the gunners, drivers, commanders and so on.  
19 So the power amount increased. So we then we had to  
20 increase the generating capacity. This was  
21 a never-ending circle of complexity and complication,  
22 which I think both the DPA and the DLO at the time, and  
23 later the Defence Equipment and Support, did extremely  
24 well to manage, but it was a nightmare to manage it. It  
25 was also extremely difficult for those who supported

1           this equipment in theatre because of all these changes.

2

3           So there is a view that the UOR process is ideal,  
4           simple, delivers quickly. It also delivers nightmares  
5           which require a long time to unpick if there is to be  
6           a sustainable capability.

7   SIR RODERIC LYNE: Thank you. That was very clear. Thank  
8           you. Even I understood it.

9   SIR JOHN CHILCOT: Thank you very much. Let's break for  
10          ten minutes. Then we will come back.

11       (11.35 am)

12                               (A short break)

13       (11.45 am)

14   SIR JOHN CHILCOT: Right. Let's restart. I will ask  
15          Sir Lawrence Freedman to pick up the questioning.

16   SIR LAWRENCE FREEDMAN: We want to now go into your role in  
17          the story of the protected patrol vehicles, Snatch  
18          Landrovers and how to counter the IED threat.

19          Snatch Landrovers were deployed in autumn of 2003 in  
20          the context of the developing insurgency. You mentioned  
21          before that Northern Ireland experiences provided  
22          perhaps better guidance than the Cold War in this  
23          conflict. So you would have been aware right from the  
24          start presumably the risks of a developing IED threat.

25          So my first question is, within the limits of what

1           you can say in public, how good was your information on  
2           the IED threat and how did it evolve?

3   LT GEN SIR ROBERT FULTON: Well, clearly the threat existed.

4           Why were Snatch deployed to theatre? Because the  
5           commanders wanted it. It was a request for a patrol  
6           vehicle, and bearing in mind they deployed with  
7           Challenger, Warrior, which were not suitable as patrol  
8           vehicles, and within the concept of tactical operations  
9           at the time what commanders wanted to do was to have  
10          a vehicle that would allow them contact with the local  
11          people, where they could patrol in berets, where they  
12          could, because, as I think you have heard, people saw  
13          that the campaign for what it was was one of engaging  
14          with the local people, and that was the best way to do  
15          it. So this is what was requested.

16          The quickest way of meeting it was to go to the only  
17          place where we had protected patrol or we had any sort  
18          of patrol vehicles, which was Northern Ireland. There  
19          was then a decision about the risk to be taken in  
20          Northern Ireland and the balance of risk between taking  
21          them out of Northern Ireland and putting them into Iraq.  
22          I mean, the effect of losing them there. The decision  
23          was taken to deploy them.

24          Simultaneously there was already the programme and  
25          then a developing programme recognising that these



1           were -- would need replacing in the course of their  
2           natural life and therefore there was a programme called  
3           Vector, which was designed to follow on. So this was  
4           a progression that came directly not only from the  
5           tactics of the day but also the request of the  
6           commanders of the day.

7   SIR LAWRENCE FREEDMAN: The question is about IEDs within  
8           that. So by the time of the autumn 2003, although  
9           clearly there was a hope that this would be a hearts and  
10          minds sort of campaign, the risk of the threat was  
11          already there. To start with I am just trying to get  
12          a sense of how that part of the problem was factored  
13          into the working through of this particular issue.

14   LT GEN SIR ROBERT FULTON: Factored in by the commanders on  
15          the ground. I don't think it was -- I didn't think it  
16          was my job to second guess the use to which they were  
17          put within the theatre, and clearly that was a decision  
18          to be taken in theatre.

19                I think also I would say that the work that was in  
20          progress did not necessarily say that -- and indeed our  
21          experience of Northern Ireland did not necessarily say  
22          that heavier vehicles is the best way of protecting  
23          people against an IED. I mean, you would need to talk  
24          to the commanders on the ground and I know you have.  
25          Tactics, techniques and procedures play their part in

1 terms of interdicting the person who is going to  
2 initiate the IED, and, of course, as you are aware,  
3 a lot of work and a lot of the UORs went into stopping  
4 the IED ever being initiated.

5 So I think if you were approaching it from the point  
6 of view of what is the best way of countering the IED,  
7 I would say three things.

8 One is the tactics in use on the ground to get at  
9 the person who is going to initiate it; stopping it  
10 being initiated in the first place, and then also  
11 choosing where you are going to use the vehicle, any  
12 vehicle, whether that be a Warrior, whether it be a 430  
13 or indeed a Challenger.

14 SIR LAWRENCE FREEDMAN: You have mentioned Vector. If you  
15 are looking ahead, or even just thinking about UORs  
16 which might help you improve the Snatch, you still need  
17 to have a sense of how the threat will develop in the  
18 future. That's really -- the main question I am trying  
19 to get at at the moment, is accepting that there are  
20 things that the commander on the ground has to do, and  
21 you described very clearly the range of options that  
22 they may have, in an equipment sense presumably you are  
23 looking ahead to the likely progression of IED  
24 capability over time where you have to assume an enemy  
25 will improve what they can do on the basis they have

1           done in previous conflicts.

2   LT GEN SIR ROBERT FULTON:  Yes, but in terms of progression

3           what you are then describing is size of IED, and clearly

4           the enemy can go up through bigger and bigger IEDs

5           faster than we can put slabs of steel on the sides of

6           vehicles.

7   SIR LAWRENCE FREEDMAN:  There is also forms of detonation as

8           well.

9   LT GEN SIR ROBERT FULTON:  That's my point, about getting at

10          the threat, and I don't think we should here describe

11          the nature of that threat or what was being done in

12          order to counter it, but that's where the work was.

13          Because the IED is simply a -- whether it is -- you know

14          whether it is artillery shells or whatever it may be,

15          you know, there were cases where IEDs went through the

16          side of an M1 Abrams tank.  So they could go through the

17          size of IED.  So if the question is: did anybody foresee

18          how big the IEDs would get?  Well, yes, because that

19          doesn't take much imagination.  Did anybody foresee how

20          they would be initiated?  Yes.  That's where the

21          scientific work and intelligence work was going on and

22          that, as General Figgures described earlier, was what

23          the people in theatre were doing in conjunction with the

24          science back here.  Of course, that was the

25          Northern Ireland lesson, that we put the work into

1       stopping it being detonated, not necessarily into trying  
2       to contain or trying to stop a bigger and bigger bang  
3       going through the side of a vehicle.

4   SIR LAWRENCE FREEDMAN: So in terms of the developing  
5       capability and as time goes by, there seems to have been  
6       a debate between either (a) improving the degree of  
7       protection that you can provide to Snatch, which is not  
8       just armoured but countermeasures as well, and (b)  
9       developing an alternative capability. Within that there  
10      seems at least initially to have been a preference for  
11      (a), for improving that you can do with Snatch.

12           Is that fair?

13   LT GEN SIR ROBERT FULTON: I don't know.

14   LT GEN ANDREW FIGGURES: I don't think I would recognise it  
15      as such. I mean, clearly something had to be done with  
16      Snatch, but then something had to be done with Warrior.  
17      Something had to be done with CVR(T). So there was work  
18      in parallel. We did work on the 430. So the whole  
19      question of protected mobility and passive protection  
20      was addressed, but also the business of the  
21      countermeasures was addressed and then, of course, the  
22      avoiding the IED or detecting it before you entered into  
23      the area, and so that was one of the reasons why the  
24      thermal imagery on the driver sights was so good, because  
25      they were able to pick up of the difference between the

1 temperature of the road and the IED at the side. So  
2 they had had some success in that in Iraq.

3 So every strand of enquiry I think was pursued.  
4 It's a question of how quickly we could come to  
5 solutions on these strands.

6 LT GEN SIR ROBERT FULTON: I think that's my point when  
7 I said "I don't know" earlier. Not that I don't know  
8 the answer to the question but I am not sure it was as  
9 simple a choice as you have described. I think people  
10 were working on a whole range of approaches to determine  
11 which was the one that was likely to -- because, of  
12 course, none of that can be divorced from what is the  
13 commander trying to do and where is he trying to get to  
14 and how is he trying to prosecute the campaign? That's  
15 the other side of it, because he is trying to make use  
16 of the tools at his disposal. We are trying to give him  
17 the best tools. He will take the tools that he has at  
18 any moment. He will try and advise us on where -- on  
19 how he wants to develop the capability. So this is  
20 an iterative process, but at any one time it has to be  
21 the commander choosing what he does at that moment.

22 SIR LAWRENCE FREEDMAN: But if we are looking at the  
23 question of the longer term or the limits of what might  
24 be achievable with Snatch as you have it and the limit  
25 of what the commander can do, you then come to this

1 question, which you have now helpfully alluded to, which  
2 is the relationship between the replacement for Snatch,  
3 or an alternative, and the rest of the programme.

4 Now the rest of the programme in this area includes  
5 FRES. Now we have heard a lot about FRES, very little  
6 of it complimentary.

7 The difficulty is you have a lot of investment and  
8 a lot of commitment to a broad programme to replace  
9 a whole suite of vehicles. The question is, within that  
10 set of priorities, where does a replacement or  
11 alternative to Snatch fit in?

12 LT GEN SIR ROBERT FULTON: I think they are two completely  
13 different questions. I don't think that FRES is part of  
14 the Snatch equation. I really don't. I mean, we can  
15 discuss FRES, if you like, but it was borne out of the  
16 1998 Strategic Defence Review. It was borne out of the  
17 defence review for a particular purpose, which was --  
18 shall I continue on FRES or do you want --

19 SIR LAWRENCE FREEDMAN: I understand that FRES was never  
20 envisaged as an alternative -- as a replacement for  
21 Snatch. That's absolutely clear. The reason that they  
22 may be related, and this goes back to what Sir Peter  
23 Spencer said to us yesterday, would be as follows. Here  
24 you have a major item in the army's equipment programme.  
25 With an alternative to Snatch you are not able to get

1 an alternative through as a UOR, initially at least, so  
2 it has to be part of the prioritisation of the defence  
3 programme. Peter Spencer spoke of the fratricidal  
4 effect. So that there was concern, he suggested, that  
5 if you made this a higher priority, then that could have  
6 a knock-on effect on your ability to proceed with FRES.  
7 So in that sense in terms of this question of  
8 prioritisation there could have been a relationship.

9 LT GEN SIR ROBERT FULTON: I fundamentally disagree, and  
10 fundamentally disagree because I was charged to be the  
11 defence equipment customer, not the army equipment  
12 customer. So in my mind at the time there was never  
13 an alternative option which said, "Replacement for  
14 Snatch has [I think in your phrase] a fratricidal effect  
15 upon FRES". FRES was -- I can describe FRES if you  
16 like, but perhaps I will stop there and see -- do you  
17 want to go down the PPV route or down the FRES route?

18 SIR LAWRENCE FREEDMAN: We are interested in PPVs. Let me  
19 quote to you what Peter Spencer said:

20 "I think the difficulty became in the amounts of  
21 money which were available and if you were going to use  
22 money from the Capital Equipment Programme to deal with  
23 the short term [as opposed to UOR action] then that had  
24 a fratricidal effect [his phrase] on your ability to  
25 move the FRES programme forward. So the programme has

1           had some awkward decisions to make so far as the  
2           priorities were concerned."

3           That was the point he was making, that that  
4           becomes --

5   LT GEN SIR ROBERT FULTON:   What I am saying is I don't agree  
6           that if you put in a replacement for Snatch it is FRES  
7           that has to come out. That's the whole point about  
8           having a central customer, not an army customer.

9           Going back to the discussion earlier about if you  
10          want to put something into the programme, something has  
11          to come out, it doesn't have to be an army vehicle. It  
12          might be a satellite. It might be an aeroplane. It  
13          might be an addition to one or other of those. That's  
14          why I fundamentally disagree with the premise that one  
15          would have had a knock-on effect on the other.

16   SIR LAWRENCE FREEDMAN:   Okay. So let's accept that maybe  
17          FRES is not the marginal programme that is always  
18          vulnerable, but it is obviously looming large at the  
19          time.

20          I will put the question another way. Was the fact  
21          that an alternative to Snatch or a replacement would  
22          have to come out of core capabilities a factor in the  
23          reluctance to give this a high priority?

24   LT GEN SIR ROBERT FULTON:   Not to me.

25   SIR LAWRENCE FREEDMAN:   So as far as you were concerned this



1           was not being held back by the pressures from the rest  
2           of the programme?

3   LT GEN SIR ROBERT FULTON:  No.  I mean, any more than any  
4           other part of the totality of this, going back to the  
5           point earlier, but no, the issue was not a question of,  
6           you know, what would be the casualty elsewhere in the  
7           programme.

8   LT GEN ANDREW FIGGURES:  If I may, I would wish to  
9           refer back to some notes I made at the time,  
10          when we discussed this in 2006. I would say  
11          that FRES had been used as a regulator for the  
12          defence programme. Money had actually been taken money  
13          out of the FRES programme in order to attempt to  
14          balance the programme.

15  SIR LAWRENCE FREEDMAN:  I mentioned 2006, which is, of  
16          course, when the issue comes to the fore. I am  
17          interested in why it takes until 2006 before the  
18          question -- I mean, we are now three years into the  
19          conflict -- why it takes this amount of time for the  
20          question of a placement to be -- to reach decision  
21          stage.

22  LT GEN SIR ROBERT FULTON:  I think my perspective would be  
23          for the reason that we described earlier, that actually  
24          people were looking at the totality of protection, of  
25          which that was a strand, and people were looking around

1 the world at whether there was anything better, but  
2 I come back to the point about, you know, we need to  
3 understand whether we are protecting against the device  
4 when it explodes or whether we are -- and whether there  
5 is a design, whether there is both a design of vehicle  
6 and whether the materials are available, bearing in mind  
7 we were talking earlier about buying things off the  
8 shelf and so on and so forth, and people were looking to  
9 see what the potential alternatives were.

10 So I think my perception would be that this was  
11 a process that had gone on right from, as you say, the  
12 autumn of 2003, when Snatch was first deployed. People  
13 were looking at what was the best way of helping the  
14 commander on the ground have the widest possible choices  
15 available to him.

16 SIR LAWRENCE FREEDMAN: If you look at what Des Browne told  
17 us about the review that he announced of armoured  
18 vehicle capability in June 2006, he told us:

19 "I would say that the pressure from the point of  
20 view to examine and continue to re-examine the use of  
21 Snatch Landrovers came from the kind of political  
22 environment to the military rather than the other way  
23 round."

24 We have declassified a day today a document from  
25 Lord Drayson where he seeks:

1 "Confirmation as to whether there is a requirement".

2 So what seems to be the case, and again going back  
3 to what Sir Peter said yesterday, it seems to be the  
4 case that the pressure to move in a particular direction  
5 at this point came from the political side rather than  
6 the military side. Is that fair?

7 LT GEN SIR ROBERT FULTON: Well, I mean, I know, although  
8 I had gone by then, I know because I have seen the  
9 papers of the June 2006 discussion, but I don't  
10 recognise the progression that had gone on through 2003,  
11 2004. Commanders' reports were saying Snatch was  
12 an excellent vehicle for the purposes for which they  
13 wanted to use it.

14 I come back to the point about there has to be  
15 a relationship -- nothing is an absolute good vehicle,  
16 for example. It has to be -- there has to be  
17 a relationship for the purpose for which they wanted to  
18 use it. Then the point at which it goes beyond that,  
19 well that is a judgment from the commanders on the  
20 ground, and that then has to be -- that is something  
21 then to which the department -- to which we had to  
22 react.

23 SIR LAWRENCE FREEDMAN: But Sir Peter said, referring to  
24 this particular case:

25 "What we needed was the leadership to define what

1        did need to be purchased and to go out and do it. That  
2        leadership on this occasion came from Drayson."

3                From Lord Drayson.

4                Why was it in this case? Why didn't the leadership  
5        come from the Defence Board and the chiefs?

6    LT GEN SIR ROBERT FULTON: Well, I think there's a sort of  
7        relationship there between the commander on the ground  
8        at whatever level, the commander in theatre, the  
9        Permanent Joint Headquarters, the chiefs, the equipment  
10       customer and a series of examinations of what was needed  
11       against what was -- what could be -- you know, what was  
12       available in the sense of, you know, did it exist?  
13       I don't think people were sitting on their hands saying,  
14       "It is all fine". I think people were saying, "This IED  
15       problem is a whole theatre problem and needs to be met  
16       by a choice of are we going to use, for a particular  
17       task, a Challenger, a Warrior, an up-armoured 430,  
18       a CVR, a Snatch, a Vector, and how are we going to  
19       interrupt the firing sequence in order to stop it being  
20       fired?" That's a totality rather than simply saying,  
21       "What we need is more steel on the side", because we  
22       already know that the kinetic effect is going to  
23       overmatch anything we can fit down -- anything that's of  
24       a dimension we can fit down the streets we want to go  
25       down.

1 SIR LAWRENCE FREEDMAN: I understand that. I am just trying  
2 to get at why this decision was being taken at this  
3 time.

4 There seems to have been the view that this decision  
5 was coming a little earlier than might otherwise have  
6 been expected in terms of the full review of the sort of  
7 capabilities as you have described, that the urgency in  
8 this episode came from the political Head of Defence  
9 Procurement.

10 The question comes back to the fact: was this  
11 unusual that the politicians were insisting on doing  
12 something with that degree of urgency? We are talking  
13 June/July 2006, rather than just coming through the  
14 Defence Board?

17 LT GEN ANDREW FIGGURES: We talked earlier about the delicate  
18 balance between requirement and ability to meet it.  
19 I think there was this question of how could this  
20 requirement be met? I think the answer lies in the  
21 eventual solution. When was the Mastiff vehicle  
22 acquired? It would not have been on the shelf unless  
23 someone had carried out the design and development work  
24 as a result of their experience in Iraq to produce it,  
25 and the American experience in Iraq in we have been over

1           this ground -- 2003/4/5, was that they were suffering  
2           grievously from this. So they had a design and  
3           development programme which eventually led to these  
4           vehicles, but they didn't exist in 2004 and to my  
5           knowledge they didn't exist in 2005. We could not  
6           have laid our hands on them.

7           So 2006, when the review took place, there was the  
8           potential to meet the requirement.

9   SIR LAWRENCE FREEDMAN: Was this the first time that Mastiff  
10           was available?

11   LT GEN ANDREW FIGGURES: Yes.

12   SIR LAWRENCE FREEDMAN: I thought it was known about a bit  
13           earlier than that. You must have known of the American  
14           programme earlier.

15   LT GEN ANDREW FIGGURES: Yes, we knew of the programme. The  
16           question was: what would it deliver? My understanding  
17           was that in General Fulton's time the team scoured the  
18           world looking for possible solutions, and I think it is  
19           perfectly natural, and if one reads the press of  
20           2004/5/6, the Ministry of Defence and the political  
21           leadership was excoriated for its apparent inability to  
22           do anything about it. So of course there is going to be  
23           political pressure. I don't think ministers will sit  
24           around saying, "Carry on with what you are doing because  
25           we quite like all this pain". That's why -- or I am

1       sure they would have initiated action but the prod of  
2       adverse press criticism I think was felt very keenly.  
3       I don't think the customer or supplier felt any less  
4       keenly the need to protect the lives of our servicemen  
5       and women in Iraq.

6               What I gain from this is that you are almost saying  
7       that a whole organisation sat on its hands and did  
8       nothing. Well, having been in the DPA and Technical  
9       Director of the DPA and the DLO and then coming to the  
10      equipment capability area, my judgment would be that  
11      every waking hour people had they were attempting to  
12      solve the problem in this area, but if there is  
13      no technical solution to it, however much effort you put  
14      into it, you can't solve it.

15   SIR LAWRENCE FREEDMAN: I don't think the suggestion is  
16      people were sitting on their hands and doing nothing.  
17      I think the question is: what brings this to a head?  
18      What actually extracts a tough decision from the system?  
19      It is not even necessarily pointing at you two. It's  
20      a question of, this seems to be something that came  
21      directly from the political sphere and the Defence  
22      Board, the chiefs, do not seem to have brought it to the  
23      fore in the same sort of way. Clearly people were  
24      looking at options all the time, but it's a question of  
25      timing.

1           Can I just quote you something else? This is from  
2           CJO, Chief of Joint Operations, on 7 July 2006 setting  
3           the equipment capability advice suggested:

4           " we have reached the engineering and  
5           technological limits of the physical protection that can  
6           be provided by Snatch."

7           Now was that the first time that this had been  
8           recognised?

9   LT GEN SIR ROBERT FULTON: No. I think right from the  
10          beginning we recognised that there were limitations, but  
11          not just for Snatch. That happened to be the one that  
12          that loose minute was about, but, I mean, we had gone  
13          through exactly the same process with the CVR and the  
14          extent to which that could be up-armoured. We had gone  
15          through that process with the 430 series. We spent  
16          a lot of money in 2004/5 up-armouring the 430 series.  
17          So this was a constant process of adding more and more  
18          protection.

19          I come back to the point that of course there is  
20          going to come a time when the enemy has gone on adding  
21          kilograms of explosive and you can't go on -- we can't  
22          go on adding kilograms of steel, and therefore there has  
23          to be a step change. For there to be a step change  
24          there has to be a technology or there has to be an  
25          equipment to which you can go. We referred up -- your



1 question about the political input has I think also to  
2 refer back to the conversation earlier about the extent  
3 to which ministers played a part in the process. Of  
4 course they are a part of the process and so there are  
5 plenty of other occasions where ministers would have, as  
6 it were, encouraged the process.

7 So I think to see this as a sort of Damascene moment  
8 would I think be to give more to that moment than it  
9 deserves in the context of the totality of progression  
10 of defence, offence, defence, offence as we went through  
11 the campaign.

12 SIR LAWRENCE FREEDMAN: In the document we have  
13 declassified -- it has been put on our website, it has  
14 been declassified for us -- there is a handwritten note  
15 which says:

16 "Ministers can no longer say in the House that they  
17 have had no requests from commanders for an alternative  
18 to the Snatch."

19 So do you think that was an important political  
20 moment?

21 LT GEN SIR ROBERT FULTON: I don't know.

22 SIR LAWRENCE FREEDMAN: Because, again going back, what we  
23 have -- I just quote General Dutton. What he said on  
24 Snatch is more that he didn't have an alternative, that  
25 it was a good situation. There was a question of the

1 alternative.

2 Just to try to pull all this together, I understand  
3 what you are saying is that you were looking for  
4 alternatives but it was not really until you had Mastiff  
5 available that you could move and that you are saying  
6 that was the really decisive moment?

7 LT GEN ANDREW FIGGURES: Yes, and I think one has to take  
8 into account the American programme, but one also has to  
9 take into account the armour packs which were developed  
10 for Mastiff. So although it looks a very simple truck,  
11 there is quite a lot behind that and it was not  
12 available earlier.

13 So I think a lot of this boils down to this delicate  
14 balance. There is a requirement crying out to be  
15 satisfied there. People are working very hard to  
16 satisfy it through scientific endeavour and then the  
17 development of a prototype. Yes, there is something  
18 that is worth investing in. Well, Minister, here are  
19 some potential solutions. Are you prepared to run with  
20 that?

21 I would not underplay the energy, enthusiasm and  
22 leadership that Lord Drayson gave, but you can have max  
23 energy, leadership and enthusiasm, but if there is no  
24 solution, then it is for naught.

25 SIR LAWRENCE FREEDMAN: Was it felt that you could do this

1           on a UOR?

2   LT GEN ANDREW FIGGURES: Well, it was, because, and this, the  
3       brings me back to the Baroness'  
4       point, not to have to find the money initially to do it  
5       from the programme meant that we could get on and start  
6       it straight away so. That helped the -- but I suspect  
7       if we didn't have the UOR framework, and again this is  
8       hypothetical, if we didn't have the framework, it was  
9       quite clear that we had to address the issue of ground  
10      mobility and force protection. So we would have had to  
11      find the money somewhere, even if we had to borrow it at  
12      credit card rates of interest.

13   SIR LAWRENCE FREEDMAN: Just to round this up, are there any  
14      lessons you might draw from this experience about how we  
15      can stay ahead of an emerging threat in this way?

16   LT GEN ANDREW FIGGURES: Well, I mean, I would start -- and  
17      I think we touched on this earlier in that you can't  
18      always look at life through the rear view mirror. So  
19      the idea that you constantly protect the platform and  
20      that will give you a long-term solution is perhaps going  
21      to go wrong at some stage. You have to look at the  
22      surveillance and target acquisition dimension to it.  
23      I mean, after all, if someone cannot lay an IED, then  
24      you are not going to be exposed to the threat. So can  
25      you maintain this basilisk-type star in your area of

1 operations? Can you ensure you have the communications  
2 within your organisation so everyone has situational  
3 understanding of the ground over which they are going to  
4 move and the last time it had been checked? Can you  
5 destroy the enemy's supply chain? Can you penetrate it?  
6 Can you exploit evidence such that you can bring them to  
7 justice or you can hunt them down?

8 So there are a whole range of things which are now  
9 being addressed. I think we have alighted on one little  
10 sector of the means by which we protect our people  
11 whilst on operations.

12 SIR LAWRENCE FREEDMAN: I suppose the difficulty is that if  
13 you can't successfully do a lot of those other things,  
14 that is all you are left with.

15 LT GEN ANDREW FIGGURES: Well, yes. You must -- if all else  
16 fails, you have to be able to survive in the worst case.

17 SIR LAWRENCE FREEDMAN: Can I now move on to helicopters?  
18 We have had quite a bit about forward helicopter plans.  
19 I just -- it would be helpful if you could set out what  
20 your plans were for support helicopters when you were in  
21 post. Forward plans?

22 LT GEN SIR ROBERT FULTON: The helicopter programme was  
23 based on a forward support helicopter programme that  
24 developed over my time and where we tried to improve the  
25 helicopter capability over time by reducing the number

1 of different types in the inventory, because one of the  
2 shortcomings was in my view the fact that there were  
3 lots of different types. But I think I would observe  
4 that the helicopters with which we went into Iraq in  
5 2003 was the helicopter programme that in a sense came  
6 out of the Strategic Defence Review and was developing  
7 forward, and at various times people -- and there were  
8 certainly, and I know you have seen them, reports that  
9 we were short of helicopters, support helicopters, and  
10 that comes back to the point earlier about being able to  
11 afford in the core programme the totality of everything  
12 we wanted to do.

13 I think there are, and I know you have had  
14 variations put in front of you of what that 38 per cent,  
15 that famous 38 per cent figure means, and whether it's  
16 the aggregation of everything. I think you would also  
17 in the same report see that --

18 SIR JOHN CHILCOT: Sorry. Could you slow down a little.

19 LT GEN SIR ROBERT FULTON: I think you can see that the  
20 figures are a reflection of the fact that we were  
21 a rather lower percentage short of land-based  
22 helicopters, 17 per cent, and that we were a rather  
23 larger figure short, some 87 per cent, short of  
24 amphibious helicopters. In other words, the statistics  
25 are what they are.

1           It is, of course, a truism to say, firstly, that  
2           everybody will always want more helicopters, and I think  
3           it is also true to say that if people have helicopters  
4           they will use them. So what I was trying to do in  
5           principle was to generate as many airframes as we could,  
6           but that was a long-term programme, i.e. out to  
7           2017/2018, not a six-month programme.

8           So our ability to react to a short-term requirement  
9           for additional support helicopters was constrained, yes,  
10          constrained by money in the core programme, because that  
11          was certainly something that at that stage was very much  
12          part of the core programme rather than a UOR, because it  
13          simply didn't exist at those days to go out and buy it.

14          I know that that changed later when there were some  
15          and by then the UOR system had moved on and it was  
16          possible to, but that's where I was.

17   SIR LAWRENCE FREEDMAN: General Figgures?

18   LT GEN ANDREW FIGGURES: Taking over, there was a requirement  
19          for more helicopter tasking lines in Iraq, and that  
20          arose for several reasons, and we were asked to look at  
21          options how that might be satisfied. At that time  
22          Merlin and Puma were deployed, the Puma in Baghdad and  
23          the Merlin in the south.

24          We looked at a number of options and became apparent  
25          that the Danish SAR helicopter force had order offered an  
opportunity.

1       There were six remaining with Westlands and it was  
2       possible to re-configure those and deploy them to Iraq,  
3       but it was going to take some time, something in the  
4       order of 12 months I recall.

5       So at the time we had our five tasklines of Merlin  
6       in Iraq and by acquiring these further six would  
7       enable us to generate seven task lines in Iraq.

8       So that dealt with the immediate problem. I will  
9       not go into the Afghanistan problem which developed  
10      later on, but the other issue was: how are we going to  
11      manage the much-discussed Mark III fit to fly -- Chinook  
12      fit to fly programme?

13      Again a piece of work which had been done by the  
14      Defence Equipment and Support really to address the  
15      issue of how we were going to certify them once the fit  
16      to fly programme had been completed. This showed there  
would  
17      still be some uncertainty about that. Therefore there  
18      was an option where they reverted back to the Mark II,  
19      IIA. If you wanted to get helicopters flying in support  
20      of operations that was possibly the quickest and least  
21      risky way of doing it. So that was a change of plan.

22      SIR LAWRENCE FREEDMAN: That was a very helpful overview.  
23      I will ask a few specific questions within that.

24      The NAO's 2009 report about support high intensity  
25      operations said that none of the UK helicopters which

1           had been used in Iraq were designed for the hot and  
2           dusty conditions there.

3           Given that from the Strategic Defence Review the  
4           Middle East had been a core region for defence, isn't  
5           that a bit surprising, that some effort had not been  
6           made to get helicopters ready for service in a region  
7           that wouldn't be totally unexpected to have  
8           an operation?

9   LT GEN SIR ROBERT FULTON:   Only surprising if we had been  
10          able to do everything the SDR wanted us to do.

11   LT GEN ANDREW FIGGURES:   I think one needs to think back  
12          prior to the SDR, and it just, as you were talking,  
13          I recall an instruction coming down from in those days  
14          the sixth floor, I think it was the minister for defence  
15          procurement, Dr the Lord Gilbert, who said, "In future  
16          you are to make your equipment suitable for deployment  
17          worldwide", full stop, carry on, get on with it.

18          I simplify, because I can see a disapproving eye  
19          from one or two places, but that essentially was the  
20          direction, and the Merlin had been developed well before  
21          the SDR was considered. It was, I suspect, and I can't  
22          remember the exact terms of the requirement, but most  
23          probably a medium helicopter designed for operations in  
24          Europe, because that's where the emphasis was.

25          So yes, work had to be done and work was done to



1 enable it through the UOR process to fly in Iraq, but  
2 was it unreasonable in the light of all the other UORs  
3 that had to be done for Op TELIC to expect that to be  
4 covered? Well, I don't think it was on balance,  
5 across the piste, in the light of, as we have discussed,  
6 there was never enough money to do everything we wanted  
7 to do at the time we wanted to do it.

8 SIR LAWRENCE FREEDMAN: What was the effect of not doing the  
9 UOR?

10 LT GEN ANDREW FIGGURES: Well, were we able to fly Merlin  
11 helicopters in Iraq? Yes, we were. Did we have to  
12 carry out a UOR programme to do it? Yes, we did.  
13 I can't remember how long it took, but it would have  
14 been in 2003 I suspect, and the fact is when I was in  
15 Iraq they were flying in support of our troops in Basra.

16 SIR LAWRENCE FREEDMAN: If we think what would be reasonable  
17 to look ahead with, and again we come back to Northern  
18 Ireland. In Northern Ireland, when faced with threats  
19 from roadside bombs the army relied a lot on  
20 helicopters. Again it is a question of what place this  
21 particular capability had in the overall programme.

22 When do you think, looking back, the potential value  
23 of helicopters had been recognised sufficiently probably  
24 by people before you in terms of developing the overall  
25 programme?

1 LT GEN SIR ROBERT FULTON: Well, if anybody before me  
2 foresaw Iraq, I haven't read it. So I think that what  
3 people were doing --

4 SIR LAWRENCE FREEDMAN: But there has not been an operation  
5 since Vietnam where helicopters have not played  
6 an important role.

7 LT GEN SIR ROBERT FULTON: But we come back to the defence  
8 planning assumptions and the scenario planning and the  
9 way the department does its business and therefore the  
10 number of helicopters in the core programme have to take  
11 their place against all other contenders.

12 If the implication is that we should buy as many  
13 helicopters as we have spare money available for, then  
14 I don't think that's the way the department ever has  
15 done its business. It buys according to scenario AB,  
16 ABC, ABC and D.

17 SIR LAWRENCE FREEDMAN: I am intrigued as to which scenario  
18 for a contemporary war would not require a lot of  
19 helicopters.

20 LT GEN SIR ROBERT FULTON: Therefore this comes back to this  
21 point about the 38 per cent figure or the 17 per cent  
22 for land helicopters and so on and so forth.

23 Of course you will always need more helicopters.  
24 I also come back to my point about people will always  
25 use a few more -- there is an iron law of helicopters

1       which is however many you have, people will find more  
2       uses for them, but my deduction from that is not, "Go  
3       out and buy more helicopters and cancel something else  
4       in the programme".

5               So, if you like, until September 2002 or whatever  
6       date one starts preparation for Iraq, the core programme  
7       was affording as many helicopters as it could over the  
8       period from 2002 through to -- well, in 2002 we had  
9       an equipment programme that went to 2012, but actually  
10      we also had a putative programme that went to 20 years.  
11      So we were looking to grow the helicopter capability,  
12      and this is I think also in the NAO report, over the  
13      period through to 2017/2018. It had to take its place  
14      against everything else.

15   SIR LAWRENCE FREEDMAN: I mean, obviously we can't resolve  
16      it here, but it just comes back to this question about  
17      how the chiefs, how the Defence Board evaluate one set  
18      of priorities against another.

19   LT GEN SIR ROBERT FULTON: What, in the core programme?

20   SIR LAWRENCE FREEDMAN: Yes, in the core programme --

21   LT GEN SIR ROBERT FULTON: Yes, yes.

22   SIR LAWRENCE FREEDMAN: -- and the scenarios that are in  
23      use. We can't go into it now, but it seems to me  
24      an intriguing question as to how these scenarios are  
25      developed, and I still find it hard to understand why

1       helicopters don't have a higher priority as against some  
2       of the other things we have been talking about. That is  
3       possibly a larger question.

4             Did you ever receive a formal request from  
5       commanders that translated into a UOR for additional  
6       helicopter provision?

7   LT GEN SIR ROBERT FULTON: I think during the time that I  
8       was there you can't buy -- I mean, we didn't -- so --

9   SIR LAWRENCE FREEDMAN: But you couldn't have the --

10  LT GEN SIR ROBERT FULTON: No. In terms of the discussion  
11       that went around, and, of course, I think, you know,  
12       there were also commanders during that time who were  
13       saying they had enough helicopters. So, you know, this  
14       was not, as it were, what they wanted to do. This is  
15       not, as it were, a universal plea, but, that aside,  
16       I think I would say that as part of the discussion  
17       between commanders in theatre, PJHQ, us and everybody it  
18       fell outside the UOR requirement.

19             Therefore what people wanted to do was to look at  
20       ways of generating more hours from the airframes that we  
21       had, because, of course, airframes is not -- I mean,  
22       coming back to a point we discussed earlier, you know,  
23       airframes are not the only part -- constituent part of  
24       a capability called helicopters, because, you know,  
25       there were a finite number of aircrew, for example, and

1           so the totality during my time was that the number of  
2           helicopters were the number of helicopters.

3   SIR LAWRENCE FREEDMAN: I mean, just to go back to what  
4           commanders were asking for, we have a declassified  
5           report from General Dutton at the end of 2005 which he  
6           highlighted a lack of helicopter capability for the  
7           operations then underway, but that would not translate  
8           necessarily for you into a request for additional  
9           helicopter resources. Your basic sense is that we had  
10          to make do with what we had and find ways of improving  
11          them and doing related things.

12   LT GEN SIR ROBERT FULTON: Firstly improving availability.  
13          That does not translate into, "Go out and buy me more  
14          helicopters that can be delivered in UOR timescales".  
15          Clearly life had moved on and, as General Figgures has  
16          described, an opportunity presented itself for something  
17          that was compatible with what existed, because, of  
18          course, clearly it was not necessarily a good idea to go  
19          and, as it were, buy off the shelf something we didn't  
20          have anywhere in the inventory and simply throw them at  
21          the problem. So, therefore, it needed to be something  
22          that was compatible with the inventory so that it could  
23          be supported.

24                So does a request for more helicopters translate  
25          into going out and buying more in UOR timescales? No,

1 not in my time.

2 LT GEN ANDREW FIGGURES: So it is back to this point that  
3 General Fulton has made. There is this iron triangle:  
4 airframes, crews and helicopter flying hours, ie the  
5 support and spares to do it. It is interesting. Seven  
6 task lines from 28 aircraft. I think to the  
7 uninitiated, they may say, "You are not really sweating  
8 the assets". The fact of the matter is it is difficult  
9 to generate crews in the short term and a lot of effort  
10 went into seeing whether we could re-role crews. Some  
11 of that was done. A lot of effort went into improving  
12 the number of helicopter flying hours we could generate  
13 per airframe per year, and defence equipment support did  
14 a lot of work on that.

15 The question then was: could we take risk against  
16 the use of helicopters elsewhere as part of the defence  
17 mission? Yes, and we looked at taking them from  
18 Northern Ireland and we looked at taking them from the  
19 Falkland islands and we looked at taking them from  
20 support for training, but if you take it from support  
21 for training, how are you going to train the brigade  
22 which is going out to the theatre? I think at the time  
23 we were generating two brigades who were dependent upon  
24 helicopters for there -- to prosecute their concept of  
25 operations.

1           So there was a huge pressure on Joint Helicopter  
2           Command to address these two other legs. You can't buy  
3           helicopters off the shelf. This was highly fortuitous  
4           that the Merlin buy was there and we had had previous  
5           experience with South African Puma where we had bought  
6           airframes which required a huge amount of money to make  
7           them fit to fly. So what apparently is an attractive  
8           option does not translate into flying hours in  
9           an operational theatre.

10   SIR LAWRENCE FREEDMAN: Does that explain the cuts that were  
11           made in 2004 on the Puma fleet?

12   LT GEN ANDREW FIGGURES: In what sense?

13   SIR LAWRENCE FREEDMAN: Well, assertions have been made  
14           about the cuts in 2004 cuts, the reduction of £1 billion  
15           from the forward helicopter programme. That included  
16           the Puma fleet. I am just interested in whether or not  
17           that had any impact on our ability to have -- to support  
18           helicopters generally, but I have just noted your  
19           mention of the Pumas as a problem.

20   LT GEN SIR ROBERT FULTON: No, I don't think so and  
21           certainly not in the timescales we are talking about.  
22           It was much longer than that and the areas on which that  
23           axe fell were not support helicopters in the land  
24           environment in the timescale we were talking about. We  
25           are talking about the marinisation of heavy lift

1       helicopters and we were already very doubtful about the  
2       technical risk involved in marinising our heavy lift  
3       helicopters anyway.

4             That was also down -- 2010/11/12 if my memory serves  
5       me right. It was the search and rescue helicopters. It  
6       was the battlefield light utility helicopter which was  
7       going to be the longer term replacement for Lynx and it  
8       was the upgrade to the Merlin Mark I, which was the  
9       naval helicopter, the anti-submarine helicopter  
10      operating off the backs of ships. It was also the  
11      replacement for the maritime Lynx as well. So for very  
12      good reasons, all the reasons you identify, whilst the  
13      1.4 billion cut to the helicopter budget was profoundly  
14      unwelcome, it had no effect at all on anything to do  
15      with Iraq.

16   SIR LAWRENCE FREEDMAN: Okay. Just my final question on  
17      this. You mentioned the Chinooks. It is obviously  
18      quite a saga. Why not do what you eventually did  
19      earlier?

20   LT GEN ANDREW FIGGURES: Well, I really don't know other than  
21      perhaps the notion hadn't occurred to us. You might  
22      say, "Why didn't the notion occur to you?" I think --  
23      well, what was our plan for the Chinook fleet? Our plan  
24      for the Chinook fleet was to upgrade it such that we  
25      could put in the capability to fly at night and the



1        necessary defensive aid suites, communications and so  
2        on. That would have required a different cockpit to the  
3        one that we were going to have in the Mark III, the  
4        Special Forces cockpit, and as more work was done on  
5        this, we realised that we could have a uniform fleet of  
6        I think 40 at the time, equipped to the same standard  
7        which we would all be fitted for, the necessary extra  
8        equipment for SF. So we would be able to use the whole  
9        fleet rather than this part fleet.

10        As that work developed and as the understanding of  
11        how the airworthiness certification would have to be  
12        undertaken for the Mark IIIs, I think the penny dropped  
13        at some stage, which said, "Carry on with the Mark III  
14        fit to fly and you have an unbounded problem. You will  
15        find it difficult to contain the costs. You will have  
16        a question in your mind about performance and the  
17        time-frame is uncertain".

18        Equally, I don't think Boeing were overwhelmed at  
19        the prospect of considerable re-work with  
20        an indeterminate end. So eventually we came to the  
21        conclusion -- I think I can give credit to the IPT.  
22        They said, "It is not worth the candle, why don't we just  
23        go back to where we started from? At least we know  
24        where that is". That of course sounded simple. There  
25        were all kinds of complications with that too, but it

1           did get those helicopters flying. I believe the  
2           first may be flying now.

3   SIR JOHN CHILCOT: Right. Last set of questions, over  
4           I think to Sir Roderic Lyne.

5   SIR RODERIC LYNE: I want to look at ISTAR which for the  
6           layman I believe is intelligence, surveillance, target  
7           acquisition and reconnaissance.

8           General Fulton, in the new chapter of the SDR of  
9           2002 it said:

10           "We also planned accelerated investment in unmanned  
11           air vehicles, UAVs."

12           What was planned?

13   LT GEN SIR ROBERT FULTON: Watchkeeper. Watchkeeper was our  
14           UAV programme which was at that time -- it had had  
15           a somewhat chequered history, but we were bottoming out  
16           what the requirement was, because I think at that stage  
17           this was a comparatively new technology not in the sense  
18           of an Unmanned Air Vehicle that flies, but what you want  
19           it to do? Having got it to do it, what are you then  
20           going to do with what it produces? In a sense it was  
21           quite clear that UAV technology was moving ahead very  
22           rapidly in the sense of the air vehicle.

23           What I think we had not -- and took us a while to  
24           do, and that's, of course, why we do the concept and  
25           assessment phase of a programme before we sign the

1 contract, so we did a lot of work with the -- both in  
2 terms of selecting the contractor and then in terms of  
3 working with the contractor through the assessment phase  
4 to work out: what's it going to gather? How is that  
5 going to be fed down to earth? How is that going to  
6 be -- it comes back to the integration point. We did  
7 not want to buy a stovepipe that simply had a UAV on the  
8 end. What we actually wanted and what the whole thrust  
9 behind the 2002 new chapter was, and I used the phrase  
10 earlier "knowledge superiority", but if you unpack the  
11 sort of jargon, it simply meant making sure that if we  
12 knew something, everybody could know it, I mean, all of  
13 our side could know it. We could share it not only with  
14 ourselves but we could share it with our allies, be that  
15 European or American allies.

16 So a lot of work in 2002 and a lot of the extra  
17 investment that went into the programme in 2002 was on  
18 not just UAVs but also all the other collectors, Astor,  
19 Raptor, E3D and all of those programmes, but also on  
20 developing the information infrastructure that would  
21 allow that to be shared, because one of the besetting  
22 problems in all the operations before was that  
23 a collector would collect the information and it would  
24 come down to a base station. Therefore we knew it but  
25 we couldn't get it to the front line.

1 SIR RODERIC LYNE: When was Watchkeeper scheduled to come  
2 into service?

3 LT GEN SIR ROBERT FULTON: I can't remember what its  
4 original in-service date was, but I do remember that at  
5 one stage the minister announced a date of the order of  
6 2005 or 6 I think. I think that a date of 2009/10 was  
7 what people had in mind. I think what that showed was  
8 not so much that they got it wrong, but a reflection of  
9 the keenness to get it in, and the wish to put pressure  
10 on not only us to work harder but on to the company to  
11 work harder, but equally, you know, the reality of life  
12 was that we were absolutely determined that Watchkeeper  
13 was one programme that was not going to get derailed by  
14 people changing their minds midway through, and that we  
15 would actually do this properly so we would get the  
16 capability, and my understanding, although I am now out  
17 of date, is that that is progressing well.

18 SIR RODERIC LYNE: So when you told the Defence Select  
19 Committee that you expected it to be in service by 2006,  
20 you were reflecting the ambitions of your ministers  
21 rather than what you --

22 LT GEN SIR ROBERT FULTON: And my own. Yes, I freely admit  
23 that we wanted to and, no, it did not go as we would  
24 have liked. That in-service date was the one that we  
25 were working to and yes, that date slipped.

1 SIR RODERIC LYNE: Is it in service now?

2 LT GEN SIR ROBERT FULTON: I am out of date. I don't know.

3 SIR RODERIC LYNE: General Figgures, do you happen to know

4 if it is in service now?

5 LT GEN ANDREW FIGGURES: No, I can't sadly say. I should

6 have boned up. My apologies.

7 SIR RODERIC LYNE: If it was, you would have probably heard

8 through the grapevine that this new dimension had

9 happened.

10 Let's go back to 2003. While you were waiting for

11 Watchkeeper, which you don't expect to have on stream

12 for several years, what capability did we have for UAVs

13 and indeed systems to make use of what they told us?

14 LT GEN SIR ROBERT FULTON: We had Phoenix, which did well in

15 the initial phase of the Gulf War, and then there was

16 the question of as the campaign, as the marathon

17 developed --

18 SIR RODERIC LYNE: Hang on.

19 LT GEN SIR ROBERT FULTON: Sorry.

20 SIR RODERIC LYNE: You mean the second war. Phoenix I think

21 goes back to the 1980s as a system. You said Gulf War,

22 but you mean --

23 LT GEN SIR ROBERT FULTON: Sorry. I mean Iraq. Sorry. I

24 apologise.

25 SIR RODERIC LYNE: You mean TELIC. Phoenix did well in the

1           sprint phase.

2   LT GEN SIR ROBERT FULTON: My apologies. Phoenix did well

3           in the sprint phase. We then get into the marathon.

4           Then there was clearly a requirement for intelligence,

5           intelligence gathered from the air. Therefore we

6           procured under UOR Desert Hawk and that came into

7           service, and then there was --

8   SIR RODERIC LYNE: Can you remember when it came into

9           service?

10   LT GEN ANDREW FIGGURES: First deployed I think in 2003, and

11           we had an issue with it.

12   LT GEN SIR ROBERT FULTON: In the electronic --

13   LT GEN ANDREW FIGGURES: Yes.

14   LT GEN SIR ROBERT FULTON: The electronic environment in

15           southern Iraq was not that for which it had been

16           developed in I think America and therefore it had

17           difficulties to begin with and then I think they were

18           resolved over time.

19   SIR RODERIC LYNE: So we got it online -- I mean, Phoenix

20           has been used in the campaign or it is worn out or maybe

21           doesn't work for this purpose so it has gone.

22           Then there is a gap and when in practice is that gap

23           filled? How long did we go without?

24   LT GEN ANDREW FIGGURES: Well, we got Hermes, which is

25           a precursor of Watchkeeper, in 2007.

1 SIR RODERIC LYNE: So there is a four-year gap. In that  
2 four-year period did we have -- did our commanders down  
3 in MND South East have UAVs?

4 LT GEN SIR ROBERT FULTON: No.

5 SIR RODERIC LYNE: Should they have?

6 LT GEN SIR ROBERT FULTON: Should they have? I think the  
7 approach that was taken was the issue -- the question  
8 was: should they have intelligence? Should they have  
9 access to intelligence? Therefore the decision was  
10 taken that the collector was to be the American assets  
11 and that we would put people into the American system so  
12 that this would cover the tasking and would make sure  
13 that we got the product, because there has always been,  
14 not just with UAVs, a question of: do you need to own  
15 the means of production in order to benefit from the  
16 product? It was the product that mattered. What  
17 this -- and we put a number, and I can't remember how  
18 many it is, but a large number of air force personnel  
19 into the American system so that we could give  
20 commanders the product of it and we could learn.

21 Now over time there was clearly a concern expressed  
22 by commanders that actually they would like to own the  
23 means of production; in other words, they would like to  
24 actually -- they would like to have these, and this  
25 is -- this then led to a stated requirement for

1 Predator, and at that stage Predator A was coming to the  
2 end of its life and it was to be replaced over that time  
3 by Predator B, a much more capable -- larger and capable  
4 UAV.

5 The decision was taken that it made no sense to go  
6 out and buy Predator A and we should wait for  
7 Predator B, son of. The issue then became one of: could  
8 we break into the American chain, because the initial  
9 demand was that all of Predator B should go as fast as  
10 they could to the Americans? It required the  
11 intervention by the Chief of the Air Staff with his  
12 opposite in the States in 2006, I think, to, as it were,  
13 break that logjam and also with the influence of Air  
14 Chief Marshal Stirrup in order also to break into that  
15 so that we were able to get the Predator capability.

16 Meanwhile there was work going on to say, "If we  
17 can't have Predator, should we go down the Hermes  
18 route?" That decision was taken in 2007. I think we  
19 might well have gone down that route earlier.

20 SIR RODERIC LYNE: So the answer is "yes".

21 LT GEN SIR ROBERT FULTON: The answer to what?

22 SIR RODERIC LYNE: The answer to the question, "Should we  
23 have had it sooner", is "yes".

24 LT GEN SIR ROBERT FULTON: Yes, it being: did we want to own  
25 our own air vehicles?



1 SIR RODERIC LYNE: If we go back to the beginning of the  
2 story, UAVs were not very new by the time the SDR new  
3 chapter was written in 2002. That recognised the  
4 importance of building up capability. As you have said,  
5 this needs to be a properly integrated system. You  
6 can't just go down to the nearest model shop and buy it.

7 We had Phoenix, which is recognised in the campaign  
8 by commanders to have played a very important part, but  
9 then we had a four-year gap in which we had to borrow  
10 the means of production, as you say, from -- at least  
11 had to access American coalition assets to get that bit  
12 of the production. I believe we also accessed  
13 Australian kit as well to do it, at a time when our  
14 commanders -- I mean, General Shirreff, for example, in  
15 evidence to us, said it beggared belief that for three  
16 and a half years he didn't have, as the GOC NMD South  
17 East, UAVs under his command. Because we are not  
18 talking about Astute submarines here or Typhoons. They  
19 are not massively expensive bits of kit, and while you  
20 are waiting for your ideal solution to come in and you  
21 have a commander on the ground who is dealing with force  
22 protection -- and, as you said earlier, this is not just  
23 about the amount of armour on a vehicle, it is tactics,  
24 techniques, procedures. It is seeing what the guys are  
25 firing at you, and if you are the commander on the

1 ground it is not unreasonable to want to have your own  
2 kit up there under your own control, is it?

3 So there was this very long gap that we didn't fill  
4 with our own kit. Now was there anything that could  
5 have been done to fill that quicker?

6 LT GEN SIR ROBERT FULTON: Yes. I think you could have gone  
7 and bought Hermes from the Israelis. I think we could  
8 have bought Predator A. We could have had some  
9 second-hand Predator A.

10 SIR RODERIC LYNE: You could have done that in 2004?

11 LT GEN SIR ROBERT FULTON: I think we probably could have  
12 done, but I think what that also underplays is actually  
13 the investment in other forms of -- I mean, I think your  
14 question focuses on the platform rather than the product  
15 and whilst I fully recognise that commanders like to own  
16 their own platforms because if they don't own them, then  
17 they don't know, you know -- it is a comfort to own it.  
18 I don't mean that this a disparaging sense. You want to  
19 own it because then you feel you can control it.

20 SIR RODERIC LYNE: You maybe also have a quicker speed of  
21 response if you own it, perhaps significantly quicker.

22 LT GEN SIR ROBERT FULTON: Perhaps.

23 SIR RODERIC LYNE: Would it be significantly quicker than  
24 summoning help from elsewhere?

25 LT GEN SIR ROBERT FULTON: It might be. Well, I mean, what

1           you are describing is reactive rather than tasking  
2           intelligence assets to cover a certain area at a certain  
3           time. If your question is: if I ask a question in  
4           Basra, how long does it take it to fly to me to react,  
5           I think underplays actually the point of tasking the  
6           intelligence assets to collect the information you want  
7           at a time you want it, at a place you want it. For  
8           example monitoring pipelines, monitoring borders.

9           So I think I would paint a picture of a plan,  
10          an intelligence collection plan rather than whistling up  
11          the cavalry at the last minute.

12       SIR RODERIC LYNE: Can I move on, because time is pressing  
13          on us, to indirect fire?

14                When did this become an issue for us and how quickly  
15          and how were we able to respond to that threat?

16       LT GEN ANDREW FIGGURES: I think this became an issue in my  
17          time and it stemmed from the withdrawal of the log  
18          elements from Shaibah log base into Basra Airport, the  
19          COB, as it was called, which obviously provided  
20          an irresistible invitation to terrorists --

21       SIR RODERIC LYNE: To fire rockets at.

22       LT GEN ANDREW FIGGURES: -- to fire rockets at.

23                My memory of it is late 2006/early 2007, I think it  
24          plays well to the business of using what we have to good  
25          effect. The phalanx guns were taken off the Royal Navy

the  
1        destroyers together with their radar. They were  
2        integrated into a sense and warn system for which we used  
3        GIRAFFE radar and they were integrated into the  
4        overall Command and Control system in Basra.

5        My memory is there were two tranches of it. I think  
6        we deployed five guns and then a further two, which  
7        would provide the area defence. That was I think done  
8        in the space of about nine months or under a year.  
9        Again should we have foreseen this? The lessons of  
10       history, concentrate, bound to be a target. What  
11       capability did we have to counter it? When faced with  
12       it, I think the reaction was swift and indeed we were  
13       helped by both Sweden and indeed the United States, who  
14       I think had a ticket on some of these GIRAFFE radars and  
15       it just shows how the coalition worked. You could phone  
16       up -- I recall phoning up the Vice Chair of the Joint  
17       Chiefs' Office and speaking to Admiral Giambastiani and  
18       saying, "Could we have these two GIRAFFE radars?" He  
19       said, "Yes, I'll sort it out with General so-and-so." It  
20       is was done. So it was a really good example of working  
21       together. I felt I had to get it in. So I am happy you  
22       have indulged me.

23    SIR RODERIC LYNE: Was it, given time constraints and all  
24       the rest of it, as effective a solution as we could have  
25       devised at that particular moment?

we able

1 LT GEN ANDREW FIGGURES: I will have to resist the temptation  
2 for an analogy, but it wasn't a perfect solution. There  
3 were always leakers who got through. The point was, were  
4 to protect the most vulnerable parts of the base and  
5 unfortunately one or two rockets got through. My  
6 memory serves me that we lost both dead and wounded as  
7 a consequence of indirect fire, but it also saved, and  
8 it is difficult to calculate this, a number of lives.

9 So as a system it was successful, and I think having  
10 seen it in operation, the morale effect was absolutely  
11 staggering. So with the incoming and to see the shells  
12 going into the air, we felt you were not just taking  
13 punishment. We were actually doing something. So it  
14 was a popular junior ranks weapon,

15 SIR RODERIC LYNE: If the armoured Reaper UAV that we had by  
16 the end stage purchased had been sent to Iraq rather  
17 than to Afghanistan, or some of them, would that have  
18 helped us to defend our forces in the Basra COB?

19 LT GEN ANDREW FIGGURES: Well, I think we go back to the  
20 basilisk-like star. Even in Baghdad for the coverage  
21 and refresh rate that the Americans could generate, they  
22 could not prevent rocket man firing. So it would reduce  
23 the ability of the enemy to operate but it would not by  
24 any means be certain to close it down.

25 SIR RODERIC LYNE: No, but it would have made a difference

1 in your view?

2 LT GEN ANDREW FIGGURES: It could potentially have made  
3 a difference. Indeed, the Hermes in 2007 and the Desert  
4 Hawk I think had some success.

5 Then we get into a further complication of rules of  
6 engagement, because you have to identify that the person  
7 who you think is setting off a rocket is actually doing  
8 it before you engage him. So there is a high level of  
9 proof required.

10 SIR RODERIC LYNE: Thank you.

11 SIR JOHN CHILCOT: I would like to ask you in a moment  
12 whether there are any final reflections you would like  
13 to offer, but I just want first to return briefly to  
14 a question we addressed at the start of this session.

15 General Fulton, you said that in 2003 we were not  
16 going to be in a position to deliver the full  
17 expeditionary capability envisaged in SDR 98 or the new  
18 chapter in the timeline for the main equipment  
19 programme, which is a ten-year timeline.

20 Recalling evidence from Air Chief Marshall Jock  
21 Stirrup, his description of the situation in 2002 was  
22 that:

23 "Our expeditionary campaign infrastructure, tented  
24 accommodation, showers, messing facilities for people  
25 who were being deployed were still built up and our

1       strategic and tactical mobility was still somewhat  
2       constrained."

3               So taking the expeditionary capability objective in  
4       the SDR in the round -- and I know you can't put  
5       a figure on it -- broadly how much of that had been  
6       delivered by 2003, March onwards? Most of it?

7   LT GEN SIR ROBERT FULTON: Do you mean how far down the road  
8       towards being able to --

9   SIR JOHN CHILCOT: That's a good way to put it.

10   LT GEN SIR ROBERT FULTON: -- mount medium scale operations,  
11       being able to do the DPAs while in the areas that were  
12       being talked about?

13   SIR JOHN CHILCOT: Yes.

14   LT GEN SIR ROBERT FULTON: We had increased strategic  
15       airlift, but not the totality required. We had  
16       increased sea lift, but not the totality required. We  
17       did not have the communications. We did not have the  
18       helicopters. We did not have crucially -- and we  
19       flirted with FRES earlier, but what the army needed to  
20       do out of the SDR was to deploy what they called the  
21       medium weight capability. In other words, if they were  
22       going to be flexible, deployable, sustainable, what they  
23       needed and wanted to do was to be able to put, and this  
24       is where FRES came from, FRES; in other words, they  
25       needed to deploy armour by air into a theatre. So,

1           therefore in, a sense the timeline of the army being  
2           able to deploy to be able to do what they required to do  
3           was the lifespan of FRES. So comms, the lifespan of  
4           Skynet 5 and indeed I would also add the ISTAR  
5           capability. I would add Watchkeeper into that, but  
6           I would also add Astor and Raptor and Soothsayer,  
7           because what we had to do, remember, is we had to be  
8           able to go there and operate on our own. We could not  
9           rely on other people being able to collect our  
10          intelligence for us. So I think we were a long way from  
11          it.

12   SIR JOHN CHILCOT: And noting in passing the SDR talks of  
13          two medium scale. Iraq is actually large scale, isn't  
14          it, with a division size engagement?

15   LT GEN SIR ROBERT FULTON: Yes.

16   SIR JOHN CHILCOT: Final reflections then from this  
17          morning's session.

18   LT GEN ANDREW FIGGURES: May I, Sir John, just add to that?  
19          I think our supply chain was an area where we have a lot  
20          of work to do, so the whole business of management of  
21          the joint deployed inventory, knowing what we have, where  
22          we have it, part of the sustainability piece, the whole  
23          understanding of our usage and the ability of  
24          pre-empting it such that we drive up the levels of our  
25          availability.



1           So the supply chain -- the joint supply chain is  
2           a critical enabler to expeditionary operations and  
3           further work needs to be done on it.

4   SIR JOHN CHILCOT: Not wanting to prolong it, but is asset  
5           tracking part of that supply chain phenomenon?

6   LT GEN ANDREW FIGGURES: Yes.

7   SIR JOHN CHILCOT: Other reflections, before we close?

8   LT GEN SIR ROBERT FULTON: No, nothing we have not covered.

9   LT GEN ANDREW FIGGURES: I would agree.

10   SIR JOHN CHILCOT: Thank you, General Figgures and General  
11           Sir Robert Fulton. I will close this session now and we  
12           will resume at 2.00 pm, just under an hour, when we will  
13           be having evidence from Dr Hans Blix. Thank you very  
14           much.

15   (1.05 pm)

16                                   (The hearing concluded)

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