



House of Commons
Committee of Public Accounts

Progress in Combat Identification

**Twenty-first Report of
Session 2006–07**

*Report, together with formal minutes, oral and
written evidence*

*Ordered by The House of Commons
to be printed 23 April 2007*

HC 486
[incorporating HC 990-i, Session 2005-06]
Published on 1 May 2007
by authority of the House of Commons
London: The Stationery Office Limited
£0.00

The Committee of Public Accounts

The Committee of Public Accounts is appointed by the House of Commons to examine “the accounts showing the appropriation of the sums granted by Parliament to meet the public expenditure, and of such other accounts laid before Parliament as the committee may think fit” (Standing Order No 148).

Current membership

Mr Richard Bacon MP (*Conservative, South Norfolk*)
Annette Brooke MP (*Liberal Democrat, Mid Dorset and Poole North*)
Greg Clark MP (*Conservative, Tunbridge Wells*)
Rt Hon David Curry MP (*Conservative, Skipton and Ripon*)
Mr Ian Davidson MP (*Labour, Glasgow South West*)
Mr Philip Dunne MP (*Conservative, Ludlow*)
Helen Goodman MP (*Labour, Bishop Auckland*)
Mr John Healey MP (*Labour, Wentworth*)
Mr Sadiq Khan MP (*Labour, Tooting*)
Mr Edward Leigh MP (*Conservative, Gainsborough*), (*Chairman*)
Mr Austin Mitchell MP (*Labour, Great Grimsby*)
Dr John Pugh MP (*Liberal Democrat, Southport*)
Don Touhig MP (*Labour, Islwyn*)
Rt Hon Alan Williams MP (*Labour, Swansea West*)
Iain Wright MP (*Labour, Hartlepool*)
Derek Wyatt MP (*Labour, Sittingbourne and Sheppey*)

The following were also Members of the Committee during the period of the inquiry:

Angela Browning MP (*Conservative, Tiverton and Honiton*)
Alistair Carmichael MP (*Liberal Democrat, Orkney and Shetland*)
Sarah McCarthy-Fry MP (*Labour, Portsmouth North*)
Jon Trickett MP (*Labour, Hemsworth*)
Stephen Williams MP (*Liberal Democrat, Bristol West*)
Kitty Ussher MP (*Labour, Burnley*)

Powers

Powers of the Committee of Public Accounts are set out in House of Commons Standing Orders, principally in SO 148. These are available on the internet via www.parliament.uk.

Publications

The Reports and evidence of the Committee are published by The Stationery Office by Order of the House. All publications of the Committee (including press notices) are on the Internet at <http://www.parliament.uk/pac>. A list of Reports of the Committee in the present Session is at the back of this volume.

Committee staff

The current staff of the Committee is Mark Etherton (Clerk), Philip Jones (Committee Assistant), Emma Sawyer (Committee Assistant), Anna Browning (Secretary) and Alex Paterson (Media Officer).

Contacts

All correspondence should be addressed to the Clerk, Committee of Public Accounts, House of Commons, 7 Millbank, London SW1P 3JA. The telephone number for general enquiries is 020 7219 5708; the Committee’s email address is pubaccom@parliament.uk

Contents

| Report | <i>Page</i> |
|--|-------------|
| Summary | 3 |
| Conclusions and recommendations | 5 |
| 1 Progress on equipment projects to improve Combat Identification | 7 |
| 2 Operation TELIC | 10 |
| Boards of Inquiry | 10 |
| Aides-Memoires | 12 |
| 3 Data Collection | 13 |
| | |
| Formal minutes | 14 |
| Witnesses | 15 |
| List of written evidence | 15 |
| List of Reports of the Committee of Public Accounts Session 2006–07 | 16 |

Summary

Combat Identification is the way military personnel distinguish friend from foe and non-combatants during operations. Effective Combat Identification is a means of minimising the risk of deaths and injuries from friendly fire while maintaining or improving combat effectiveness. Failures in Combat Identification can result in deaths and injuries from friendly fire (deaths from friendly fire are also known as fratricide), civilian casualties, reduced operational tempo as well as damage to civilian property and infrastructures. The Department aims to minimise the risk of fratricide without substantially slowing down operations which could increase the length of the conflict and result in more deaths from enemy fire.¹

The Department expects that future operations will mainly be conducted in coalition with allies. This makes Combat Identification more complex as it requires interoperability of equipment and harmonisation of tactics and practices.

The Committee of Public Accounts first reported on the Department's efforts to improve Combat Identification in 2002. Since then the Department has made little progress in addressing the Committee's recommendations.

There is no one single equipment solution to effective Combat Identification. The Department has in train a number of equipment programmes that aim to improve Combat Identification by enhancing awareness of the location of people and equipment on the battlefield. The Department has also made firm investment decisions on a number of other projects which will, in part, contribute to better Combat Identification. The Department's progress in procuring Combat Identification related equipment has however been mixed as half of these projects have suffered delays, been deferred or re-scoped. The single largest equipment project to improve Combat Identification—the Battlefield Target Identification System—has also suffered considerable delays while the Department tries to scope a solution which will allow us to operate effectively with our allies, notably the United States. A decision on a Battlefield Target Identification has still not been made despite assurances from the Department and the development of a successful prototype in September 2001.

In April 2004, the Department appointed a Senior Responsible Owner to act as a champion for Combat Identification. He does not, however, have any budgetary or line management responsibility or other direct authority. He directs work to support improvements to Combat Identification and represents Combat Identification requirements and issues within the Department.

There were six deaths during Operation TELIC caused by friendly fire. The Department's Boards of Inquiry have investigated each of these and concluded that they were caused by a mixture of technical factors, failures in communication and procedures and issues related to doctrine and training. However, there were considerable delays in the time the Department took to conclude the findings and make them publicly available.

1 C&AG's Report, *Ministry of Defence: Progress in Combat Identification*, HC (2005–06), Executive Summary

The Department has made some progress in improving its data collection of friendly fire incidents and has created a database of them. Data from friendly fire type incidents that occur during training exercises and simulations can also provide useful insights. The Department has introduced better procedures for recording incidents that occur during training although it has not yet begun to analyse this information.

On the basis of a Report from the Comptroller and Auditor General, we took evidence from the Department on three main issues: progress on equipment projects to improve Combat Identification; Operation TELIC; and data collection.

Conclusions and recommendations

- 1. The Department has failed to develop viable Combat Identification solutions to counter the risks of friendly fire incidents, despite their devastating effects, and despite the recommendations made by the Committee of Public Accounts in both 1992 and 2002.** Some improvements have been made, for example for air and naval operations, but the Department needs to address the outstanding areas without further delay.
- 2. Over half of the equipment programmes for Combat Identification have been delayed, deferred or re-scoped during the last four years.** A Battlefield Target Identification System will not be available until early in the next decade. Equipments such as the Blue Force Tracker and Bowman communications system may improve situational awareness in the meantime, but the inevitable time-lag in analysing and collating information from these systems will restrict their potential for positive target identification. The Department therefore needs to develop a timetabled plan for introducing a credible target identification system.
- 3. Progress in procuring the Battlefield Target Identification System has been held up for six years awaiting allies' decisions.** The Committee recommended in 2002 that the Department develop methods of co-operation with allies on Combat Identification, but preliminary decisions are yet to be made. The Department needs to reach agreement with allies on procuring a system, or introduce, as an interim, a more limited national programme, focusing on key risk areas such as ground to ground combat.
- 4. The Department's Senior Responsible Owner on Combat Identification has no budgetary or line management responsibility.** The Department should identify what impact the Senior Responsible Owner has been able to make since the role was established in 2002, and determine whether giving greater management authority would increase the effectiveness of the role.
- 5. During Operation TELIC the Department produced 60,000 Aide Memoire cards to raise awareness of Combat Identification, but failed to distribute them to front-line troops.** The Department regretted this failure, which it attributed to more general difficulties with supplies in Iraq. Cards are now given to personnel before deployment. The Department should determine how successful they have been in raising awareness among the troops concerned.
- 6. As the Committee recommended in 2002, the Department has developed a database on the fratricide incidents, but it does not collate data on the fratricide rates of our allies or on non-combatant casualties.** The Department should update the database regularly and expand it to include data on allied fratricide rates and non-combatant casualties. The Committee also recommended in 2002 that the information gathered in the database be analysed and disseminated appropriately within the United Kingdom and to allies. The Department should share the database with our allies to promote greater joint interest in finding effective solutions.

7. **It took between eight and 28 months to conclude the Boards of Inquiry investigations into the four friendly fire incidents during Operation TELIC, and in one case it was a further 27 months before the findings were made publicly available.** There will inevitably be variations in the time taken to complete investigations due to differing levels of complexity and the possibility of criminal prosecutions. But once complete, the Department should make every effort to publish the findings of Boards of Inquiry within one month of the investigation being concluded.
8. **It took the Department over six months to inform the Committee that it could not provide information on allied fratricide rates and non-combatant casualties requested at the hearing.** The Department should in future provide promised information no later than four weeks after the hearing. Where more time is required, the Department should agree an appropriate timetable for delivery within a week of the hearing.

1 Progress on equipment projects to improve Combat Identification

1. We questioned the Department on progress made since our predecessors reported in 2002.² There has been mixed progress in the range of equipment projects that aim to improve Combat Identification. Some progress has been made in respect of air and marine operations, and projects including Successor Identification Friend or Foe (secure identification of friendly aircraft and ships) and Link 16 (better situational awareness of some ships and aircraft) are now in service.³

2. The Department told us that there had been progress with the Bowman communications system.⁴ The Bowman system provided a secure voice and data communication system for the Army, Royal Air Force and Royal Navy. It also helped to provide awareness of the whereabouts of people and equipment in the battlefield. It was declared in service in March 2004 subject to a number of provisos, but would not be fully operational until 2007. A project closely related to Bowman (Combat, DBL Infrastructure and Platform BISA) comprised three sub-projects procured as a single programme through the contractor providing Bowman. This programme was designed to give inter-operability of United Kingdom communication systems with those of our allies. It failed to meet its target date to be in-service in December 2004 as the technology was not sufficiently reliable.⁵

3. The Battlefield Target Identification System has suffered significant delays. This is the main equipment project to help forces identify friend from foe. It was been delayed for five years as the Department attempted to find a solution that would ensure inter-operability with allies.⁶ The Department considered that the need for inter-operability was vital as it expected that greater numbers of operations in the future to be conducted with allies.⁷ Developing inter-operable systems was a time consuming process, and the Department acknowledged that the process of discussing with allies which would be the best technological approach had taken longer than it would have wished.⁸ In 2000, NATO agreed to adopt a solution to the Battlefield Target Identification System that would allow inter-operability, and in September 2001, the Department successfully trialled a solution that complied with NATO standards.

4. In 2003, the Department realised that there was a wider range of possible operating environments and technical solutions. The United States and the United Kingdom with

2 Q 17

3 C&AG's Report, Appendix 4

4 Q 17

5 C&AG's Report, Appendix 4; Committee of Public Accounts, Fourteenth Report of Session 2006–7, *Ministry of Defence: Delivering digital tactical communications through the Bowman CIP Programme*, HC 358

6 C&AG's Report, para 18

7 Q 38

8 Q 45

other allies then agreed to pursue a joint assessment of the available technologies. In December 2004, the Department revised the scope of the Battlefield Target Identification System project. The United Kingdom and other allies have been pursuing a four year programme of including trials and exercises, the final element of which was an exercise called URGENT QUEST on Salisbury Plain in September and October 2005. The results are still being analysed but should inform the decision on the Battlefield Target Identification System to be adopted.⁹

5. The Department expected to make a decision on the system in Summer 2006, some six years after the NATO agreement.¹⁰ It expected the system to be manufactured and in the field in sufficient numbers by the end of the decade.¹¹ The Department intended to wait until the technology was sufficiently mature before deciding whether to continue to wait for international agreement or to consider a UK only solution.¹² The Department subsequently told us that it had further delayed its decision on the Battlefield Target Identification System and it has still reached no decision on the system.

6. Other projects that would contribute to better Combat Identification have also suffered cancellation or delays. The Airborne System for Target Recognition Identification and Designation programme aimed to develop an air to ground target identification system with three European partners. This project should have enabled military personnel to identify possible targets at much greater ranges than current equipment. However, funding for the project was withdrawn in 2004, three years after it was initially allocated. The need for the system still remains. Funding has now been allocated to the Battlefield Target Identification System to provide this capability.¹³ The Co-Operative Engagement Capability has also been deferred and re-scoped following funding decisions in 2005. The project should have enabled better detection, tracking and identification of possible targets in the air.¹⁴ The Department told us it was taking longer to assess some technical solutions to Combat Identification, as the nature of modern warfare and the speed of operations had made it more imperative to find a robust means of recognising friend from foe.¹⁵

7. The Department appointed a Senior Responsible Owner in April 2004 to act as a champion for Combat Identification. He is directly responsible to the Defence Management Board and directs work in support of delivering improvements to Combat Identification. He represents Combat Identification issues within the Department. The Senior Responsible Owner does not have any overarching line management or budgetary responsibility for Combat Identification. The Department considered that he was sufficiently empowered to lead, co-ordinate and focus relevant activities,¹⁶ and that it was not necessary for him to have a budget as there was no one single equipment project for

9 Q 105

10 Q 8

11 Q 44

12 Q 16

13 C&AG's Report, Appendix 4

14 C&AG's Report, Appendix 4

15 Q 18

16 C&AG's Report, para 32

Combat Identification. It noted there was a combination of equipment programmes, and other inputs such as training and practices.¹⁷

8. To date, the Senior Responsible Owner's achievements have been the production of more information, not the delivery of improved Combat Identification or even of projects designed to improve Combat Identification. For example, the Senior Responsible Owner obtained funding to install equipment in an aircraft to test the practical application of a potential target identification system. He has also persuaded other areas of the Department of the necessity and achievability of a database of Combat Identification information.¹⁸

17 C&AG's Report, para 33

18 Q 96

2 Operation TELIC

Boards of Inquiry

9. The Department conducts examinations of serious military incidents including deaths from friendly fire, investigating the circumstances of the incident and making recommendations to minimise the chances of a similar incident re-occurring. These examinations are called Boards of Inquiry. All four incidents of deaths from friendly fire during Operation TELIC were investigated in this way.¹⁹ The time taken by these Boards to investigate is significant. In the case of the incident involving two Challenger tanks outside Basra, the Board of Inquiry took 28 months to report. The Department's policy is that subject to external constraints such as police investigations; awaiting information from technical experts; and the necessity to synchronise some investigations with other allied forces, the inquiries should be concluded within 14 weeks of the incident.²⁰ Clearly the Department was unable to meet its target deadline in these cases.

10. The Department has agreed to make summaries of all Boards of Inquiry reports available to Parliament. It has gone further by making Inquiries into incidents of public interest publicly available; this will include all Board Reports into fratricide. There has been considerable delay from completion of the Board of Inquiry to publication in some cases.²¹ In some cases, the time taken to publish the report took longer than the inquiry itself. In the case of the Royal Marine landing craft which came under friendly fire south of Basra in March 2003, the inquiry was complete by December 2003 but the finalised report was not published until February 2006, some 26 months later.²² The Department provided the Committee with more detailed information about the delays which is summarised in **Figure 1** below. The families of the personnel killed in these friendly fire incidents were kept informed about the progress of inquiries throughout the process.

19 C&AG's Report, para 11

20 C&AG's Report, footnote 9

21 Q 1

22 Qq 73–79

Figure 1: Boards of Inquiry delays

| Date of incident | Details of Incident | Length of time for investigation to conclude | Reason for delay to conclude the investigation | Time between conclusion of investigation and publication of report | Reason for delay to publication |
|-------------------------|---|---|--|---|---|
| 22 March 2003 | United States Patriot surface to air missile shot down an RAF Tornado. Two United Kingdom airmen were killed. | 12 months | Awaiting the results of a study by QinetiQ into the aircraft's identification friend or foe system. Difficulty in obtaining technical data from the United States in a format compatible with United Kingdom systems. | 2 months | Time taken to notify next of kin. |
| 25/03/03 | British Challenger 2 tank engaged a second Challenger Tank 2 outside Basra. Two soldiers were killed and two wounded. | 28 months | The Board of Inquiry was not convened until the Royal Military Police investigation was complete in May 2004. An initial Board Report was completed in July 2004 but the discovery of new evidence led the Board to be reconvened in November 2004. In January 2005, the Board ordered a technical investigation which required a special facility to be built because of depleted uranium dust. | 4 months | Internal consideration of the Board's Report within the Ministry of Defence. |
| 28/03/03 | United States Air Force A10 ground attack vehicle mistakenly engaged a British Combat Vehicle resulting in the death of one soldier and four wounded. | 14 months | The Royal Military Police investigation was completed in October 2003. It was decided to delay the Board of Inquiry until the United States Report became available in December 2003. | 20 months | Delays occurred in trying to persuade the United States to declassify their secret report. A heavily redacted report was released in September 2005 and the next of kin informed in October. The Report was finally provided to the House of Commons library in January 2006. |
| 30/03/03 | A British Marine was killed, and four wounded when his landing craft came under fire from rockets and small arms fire. | 8 months | As a result of a BBC programme raising doubts as to whether the incident was as a result of enemy fire, the Royal Military Police carried out two investigations between March and October. The Board of Inquiry was then convened in October 2003 and reported in early December 2003. The next of kin were given the Report in January 2004. | 26 months | The Royal Navy were not aware of the requirement to provide high profile Board of Inquiry reports to Parliament and to publish them. Action was taken as soon as the requirement was known. |

11. These delays can be explained by factors such as preceding Royal Military Police inquiries; liaison with the United States; and further more detailed investigations needed when the convening authority did not believe that all questions had been fully answered. These aside, there was still a significant time lag before some reports were published.²³

Aides-Memoires

12. The Department has undertaken work to research the impact of human behaviour on the success of Combat Identification, and the adoption of methods such as incident casualty checklists, combat identification Aide Memoire cards and training packages to reduce the risk of fratricide. During Operation TELIC the Department produced 60,000 Combat Identification Aide Memoire cards which aimed to raise awareness of Combat Identification. These cards were transported to theatre but their distribution was prevented by logistical problems,²⁴ which was particularly unfortunate as they could have played a role in avoiding any of the UK friendly fire incidents.²⁵ The Department was confident that these problems would not occur again, and the cards are now given to service personnel before deployment.²⁶

23 Q 25

24 C&AG's Report, para 27

25 Q 13

26 Q 14

3 Data Collection

13. Since the previous report in 2002, the Department has improved its collation of data regarding incidences of deaths from friendly fire involving United Kingdom Armed Forces and it has created a database of these incidents.²⁷ The Department's Defence and Science and Technology Laboratory has developed a database of fratricide drawing on data from incidents since 1950. The Department is also drawing on internal records and historical data. The Department has only conducted limited analysis of the data so far, but this work confirms that fratricide continues to be a part of modern operations. Further analysis could usefully inform the Department's and allies' decision making on Combat Identification related issues.

14. There are, however some gaps in the data collated. The Department has made some improvements in the collation of data on friendly fire incidents that occur during exercises and training. It prefers to keep these incidents separate, however, from actual incidents on operations, as it believes service personnel will react and behave differently in training situations than they would in operations.²⁸ There is therefore a risk that this source of information will not be analysed alongside actual friendly fire incidents and valuable lessons may be missed.

15. The Department undertakes very little comparative work to understand how the United Kingdom's fratricide rates compare with those of other nations' Armed Forces. Without such a comparison, it is difficult to benchmark the United Kingdom's progress in Combat Identification against other nations.²⁹ The Department has subsequently told us that, in the period since 1990, none of the other major partner nations (Australia, Canada, France Germany and the Netherlands) other than the United States of America have been responsible for any fratricide incidents. The Department was unable to provide figures for the United States of America fratricides.

16. The Department explained that the focus of the training and tactics, techniques and procedures is to ensure that military personnel do not kill anyone who is not a primary target. However, there is little done by the Department to collate data relating to civilians killed because military forces failed to identify them as non-combatants.³⁰ Were data of this kind gathered, it might be possible to benchmark the United Kingdom's civilian casualty rates against those of other Allied Forces. The Committee requested that the Department obtain international data on rates of casualties amongst non-combatants but were told by the Department that reliable data on civilian casualties is not and cannot be collected.

27 Q 91; C&AG's Report, para 46

28 Q 91

29 Q 56

30 Qq 66-72

Formal minutes

Monday 23 April 2007

Mr Edward Leigh, in the Chair

Mr Ian Davidson
Mr Sadiq Khan
Mr Austin Mitchell

Mr Alan Williams
Mr Iain Wright
Derek Wyatt

Draft Report

Draft Report (Progress in Combat Identification), proposed by the Chairman, brought up and read.

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

Paragraphs 1 to 16 read and agreed to.

Conclusions and recommendations read and agreed to.

Summary read and agreed to.

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

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

Ordered, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

[Adjourned until Wednesday 25 April at 3.30 pm.]

Witnesses

Monday 13 March 2006

Mr Bill Jeffrey CB, Permanent Under Secretary and **Air Vice Marshall Stephen Dalton CB**, Capability Manager (Information Superiority) and Senior Responsible Owner for Combat Identification, Ministry of Defence.

Ev 1

List of written evidence

Ministry of Defence

Ev 12

List of Reports of the Committee of Public Accounts Session 2006–07

| | | |
|---------------------|---|------------------|
| First Report | Tsunami: Provision of support for humanitarian assistance | HC 25 (Cm 7018) |
| Second Report | Improving literacy and numeracy in schools (Northern Ireland) | HC 108 (Cm 7035) |
| Third Report | Collections Management in the National Museums and Galleries of Northern Ireland | HC 109 (Cm 7035) |
| Fourth Report | Gas distribution networks: Ofgem's role in their sale, restructuring and future regulation | HC 110 (Cm 7019) |
| Fifth Report | Postcomm and the quality of mail services | HC 111 (Cm 7018) |
| Sixth Report | Gaining and retaining a job: the Department for Work and Pensions support for disabled people | HC 112 (Cm 7019) |
| Seventh Report | Department for Work and Pensions: Using leaflets to communicate with the public about services and entitlements | HC 133 (Cm 7020) |
| Eighth Report | Tackling Child Obesity—First Steps | HC 157 (Cm 7020) |
| Ninth Report | The Paddington Health Campus Scheme | HC 244 |
| Tenth Report | Fines Collection | HC 245 (Cm 7020) |
| Eleventh Report | Supporting Small Business | HC 262 |
| Twelfth Report | Excess Votes 2005–06 | HC 346 |
| Thirteenth Report | Smarter Food Procurement in the Public Sector | HC 357 |
| Fourteenth Report | Ministry of Defence: Delivering digital tactical communications through the Bowman CIP Programme | HC 358 |
| Fifteenth Report | The termination of the PFI contract for the National Physical Laboratory | HC 359 |
| Sixteenth Report | The Provision of Out-of-Hours Care in England | HC 360 |
| Seventeenth Report | Financial Management of the NHS | HC 361 |
| Eighteenth Report | DFID: Working with Non-Governmental and other Civil Society Organisations to promote development | HC 64 |
| Nineteenth Report | A Foot on the Ladder: Low Cost Home Ownership Assistance | HC 134 |
| Twentieth Report | Department of Health: The National Programme for IT in the NHS | HC 390 |
| Twenty-first Report | Progress in Combat Identification | HC 486 |

The reference number of the Treasury Minute to each Report is printed in brackets after the HC printing number.

Oral evidence

Taken before the Committee of Public Accounts

on Monday 13 March 2006

Members present:

Mr Edward Leigh, in the Chair

Mr Richard Bacon
Mr Ian Davidson

Mr Austin Mitchell

Sir John Bourn KCB, Comptroller and Auditor General, National Audit Office, was in attendance and gave oral evidence.

Mr Marius Gallaher, Alternate Treasury Officer of Accounts, HM Treasury, gave evidence.

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL

MINISTRY OF DEFENCE

PROGRESS IN COMBAT IDENTIFICATION (HC 936)

Witnesses: **Mr Bill Jeffrey CB**, Permanent Under Secretary and **Air Vice Marshal Stephen Dalton CB**, Capability Manager (Information Superiority) and Senior Responsible Owner for Combat Identification, Ministry of Defence, gave evidence.

Q1 Chairman: Good afternoon, welcome to the Committee of Public Accounts where today we are considering the Comptroller and Auditor General's Report on *Combat Identification*. I welcome back Bill Jeffrey; welcome also to Air Vice Marshal Stephen Dalton who is the Senior Responsible Owner (SRO) of Combat Identification. I should say that this Committee has taken a particular interest in this matter and I have taken a particular interest in this matter. We first issued a Report in 2002 and we made a number of recommendations. I think our Report has had an impact and there has been progress Mr Jeffrey on which I congratulate you. We should put this into context that, although any death from friendly fire is appalling, of course the numbers were relatively low in the Iraq war compared with any other war, so clearly progress had been made, is being made and I put that into context. I should also say that we are joined in this Committee by the Geneva Centre for the Democratic Control of Armed Forces, so a number of people sitting in the public gallery, particularly a number of colleagues from south eastern Europe, and we are very grateful to them for joining us today. Perhaps I can begin then by asking you to look at figure four on page seven which is the amount of time it has taken to investigate these fratricides. When we look at page seven we can see that the elapsed time between incident and board of inquiry report was 14 months, 28 months, 14 months, 8 months. Why did it take so long to investigate these fratricides?

Mr Jeffrey: May I say first that I appreciate very much your introductory remarks because, as you know, I am still quite a newcomer to the MoD. Although this is not an area that any of us feels we have got quite right yet, my sense is that we are making some progress, although every single death that underlies these cases is in itself a tragedy. On the

question of the time it takes for boards of inquiry to do their business, I agree with the underlying sentiment of what you say that in these four cases it has taken a great deal longer than one would certainly want. Each of them raises somewhat different issues. What has often caused the most significant delay has been the requirement to investigate whether there is any criminal issue before the board of inquiry could get started on its business. In other cases it has been a requirement to synchronise what we are doing and match it with investigations that our American colleagues in particular have been undertaking. In others, we have required technical advice from companies which manufacture the equipment. These are the explanations: I am not offering them as excuses.

Q2 Chairman: You will admit that some of these figures show that it is a long time, do they not?

Mr Jeffrey: It is indeed.

Q3 Chairman: So you are going to try to do better. If you look at the previous page, fatalities during the combat phase of Operation TELIC, it makes the point about the extraordinarily low number of people killed by enemy action, which is just a truly extraordinary figure really for a war. What were the causes of the 21 out of 33 fatalities in the operation that were not the result of enemy action or fratricide? What were the causes?

Mr Jeffrey: The principal causes were: two flying accidents, which between them accounted for 14 fatalities—eight and six; one case involved the illness of the officer who died; three occurred as a result of road traffic accidents; two are described as “killed on active service”, one during an explosive ordnance

 Ministry of Defence

disposal operation, one during an explosion; and one case is still *sub judice*, so it is not possible to attribute it to any of these categories.

Q4 Chairman: Any death is unfortunate. Would it be an unfair question to put to you that perhaps you are not doing enough to protect our troops, given what you have just told us about the aircraft crashes in particular? Is that an unfair question or is it just inevitable in the fog of war that this sort of thing is going to happen and there is nothing more you can do to protect our troops?

Mr Jeffrey: I do not intend to make a practice of coming to this Committee and saying there is nothing more we can do, because there always is. I am sure that what one might call the health and safety aspect of this, as opposed to the measures that we are trying to take on combat identification to reduce fratricide, is equally important. What I should do is draw attention to the fact that two thirds of these fatalities were attributable to two highly regrettable but nonetheless isolated accidents in the air.

Q5 Chairman: Let us get to the heart of this now, which is the Americans, as always when we are talking about combat. Please look at paragraph 18 on page nine. I took a particular personal interest in this subject and I wrote letters to the Secretary for State at the time and these may be on your file, I do not know. If you look at paragraph 18 it says "It is important that the Battlefield Target Identification System is inter-operable with allies, particularly the United States." well that is obvious "Ensuring the inter-operability has led to slow progress". That has always been the problem when I have studied this previously; dealing with the Americans has been a problem, particularly in NATO. "While NATO issued a Standardisation Agreement in June 2000 and the Department successfully trialled a compliant solution (Battlefield Target Identification Device) in September 2001, the project was deferred in 2003 when allies and partners agreed to a United States proposal to assess technologies other than those defined in the NATO Standard Agreement". In other words, we are back to the old NATO thing; two steps forward, one step back and all the rest of it. If the Americans fail to reach a decision on this, are we back to square one? This is absolutely crucial, is it not?

Mr Jeffrey: We are not back to square one; it is true to say, as you do, that we did successfully trial the system which is compliant with NATO standards. We then, round about 2002–03, realised that there was a wider range of operating environments in which it might need to be deployed and a wider range of candidate technologies, if I might put it that way. At that point the Americans proposed and we agreed, with others, that there should be a joint assessment of the available technologies. It is certainly the case that when one goes international things sometimes take longer. On the other hand, in this environment in which we are now operating, there does not seem to us to be much alternative to

going international; so much depends on coalition operations and so much depends on having compatible technology.

Q6 Chairman: Air Vice Marshal Dalton could you comment on this because you are obviously an expert on this? Tell us a bit about the Americans and your dealings with them and how interested they are in this whole area and how much progress we can make. It was said to me when I was taking an interest in this at the time of the war, that there was no technology and the best I could hope for was that one of our tanks driving in the desert had a Union Jack on the top of it so the Americans did not blow it out of the desert. Is that a bit unfair?

Air Vice Marshal Dalton: I believe that is a little unfair. I think we shall discover that the Americans, as with many of our allies, take this as seriously as we do. The issue of course is trying to make sure that we have the right balance between the technology and the right level of risk, in other words that it works and does not lead to people not having faith in it and that it works across all the platforms and environments. We and the Americans, the French, the Germans and the Swedes are all involved in this to try to find a technology which is reliable and that will complement the whole question of tactics and training and procedures as well as our situational awareness. They are taking it very seriously.

Q7 Chairman: That is fine, but it does not really say a great deal. When is this going to happen? Assuming there is another war and our tanks go into action and there are American helicopters and planes flying about above them, will there be some piece of kit on the tank which will prevent the Americans blowing our tanks out of the desert?

Air Vice Marshal Dalton: The current rate of progress means that, hopefully by the summer this year, we shall have an understanding as to which particular technologies of the ones we have tested, culminating in that major test in September/October last year, are now at a stage that we can all put our weight and money behind moving ahead and trying to develop.

Q8 Chairman: Okay, we shall have an understanding this summer.

Air Vice Marshal Dalton: Yes.

Q9 Chairman: We shall now put our weight and our money behind this. Putting our weight and our money behind this and us all agreeing, how many years will it be before we have a system by which American planes can recognise our tanks, for instance?

Air Vice Marshal Dalton: I cannot answer that question directly.

Q10 Chairman: Give us an idea. Will it be five years, 10, 15?

Air Vice Marshal Dalton: It could be very few years, but I cannot answer that question directly because I do not know what the other nations themselves will decide. It is for them to make their minds up. What

Ministry of Defence

I can say is that our decision process has been based very much on getting an understanding as to the likelihood of the way the United States in particular are going to go so that we can back the horse that we think is going to be the most helpful.

Q11 Chairman: Is there a not a particular piece of technology out there? How far advanced is this? Is there some piece of kit, which we know is manufactured by a certain American company for instance, that we can all rally behind and which is affordable? Is there no piece of kit? Where are we? Are we still in the business of talking? Where are we exactly? You must be able to tell me whether, in five months, five years or 10 years, it is likely that we can get this piece of kit, because we have been talking about it for a long time. When you have all this technology available, particularly to the Americans, it is extraordinary that they cannot produce this one piece of technology.

Air Vice Marshal Dalton: The whole aim of the advanced concept technology demonstrator, which we are just coming towards the end of, was to identify those technologies which were ready to go forward and that then could be adjudged in terms of their affordability across the piece. That is what we are aiming for in the work we are doing now in analysing the results of the programme we have been involved in, such that we can now make decisions on which way to go.

Q12 Chairman: So there is no particular piece of technology out there at the moment?

Air Vice Marshal Dalton: There are several bits of technology out there at the moment. The question is which is the most effective, reliable and in a battlefield situation going to work.

Q13 Chairman: Other Members can continue on this if they want; I think I have made my point. Can you please look now at paragraph 27 on page 11? You produced, very usefully, 60,000 combat identification *aide-mémoire* cards, did you not? They were taken out to Iraq, not a single one of them was given to any of our troops, they were left on the dockside and then were shipped back to England. What was the point of that? Where is the value for money in producing 60,000 *aide-mémoire* cards which stay on the dockside?

Mr Jeffrey: The short answer is that there is no point in that and it was a highly regrettable passage of events. What I understand is that it did reflect more general difficulties in Iraq at the time with supplies and asset tracking that this Committee is aware of, which we have addressed in the meantime.

Q14 Chairman: So you want to apologise for that do you?

Mr Jeffrey: I do so readily. It was an error at the time. What I can say is, first of all, that it could not happen now because the *aide-mémoire* cards are issued to troops prior to their deployment rather than afterwards. We have made improvements in the

tracking of all sorts of consignments in the meantime and we feel we are in a significantly stronger position for the deployment in Afghanistan.

Q15 Chairman: Air Vice Marshal, you are the Senior Responsible Owner in this field and, as recommendation three on page five tells us, what we are talking about "... will stretch and test the operation of the Senior Responsible Owner concept". How can you take this process forward when you do not have any direct line management or budget? In other words, would it be unfair to say to you Air Vice Marshal that in this field you have no staff, no budget, no management therefore how seriously can we take your role?

Air Vice Marshal Dalton: The principle here is that my staff directly are involved in how the information on which combat identification is based is passed around the battle space. So from the point of view of having a direct line and direct point of influence and a responsibility, it makes eminent sense for me to have that responsibility. The way that the department works, in terms of the whole financial planning piece and of course the priority setting and also in terms of who is responsible, is very much based on who is going to benefit from the activity going on within the SRO construct. As the information manager for the battle space, then it makes sense for me to be responsible for it and I do have enough authority to make things happen.

Q16 Chairman: You can make things happen in this field? You have the staff, the budget, the people and the authority to do it?

Air Vice Marshal Dalton: Yes.¹ I can always refer back to the Defence Management Board if I feel there is any issue which is not being addressed seriously enough to move things forward.

Q17 Mr Mitchell: It does seem appalling that progress in this matter has been so slow. I am a newcomer to the Committee, but since the last report, the last inquiry, not much seems to have happened. This seems very odd, because the nature of modern warfare is going to be totally different to the kind of warfare we were used to in the days of great power warfare. Now it is going to be big states, fast moving invasions, chaotic situations, probably allies working with them and because things are moving so fast this is going to be a situation in which, unless we do take some clear action, there is going to be more of this friendly-fire killing. We are preparing our way for a disaster, are we not?

Mr Jeffrey: I entirely accept the implication of what the Chairman was saying earlier that our discussions with allies have taken longer than any of us would have wished, but I should take issue a little with Mr Mitchell's general assertion that not much has been done since the last report. If one looks at the NAO's Report, it does set out a fair amount of progress: to get some equipment systems in, including the

¹ *Note by witness:* The Senior Responsible Owner for Combat Identification does not have a specific budget. The role is explained in paragraphs 31 to 33 of the NAO Report, *Progress in Combat Identification*. See also Question 46.

 Ministry of Defence

Bowman radio system, which is greatly improving the situational awareness; to learn the lessons of the first Iraq engagement and drive through changes there which are in appendix three of the Report; to publish doctrine on this subject—and we are the only country to have done so; to improve training, which paragraph 24 of the Report brings out; and to improve the collection of information which the previous Committee requested us to do. I should argue that although one is never as far along the track as one would want to be, we have made quite a bit of progress on this.

Q18 Mr Mitchell: How would you argue the case I have just put up that it is going to be more a problem in the nature of modern warfare?

Mr Jeffrey: The Air Vice Marshal may have something to say about this as the military man, but I should dispute that. Certainly, what is clearly an aspect of modern warfare is the engagement of coalitions of a number of countries and it is obvious that there are more risks of this sort inherent in that. I do not know whether the Air Vice Marshal would want to add to that?

Air Vice Marshal Dalton: Two things, if I may? The first one is that with modern warfare and the speed of operations it becomes that much more imperative to try to find the most reliable and robust way of recognising your own before you start recognising the enemy. That is why some of the technology we have been looking at has taken longer to examine: to make sure we understand what it is and how it works better than perhaps others. That is a point which is true. The other aspect of it is that there of course will be many more non-enemy and non-friendly people in the battle space in the future and therefore we need to be sure that we are doing enough to recognise that we shall only be able to recognise our own through some form of pure identification systems *per se*. It is the situational awareness, knowing the likeliest position of the enemy in particular, but also of any non-combatants in there, which is also important for us to do.

Q19 Mr Mitchell: How happy are you with the situation in Afghanistan? Incredible terrain, broken, numerous different forces, war lords all over the place, different missions, some patrolling the capital, others destroying poppy crops and pursuing the Taliban, the Americans pursuing whoever they are pursuing wherever it is. This is going to be a natural place for this kind of accident, is it not? What can you tell us about how the situation has been improved so that it does not produce more tragedies in Afghanistan?

Air Vice Marshal Dalton: Of course the bottom line is that we can never guarantee that there will not be any further incident of fratricide. It is a fact of warfare that from time to time, because of all the conditions, especially the human conditions which are factors, it is difficult to put down and pin down the precise way in which you can solve this, but the human factors will become more of the issue. The second thing is that we have done an awful lot more in making sure this time that before the deployment

we have a lot more cross-discussions with the various nations involved out there in defining the areas of responsibility to try to make sure that the interfaces, which are often the areas where these things go wrong, are better defined.

Q20 Mr Mitchell: The more nations involved, the more difficult it is to get a common system.

Air Vice Marshal Dalton: Absolutely, and that is why tactics, techniques and procedures, procedures being the absolute key here, are an integral part of combat ID.

Q21 Mr Mitchell: How far is the root of the problem the Americans? In the 1940s and 1939–45, the American style was to throw big numbers at a problem and go in boots and all with massive power, which has not always been the British approach. I should imagine that in that kind of situation our troops are more at risk from the Americans than theirs are from ours.

Air Vice Marshal Dalton: I would not agree with that particular statement, for two reasons. First of all, the Americans, as I have mentioned, are taking this extremely seriously at the moment.

Q22 Mr Mitchell: So they should be; they are killing more.

Air Vice Marshal Dalton: We have made a lot of progress with them in getting to where we have got to today, particularly around the situation we shall hopefully find ourselves in this year, in being able to make progress directly in trying to prevent any more of these incidents happening.

Q23 Mr Mitchell: Are they secretive about systems?

Air Vice Marshal Dalton: No, not as far as I am aware.

Q24 Mr Mitchell: There seems to be a pattern now that we are ordering more within Europe, presumably at greater expense, but of course the way we are paying for good relations with Europe is to waste more money there. We are going to be buying more military equipment from Europe and less from the US. Is that going to cause more of a problem with identification?

Mr Jeffrey: I am not sure that we are necessarily buying more from Europe. Our procurement, as the Committee will know in a different context, is now very much undertaken under the Defence Industrial Strategy that was published at the end of last year and it looks as though we shall have a mixed picture. We shall have some equipment which is purchased from UK-based firms, we shall have some which is based in European consortia and some from the United States. I do not know whether it is necessarily the case that the balance of equipment purchased is shifting in quite the way you suggest.

Q25 Mr Mitchell: The Chairman commented on the delays in inquiries. I wonder how far that is deliberate, in the sense that this is something which is very destructive of morale and certainly caused a lot of shock and horror to me and various others at

Ministry of Defence

the time at home and disillusionment with the purposes of the war. How far are inquiries being delayed so that the thing can fade away and be forgotten?

Mr Jeffrey: In preparing myself for this hearing I have seen nothing whatsoever to suggest that that has been a factor. There have been several factors.

Q26 Mr Mitchell: So it is not a deliberate policy.

Mr Jeffrey: No; certainly not.

Q27 Mr Mitchell: It says in the Report that there has only been real progress on one front. Why is that? Which is it?

Mr Jeffrey: I am not sure that we should necessarily accept that there has only been progress on one front. There has been progress on equipment, there has been progress in policy and doctrine, there has been progress in training and there has been progress, albeit slower than we should wish, in working with our partners to develop more effective joint systems. We should gently contest the conclusion that there has only been progress on one front.

Q28 Mr Mitchell: The Report also says that the department should consider carefully the likely costs and benefits of proceeding with UK-specific solutions. Would they be any use in fact?

Mr Jeffrey: It goes back to the earlier exchanges. It would be possible for us to proceed completely independently of our allies but we do not believe it would make very much sense because of the interconnected nature of the engagements that we are deployed on at the moment. That is not to say that when it comes to it and we have a good understanding with our allies we shall not acquire our own capability. However, to go completely alone and not wait for the outcome of the discussions, in which the Air Vice Marshal is pretty closely involved would, in my judgment, be a mistake.

Q29 Mr Bacon: Air Vice Marshal, you mentioned that you disagreed with Mr Mitchell's statement about the number of people being killed. Could you say how many members of the British Armed Forces have been killed by Americans?

Air Vice Marshal Dalton: Sorry; in which context?

Q30 Mr Bacon: In Iraq.

Air Vice Marshal Dalton: During the combat phase of TELIC there were three.

Q31 Mr Bacon: And how many Americans have been killed by British forces?

Air Vice Marshal Dalton: None, as far as I am aware.

Q32 Mr Bacon: So Mr Mitchell was right when he said Americans were killing more British than the other way around.

Air Vice Marshal Dalton: In that sense the statistics would indicate yes.

Q33 Mr Bacon: That is what I thought. Could I ask you to turn to page nine? In paragraph 18 it refers to the battlefield target identification system and it is listed above as well as one of the six projects. Could you say why the battlefield target system has been so badly delayed?

Air Vice Marshal Dalton: Can I just make it clear that one is talking about the Battlefield Target Identification System, which is the overall way in which we see identification in the battle space, and one is talking about the Battlefield Target Identification Device. The device they are talking about in paragraph 18 is a particular piece of kit; the system is the overall way which is referred to in the table above. The actual technologies that we have been looking at to supply the BTIS requirement is part of what we have been talking about so far. There are several technologies ranging from optical to radar and what we have been trying to establish is which is going to be effective, reliable and robust in the battlefield area.

Q34 Mr Bacon: When was the NATO standardisation agreement issued?

Air Vice Marshal Dalton: In 2003, if I remember correctly.

Q35 Mr Bacon: I thought it was in June 2000.

Air Vice Marshal Dalton: Yes; sorry, 2000. I beg you pardon.

Q36 Mr Bacon: It is nearly six years ago, is it not?

Air Vice Marshal Dalton: It is.

Q37 Mr Bacon: How long did it take to fight World War II? It is a serious question. How long did it take to fight World War II?

Air Vice Marshal Dalton: Around about the same time.

Q38 Mr Bacon: Yes, it did. I was not there at the time, but as far as I remember it took from 1939 to 1945. Getting this right is taking almost as long as it took to fight the entire World War II. It is nowhere near acceptable, is it?

Air Vice Marshal Dalton: The key here is to try to make sure that we are closely interoperable with our allies because that is the key to how we are going to fight future operations. That interoperability is absolutely vital, if we can make it in the timescale that we can afford. In other words, when the technology becomes mature enough, which should be in the coming year, we shall then be in a position to decide whether the prize of interoperability is still worth waiting for in its fundamental sense or whether we should then need to consider going alone because the technology would be available to protect British troops.

Q39 Mr Bacon: Could you just repeat that last bit, "... or whether we should need to consider going alone because ...?"

Air Vice Marshal Dalton: Because the technology is then reliable enough. Using the standards you have mentioned as being the bedrock of that, we have

 Ministry of Defence

confidence that it is then in a good enough position for us to move forward because it is going to be reliable, robust enough and will work in the international environment in which we find ourselves.

Q40 Mr Bacon: Presumably the international environment requires that whatever standard robust technology you have can send out a message which is encrypted, but which can be read by the people you want to read it to say “We are friends”, but not by other people. Is that right?

Air Vice Marshal Dalton: Only if they have similar equipment or equipment which can read it..

Q41 Mr Bacon: Obviously they have to have the right equipment, but presumably the aim is that you are sending out an electronic signal which can be read by friends, that says “We are a friend”, but which cannot be read by others.

Air Vice Marshal Dalton: Absolutely.

Q42 Mr Bacon: I am just astonished that it should take so long and that even now, correct me if I am wrong, in paragraph 19 it says that the target dates for delivery are the end of this decade. Is that right?

Air Vice Marshal Dalton: That is when we should hope to have it fielded in the field with enough equipment to make it viable across the piece.

Q43 Mr Bacon: Why will it take until the end of this decade?

Air Vice Marshal Dalton: There are various processes now but we need to make sure that we can get the international forum to sign up to the standards that we are going to use. Just because a standard exists does not mean to say that they will all decide to use that standard and obviously what we are trying to do at the moment is use our influence to get them to do so. Secondly, there will then be the question of actually maturing the equipment themselves. It is not just the technology: the equipment itself has to be reliable and robust enough in production to meet the needs we have. Thirdly, we should aim to field and manufacture enough of them to equip a sensible-sized force that makes it worthwhile putting it into place. If we do not do that and people come to rely on it, when it is not there we then have the obverse human factor of people drawing the wrong conclusions.

Q44 Mr Bacon: So 2010 is the date when you would hope to have it operable?

Air Vice Marshal Dalton: In sufficient numbers, fielded in the field.

Q45 Mr Bacon: So it is actually 10 years, is it not? It is World War I and World War II added together in terms of time.

Mr Jeffrey: As we said earlier, this process of discussing with the allies what would be the best technological approach to the problem, which is a technically quite challenging problem, has taken longer than we should wish. It is also worth bearing in mind that there are other equipment

developments, including the success of the identification friend or foe programme, which has been introduced, and the major Bowman radio system, the effect of which in practice is to improve situational awareness and to reduce the likelihood of casualties from friendly fire. It is a complicated picture. We are not pretending for a moment that the Battlefield Target Identification System issue has been advanced as quickly as we would wish, but it is not by any means the whole story.

Q46 Mr Bacon: The report says that the delivery of combat identification is difficult and demanding and requires strong direction. That is presumably why we have the Air Vice Marshal as the Senior Responsible Owner. What justification is there for not giving the Senior Responsible Owner a budget?

Mr Jeffrey: It comes back to the nature of the issue which, to me anyway, leaps off every page of the NAO Report and is one which runs right across the piece. If you look at the measures that we are taking to address this issue, they include equipment programmes which exist for other purposes, to improve combat capability, they include training within each of the individual Services, a whole variety of steps which are being taken right across the defence community. If it were a single equipment project, whose purpose was to acquire equipment which could only be used to reduce the likelihood of casualty from friendly fire, then the natural thing to do would be to put the Air Vice Marshal or someone directly in charge of it with the relevant budget. The approach we have adopted is to identify a senior figure within the Ministry, who is well placed, who has access to our Defence Management Board and to me personally and who is effectively the champion for all this activity right across the Ministry. We think that is the best way of ensuring that it is given the priority where it is needed.

Q47 Mr Bacon: Is the Air Vice Marshal’s job to deliver this and he does not move onto another job until this is delivered or will he be replaced by another Senior Responsible Owner at some point halfway through the project?

Mr Jeffrey: He has already been performing this role for over two years and will move to other duties at some point in the future.

Q48 Mr Bacon: So your expectation would be that before this is actually delivered, there will be a new Senior Responsible Owner?

Mr Jeffrey: It is quite likely, but it depends how you define when it is delivered. This is the work of quite a long period, as you have observed yourself.

Q49 Mr Bacon: Indeed. One of the great criticisms of many of the projects of this kind in the public sector is that the person in charge keeps on changing, whereas often in the private sector the person does not move until the project is delivered. This project is nowhere near delivered. When would you expect the Air Vice Marshal is likely to move on to his next posting?

 Ministry of Defence

Mr Jeffrey: Within the next year.

Air Vice Marshal Dalton: This year.

Q50 Mr Bacon: So presumably whoever does the coordinating, defining the success criteria, the advocating and being the strong champion has to go up the learning curve all over again and you have to have a new person doing all of that.

Mr Jeffrey: It is very likely that someone would be appointed to this who was already well acquainted with the equipment programme and the issues which arise on the equipment.

Q51 Mr Bacon: Do you mean somebody who is working with the Air Vice Marshal on the combat identification at the moment?

Mr Jeffrey: Not necessarily, but certainly somebody who is extremely knowledgeable of the equipment programme and the issues which arise on generating military capability.

Q52 Mr Davidson: We have already established that three deaths of British servicemen were caused by British forces and three by Americans. You said that as far as you were aware, no American deaths were caused by British forces, is that correct? May I clarify, just for comparison purposes, how many cases there were there of Americans killing their own?

Mr Jeffrey: We might need to inquire about the answer to that question and send the Chairman a letter. I do not have that information in my brief.

Q53 Mr Davidson: Do you know anything about any other forces' personnel that the British forces killed?

Mr Jeffrey: I am not aware of any.

Q54 Mr Davidson: Would you know?

Mr Jeffrey: Within the department we may have knowledge. My guess is that the answer is that we have not caused any deaths amongst other forces.

Air Vice Marshal Dalton: Not that I am aware of; we should have to check.

Q55 Mr Davidson: Are you aware whether or not the Americans caused the deaths of any other allies?

Air Vice Marshal Dalton: Yes, I know of a couple of instances where there has been American involvement in accidents with other allies.

Q56 Mr Davidson: How does the American record compare with the British record? There are a lot more of them there than there are of us.

Mr Jeffrey: That was the point I was going to make. It is the case that if you make the straight numerical comparison, as Mr Bacon did a moment ago, we have these three cases which are all tragic cases which are written up in the NAO Report and there is nothing in the opposite direction. However, the Americans are there in massively greater numbers than we are.

Q57 Mr Davidson: That is why I am asking whether or not you have made any comparisons.

Mr Jeffrey: In terms of deaths, the only comparison one can meaningfully make is a straight numerical one.

Q58 Mr Davidson: No, that is not the case. If they had 100 times more troops that we did, all other things being equal, you would expect the casualty figures, blue-on-blue, to have been 100 times our figures. Was that the case or was it something different?

Mr Jeffrey: We should need to—

Q59 Mr Davidson: Have you not looked at this?

Mr Jeffrey: If the question is about casualties rather than deaths, then we should need to do some comparison of the figures.²

Q60 Mr Davidson: Have you not done this already?

Air Vice Marshal Dalton: No, we have not done any direct comparison.

Q61 Mr Davidson: Why not?

Air Vice Marshal Dalton: The primary focus of our effort there has been to establish what the British people have done and what the integration there was with the allies, particularly the Americans. We have not done an analysis of the American deaths but we are aware.

Q62 Mr Davidson: Have you done comparisons with anyone else who was either in Iraq or indeed anywhere else, any other equivalent circumstances?

Air Vice Marshal Dalton: We shall be aware of the majority of situations.

Q63 Mr Davidson: Is that a yes or a no? Have you done a comparison or not?

Air Vice Marshal Dalton: No, we have not done a comparison, but we are aware.

Q64 Mr Davidson: Why not?

Air Vice Marshal Dalton: Because the focus of our attention has been on—

Q65 Mr Davidson: I understand that, but I do not know, looking at this Report, whether or not three deaths, British on British, are reasonable or not. If I found that, say, the Ukrainians had a 100th of what we had there and they had had 20 deaths, I should have thought that that indicated that our troops were perhaps better disciplined and we had the mechanisms and so on and so forth. If on the other hand the figures were reversed in some way, then I should be concerned about our position. May I ask the National Audit Office whether or not there were any figures available which could have allowed us to make a meaningful comparison, benchmarking basically both the British deaths and injury figures?

Sir John Bourn: No, there were not, but in view of the interest the Committee has in it, we shall look with the Ministry of Defence and seek to supply some, including consultation with the United States forces if that is necessary.

² Ev 12–14

 Ministry of Defence

Q66 Mr Davidson: British marines and Dutch marines for example would seem to be a reasonable comparison to make but that has not been done, has it? No. The thrust of a lot of this seems to be about making sure that soldiers are not killed by their own side, but there is also the other side of it of making sure they do not shoot other people, the difference between giving and receiving, which takes us on then to the question of civilians. We do not have figures in here for civilians who might have been killed by mistake to the best of my knowledge, because obviously combat identification involves civilians as well. May I just clarify whether or not we have any figures dealing with civilian deaths and injuries where errors have been made?

Air Vice Marshal Dalton: The whole focus of our work is to make sure, through the tactics, techniques and procedures our people learn, that they do not kill anybody who is not a primary target. They are very disciplined in making sure that those tactics and procedures are applied.

Q67 Mr Davidson: I understand that, but it clearly did not always work, did it, because some of our own soldiers were killed by our own soldiers, so it is obviously not effective? The same rule about trying your best would apply to civilians as well and presumably it is reasonable to assume that it did not always work. Are there any figures which would indicate the scale of the problem?

Air Vice Marshal Dalton: No, there are not; not that I am aware of.

Q68 Mr Davidson: Are any figures available for the scale of the problem in any other forces with whom we were allied?

Air Vice Marshal Dalton: Yes, there are figures available. I certainly know there are figures available with the Canadians and the Australians.³

Q69 Mr Davidson: If they have them, why do you not?

Air Vice Marshal Dalton: I said we were aware of some of the figures. I said I could not give you details of them all.

Q70 Mr Davidson: So you have some figures. Can you give me an indication of what those figures tell us?

Air Vice Marshal Dalton: No, I would have to research them to be precise otherwise I could be misleading you. We do have some figures with those two nations certainly.

Q71 Mr Davidson: Are we more efficient, in a sense, in making sure that we do not hit the civilians unnecessarily than the others or less so?

Mr Jeffrey: We certainly have a very clear policy.

Q72 Mr Davidson: I did not ask for the policy. I was asking what the figures showed. I presume that the policy is not to shoot civilians. I am just asking

whether or not the figures demonstrate that our training makes our troops more effective at making sure that there are minimal civilian casualties.

Air Vice Marshal Dalton: I believe the figures would show that, but I cannot guarantee that because I do not have the figures.

Q73 Mr Davidson: It would be helpful if we could have that as well. The other issue I want to pursue is the question of progress on Boards of Inquiry. I do not quite understand it and I should maybe have checked this beforehand. As I understand it, there is a process by which the board of inquiry takes place, completes its work and then there is a period after which the report is made publicly available. You are nodding, so I presume that is correct. May I just ask why there is such a long length of time, not between the incident taking place and the board of inquiry, because I can understand that that can sometimes be complex, but in between the board of inquiry producing its report and it being made publicly available? In the last of the incidents there, that is actually much longer than the period it takes to compile the report.

Mr Jeffrey: In some cases it reflects the time it takes for it to be received and considered by senior officers within the Armed Forces. In others I think it is the case that there is a process under which families are made aware of the emerging findings before anything is published. That can sometimes take time.

Q74 Mr Davidson: May I just be clear about this, that the process then is that an incident occurs, there is a Board of Inquiry and a report is produced? Then after that, it is internally considered before it is made publicly available. Clarify for me. Can it then be changed? Can the Board of Inquiry report be changed as a result of the internal examination?

Air Vice Marshal Dalton: No, but the Board can be sent back for further investigation if the convening authority does not believe that it has answered all the questions it needs to answer and that is certainly the case in one but not two of the cases in the report.

Q75 Mr Davidson: That would be an explanation as to why it is not released publicly at the time that it is produced, I can understand that. Of the deaths that there have been in Iraq to date, are all those then the subject of boards of inquiry?

Air Vice Marshal Dalton: In general terms yes, but if the issue is that nothing is deemed to be unknown about the incident, then it is up to the convening authority to decide whether one is required. If it is felt that anything is unknown then yes—if the facts are all known, then maybe not—a police investigation is done.

Q76 Mr Davidson: We have now just gone over the 100 figure. May I just clarify how many boards of inquiry therefore will have completed their work to date, approximately?

Air Vice Marshal Dalton: I do not know that. I am focused on the fratricide incidents in the report, so I cannot tell you that.

³ *Note by witness:* The figures referred to by the witness relate to military personnel not civilians.

Ministry of Defence

Mr Jeffrey: If you will allow us, we ought to write to you about this. I do not have that figure immediately available to me.

Q77 Mr Davidson: Okay. Is it a reasonable expectation that all of the Boards of Inquiry that are being conducted into casualties in Iraq will eventually be published?

Mr Jeffrey: It is; yes.⁴

Q78 Mr Davidson: Is that published in full, except presumably that there will be some deletions in the interest of national security where it is related to equipment and so on? In general terms, do I take it that they will be fully published?

Mr Jeffrey: The intention is to publish when appropriate. It will not invariably be in full because there will be some material that cannot be published.

Q79 Mr Davidson: I understand that. The general intention is that all of these would be publicly available at some point.

Air Vice Marshal Dalton: Yes. There is a statement to that effect from the department to say that is exactly what we shall do.

Q80 Chairman: Mr Davidson mentioned civilian casualties. There was a PAC recommendation, which is mentioned on page 17 of this Report “The Department needs to provide a clearer account than it has done so far of the steps it is taking to reduce the risk of civilian casualties and when these measures will be in place”. What have you done since we have had our report?

Mr Jeffrey: We have certainly published the statement of policy which is described in box six in the report itself.

Q81 Chairman: Statements of policy are good as far as they go, but what have you done to reduce the risk of civilian casualties in a future war?

Air Vice Marshal Dalton: There is now a better focus than ever before on the issue of engagement criteria, rules of engagement which clearly stipulate when individuals may use their weapons. There is greater focus in the training on the circumstances around that, there is greater focus on providing them with a clearer situational awareness so that they know what is around and a huge amount of effort has gone into making sure that in all cases we are attacking the right targets and minimising any form of collateral damage, particularly to people.

Q82 Chairman: Is there any difference in our approach to that of the Americans?

Air Vice Marshal Dalton: We each operate by a set of Rules of Engagement. Those Rules of Engagement are nationally decided upon, but the training is certainly harmonised so each other knows

what training goes on with each side to make sure that we are getting the best out of it. That is why we do joint exercises all the time.

Q83 Chairman: Would it be unfair to say that Americans are more casual than we are about civilian casualties or collateral damage, as you put it?

Mr Jeffrey: I believe our sense is that it would be unfair in the sense that—

Q84 Chairman: It would be unfair?

Mr Jeffrey: That is my belief.

Q85 Chairman: So the report of the retired trooper from the Special Air Service, who was all over the *Sunday Telegraph* this week, that he was not prepared to stay in the army because of the way that the Americans treated civilians in Iraq, was wrong, was it?

Mr Jeffrey: What I was about to say was that everything I have heard would suggest that the Americans take this issue very seriously, as we do.

Q86 Chairman: As seriously as we do?

Mr Jeffrey: Yes.

Q87 Chairman: So all this Report about us being much more careful and all this stuff about wearing the berets rather than helmets and all that is nonsense, is it?

Mr Jeffrey: I repeat that our contacts with the Americans lead us to conclude that they take these matters seriously, just as we do.

Q88 Mr Davidson: May I just ask the National Audit Office whether they could have a look at the paper that we are going to get from our visitors about the Boards of Inquiry and particularly have a look at the question of whether or not there are either undue delays in the process of producing the report or in then making the report public and whether or not the reports that are produced are unnecessarily restricted in some way? I accept that it will be necessary in some circumstances not to reveal various things, but I just want to clarify whether or not they are being as open as they might in all circumstances. May I just ask the Air Vice Marshal, in terms of working with our allies, whether there is a league table of allies to be avoided, as it were? Do we rate our allies in some way in terms of those which are quite reliable and are up to the same standards in terms of blue-on-blue incidents and those of whom we ought to be much more wary? Presumably the Armed Forces of the various allies we have are at different levels. How does the training which is provided to our own forces, which you accurately indicated put restraints upon them, train them to protect themselves perhaps against less restrained allies we might find ourselves with?

Air Vice Marshal Dalton: There is certainly no question of having any sort of league table in that way. We make sure that before any operations those allies who are involved are aware of each other's tactics and each other's rules as pertain to making

⁴ *Correction by witness:* Not all Boards of Inquiry reports are published. The Department's policy is that in cases where there is a clear public interest in the findings of a report, as in the case of the fratricide cases discussed during the hearing, these will be made publicly available. This also impacts on the answer given to Question 77.

 Ministry of Defence

sure that they minimise the chances of any form of blue-on-blue engagement. As I have indicated, that almost becomes an issue at the boundaries and I do not suppose that there is any way I could sit here and say we shall never get problems at those boundaries. They are the difficult area, but we try, by agreeing procedures and agreeing the minimum RoE, to ensure that is minimised.

Q89 Mr Mitchell: As far as I remember, this was also a problem in the first Gulf War in the sense that there were at least two highly publicised incidents where British troops were gunned down by American planes. What statistics do you have on that and the relative rate of injuries the Americans inflicted on British or British inflicted on Americans?

Mr Jeffrey: There were some casualties and indeed fatalities in the first Gulf War. I do not have the figures immediately to hand. Do you?

Air Vice Marshal Dalton: We had nine British servicemen killed by fratricide engagements during the first Gulf War and six in Operation TELIC. There were incidents of course; they were not the same, although they were in similar circumstances. Given the incredible number of people involved and the actions which were going on and the lack of any real technology to address it in the first Gulf War, the ones which happened in TELIC were of a nature that would be fundamentally down to human nature and not necessarily down to pure technology.

Q90 Mr Mitchell: Some of them were due to failure to recognise, were they not, electronic recognition? What steps were taken after the first Gulf War to improve the situation?

Air Vice Marshal Dalton: Take the example of the Tornado and the Patriot, which is maybe the one you are referring to there, certainly the technology was there and is there to try to limit the chances of that. If that technology does not work or if someone is not satisfied that the answer they get is right, there has to be a range of other measures in place such as airspace control, such as profile, such as speed and so forth, to try to limit the possibility, if the technology does not work, of someone jumping to the conclusion that that is the enemy. Despite those procedures being in place, on this particular occasion, mainly because of the difference in technologies which exist, the individual concerned was persuaded that this presented a threat to him where he was and therefore he engaged it.

Q91 Mr Mitchell: I wonder too about the role of statistics. The proper collection of statistics would bring home the scale of the problem. Yet I see that in terms of exercises as opposed to real battle each Service collects its own and they are not all lumped together. Nobody will take me on paintball exercises because I just blast out at everybody and the death rate—not mine—is atrocious. You would get a better idea of the problems if there were statistics from exercises on all British interventions, such as in Sierra Leone against the Westside Boys or whatever they were called. Why are all these statistics not added in and collected in?

Air Vice Marshal Dalton: We do collect the statistics from exercises and in fact the Army publishes its figures from places like BATHUS⁵ each year after the training season is finished. This is to try to get the information fed into future training and future awareness. You have to remember that training is often designed to create situations and people are training; by definition they are not necessarily combat ready. Therefore what they do does not necessarily relate to the way people react in operations.

Mr Jeffrey: As the earlier discussion revealed, we may not be collecting or have available to us immediately as much on the practices of other countries as Mr Davidson was asking for earlier, for example, but if you look at the NAO Report the collection of data on fratricide is one area where the NAO acknowledges we have made quite significant progress. Paragraph 44 says “The Department has developed its analysis and collation of data on fratricide incidents . . . Improvements are being made to the collection and analysis of data from training and simulations”. They are not both the same thing. We need to keep the hard data from the real engaged situation separate from the data from training and exercises. I do believe that we are better placed on data collection than we were before.

Q92 Mr Mitchell: What about an actual operation like Sierra Leone? Were there any deaths like that in Sierra Leone? I see a nod behind you.

Mr Jeffrey: You have the benefit of seeing behind me. I do not know off hand whether there were.

Q93 Mr Mitchell: The nod was saying no, not yes.

Air Vice Marshal Dalton: As far as I am aware there have not been any from the other operations like Sierra Leone in which we have been involved.

Q94 Mr Mitchell: What is the joint recognition trainer to help military personnel identify friend from foe which is not going to be available for some years? Is it just an aircraft type thing or signal type thing? What is a joint recognition trainer?

Air Vice Marshal Dalton: The joint recognition trainer is designed to create the environment where any military object or civilian vehicle can be seen from a variety of angles, through a variety of sensors, so that the troops and the airmen and all the sailors can all be trained to recognise these things in all those guises. To create that database is something we are working on and that is what takes the time. What we do have is series of equipments which exist throughout all three Services which provide the basics of visual recognition, some thermal recognition, which is going on now, and increasingly radar recognition. It takes time to build up that database of all the various vehicles we might need to recognise in the future. There is a lot more going on and certainly has been over the last five years and before that.

⁵ *Note by witness:* BATHUS is the British Army Training Unit Suffield, in Canada, where large scale training exercises are conducted.

 Ministry of Defence

Q95 Mr Mitchell: So it is the creation of situations from which people can learn?

Air Vice Marshal Dalton: Yes.

Q96 Mr Bacon: The Report says that the Senior Responsible Owner "... works by leading, co-ordinating and focusing the relevant activities in the Department and acting as an advocate for the capability within the Department". Can you give me a concrete example of how the Senior Responsible Owner has instigated real improvements in combat identification?

Mr Jeffrey: He can speak for himself, but I think he is the architect of a good deal of the progress which is reported in the NAO Report. Would you like to give a specific case?

Air Vice Marshal Dalton: If I may, I shall give two. The first one is that we were looking earlier last year at one of the technologies which might provide the BTID capability, Battlefield Target Identification Device, particularly in the ground-to-ground environment and we were keen to try to make sure the same technology might work in the aviation-to-ground attack helicopters and air-to-ground fast jets. What I was able to do was to get money assigned to take that equipment and get it put into an aircraft so that in the test we did in September we could demonstrate that it was practical, feasible and did do the job. That level gives the evidence which I hope later this year will allow me to persuade everyone that it is worthwhile going down that road because the technology exists. In terms of the database it is through persuading people that the intention of having a database which differentiates between operations and training that nevertheless exists is practical to achieve even though it is a lot of effort to try to pull all the figures together at the time. People were reluctant to do that, but they have now agreed to do it.

Q97 Mr Bacon: Essentially your achievements are in the area of producing more evidence for what you are saying is the case or what you are saying is possible.

Air Vice Marshal Dalton: At the moment, absolutely.

Q98 Mr Bacon: So in terms of actually delivering real improvements in combat identification which are of use to our forces now, so far there has not been a delivery, has there?

Air Vice Marshal Dalton: Yes, there has, because there is improved—

Q99 Mr Bacon: There is an improved understanding of what might be possible, but it is not the same thing as actually delivering it and it being used by forces. They are separate things. As you said yourself, it is a process.

Air Vice Marshal Dalton: But programmes of equipment are being delivered all the time and the issue is to look across the programmes of equipment being delivered which encompass the idea of how we improve Combat ID. For instance, we are about to coordinate the information which comes for the

airspace, to make sure it is collected once and delivered to everybody. That is another programme which is en route to deliver.

Q100 Mr Bacon: It says in figure three that there were fatalities during the combat phase of Operation TELIC. Were there other fatalities? Obviously there have sadly been fatalities caused by insurgents, but have there been other blue-on-blue fatalities in the non-combat forces?

Air Vice Marshal Dalton: No.

Q101 Mr Bacon: None as far as you are aware. One of the things I am surprised about is the paucity of information. Our Committee commented on that before and you say you have made progress on it, but, given that you have been living and breathing Combat Identification for two years, I should have thought that you would have at your fingertips some feeling for where things were with the Australians and with the Dutch and the Canadians and Americans and so on and be able to rattle off at your fingertips where things stood in terms of the number of blue-on-blue fatalities which each had caused either to their own troops or to allied troops in recent operations over many years and would have been able to allude to examples in Afghanistan or Sierra Leone or elsewhere in the Middle East. Yet neither of you were able to do that. Is it possible you could write to the Committee? What I should like to see personally is a matrix, a table with the year down the left-hand side, say starting at 1990, before the first Gulf War and go through to the present day. Then go from left to right, each country, perhaps in alphabetical order, or rank them by the number of fatalities, going from the United States, Australia, Canada, Germany, the Netherlands, the major countries, with how many there were, by whom and on whom. Is that too much to ask?

Air Vice Marshal Dalton: We shall do our best.

Q102 Mr Bacon: I should have thought it would be relatively simple to produce in a table.

Mr Jeffrey: We shall certainly write to the Committee with as much information of that kind as we can muster.

Q103 Chairman: Where are we with the Sergeant Roberts case?

Mr Jeffrey: The Sergeant Roberts case is with the prosecution authorities, the Crown Prosecution Service and the police, and is therefore effectively *sub judice* in the sense that it would be unwise for me or anyone else to comment on it at this stage.

Q104 Chairman: Can you tell us about the fratricide database and whether this has made any progress?

Air Vice Marshal Dalton: We now have a single store in the corporate memory within the Joint Capabilities area. It has all the data to do with fratricide on operations and we have a store through our Defence Science and Technology Laboratory Agency which pulls together both that and also for training and exercise data.

 Ministry of Defence

Q105 Chairman: Are you making good progress on the results of Exercise URGENT QUEST?

Air Vice Marshal Dalton: Yes, we are. The results of that are currently being assessed by our experts. I am due in America on Wednesday to hear what the American assessment has been within the Pentagon so that we can then see whether we have covered enough of the areas to make clear and accurate decisions on where we are going to go.

Q106 Chairman: Summing up, would it be unfair to put to you that since our last report—and I stress that we took a particular interest in this—progress has been uneven, that fewer than half of the projects identified have actually made good progress? Does this show a lack of real push within your department? Perhaps this issue is not taken entirely seriously compared with other issues you have to deal with. Would that be unfair?

Mr Jeffrey: I firmly resist the suggestion that this is not taken seriously.

Q107 Chairman: Why have fewer than half the projects made significant progress?

Mr Jeffrey: First of all, it is fewer than half of the projects which happen to be listed in table five of the report. A much wider range of projects is given in the appendix. If you look at these, there is a wide variety of explanations. Some of them have made good progress, as is noted. We discussed earlier in the hearing why the Battlefield Target Identification System has taken longer than was originally intended and essentially it is because it has been internationalised.

Q108 Chairman: We knew all about that five years ago, ten years ago, 15 years ago. It has just been bogged down in NATO for years and years and years and you have done nothing about it, have you?

Mr Jeffrey: That is not my sense. It is certainly the case that pursuing these issues in international fora is always more time consuming than it would be if we simply pursued them ourselves. The other point I should make about the equipment projects is that in some of those cases which are listed in table five,

what has happened is in fact what this Committee urges us to do in another context, which is to look carefully at the risk we face both technically and in other ways as early as possible in projects and to re-scope them if necessary or indeed in one case, ASTRID, to cancel it altogether. I agree that we could be further ahead with some of this and I am not suggesting for a moment that we are complacent about it, but in terms of the list of projects which have slipped or otherwise, there is an explanation in each case which I am sure the Committee is aware of.

Q109 Chairman: The fact remains that if there were another Iraq war tomorrow or a war in Iran, anywhere else tomorrow, if an American plane sought to attack a British tank by mistake there would be little the crew of the tank could do apart from waving a Union Jack. That is right, is it not?

Air Vice Marshal Dalton: No.

Q110 Chairman: Tell us why not.

Air Vice Marshal Dalton: The example there I should give is the fact that we have just recently enabled our situational awareness picture to be transmitted seamlessly across to the Americans through their coalition blue force tracker system and from Bowman such that they will now know, if it had to be done, technically we could field that sort of capability relatively quickly. It may not be the most efficient way to do it, but we could do it.

Q111 Chairman: From the tank to the plane?

Air Vice Marshal Dalton: From the tanks to the planes via the headquarters.

Q112 Chairman: In real time, quick enough in the fog of war and all that?

Air Vice Marshal Dalton: Quick enough is always a major thing. It would certainly be in a time which is reasonable for people to be able to know whether enemy or friendly forces are in that area.

Chairman: We shall leave it there gentlemen. Thank you very much for what has been a very interesting hearing. We look forward to the further progress you will be making. Thank you.

 Supplementary memorandum submitted by the Ministry of Defence

Ian Davidson MP raised two further questions about the way in which we deal with Board of Inquiry reports. The first related to the definition of “clear public interest” when a decision is taken whether to publish a report; the second to the provision of reports to next of kin. I am sorry not to have responded earlier.

On the first point, Boards of Inquiry are set up not only in high profile cases such as those involving loss of life or serious injury, but in a wide variety of more mundane circumstances, in many of which there is unlikely to be any interest on the part of the public. Preparing a report in a suitable form for publication consumes significant administrative effort. That is why reports are not routinely published, but Mr Davidson can be assured that the policy of publication where there is a clear public interest is not used as a way of avoiding publication in cases such as those which were discussed in the hearing where concern has been expressed about the particular circumstances of an incident subject to a Board of Inquiry.

As regards Mr Davidson’s second question, next of kin are, in all cases, routinely provided with copies of reports without having to request them. Moreover, while the way in which BOIs are handled varies slightly among the three Services, a common theme is to ensure that families are kept closely informed of

the progress of BOIs. Care is also taken to ensure that, in cases where there may be complex or technical issues involved, an offer is made to the family for a qualified officer to be present when the findings are issued, to explain these matters to them more fully.

I am also conscious that during the hearing, the Committee raised several questions that could not be answered at the time and I undertook to write and provide greater detail. The questions related to information we hold within the Ministry of Defence on other nations' experiences of fratricide, as well as the handling of the Boards of Inquiry into the 2003 fratricide cases. I'm afraid that it is taking some time to validate some of the information we hold on cases involving the United States, and we are still not in a position to respond on that specific point. I can, however, respond to the other questions raised.

As regards UK involvement in instances of fratricide with nations other than the US, there are no known instances of action by UK forces resulting in fratricide in the forces of friendly nations. Nor are we aware that in the period since 1990, the forces of any of the other major partner nations (eg Australia, Canada, Germany, France and The Netherlands) were responsible for fratricide as defined in the NAO report involving their own or other nation's forces. On the issue of fratricide incidents resulting in civilian casualties, military reporting of any kind of civilian casualties is necessarily limited and incomplete and cannot provide a confident basis for civilian casualty estimates, so no basis for comparison exists. But there is certainly no record of any incidents involving UK forces in Iraq since 2003 in which civilian fatalities occurred as a result of the person concerned being mistaken for an enemy combatant.

On Boards of Inquiry, I enclose an explanation of the timescales for completing each of the investigations into the four fratricide cases arising from Operation TELIC. As requested, this information has been examined by the NAO, and they are content.

Bill Jeffrey CB
Permanent Secretary

27 July 2006

OPERATION TELIC BOARDS OF INQUIRY (BOI) INTO FRATRICIDE—EXPLANATION OF DELAY

| <i>Ser</i> | <i>BOI Name</i> | <i>Significant Dates</i> | <i>Reasons For Delay</i> |
|------------|--|---|--|
| 1 | Tornado ZG710 Patriot Shootdown | Incident—22 March 2003 BOI Reports—30 January 2004 Report to MOD—01 March 2004 Report to NOK ¹ —2 May 2004 Report to HCL ² —May 2004 Report on Internet—May 2004 | The Inquiry was delayed considerably between May and August 2003 when the Board adjourned whilst awaiting the results of a QinetiQ report into the aircraft Indicator Friend or Foe (IFF) system. Further delay, in parallel, resulted from the difficulty in obtaining the US Airborne Warning And Control System (AWACS) tapes in a format compatible with UK systems. Whilst the US inquiry into the incident was completed in November 2003 a deliberate decision was taken not to rush the UK BOI to obtain concurrent release. |
| 2 | Challenger 2 Main Battle Tank (CR2) | Incident—25 March 2003 BOI Reports—12 July 2005 Report to MOD—31 October 2005 Report to NOK—24 November 2005 Report to HCL—November 2005 Report on Internet—January 2006 | Since a Royal Military Policy (RMP) investigation was required a BOI was not convened until the police had completed their enquiries in May 2004 with the Board convening 17 May 2004 after the Army Prosecuting Authority (APA) had weighed the evidence. An initial BOI report was complete by 23 July 2004 but the discovery of new evidence in November led to the General Officer Commanding 1st (UK) Armoured Division ordering the BOI to re-convene. |

¹ Next of Kin.

² House of Commons Library.

| <i>Ser</i> | <i>BOI Name</i> | <i>Significant Dates</i> | <i>Reasons For Delay</i> |
|------------|-----------------|--|---|
| | | | 18 January 2005 The BOI concluded that a special technical investigation of the CR2 was required. This was completed in March 2005. |
| 3 | A10/CVR(T) | Incident—28 March 2003 BOI Reports—27 May 2004 Report to MOD—01 July 2004 Report to NOK: US report—17 February 2004 Family briefed—06 October 2004 Report released—19 September 2005 Report to HCL—November 2005 Report on Internet—January 2006 | The Board then completed its inquiry 12 July 2005. 20 October 03 RMP report was forwarded to 1st (UK) Armoured Division. It was decided to delay the BOI until after US report was made available. The US (classified SECRET) report arrived at the Permanent Joint Headquarters (PJHQ) in December 2003. Delays to the briefing of NOK and final release of the report were caused by the need to discuss the classification of certain aspects with the Americans. |
| 4 | Marine Maddison | Incident—30 March 2003 BOI Reports—4 December 2003 Report to MOD—5 February 2004 Report to NOK—27 January 2004 Report to HCL—February 2006 Report on Internet—February 2006 | A BOI was not convened until 27 October 2003 as the incident was originally thought, on the basis of an initial investigation by the SIB, to have been caused by enemy fire. It was only after speculation in a BBC documentary on the war in Iraq, and in other media, that Mne Maddison had been killed by friendly fire that a second SIB investigation was commissioned. This concluded that Mne Maddison death had most likely been caused by friendly fire from a MILAN weapon. A BOI was convened shortly after the outcome of the second SIB investigation was known. The RN were not aware of the requirement to publish high profile BOI reports in the HCL and on the website until early 2006. Once the requirement was known, action was taken as soon as possible. |

Letter from Permanent Under-Secretary of State to the Clerk to the Committee

We continue to work with our American colleagues to firm up out fratricide data but I am afraid it now looks unlikely that we will be in a position to provide a definitive answer to the final point on comparable US data in a timeframe that would fit with early publication of the Committee's Report. I therefore suggest that the Committee might proceed with publication on the basis of the answers given at the hearing and in my subsequent correspondence. This is a very sensitive issue and I'm sure you will understand that I want to be completely confident about the facts before giving the Committee any further information.

18 September 2006