House of Commons
Committee of Public Accounts

PUBLIC PRIVATE PARTNERSHIPS:
AIRWAVE

Sixty-fourth Report of Session 2001–02
House of Commons
Committee of Public Accounts

PUBLIC PRIVATE PARTNERSHIPS:
AIRWAVE

Sixty-fourth Report of Session 2001–02

Report, together with
Proceedings of the Committee,
Minutes of Evidence and Appendices

Ordered by The House of Commons to be printed 4 November 2002

HC 783
Published on 28 November 2002 by authority of the House of Commons
London: The Stationery Office Limited
£11.00
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)
Mr Ian Davidson MP (Labour, Glasgow Pollok)
Geraint Davies MP (Labour, Croydon Centra)
Ms Angela Eagle MP (Labour, Wallasey)
Rt Hon Frank Field MP (Labour, Birkenhead,)
Mr Nick Gibb MP (Conservative, Bognor Regis and Littlehampton)
Mr George Howarth MP (Labour, Knowsley North and Sefton East)
Mr Brian Jenkins MP (Labour, Tamworth)
Mr Nigel Jones MP (Liberal Democrat, Cheltenham)
Ms Ruth Kelly MP (Labour, Bolton West)
Mr Edward Leigh MP (Conservative, Gainsborough) (Chairman)
Mr George Osborne MP (Conservative, Tatton)
Mr David Rendel MP (Liberal Democrat, Newbury)
Mr Gerry Steinberg MP (Labour, City of Durham)
Jon Trickett MP (Labour, Hemsworth)
Rt Hon Alan Williams MP (Labour, Swansea West)

Powers
Powers of the Committee of Public Accounts are set out in House of Commons Standing Orders, principally in SO No. 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) can be accessed via internet via www.parliament.uk. A list of reports of the Committee in the present Parliament is at the back of this Report.

Contacts
All correspondence should be addressed to The Clerk of the Committee of Public Accounts, Committee Office, 7 Millbank, London SW1P 3JA. The telephone number for general inquiries is: 020–7219–5708. The Committee’s e-mail address is: pubaccom@parliament.uk.

Footnotes
In the footnotes of this Report, references to oral evidence are indicated by ‘Q’ or ‘Qq’ followed by the question number; references to the written evidence are indicated by the page number as in ‘Ev ......’.
# TABLE OF CONTENTS

## SIXTY-FOURTH REPORT

- Introduction and list of conclusions and recommendations ........................................ 5
- The costs and expected benefits to the police of Airwave ........................................... 6
- Negotiating the deal ......................................................................................................... 10
- Interoperability between the emergency services ......................................................... 13

## PROCEEDINGS OF THE COMMITTEE RELATING TO THE REPORT ........... 15

## EVIDENCE (Monday 22 April 2002) (HC 783-i, Session 2001–02)

### WITNESSES

- Mr Tim Burr, Deputy Comptroller and Auditor General ............................................. Ev 1
- Lorraine Constable, Assistant Treasury Officer of Accounts ......................................... Ev 1
- Mr John Gieve CB, Permanent Secretary, and Mr Vaughan Asque, Head of Radio  
  Frequency and Communications Planning Branch, Science and Technology Unit, 
  Home Office .................................................................................................................. Ev 1
- Mr Philip Webb, Chief Executive, Police Information Technology Organisation .......... Ev 1
- Mr Jeff Parris, Vice President, Airwave mm0, ............................................................ Ev 1
- Mr Jeremy Colman, Assistant Auditor General, National Audit Office ....................... Ev 1

### APPENDICES

1. Supplementary memorandum submitted by the Home Office ................................. Ev 24
2. Supplementary memorandum submitted by the Home Office ................................. Ev 28
3. Supplementary memorandum submitted by the Office of the Deputy Prime Minister ................................................................. Ev 30

## LIST OF REPORTS PUBLISHED IN SESSION 2001–02
SIXTY-FOURTH REPORT

The Committee of Public Accounts has agreed to the following Report:

PUBLIC PRIVATE PARTNERSHIPS: AIRWAVE

INTRODUCTION AND LIST OF CONCLUSIONS AND RECOMMENDATIONS

1. In February 2000, the Police Information Technology Organisation (PITO\(^1\)) signed a framework arrangement with O2 (formerly the mobile communications arm of British Telecommunications plc) for a new radio service, known as Airwave, for police forces in England, Wales and Scotland. The framework arrangement was negotiated under the Private Finance Initiative. O2 will design, build, finance and operate the service and in return PITO and the police will pay charges over 19 years of some £1.5 billion. Roll-out of the new radio system started in 2001 and is expected to be completed by 2005, when all police forces will be using Airwave.

2. On the basis of a Report by the Comptroller and Auditor General\(^2\) the Committee took evidence from the Home Office, PITO and O2 on three main issues: the costs and expected benefits to the police of the project; the negotiation of the deal with O2; and the extent to which the new radio system will provide for interoperability between the emergency services.

3. Our key conclusions are:

- Airwave might be more sophisticated and expensive than it really needs to be. As a result of the procurement of Airwave, the police are acquiring a radio system which permits a very high degree of interoperability between forces throughout the country. Compared with a series of regional procurements which would have provided more limited interoperability but including interoperability with other emergency services, Airwave will cost an additional £300 million. It is significant that individual police authorities and the fire service cited the cost of Airwave as their reason for being unwilling to subscribe to it.

- There is no substitute for full competitive tendering. But where full competitive tendering is impossible or fails, departments should follow the example set by PITO end seek to use appropriate mechanisms, such as should-cost models, to protect the taxpayer.

- In negotiating a deal with O2, PITO and the Home Office failed to secure any clawback for the taxpayer of additional profits if other emergency services decide to join Airwave or if the system is sold by O2 to overseas governments. O2 was prepared to share the rewards from bringing extra users onto the system only if the Home Office was prepared to share the risk if extra users did not join. Failure to negotiate a clawback agreement was a product not just of O2 being in a powerful position as the only bidder but also the inability of the Home Office to bring the fire service and other safety organisations on board by demonstrating the real benefits that Airwave had to offer.

- It is now nearly ten years since a Home Office review recommended a joint approach to the procurement of new radio systems for the police and fire services. But the emergency services within a particular area or region are still unable to communicate easily with each other during major incidents, and a solution is still a long way off.

4. Our detailed conclusions and recommendations are:

*The costs and expected benefits to the police of Airwave*

(i) The costs of introducing Airwave will more than double existing police expenditure on mobile communications. However, it is not certain that one of the key benefits expected from the new system – the ability of police officers to communicate with each other when operating outside their home force area – has not been rigorously evaluated. The

---

\(^1\) A Non-Departmental Public Body established by the Home Office in 1998 to provide a procurement, contract management and advisory service for communications and information technology used by police forces.

Home Office and PITO did not give us any clear indication of the extent to which this facility would be taken up in practice. The Home Office and PITO should be able to demonstrate that each of the main facilities of the new system is in fact necessary for better policing.

(ii) Although some work had been undertaken to identify and value the potential benefits of Airwave, it is unlikely to provide an adequate framework for monitoring whether the benefits will in fact be achieved. We expect PITO to take forward the work of the Business Benefits Steering Group as a matter of priority and to be in a position to measure the benefits across police forces before Airwave is fully rolled out in 2005.

(iii) Throughout the procurement, police authorities expressed doubts about whether Airwave was affordable. To overcome these concerns, the Home Office decided at a late stage to pay police authorities some £500 million to finance the deal over the first three years. In seeking to secure additional benefits by procuring local services to a national plan, it is essential that users are convinced at an early stage in the procurement that a project is justified and affordable.

(iv) It was by no means clear to us who will bear the risk if concerns about the effects on health of using the Airwave system prove to be real. The Home Office should take early action as necessary to mitigate any risks once the outcome of current research is known.

Negotiating the deal

(v) A public sector comparator was not prepared until late in the procurement, and after a decision to use the PFI had already been made. It is therefore doubtful that the use of a comparator added anything significant to the decision making process. Departments need to think through what financial and other analyses are needed at each stage of a procurement and to determine and implement the most effective means of testing whether value for money is likely to be achieved.

(vi) Although O2 assured us that the Airwave system was up and running in five forces, problems still have to be ironed out. The remedies available to the Home Office if the system does not work will not fully compensate police forces for the disruption and operational risks that would inevitably follow. In negotiating PFI deals, departments should consider carefully whether the taxpayer is fully protected before entering into such long-term contracts.

Interoperability between the emergency services

(vii) The planned procurements of new radio communications systems by the fire and ambulance services are now to go ahead on the basis of an enhanced capability for communications between all three emergency services. These procurements will need to take full account of the lessons learned by the Home Office and PITO in negotiating and implementing Airwave.

THE COSTS AND EXPECTED BENEFITS TO THE POLICE OF AIRWAVE

5. For many years police forces were responsible for procuring and maintaining their own radio communications systems. In 1993, following a review, the Home Office concluded that many of the existing systems were obsolete and needed to be replaced (Figure 1). The Home Office also decided that there would be substantial benefits from procuring the new system on a national rather than a local or regional basis. We looked at the following areas: the structure of the procurement; the benefits of the new system; its affordability at local level and the safety of the new technology involved.\(^3\)

\(^3\) C&AG's Report, paras 1.1-1.9
Figure 1: Problems with existing police radios

<table>
<thead>
<tr>
<th>Problem</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congestion</td>
<td>Existing radio channels are often very congested, with police officers unable to gain access when required. As a result there is a considerable level of suppressed demand because officers do not communicate on routine matters. More importantly, police officers sometimes lose the ability to call for rapid response when required.</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Allied to the problem of congestion, current radio systems are inflexible. Capacity cannot be re-assigned quickly to overcome congestion, or, when necessary, provide command and working-level channels.</td>
</tr>
<tr>
<td>Security</td>
<td>The majority of police radio systems are unencrypted and messages can be intercepted with simple scanning receivers available cheaply (costing less than £100) from high street stores. This can result in police operations being called off, as suspects, monitoring police radio traffic, become aware of police surveillance.</td>
</tr>
<tr>
<td>Interference</td>
<td>Interference from commercial continental radio users causes severe problems to police radio systems in the South and East of England and some way inland (to the extent that the West Midlands police told us that they too suffered from radio interference).</td>
</tr>
<tr>
<td>Operational</td>
<td>With vehicle mounted radios operating on a different radio frequency to handheld radios, police officers in vehicles are frequently unable to communicate with police officers on foot, without the use of a second radio.</td>
</tr>
<tr>
<td>Roaming</td>
<td>Lack of support for regional and national roaming prevents police officers maintaining radio contact with their control rooms when outside their force areas. This is particularly relevant for organisations such as regional crime squads, which need to operate across force boundaries.</td>
</tr>
<tr>
<td>Management Information</td>
<td>Lack of information on the status and location of police officers can inhibit the ability of commanders to make operational decisions on, for example, deployment of police officers.</td>
</tr>
</tbody>
</table>

Source: C&AG’s Report

The structure of the procurement

6. As part of the business case for the project, PITO estimated that Airwave would cost some 2% of annual police budgets compared with a cost of slightly under 1% for existing systems. A review in 1999 concluded that Airwave would cost some £300 million more than a series of less ambitious, locally procured systems. The Home Office told us that it had opted for a national procurement for a number of reasons. First and foremost, a single system for the whole country would secure better co-ordination between police forces. Secondly, a national system would allow police officers from one area to assist another force and still use their own equipment. Thirdly, the system would concentrate expertise, especially in new technology as complicated as Airwave, and allow economies of scale to be achieved in the procurement and management of the system.⁴

Quantification of the expected benefits

7. Officers working in adjoining forces are often obliged to cross into each other’s areas. Motorway patrol officers may have no choice but to do so because of the limited number of motorway exits. In cases of hot pursuit of a suspect, the pursuing officers need to notify the force into whose area they are crossing. Such notification is essential when the suspects are armed as the express authority of a Chief Police Officer of the host force is necessary before firearms can be deployed. The ability to operate and communicate across geographic boundaries is also important for police forces that operate across the country, such as the National Crime Squad and the British Transport Police. The Home Office was

---

⁴ C&AG’s Report, paras 1.19, 2.40; Qq 2, 177, 191
however unable to provide us with data on the numbers or proportions of police officers routinely operating outside their force boundaries.$^5$

8. Interoperability between forces was only one of a number of features of the new system that had been designed to deliver an improved service. Police control rooms would be able to locate and talk to officers in areas where there is currently no radio reception. The new system would also allow officers to communicate with one another when responding to a major incident. Such communication is often difficult at present, particularly at airports and in rural areas.$^6$

9. Prior to the development of a full business case for Airwave, police forces were asked to examine the potential impact of a new radio system on their efficiency. Work by Thames Valley Police Force suggested that around 37% of a uniformed officer’s time was spent in the police station. If Airwave could help bring about a 10% reduction in the time spent by officers in police stations, a saving of approximately £37 million a year could be achieved, allowing an extra 1200 officers to be deployed on the streets. In 2001, PITO established a Business Benefits Steering Group to oversee work to determine what functions of Airwave have the potential to deliver benefits and how to measure these benefits.$^7$

10. The Home Office told us that the Airwave system would help to secure direct savings in officer time. For instance, officers would be able to make and receive telephone calls rather than having to return to the station to pick up a message on an answering machine. The suggested saving of £37 million a year was only an illustrative figure and it was also important to recognise that the benefits of the new system were not just to make extra police officers available for operational duties. The system would also make officers more effective by providing them with up-to-date equipment. There had been a choice about how far to go, but the Home Office viewed Airwave as a key part of equipping the police properly and therefore making them more effective. PITO was now putting in place measures to identify how police operations were being conducted prior to implementation of Airwave and the benefits that will arise after implementation. Some areas where Airwave is expected to improve police performance are listed in Figure 2 below.$^8$

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit to the police</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Quality Transmission</td>
<td>Ease and speed of communication, reliable and understandable voice messages. Less need for messages to be repeated.</td>
</tr>
<tr>
<td>Encryption</td>
<td>Greater security of information, criminals unable to use scanners in order to intercept police communications and greater privacy for personal information potentially transmitted over the radio.</td>
</tr>
<tr>
<td>Talk Groups</td>
<td>Enables everyone on a particular operation to hear radio messages intended purely for them and no-one else. Relevance of information received is therefore higher with less distracting background information.</td>
</tr>
<tr>
<td>Data Services</td>
<td>Access to Police National computer and other data checking services while on the beat. Expected to lead to greater detection of crime as checks are made more rapidly and more frequently.</td>
</tr>
<tr>
<td>Management Information</td>
<td>Enables senior officers to have a greater understanding of the deployment of their officers and so improves command and control.</td>
</tr>
<tr>
<td>Emergency Button</td>
<td>Improved officer safety and improved officer morale.</td>
</tr>
</tbody>
</table>

Source: C&AG’s Report

$^5$ Q 181; Ev 24–25
$^6$ Qq 158, 164
$^7$ C&AG’s Report, paras 3.27–3.28, 3.30
$^8$ Qq 55, 59, 142
11. The Home Office hoped that Airwave would improve the quality of communications within police forces, and improvement was evident from the early implementations of the system in Lancashire and North Yorkshire. There had been some valuation of other benefits expected from the new system, but the greatest benefit would be the additional functionality and capability of the new system in terms of operational policing. Although the benefits of a national system had not been priced before the decision was taken to go ahead, a benefits realisation exercise was now underway. PITO was putting in place measures to identify current practices and to measure the benefits achieved once Airwave was operational across police forces.\textsuperscript{9}

**Affordability**

12. Although there was widespread support for a new radio system, the cost of Airwave was thought by many police authorities to be prohibitive. In July 2000, the Government announced the allocation of £500 million to pay for the first three years of the contract.\textsuperscript{10}

13. The Home Office told us that, after the decision was taken in 1993 to procure a national system, it had spent some time trying to create a co-operative basis on which the project could proceed. The specification for the system had been drawn up following a major consultation with police authorities. The preferred technology was cutting edge and some police authorities had voiced misgivings as to whether it would work. In the Home Office’s view, if police authorities had been required to use their own budgets to fund Airwave, they would have preferred a system with less risk and less functionality. It was therefore possible that the sum of police authorities’ local priorities would not have added up to a coherent and satisfactory total picture.\textsuperscript{11}

**Safety**

14. There has been concern over recent years about whether mobile communications masts and handsets could be dangerous to health. A number of reviews have been carried out and further research is underway. We asked how far this research had progressed and how matters now stood. The Home Office told us that it was addressing all of the recommendations made by previous reviews and monitoring the outcome of current research. Initial results had indicated that the rate of absorption by the human body of the radio frequencies used by Airwave terminals was well within international safety guidelines. As Airwave was only now being rolled out, the research had been limited to experimental work in the laboratory prior to a final trial that would be part of a much wider programme of research on mobile phones.\textsuperscript{12}

15. The Home Office also told us that police authorities, as employers, would have to meet their obligations to protect the health of police officers under health and safety legislation. O2, as suppliers of the technology, would have to meet all health standards. If the outcome of the research led to changes to those health standards, then changes would have to be made to the Airwave system. Where the cost of any changes would fall would depend on the circumstances. If international health standards changed, the Home Office’s first response would be to approach O2 to see whether the system could be changed to be consistent with those standards. The main danger from mobile phones appeared to arise more from existing analogue systems than with digital systems, such as Airwave. Nonetheless, if new health standards were set, changes to the Airwave contract might need to be negotiated.\textsuperscript{13}

\textsuperscript{9} Qq 47, 142
\textsuperscript{10} C&AG’s Report, paras 1.21–1.22
\textsuperscript{11} Qq 14, 22, 190, 194, 196, 198
\textsuperscript{12} C&AG’s Report, paras 3.23–3.25; Qq 236–250, 251; Ev 25–27
\textsuperscript{13} Qq 264–265
NEGOTIATING THE DEAL

16. Although three consortia were formed to bid for the Airwave contract, the competition quickly collapsed, leaving the O2-led consortium as the sole bidder. The market for providing a national radio service for public safety organisations was relatively small because only a few companies possessed the financial strength to take on such a large project. The size of the market was further reduced by the decision to adopt the TETRA standard, which required potential bidding consortia to include companies committed to the development of what was, at the time, an emerging technology.14

17. PITo realised that, in the absence of competition, it would be difficult to demonstrate that any offer from O2 would represent value for money. As existing radio systems were not meeting operational requirements, there was effectively no do-nothing option and any delay in implementing a new radio service had to be avoided.15 In PITo’s view, the option that posed the least risk of delay was to continue with O2 as a single bidder and to protect the taxpayer’s interest by comparing O2’s projected costs against two models:

(a) a financial model to estimate what O2’s technical solution should cost ("the should-cost model");

(b) a public sector comparator—based on the estimated cost of a conventionally financed public sector project delivering the same benefits as Airwave.

The should-cost model

18. When the procurement went down to a single bidder, O2 had recognised that there was a need to change its approach and proposed the concept of a “should-cost” model. In effect, the model would describe the components that make up the system, O2 would make its own estimate of what it would cost and PITo could check whether it felt the estimates were appropriate. However, completion of the model took longer than expected, mainly because the design of the system had taken time to develop to a level where O2 could provide all the detail required.16

19. PITo had taken advice from technical and financial experts in reviewing the model and considered that the level of risk transferred to O2 justified a 17% return on the project. It was argued that there was no precedent for such a large system in previous procurements, the technology was new and a large number of stakeholders were involved. The acquisition of sites by O2 for new masts for Airwave transmissions was also subject to considerable uncertainty.17

The public sector comparator

20. Although it is usual practice in PFI deals for a public sector comparator to be prepared, the validity of such a calculation is questionable if it would not be practicable for the public sector to develop the project conventionally. It was on just such grounds that PITo had originally decided not to use a comparator. Later on, however, PITo considered that a comparator would supplement output from the should-cost model in the assessment of value for money. PITo told us that the comparator had been used towards the end of the project to comply with Treasury guidelines and as an extra confidence check. Having gone through that process and having had it rigorously reviewed by financial and technical

14 C&AG’s Report, paras 2.0–2.11
15 Ibid, para 2.15
16 Q 202
17 Qq 7–8, 93
advisers, the public sector option had looked considerably more expensive than the PFI deal on offer from O2.\textsuperscript{18}

21. The comparator included a £170 million provision for risks, which were identified and quantified in terms of likelihood and impact. PITO told us that it had been advised that it was a regular practice in major projects to include a separate estimate for contingency. An extra £70 million had therefore been included to allow for unforeseen requirements. The comparator estimated the cost of a conventional procurement at £1,610 million, compared with a cost for Airwave of £1,470 million (Figure 3).\textsuperscript{19}

<table>
<thead>
<tr>
<th>Figure 3: Public Sector Comparator compared with the PFI deal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public Sector Comparator (£m)</strong></td>
</tr>
<tr>
<td>Base cost</td>
</tr>
<tr>
<td>Add risk allowances</td>
</tr>
<tr>
<td>Add cost contingency</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
</tr>
</tbody>
</table>

Source: C\&AG's Report

Risk management

22. Unlike any other radio system or mobile phone system, Airwave will provide guaranteed access and coverage. Under the contract O2 agreed to conduct a pilot project in Lancashire. PITO’s acceptance of the pilot was a condition precedent to the start of the roll-out of the service. The two most critical problems encountered during the pilot were the difficulty of demonstrating that coverage met requirements in all the key areas, particularly major roads, and the persistent dropping of users from the system. Attempts to resolve these problems led to an extension of the pilot period, but they were still not fully resolved before PITO accepted Airwave, albeit on a conditional basis. O2 explained that the purpose of the pilot had been to examine in great detail all the issues associated with the implementation of Airwave so that lessons could be learned. A number of problems had been encountered and these had now been resolved to the extent that the service was now operating in five police forces. Some issues were still outstanding on the implementation of the new system for the Greater Manchester Police and O2 had not yet shown that Airwave could work as expected in major metropolitan areas, something that had to be done over the next two years.\textsuperscript{20}

23. O2 had invested very heavily in the technology and PITO believed that Airwave would provide an exceptional service. If Airwave failed or could not produce a good enough service, PITO would endeavour to ensure that O2 delivered its obligations under the contract. The police had not given away the right to use someone else. But as most of the old analogue radio systems would have been replaced by Airwave, it would be difficult to return to an analogue system and PITO would have to procure an alternative system, probably on a local basis. The Home Office told us that O2 would be required to deliver under the contract and if it did not deliver, there would be severe consequences. There was, however, a residual risk that a new supplier might have to be found because police operations depended on effective radio communications.\textsuperscript{21}

\textsuperscript{18} C\&AG's Report, paras 2.24, 2.27: Qq 9–10
\textsuperscript{19} Qq 49–52
\textsuperscript{20} C\&AG's Report, paras 3.3, 3.7–3.18; Qq 15–16, 111
\textsuperscript{21} Qq 104, 128–132
Clawback of additional revenue from sharers

24. In offering a price for Airwave, O2 assumed that other organisations would join the service and modelled the probable additional income. O2's financial modelling had indicated additional revenues of between £1.8 million and £5.5 million a year, which had been taken into account in the negotiations with PITo. Nevertheless, under the contract with O2, the Home Office will not get anything back if higher than expected numbers of sharers join the system. The deal with O2 was that it would take the risk if sharers fell below what it was expecting and would take all the gain from a higher than expected number of extra users. The size of any gains would depend on the deals struck with the sharers, most of whom were likely to be publicly funded services (Figure 4).22

<table>
<thead>
<tr>
<th>Civilian Emergency Services</th>
<th>Ministry of Defence Organisations</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Transport Police</td>
<td>MOD Police</td>
</tr>
<tr>
<td>Ports Police</td>
<td>Navy Police</td>
</tr>
<tr>
<td>UK Atomic Energy Authority Constabulary</td>
<td>Royal Parks Constabulary</td>
</tr>
<tr>
<td>Borough Parks Police</td>
<td>RAF Police</td>
</tr>
<tr>
<td>Waterway, Tunnel and Airport police</td>
<td>Royal Marines Police</td>
</tr>
<tr>
<td>Fire Brigades</td>
<td>Royal Military Police</td>
</tr>
<tr>
<td>Airport Fire Brigade</td>
<td>Adjutant Generals' Corps – Provost Branch</td>
</tr>
<tr>
<td>Air Ambulance</td>
<td>Defence Fire Service</td>
</tr>
<tr>
<td>NHS Community Trust Staff</td>
<td>Army Fire</td>
</tr>
<tr>
<td>NHS Hospital Trust Staff</td>
<td>RAF Fire</td>
</tr>
<tr>
<td>Private Ambulance Services</td>
<td>Navy, Army and RAF Ambulances</td>
</tr>
<tr>
<td>Donor organ and transplant team transport</td>
<td>Firing Range Security</td>
</tr>
<tr>
<td>Patient Transport Services</td>
<td>Armed forces bomb disposal teams</td>
</tr>
<tr>
<td>Coastguard Service</td>
<td>HQ London (Army regional Brigade)</td>
</tr>
<tr>
<td>Air and Land Search and Rescue Services</td>
<td>Intelligence Corps</td>
</tr>
<tr>
<td></td>
<td>RAF Nuclear Accident Response Organisation</td>
</tr>
<tr>
<td></td>
<td>Security Services</td>
</tr>
<tr>
<td></td>
<td>Special Forces</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other public safety and emergency response services</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCTV control rooms (under certain circumstances)</td>
</tr>
<tr>
<td>Prison Service</td>
</tr>
<tr>
<td>Private Prisoner Transport</td>
</tr>
<tr>
<td>Privatised Police Patrols (including stadia and complexes)</td>
</tr>
<tr>
<td>Post Office Security and Investigation Service</td>
</tr>
<tr>
<td>Customs and Excise enforcement branch and National Investigation Service</td>
</tr>
<tr>
<td>EA Environmental Crime Unit</td>
</tr>
<tr>
<td>Environment Agency Enforcement Officers</td>
</tr>
<tr>
<td>UK Immigration Service – Ports and Enforcement Directorate</td>
</tr>
<tr>
<td>National Nuclear Accident Response communications System</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Source: C&AG’s Report

22 C&AG’s Report, para 1.35; Qq 78, 80
25. In response to a question on whether Airwave would generate further income from sales to other countries, O2 explained that its approach was to deliver the service in the UK, establish a track record and then look to expand into other areas. A number of countries in Europe had committed to the TETRA standard but had not yet chosen a particular service provider. The same was true in other parts of the world, such as Africa and Australasia. From O2’s perspective, overseas sales were a possibility but only once Airwave had been successfully delivered in the UK. O2 had been prepared to discuss sharing the rewards from other parties if the Home Office could bring those other organisations on board. For its part, the Home Office would have liked to have achieved a better deal on sharing the rewards from the wider use of Airwave, but was unable to move O2 during the commercial negotiations.23

INTEROPERABILITY BETWEEN THE EMERGENCY SERVICES

26. From an early stage the Home Office had seen the Fire Service as a likely participant in the Airwave procurement. But the Fire Service considered that some features of Airwave, such as encryption, were not needed and were likely to add significantly to the cost. As a result, the Fire Service decided in 1996 in consultation with the Home Office that it would not be part of the initial procurement but should be included, with other emergency services, as a potential sharer of the new system.24

27. The Home Office and the Ambulance Service had discussed the project in the early 1990s, but at that stage the Ambulance Service had no requirement for a new radio system. There was now such a requirement and the Ambulance Service was planning a national procurement which would have interoperability with the other emergency services as part of the specification. We were told that from a government point of view, it was not necessarily a bad thing that the emergency services had independent views. Nevertheless, if all the emergency services had been able to join together at the beginning, it would have been possible to achieve greater economies of scale.25

28. In the Home Office’s view there were still questions over whether individual police superintendents needed to talk directly to fire officers on the ground. In the case of emergencies there were well established procedures to bring the commands of the Fire Service and the Police Service together so that they could communicate and co-operate closely. A clear chain of command was required, as confusion could arise if officers were communicating directly with one another rather than through a central control point. Nevertheless there had been problems with the police communicating with the other emergency services.26

29. Communications between individual police and fire officers was not something the Fire Service had said they wanted, but it is desired in some cases by the Police Service, particularly for incidents at airports. Whether or not direct communications between individual officers were actually required, the Home Office told us that no estimate had been made of how much would be gained by the police and fire services in having such interoperability. But the Home Office accepted that the emergency services had to be able to communicate easily with each other when responding to major incidents. This requirement had been pointed up by the King’s Cross fire in 1987, when communications had not worked well. Interoperability between the emergency services was not, therefore, a new issue, but the scale of recent terrorist incidents in New York and elsewhere had

23 Qs 116, 205–209
24 C&AG’s Report, para 1.28
25 Q3–6
26 Q38–43, 151, 154–155
caused the Government to look again at the matter afresh. Airwave would for the first time enable PITO and the Home Office to provide a national service for the police.\textsuperscript{27}

30. The C\&AG’s Report noted that the Department of Health is planning to procure a new national network for ambulance services which will include interoperability with the police and fire services as a key requirement. The Report also noted that local fire services were being encouraged to form consortia, based on geographical proximity, to determine local needs and a degree of interoperability between neighbouring fire brigades. Since the terrorist incidents of 11 September 2001, the Government had been reviewing the requirements on interoperability which underlie these planned procurements. In a note provided after the hearing, the Home Office told us that agreement had been reached between the police, fire and ambulance services on the need for enhanced radio communications interoperability in the light of the events of 11 September. A new specification reflecting this requirement was being prepared and would be included in the fire and ambulance service procurements. Furthermore, with Government support, management and funding, the planned fire service procurement would now go ahead on a national rather than regional basis. The current timetable envisaged award of a contract by 2004 and full implementation of the new system by the end of 2007.\textsuperscript{28}

\textsuperscript{27} Qq 108–110, 152–153, 187–188, 260–263
\textsuperscript{28} C\&AG’s Report, paras 1.40–1.44; Q 37; Ev 30
MINUTES OF PROCEEDINGS OF
THE COMMITTEE OF PUBLIC ACCOUNTS

SESSION 2001–02

MONDAY 22 APRIL 2002

Members present:

Mr Edward Leigh, in the Chair
Mr Richard Bacon Mr George Osborne
Mr Ian Davidson Mr David Rendel
Geraint Davies Jon Trickett
Mr Nick Gibb Mr Alan Williams
Mr Brian Jenkins

Mr Tim Burr, Deputy Comptroller and Auditor General, was further examined.

The Committee deliberated.

Lorraine Constable, Assistant Treasury Officer of Accounts, was further examined.

The Comptroller and Auditor General’s Report on Public Private Partnerships: Airwave (HC 730) was considered.

Mr John Gieve CB, Permanent Secretary, Home Office, was further examined; and Mr Philip Webb, Chief Executive, Police Information Technology Organisation; Mr Jeff Parris, Vice President, Airwave mm02; Mr Vaughan Asque, Head of Radio Frequency and Communications Planning Branch, Science and Technology Unit, Home Office; and Mr Jeremy Colman, Assistant Auditor General, National Audit Office, were examined (HC 783-i).

The witnesses withdrew.

The Committee further deliberated.

* * * * *

[Adjourned until Wednesday 24 April at Four o’clock.

* * * * *

MONDAY 4 NOVEMBER 2002

Members present:

Mr Edward Leigh, in the Chair
Mr Richard Bacon Mr George Osborne
Mr Ian Davidson Mr David Rendel
Angela Eagle Mr Gerry Steinberg
Mr Frank Field Jon Trickett
Mr George Howarth Mr Alan Williams
Mr Brian Jenkins
Sir John Bourn KCB, Comptroller and Auditor General, was further examined.

The Committee deliberated.

Mr Brian Glicksman, Treasury Officer of Accounts, was further examined.

* * * * *

Draft Report (Public Private Partnerships: Airwave), proposed by the Chairman, brought up and read.

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

Paragraphs 1 to 3 read and agreed to.

Paragraph 4 postponed.

Paragraphs 5 to 30 read and agreed to.

Postponed paragraph 4 read and agreed to.

Resolved, That the Report be the Sixty-fourth Report of the Committee to the House.

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

Ordered, That the provisions of Standing Order No. 134 (Select Committees (Reports)) be applied to the Report.

* * * * *

[Adjourned until Wednesday 6 November at Four o’clock.]
MINUTES OF EVIDENCE

TAKEN BEFORE THE COMMITTEE OF PUBLIC ACCOUNTS

MONDAY 22 APRIL 2002

Members present:
Mr Edward Leigh, in the Chair
Mr Richard Bacon
Mr Ian Davidson
Geraint Davies
Mr Nick Gibb
Mr Brian Jenkins
Mr George Osborne
Mr David Rendel
Jon Trickett
Mr Alan Williams

MR TIM BURR, Deputy Comptroller and Auditor General and MR JEREMY COLMAN, Assistant Auditor General, further examined.

LORRAINE CONSTABLE, Assistant Treasury Officer of Accounts, further examined.

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL:
PUBLIC PRIVATE PARTNERSHIPS: AIRWAVE (HC 730)

Examination of Witnesses

MR JOHN GIEVE CB, Permanent Secretary and MR VAUGHAN ASQUE, Science and Technology Unit, Home Office, MR PHILLIP WEBB, Chief Executive, Police Information Technology Organisation (PITO) and MR JEFF PARRIS, Vice President, Airwave mmO2 Ltd, examined.

Chairman

1. Good afternoon and welcome to the Committee of Public Accounts. This afternoon we are looking at the PFI deal to provide a new radio communications system for the police. We are very happy to welcome Mr John Gieve, Permanent Secretary of the Home Office. Welcome. Would you like to introduce the top table for the members of the Committee?

(Mr Gieve) Phillip Webb is Chief Executive and Accounting Officer for PITO. Jeff Parris is Vice President of Airwave mmO2 Ltd. Vaughan Asque is a member of the Science and Technology Unit in the Home Office.

2. Why do you consider the Airwave deal a better outcome than a series of local procurements?

(Mr Gieve) For a number of reasons. Firstly, it allows better co-ordination between police forces and that is a key gain from having a single system which straddles the whole country. Secondly, it allows what is called roaming, that is to say police from one area to come to the help of another and then use their own equipment. Thirdly, it enables us to concentrate our expertise, especially in new technology as complicated as Airwave’s, also it allows some economies of scale in the resource put into managing the system and there may be economies of scale in the procurement.

3. Do you want to comment on the disappointing outcome of this? We only have the police on board, not the Ambulance or Fire Services. How would you reply to somebody who said to you that you locked yourself into this contract early on, you were determined to press ahead with it with only the police, you only had a single supply, in fact you did not get as good a deal as you might have done? If you had looked at a series of local deals, you could still have ensured interoperability between the various police forces which I am sure you would agree is the important aspect. You have actually got quite a bad deal at the end of this with a lot of public money thrown at it. I just throw that general question in as a starter.

(Mr Gieve) There were two questions really. One was: why did we not keep the Fire Service and Ambulance Service on board and have an even bigger national procurement? The other was: why did we not go for a series of local procurements? On the first, we did intend originally for this to be a fire and police system. The Ambulance Service was not engaged and in 1996 the Fire Service decided that the requirements of the police for their system were more complex than the requirements of the Fire Service, so they disengaged from the procurement, although they have stayed on the potential sharers’ register. That was what happened with the Fire Service.

4. Why was the Ambulance Service not included in the scope of the project?

(Mr Gieve) We talked to the Ambulance Service at the time, in the early 1990s, but at that stage they had no requirement for a new radio system. There is now, as you know, and they are now planning to have a national procurement which will have interoperability requirements in it.

5. So they might come in on this system.

(Mr Gieve) They might.

6. That will increase the already substantial profits for the company once they do.
MR JOHN GIEVE, MR VAUGHAN ASQUE
MR PHILLIP WEBB AND MR JEFF PARRIS

[Continued]

[Chairman Cont] Not necessarily. They have not negotiated a price. The Fire Service, or a substantial part of it, may also join the system, if it works. If you look back to the early or mid 1990s, there was no proof that it would work and the Fire Service, quite properly, took a look at that stage, that they were not looking for quite the functionality that the police were and they disengaged. From a government point of view, the fact that you have three or four people taking an independent view is not necessarily a bad thing. Yes, in principle, after the event, if it all works very, very well, you could say we should all have gone in at the beginning and we would have gained even better economies of scale. However, coming to your second question, there is a risk in putting all your eggs into one basket well in advance. Coming on to that: why did we not let the police pursue over 50—including Scotland—separate procurements? Because the police agreed with us that there were great advantages from having a single comparable system across the country. You say we have thrown a lot of money at it. Yes, it is a very expensive project but we think it is still a project which is going to produce and is beginning to produce great benefits for the Police Service.

7. May I ask Mr Webb about this 17% return which was calculated as being what would be the right sort of return? How was this figure arrived at? Why was it deemed to be reasonable?

(Mr Webb) It was arrived at by O2. We took advice from both our technical and our financial advisers in reviewing that. Considering the level of risk we were transferring to O2 and the fact that there was no precedent for such a large system in previous procurements, it was new technology, there were several stakeholders and in fact there were issues relating to site acquisition, we considered the 17% return was fair. This was endorsed at the time by both ourselves and the Home Office. We felt we had actually taken independent advice and the return was fair.1

8. What worries me is that a reliable model could not be constructed without O2 providing detailed information about the quantities of components and labour and the timing of when they would be required. So you arrive at this figure, but you only have one company now bidding for this because you are locked into this project. You arrive at this figure of 17%, though it is not entirely clear how you achieve it, but you only achieve it with the help of the only company bidding for the contract. That seems a strange way of going about things to me.

(Mr Webb) Before that, through the two models we applied to look at value for money, we examined very carefully exactly how much the cost would be and in fact as a result of that exercise we have reduced their costs so the return was on the final cost agreed.

9. May I ask you about this public sector comparator? Firstly you decide not to use a comparator, then very late in the day you decide to use a comparator. There is absolutely no question of a public sector body being able to bid for this. Why did you use a comparator? Was it just to please this Committee?

(Mr Webb) We actually chose initially to use the ‘should-cost’ model. We felt that the ‘should-cost’ model was far more robust. In the report we received support for that from the NAO in the sense they felt that was a right approach. The fact we actually used the public sector comparator towards the end of the project was because we felt it did meet the public sector comparator and so we undertook that at the end.2

10. How did that help your value for money assessment?

(Mr Webb) Let us be perfectly honest. If it had come out significantly less, we would have been very concerned about the figures we had come up with. In fact, having gone through that and having had it rigorously reviewed by our financial advisers and our technical advisers, it came out considerably more expensive.

11. It seems that existing police radios are not up to the job. Why?

(Mr Gieve) In what respect or why not?

12. In reading the report, it does seem that you have been responsible for this for 50 years—admittedly not the same radios, although sometimes the police may be forgiven for thinking so.

(Mr Gieve) And not the same Permanent Secretary either.

13. Certainly not you personally. You think that the existing police radios were perfectly good for the job, do you?

(Mr Gieve) No, we do not, which is why we are helping to procure a better one. What is wrong with the existing police radios varies across the country. Some have more modern ones than others but quite a lot of forces have very old systems which are subject to interference, which are running down, which are difficult to maintain, which can be listened to by hackers and so on. That is the fundamental reason why we have been supporting this project.

14. You took a long time to get something moving though, did you not?

(Mr Gieve) Yes. The context of this is that the police are not a state run service. This is not like buying radios for the Prison Service. There are independent police authorities and chief constables and after the decision was taken in 1993, after the review which said that we should go for national procurement, we had to spend some time in getting our constituency together on a co-operative basis. Indeed we still have to. In terms of timing, this is still cutting edge technology. It is not that we are buying yesterday’s technology five years on. Airwave is still at the cutting edge.

15. That leads me straight into the next question to Mr Parris. With problems being encountered during the pilot, how confident are you that Airwave will work?

---

1 Note by witness: The 17% return was arrived at by the project’s financial advisers. It was endorsed by PITO.

2 Note by witness: In addition we used the public sector comparator because of the Treasury guidelines and to give an extra confidence check.
(Mr Parris) Airwave does work. Airwave is operating excellently in five of the police forces where it is currently rolled out. I am absolutely confident that Airwave will and is working. There are some issues for the Greater Manchester police, which we may come onto later, which we are resolving with GMP and the other parties operating there. Unequivocally I can say that Airwave is working.

16. You say that, but the pilot of Airwave in Lancashire has encountered a number of problems that have not yet been fully resolved. That is mentioned in paragraphs 3.8 to 3.14. These problems include lower than contracted levels of coverage and a dropping of calls off the network. I understand that dropping of calls means if you are a police officer in a serious situation that suddenly your set can go dead, which might be rather alarming.

(Mr Parris) The whole purpose of the pilot was to examine in great detail and very publicly all the issues associated with implementing Airwave so those lessons could be learned from as we went forward with the rest of the police forces. The issues you list were encountered and I think have all now been resolved. I have no embarrassment about the pilot throwing out lessons to be learned and opportunities; it was designed by the procuring parties to do just that.

17. You are working on how to identify benefits from Airwave. How will you isolate the benefits of Airwave from other improvements in police IT systems?

(Mr Webb) It is a very difficult task. The first thing we are endeavouring to do is to establish a rational benchmark in terms of each of the forces where we are putting them in. From that we are putting in place measures to determine exactly what benefits are being achieved. By virtue of the fact that we are putting in infrastructure here, it will have an impact on the processes and procedures the police use, in the sense that it will open up new opportunities. We are monitoring very carefully to determine what could and could not have been done prior to Airwave being introduced.

Mr Osborne

18. May I return to the cost of the Airwave project? It says in this report that local solutions would have been cheaper, although you would argue not as good. Do you have any idea what the extra cost was of the Airwave project versus a local procurement?

(Mr Gieve) The figure quoted in the report is £300 million, which was a comparison with a review conducted for ACPO. As you say, that would not have been a comparable system in terms of functionality.

19. Do you accept the £300 million figure?

(Mr Gieve) Yes.

20. Would you not argue that it is quite a lot of money extra to pay for the improvements?

(Mr Gieve) It is a lot of money but we think that it is worth paying for the improvements.

21. Various police authorities thought it was not worth paying. According to paragraph 1.21 of the report several police authorities said they had an obligation to pursue best value and that this radio system did not meet their requirements under local best value. Were they wrong?

(Mr Gieve) They were right in thinking they could have bought something else more cheaply which would have met some of the requirements locally, but not all. You have to understand this was also part of the negotiation with the Home Office on funding this project.

22. Which you solved by bunging all the local police forces money specifically for the Airwave project. You resolved the project by stuffing their mouths with gold.

(Mr Gieve) We resolved it by saying we would pay the costs in the first three years.

23. One of the original ways in which you structured the deal was that local police authorities were going to buy the equipment separately and that was going to encourage them not to over-order their equipment. By paying them directly now and helping them with the initial startup costs are you not watering down that mechanism?

(Mr Gieve) I do not think so. The thinking behind leaving a competitive market in some of the equipment was to get some contestability within the market. If you have more than one person offering terminals, that in itself would be the main constraint on the price rising. The second point is that we were not paying for the full cost of this. This is a 19-year contract and we offered to pay £500 million in the three years of the last spending review, that is up to 2003–04. They still have a very big interest in the costs.

24. I am not a technology expert, so you will have to forgive me if I get this wrong. According to paragraph 1.14 you did conduct a review in 1998 of mobile phone technology developments. You tried to identify whether future developments in mobile phone technology would make the system you were buying obsolete. You concluded that was not the case. Do you still stand by that? Have you updated that review? Mobile phone technology has moved on a lot.

(Mr Gieve) This was the examination by Professor Benjamin who reported in 1999. We have not updated that since then. Equally, we have no new reason to think this is going to be outmoded technology.

25. To the complete layman, apart from the encryption, what is the difference between this system and giving all your police officers mobile phones?

(Mr Asque) The difference between the technologies is that this technology was designed to meet a requirement which is subtly different from people using a mobile phone. This requirement for emergency services calls for a high level of integrity in the signal, but especially a very fast call setup. For example, making an emergency call is almost instant in this technology, whereas we all know with a mobile phone, where you have to dial through, it does take an awful long time to make that connection. The technology facilitates that very fast call setup. That is one of the main differences between the TETRA technology and the mobile phone technologies and this includes the ones which are developed now.
rather than the ones developed originally; it includes third generation mobiles, not just the second and first generations.

26. According to figure 2, “A police force joining Airwave will receive a grade of service across its geographical area based on a greater than 87% probability that an officer wanting access to Airwave would receive a channel without having to queue. It does not sound that great. What happens if you are one of the 13 out of 100 police officers who desperately needs to get through and cannot get through?

(Mr Asque) There is no way of giving an absolute guarantee with a radio system that it will always make a connection and always be interference free. There is always a risk that can be engineered out to a very small percentage.

27. Thirteen\% is quite large.

(Mr Asque) That is based on an assumption of an implementation. That is a starting point. If you require better than that, you can engineer the system to increase that level. It is not an absolute, it is a figure just based on an assumption of the way a network can be put in. If a police force had an extra requirement, the contract allows for additional facilities to be added on to meet their individual requirements. That is just a base level. It is not an absolute. There is no technological level which you cannot go over.

28. What police force in their right mind would not be forced to buy the improvements, given that otherwise they have a system which gives them at least a one in ten chance when they are trying to get through of not getting through? Presumably this could be an officer with his life in danger.

(Mr Asque) Compared to the existing systems which do not provide comprehensive cover and where it is not possible to measure the performance available, this new system has been engineered with a much higher level of integrity than other systems. The figures may not look good in the way that you have described them, but in practice we are actually providing a much better level of integrity of radio system.

(Mr Gieve) Coverage is the other thing. There has been discussion about coverage but the figures we are talking about for Airwave are hugely better than you get on commercial mobile phone networks. If you have been on a train, you will know that it cuts out now and again.

29. I have never seen a police officer on a train, or in the rural area where I live in Cheshire, so I am not sure the police need the technology.

(Mr Gieve) The coverage in rural areas is a plus point for Airwave. In North Yorkshire, which is trying it now, they say it has absolutely transformed the position.

30. If you were one of the 13 out of 100 police officers who could not get through, then you might try your mobile phone, because you have another way of getting through to the police station.

(Mr Asque) It is very unlikely that a mobile phone would work better than this system because it has been engineered to a much higher standard. There will always be cases where it might not work, but it may be that just taking one step to one side will make all the difference. It is that critical in these sorts of radio systems. It does not mean that you are completely out of coverage; it may mean that a small change would bring you back into coverage.

31. Paragraph 1.11 says “There were also two deadlines putting additional pressure on PITO and the project. First, Greater Manchester Police needed the new radio communications service in time for the Commonwealth Games. I represent a Cheshire constituency so we are close to the Commonwealth Games. Will Greater Manchester Police have this system up and running for the Commonwealth Games this summer?”

(Mr Gieve) No. We hope they will have it up and running in some districts of Manchester but it will not be the main system used at the Commonwealth Games.

32. So one of the two deadlines putting additional pressure on PITO was completely missed because it is not going to be used for the Commonwealth Games. The other is the vacation of the radio spectrum.

(Mr Gieve) We have moved that one as well in the sense that we will not switch off the existing systems until the police are satisfied they can do without them. Nonetheless, these were two reasons why we wanted to press ahead.

33. Why was it so important for the policing of the Commonwealth Games that this system was up and running?

(Mr Webb) It was a request at the time from the Greater Manchester Police that we actually did that. Quite frankly they were concerned about their existing system. The existing system is perfectly capable of supporting the Commonwealth Games but it was a desire, if they had to have this in for operational purposes, to get it in before the Games rather than doing it during the Games.

34. Do you think it will affect the policing of the Commonwealth Games?

(Mr Gieve) It will affect the “how” and we have sought assurances from GMP that it will not affect the safety of the Games and they are satisfied that they can do it without Airwave. They would have preferred to do it with Airwave.

35. You cannot have it both ways. You cannot say this is worth all the money because of the incredible improvements in the efficiency of policing it would bring and at the same time say that it will not make any difference.

(Mr Gieve) No, I am not saying it will not make any difference. They would have preferred to do it with Airwave because no doubt it would have allowed them to do it more efficiently than they can with their existing system.

36. Do you agree with the conclusion of this report in paragraph 15, that the events on 11 September “... make it all the more important that our emergency services have the best communications and information sharing capability”? Do you agree with that?

(Mr Gieve) Yes.
37. Do you therefore think that the fact the Fire Service is not on board undermines that?
(Mr Gieve) No. I should say that since 11 September in government we have been reviewing and are still currently reviewing whether we should change the requirements on interoperability which underlie the Fire Service procurement and will underlie the Ambulance Service procurement. The experience in New York brought out two things. The first is that if you pull people in from outside the region, which they had to do, it is very important they have equipment which can work with the equipment in a particular place. So that is service interoperability. The Fire Service procurement which is currently under way allows a modest amount of that but not full interoperability between regions of the Fire Service. Secondly, you need to be able to communicate with the other emergency services efficiently. We are currently reviewing whether we should put greater requirements on the Fire Service procurement and the Ambulance Service procurement than we have hitherto. We are hoping to reach a decision on that very quickly.  

38. I recently went to the fire control centre in Cheshire which runs the whole of the Cheshire Fire Service. While I was in the control centre, there was an accident on the M6 and they despatched fire engines to the scene of the accident. It took them a while to find it; in fact they could not find it because it turned out that the police had got there first, dealt with the accident but did not bother to tell the Fire Service who were then going up and down the M6 looking for the crash. I cannot see that the Airwave system, because the Fire Service is not involved in it, is going to make any difference to that kind of daily problem the emergency services face which was one of the original reasons for this whole project.
(Mr Gieve) There are attractions in having a single set of networks and we may well get that in Cheshire. The Fire Service has not yet placed any orders. The Lancashire Fire Service, for example, has taken Airwave so there you do get that correspondence. Whether you would want individual police superintendents able to talk directly to fire engines is a subject for some debate. In crises especially you would want to have a clear chain of command; you can get confusion if people are corresponding laterally.

39. They start co-operating with each other. God forbid!
(Mr Gieve) No, they will co-operate. This is what the review I have spoken about is currently looking at. Do you want individual policemen to be able to communicate with individual fire officers? Do you want in an emergency to keep a clear chain of command on a team basis down the fire side and the police side but to co-operate at other levels? There are different levels of interoperability and deciding which of these is essential is what we are trying to nail down now.

40. Should you not have done this in 1993?
(Mr Gieve) Yes, we should have perfect foresight but 11 September was a surprise in a number of ways.

Mr Trickett

41. It does not take any foresight at all, does it, to know that the Ambulance Service should know what the Police Service and Fire Service are doing or the Fire Service should know what the Police Service and the Ambulance Service are doing in cases of civil emergency? I am surprised that we only realised the emergency services needed to communicate with each other several years after looking at radio communications which is what you seem to be saying.
(Mr Gieve) No, that is not what I am saying. In the case of emergencies there are well established procedures about bringing the commands of the Fire Service and the Police Service together. They do co-operate very closely.

42. I did not say “co-operate”, I said “communicate”.
(Mr Gieve) Yes, and communicate very closely together.

43. Are they already able to communicate prior to this system?
(Mr Gieve) Yes, of course they are able to communicate. The question is at what level they need to be able to communicate as a matter built into the radio system as opposed to other means of communication. The police, fire and ambulance communicate all the time.

44. What we have here is a luxury which I do not think we can afford. Looking at the figures, at the moment the estimate is that about 0.8% of the police budget goes on communication and this system will cost £180 million a year. My estimate of the difference between the existing communication, which you say is working between the services, and the new system is about £120 million a year. I do not know what a police officer costs, but let us say £40,000 per annum. I calculate £40,000 into £120 million is an additional 3,000 Bobbies. I know what my constituents want who are threatened by a tidal wave of crime which the Home Office has presided over, for a long period of time and that is more policemen. I would look really for a much stronger case than has been made so far for referring this, which is now going to cost £2 in every £100 of the entire police budget to maintain. I just wonder whether you have your priorities right in the department.
(Mr Gieve) We think we have. Your constituents want properly equipped police. When I was saying the emergency services communicated with each other, I was not saying it was perfectly done. They know it is not. We hope this is going to improve in particular communication between police forces, which is not perfect at the moment and where you do have different systems in different areas. I am not saying we cannot improve it; we should be improving it. In terms of the percentage of the budget, the £180 million is a significant increase in cost but we do not know what the budget for the police force is going to be in three or four years’ time when that sort of cost will become apparent because that is still to be settled in the spending review.
45. The fact is that something well over £100 million additional costs per annum are now being incurred so that police officers can speak to each other at best marginally more efficiently than they could in the past.

(Mr Gieve) No, “marginally” is not true.

46. Would you agree with my estimate that the comparative figure in terms of police officers is somewhere between an additional 2,500 to 3,500 police officers?

(Mr Gieve) I cannot do that in my head.

47. You have not done that calculation.

(Mr Gieve) I put the cost of a police officer somewhere in my papers. In any business you have to decide whether you put money into equipment or manpower and the police have to decide this on all sorts of fronts: about this equipment, about vehicles, about planes and everything else. You could make the same calculation about any of their equipment budgets. It is a matter of judgement. You say this is just so they can communicate across borders better. That is not the whole point. We hope Airwave is going to produce and we think it is, there are signs of that already, very much better communication within police force areas and that is what we are hearing from Lancashire and North Yorkshire. That is an improvement in efficiency.

48. I am going to ask you about that in a minute because some of the figures beggar belief and some of the defence which has been mounted in favour of this beggars belief. From my point of view the two priorities which communities I represent have are: the public being able to speak to the police, which is a very difficult problem even on 999 calls, it is difficult for people to get through; secondly, the police being able to attend incidents which are occurring in villages and towns. I would have thought that the priority would have been for additional police officers. I see that you disagree with me in relation to that.

(Mr Gieve) No, I do not; we are employing more police officers. We have a record number already and we have plans to increase them.

49. The fact is that you could have employed even more police officers had you not decided to go down what appears to me to be a fairly disastrous track. May I move in a different direction for a second or two? When you found you only had a single bidder for this very costly system, one of the things which the department did was to try to calculate what it would cost for the public sector to provide a similar kind of equipment. I think you cooked the books. You added £170 million for the alleged risk which the private sector were taking and you were losing. You added a further £70 million for a contingency sum. Presumably £240 million was added to the cost of the public sector price in order to get it higher than the price which the private sector was bidding. Would you agree with the way in which I have expressed that?

(Mr Gieve) No.

(Mr Webb) We had the private sector comparator undertaken by an independent authority, in fact Charterhouse and Masons Communications undertook that on our behalf. They did that in line with the Treasury guideline for calculating these terms. All of the things included were part of the guideline.

50. I have a note in front of me saying that the risks which the private sector were allegedly taking if they were to be the supplier were valued at £170 million. It does not say that your consultant advised you on the contingency sum, it says that PITO decided to have this contingency sum, that is a further £70 million. You added a quarter of a million pounds to the price of a public sector provider. Is that figure correct?

(Mr Webb) Yes, those figures are correct.

51. Did your consultants, who themselves are in the private sector and may have an interest in trying to load the dice against the public sector, advise PITO to add £70 million for unknown contingencies? Was that the figure they recommended?

(Mr Webb) Yes, it was.

52. Did they identify the £170 million of risk which the private sector were allegedly taking and you were divesting yourselves of? Did they recommend that figure as well?

(Mr Webb) Yes, they did. Bearing in mind this was new technology, it had not been done before, it was the largest IT project ever undertaken by the Police Service, risks were identified, particularly in the area of the acquisition of sites, which we have already seen have materialised. There was significant risk in terms of the figures which were being used in this activity and that is why they were included.

53. With the Chairman’s permission, could we ask for some further information on how these prices which are one quarter of a billion pounds in two global sums like this were calculated? That information would be helpful.

(Mr Gieve) Yes; certainly.4

54. Part of this report reads as though you have written it, frankly. It does not read as a report which was written jointly by yourselves and the C&AG. Paragraph 1.23 says “PITO regards the system as an enabler that can reduce the frequency with which police officers have to return to the station and the length of time they spend on tasks such as making telephone calls or receiving briefings”. It goes on to say “… not all forces were convinced” of this. May I ask the C&AG what independent evaluation they made of these claims?

(Mr Colman) They are claims about the future and you will see that we word this paragraph very carefully to say these are PITO’s opinions as to benefits which should flow from the introduction of this system. The system was not in operation when we were doing this work, so it was not therefore possible to verify that these savings would be achieved.

55. Have we identified how much time police officers use making telephone calls which is now going to be saved by making radio calls? Somehow they are going to be more brief than the telephone calls the police are currently making. If PITO has made that claim, which sounds bizarre, since I cannot understand why a telephone call takes longer than a

---

4 Ev 24.
radio call, what evaluation have you made with the Home Office of what I regard to be a somewhat extraordinary claim?

(Mr Webb) They can actually make direct mobile telephone calls from the Airwave system, so they can receive and send mobile phone messages directly. A large number of our police officers could be contacted directly on a number by the public and could respond directly to that without having to go back to receive a message from an answering machine in the police station. That is one issue. Also underlying this is the fact that not only can these terminals provide access to voice, they can also provide data as well. Information can be texted down to the police officer directly so they can read it on their screen in much the same way as you have now on a pager.

56. Why could that not happen with the existing radio systems?

(Mr Webb) That was not available on analogue systems.

57. I see the next paragraph as the icing on the cake. Paragraph 1.24 says these are claims which PITH has made but when Thames Valley and other police forces looked at the benefit analyses what they decided was that the most important gain from these hundreds and millions of pounds was that it would allow an overview by senior officers of where their police officers were. Is that really what it boils down to, that the senior officers will now know where the Bobbies are, because the rest of us quite frequently do not have a clue where they are? Is that really what we can claim for this system?

(Mr Webb) That is a feature of the system. In fact there is a significant health and safety aspect associated with that in knowing where officers are at any one time. As we also put forward in the same way in which technology is moving but in fact it will become an increasing part of policing.

58. I notice that a number of local police authorities felt this was not going to give value for money and eventually a kind of bribe was offered of £500 million to get everybody on line. Some authorities were saying they did not want to sign this because they were not going to get value for money from this particular scheme, which is how I feel about it as well. Was any evaluation made of the work local police authorities had done in VFM terms on this scheme? They were really saying they wanted to stick to their own schemes.

(Mr Colman) We are not the external auditors of individual police forces so we were not able to do that kind of evaluation. From the point of view of our examination, we were concerned to see what the Home Office were trying to achieve and the measures they took to achieve that. When they ran into difficulty, as they did, with a number of local forces saying it was not good value locally, they could do two things, possibly both. One was to try to persuade them it was good value and the other was, as happened, to absorb the cost for the first three years.

It seemed to us that those were perfectly reasonable responses to the problem the Home Office faced in doing what they set out to achieve.

Chairman

59. Mr Gieve, may I just give you another chance to reply to the questions Mr Trickett put to you earlier on because they were perfectly fair questions? He said that this money would be better spent on more police officers and your reply was that you had to make a decision. If I may help you out—because I always like to help witnesses out if I can—the key paragraph here is this paragraph 3.28 on page 36. This seems to me absolutely key on the typical pattern of an officer’s day. “If Airwave could help bring about a 10% saving in the time spent by officers in the police station, this would be the national equivalent to deploying an extra 1,200 officers”. I know we have had a discussion on this but this is what is worrying me. I do not understand how this statement is arrived at. I agree none of us is expert on how police officers spend their time in a police station but could somebody help us out on how we are going to deploy an extra 1,200 officers just because of a different radio system? You do see that it is not very clear from this report.

(Mr Gieve) Despite what Mr Trickett says, this is an NAO Report. I think they are just giving that as an illustrative figure. You are asking how this will help to improve the effectiveness and efficiency with which police time is used. We have said that it will help in a number of ways. We shall be able to send data to police who are outside the station. They will have to make fewer calls; if you talk to police now they will tell you that very often there is interference on the calls they make, they lose contact, they have to ring back and so on. This will improve that. It will allow better deployment of The general argument is that we do not just want more police, but we want them to be effective and part of making them effective is equipping them with up-to-date equipment and that is what this is about. Yes, there is a choice about how far you go, but our view is that Airwave is giving them an up-to-date digital radio system which is a key part of equipping them properly and therefore making them effective. In most other services that would be taken for granted, as it is in the Fire Service or the Ambulance Service.

Chairman: Are you happy with that, Mr Trickett?

Jon Trickett: Thank you.

Mr Jenkins

60. It is always interesting to follow because then you have heard some of the answers and realise you had not thought of something. One of the things I did not think about was the reason for the non-use of local radio. Living outside the West Midlands, I am aware that they have to stop and use a telephone box to call our local police headquarters to say the villains have just gone over the border and could they catch
them. It would be much better if we had this national system and get economies of scale. Then in another answer you said you should not put all your eggs in one basket. I feel that maybe we did. In looking through the report, it says we had one bidder, that is we were tying ourselves to one supplier only, and we had no fallback position. If that is not putting your eggs in one basket, what is?

(Mr Gieve) I was answering the question the Chairman asked that either we should have gone local or we should have had one deal which covered everyone: fire, ambulance and police at one time. I was saying that being somewhere in the middle, which is where we are, was a defensible place. On the answer to you about there being only one bidder, clearly that was not what we had hoped for. When we started off putting this out to tender we had three consortia but two dropped out. The question for us then was whether to proceed, to junk the competition and start again and for a number of reasons which are set out in the report, we decided to press ahead. On the fallback position, we did do work on it and we were confident that if it looked as though the national procurement was not going to come up with the goods, we could then have moved quickly to a local fallback. It was always possible that we would not proceed with this. That has always been clear.

61. The equipment we had in place at that time in 1993 was rapidly running out of life. It was failing over, the radios were failing, we had difficulty getting space, there was no fallback position apart from the locally supplied radios. That was your fallback.

(Mr Gieve) The fallback was not to proceed with this procurement.

62. So on this procurement, this was untried, in fact it did not exist, we were going to go ahead with one supplier with a technology which was untried. You must have done some rather smart mathematical modelling or risk assessment on this one.

(Mr Webb) We did a lot of work on assessing risk. It is worth saying that the technology was emerging at that time and during the process of the procurement it actually became far more solid; in fact by the time we got to procurement, a number of TETRA systems were in use in Europe and other places which were providing for a big service radio. It was a risk but quite frankly we did not want to be backward looking, we wanted to be forward looking. We knew the procurement was going to take some time, therefore we were looking at new technology and we were endeavouring to deliver for the police force the sort of service they would want and they would be able to use effectively over a long period. There were many risks associated with that and we and our advisers in fact assessed the technology we had chosen consistently through the project, and it kept coming out that TETRA was the most reliable product emerging on the market and was the source of the future. That has been borne out by virtue of the fact that it is now a very strong technology, is offered by a number of organisations and is being taken up by other organisations in terms of their service supplier. Quite frankly the risk we took has been well borne out, but we constantly reviewed that situation as the procurement went forward.

63. When I go to my local police station I know that they have radios but not every police officer has one. They leave the radios on charge or they come on shift, go to pick them up and one is in a car. We have many, many more police on the beat now; we know by next year or the year after we are getting up to 130,000 police officers, but how many radios did this deal include for our police force?

(Mr Webb) It is up to the force how many they buy, whether they want one per policeman. The arrangement is that every policeman will be able to have his individual radio.

64. Every police officer who goes on duty will have an individual radio which they will leave at the station when they are not on duty. We have a five-shift system in my local police station so four will be standing there because one will be in use and four will be standing.

(Mr Webb) If that is how the force want to operate it, yes; every police officer could have an individual radio if they wished.

65. Could have.

(Mr Webb) Yes.

66. Does it cost the force an amount of money for every radio they take out?

(Mr Webb) Yes.

67. I suggest that if the force has anything like an aspiration to get value for money they will minimise the number of radios in use, will they not?

(Mr Webb) That may well be the case. May I just step back slightly? Airwave provides a service at operational level. The decision on how they invest that money in terms of the hand-held equipment and radio equipment in cars is totally down to a decision made by the local police service. If the police authority wants to ensure that they are gaining value for money and the level of service they require by reducing those numbers, it is entirely up to them.

68. Let us get back to basics then. What is the cost per radio under this deal?

(Mr Gieve) There is no charge from Airwave for providing this service to extra radios, but the handsets have to be bought separately by the police service. I do not know what it costs.

69. So they are additional to the costs we are paying?

(Mr Webb) The cost is actually being borne. It works out at about £1,000 per person with a radio.

70. Per year.

(Mr Webb) Per radio.

71. Per year for 20 years.

(Mr Webb) For 20 years.

72. That is £20,000 over a 20-year period for a radio.

(Mr Webb) No; no.
Chairman

73. Come back on that.

(Mr Gieve) Can we come back on the cost of the individual handsets?  

Chairman: It is a fairly easy question. You need to get an answer on that.

Mr Jenkins

74. I am not sure that “all your eggs in one basket” is looking too good, but perhaps “a pig in a poke” is.

(Mr Gieve) Why do you say that?

75. Unless we know the cost and how these things are operated. I should like the details of how much (what sort of cost do they face? The same sort of cost?  

84. Can it go to private ambulances as well?

(Mr Gieve) No, there is a limit under the terms of the licence that the DTI run. There is a list on page 17 of the people we think qualify at present. That can be expanded if the DTI agree, but this is essentially a public service emergency service frequency and it is being reserved for that.

81. We have that tied up then.

(Mr Gieve) Yes.

(Mr Webb) It is in the process of being extended; there are discussions with gas and water and these sorts of other utilities.

82. Because they are emergency standby services.

(Mr Webb) For the emergency aspect of that.

83. So it can go to water, gas, electricity.

(Mr Webb) For their emergency services.

84. Can it go to private ambulances as well?

(Mr Webb) If they are registered as part of the emergency service.

85. So it is flexible.

(Mr Webb) To people providing emergency services.

86. But they can be added to. I am not familiar with the term “call dropping”. What is it and how big a problem is it?

87. They have not been sorted yet, have they?

(Mr Asque)—which one by one are being solved and there are no unknown issues now. All the issues have been addressed.

88. One of the advantages you have is that we have never seen this in operation. I have never seen a dummy of it but I have seen some of the proposals where we were going to use police officers in police cars and through this system be able to download stuff to the onboard computer and upgrade stuff on the car computer system and transmit that to the station, thereby saving the officers time to go back to the station. They could type that or even, God forbid, dictate their reports, which could be typed up on a central computer system and there would be very

---

5 Ev 24.

6 Note by witness: The costs in this report are shown as £1.47 billion over 19 years for the core service and the ‘Menu Exclusive’ services. This excludes the cost of handsets and control room equipment which are estimated at £280 million over 19 years and will be purchased by each police force to meet their needs.
little need to go back to the station apart from the start and finish of the shift. This technology will drive the officers’ timetables and keep them up to date on a minute by minute basis. Is that still the aim? (Mr Asupe) That is broadly the intention. It is a very flexible system and there are lots of phases of developments. At the moment the system is being rolled out and the intention is simply to replace the previous generation of voice communications and slowly add on these additional facilities ranging from small bits of data to very large amounts of data. It is a progressive implementation.

89. When we have gone through these next three years and we have invested this extra £500 million in the system, we then get to a crunch point. We either pick up the bill again for the next five years or the chief constables will come and explain to us that since they have to fund this over a 19-year cycle they cannot pay for that and the police officers. You have to convince them that the new technology means a more efficient use of their police officers so they will not require those police officers. Can you tell me how you are going to do that and tell me what I can say to my constituents as well? (Mr Gieve) The last spending review set our budget for the years to 2003–04. We set aside up to £500 million to meet the costs of Airwave during that three-year period. We are currently engaged in the next spending review, which will roll that forward for another two years, so we do not know yet what the top-up of the budget will be. We have not yet decided how much we shall give out in specific grants for being used by forces and what technology is available. We would have to work closely with both the Police Service and the supplier of the service to ensure that we are getting the most up-to-date and relevant equipment. You have fact that it has been recognised by the criminal fraternity that the messages are now encrypted.

91. Looking as a layman at the incredible rate of change just in our mobile phones over the last five years, the rate of technological change in this area seems to be accelerating if anything. What is the nature of the guarantee you have on technological upgrade? What is your criterion going to be as to whether you are getting the most up-to-date equipment? Who judges under the contract? (Mr Webb) The contract is run and monitored by PITO, in fact that is always the case in terms of watching what is happening with the police and ACPO, both of whom are on the programme board, in fact a police chief was actually chair of the project board, in fact we are constantly examining what is the position will be in three years’ or more time. I should just like to say that we have done this development and we are continuing to run this project with the full co-operation of the police authorities and ACPO, of the police and ACPO, of both of whom are on the programme board, in fact a police chief was actually chair of the project board when the contract was signed. It is not the case that they are saying they will only take it if we force it on them. They are very keen to have Airwave and their main concern is whether it is coming in early enough. Mr Jenkins: Anything for free.

Mr Williams

90. I have no problem whatsoever with the idea of the police having the most up-to-date and relevant equipment available to them at reasonable cost. I can remember three years ago the Deputy Director of the FBI complaining that the international drug cartels and the international crime operators had better technology even than he had available to him at that stage. More and more of the crime that matters to the public is nationally and internationally based. So we have to look at a wider perspective than just the Bobby on the beat and the local burglar. I start off supportive of the general proposition, particularly as we previously went through the situation where the Met decided to computerise and forgot to arrange for each division's computers to talk to the next division's computers. I can understand the need for interoperability. What I do find difficult to understand, reading the report, is why this project is based on 19 years. Why 19 years, why not 20 years, why not 15 years or indeed with the rapid rate of change in technology, why not fewer than 10 years? (Mr Webb) In fact that is actually based on 15 years but the 19 years allows for the two-year run-in and the two-year run-out. The service is being provided to each of the forces for a block 15 years. We went for 15 years because having examined the other options that seemed reasonable. Included in the project cost is an allowance for technology upgrades during that period, but the rationale of going for the version of technology we went for, was the fact that we understood a pretty stable development path, enhancement path as far as that was concerned. To address one of the issues you raised about security, the system itself comes as standard with encryption. Therefore all radios provide a level of encryption. It is a very good level of encryption and has already in service identified the fact that it has been recognised by the criminal fraternity that the messages are now encrypted.

92. It is a very unforeseeable area, is it not? The risk cost of technological progression must be very considerable. (Mr Webb) They are and in fact that is always the case in terms of watching what is happening with technology and ensuring that you maintain to current standards and to current developments in technology in the domestic sector. We would have to monitor that constantly and ensure that there was an upgrade path.

93. Looking over a 15-year period and looking at the rate of change and looking at the risk element in that, how are you able to come to the conclusion that the rate of return is 17%? (Mr Webb) In that 17% a fair degree of risk was built in. Bear in mind that it is the responsibility of O2 to deliver the technology upgrade, therefore recognising that was part of the risk they built into that assessment.

94. Looking at page 12 and the services it says Menu Exclusive Services "The guaranteed handheld coverage... will meet only some of the force’s need for this service... To meet its requirements for guaranteed handheld coverage, the force will
purchase this additional coverage directly from O2”. What protection do they have, since they are a captive market, that the prices they will be charged for the extra facility will be reasonable and competitive?

(Mr Webb) Those charges are guaranteed within the contract.

95. They are guaranteed within the contract indefinitely, right through the life of the contract?

(Mr Webb) Yes.

96. Does the same apply in the diagram below which says some forces require to operate inside buildings and again they can purchase guaranteed in-building penetration of Airwave from O2?

(Mr Webb) That is right.

97. That is also covered.

(Mr Webb) That is right.

98. We are not in a situation where we could be held over a barrel by O2.

(Mr Webb) No. We are providing a general service here but it was recognised that in a number of areas police forces may wish, where they operate in large shopping centres or in airports or underground areas, to have additional coverage and that was provided for them.

99. What is built into the contract to ensure not only that those costs are fair in relation to the cost which goes to Airwave, but also are value for money in terms of what in this evolving technology and evolving market could be available to carry out these add-on functions from other suppliers. Is there any protection about the marketplace developing and O2 not developing as fast as these suppliers?

(Mr Webb) The current programme is one of extending the Airwave coverage into these areas, assuming that is what the police force wants, to have a level of coverage within buildings with their existing hand-held radio equipment, therefore the assumption is that they would want to use the same technology everywhere. They would not wish a terminal for one requirement and a totally different one if they are going into a building. They would want to use the same terminal for everything.

100. How are we protected against a lower cost competitor appearing who can provide these extra facilities at a considerably lower cost?

(Mr Webb) If any new technology or new suppliers came onto the market we would always be constantly examining the arrival of those and benchmarking against them compared with our own costs.

101. How is that protected in the contract? How is that allowed for in the contract?

(Mr Webb) There is a benchmarking provision in the contract which allows our staff to address these issues with O2 and if we believe they are no longer competitive, it is something which O2 would have to review.

102. Are there penalties in place if they fail to review, or do you have freedom in so far as the options are compatible technologically to go and use an alternative supplier if O2 were not able to compete?

(Mr Webb) No, not within the current contract.

103. So there is no real incentive on them.

(£) There is in the sense that, if they were proving to be uncompetitive in that area, we have the ability to apply some pressure to ensure that they bring their prices into line. Bear in mind that we are actually paying them for the core charge.

104. What pressure can you bring in reality? They have the contract. We have been through this with the Passport Office and a contract was drawn up with them and their supplier left them with absolutely no legal armoury at all and no real penalty clauses. All they got back was one fifth of the total loss because of computer failure and that was given a couple of weeks before a hearing before this Committee and was done as a concession. It was not done as a legal requirement. How watertight do you think your contract is?

(Mr Gieve) It is not completely exclusive. If Airwave falls down or cannot produce a good enough service, the police authorities can buy another one. There is that fallback position. Obviously Airwave have invested very, very heavily in this technology and we believe it is going to produce an exceptional service. We have not given away our rights ever to use anyone else.

105. We can see all the advantages of interoperability and I am the last to knock them, but the opposite side of the coin is that if someone did find a way of jamming the system, they could do so throughout the country or anywhere in the country, could they not, because of the single operating system? What assurance do you have that current encryption will continue to be adequate against the attacks from organised well financed criminals?

(Mr Asque) On encryption, the basic system which is being provided has a level of encryption which will mean that the casual listener cannot listen to the system which is in itself a big step forward from the current systems where people can directly listen to them. That is one aspect. Also, for certain specialist users who require an additional level of encryption that can also be provided on an end-to-end basis. So there is more than one level of encryption, depending on the type of user. That can be developed as scenarios develop over the years. This is a bearer and you can change parameters over time to provide different facilities. Encryption is something which can be developed to meet any threat which may come along. It is flexible enough.

(Mr Parris) We are required to ensure that our security and our encryption are accredited by the CESG which is the Government’s approved body in this regard. We have an obligation to meet their stringent levels of security and encryption.

106. Mr Gieve, this is specifically to you because of Home Office responsibilities in relation to terrorism. You did say that since 11 September you have become increasingly conscious of a need for interoperability between the emergency services, but the fact is that your department, like your counterparts in the United States and probably in the other Western countries, has been conscious of the risk of biological and of chemical attack for some years. Why is it only after 11 September, which was an attack of neither form, that you became so
Mr Williams Cont]
conscious of the need for interoperability between
the services, whereas it is quite clear from this report
that no priority has so far been given to it?
(Mr Gieve) On 11 September you are quite right
that we have known there was a risk of major
terrorist attack for some time, but this was the first
one of that scale or of that nature in America or
indeed elsewhere in the Western world. Yes, we have
thought it right to take time off after that and think
whether this means that the previous requirement
which we had set out for a degree of interoperability
between the Fire Service and so on is right or whether
we want more. That is what we are doing. It may be
we could have set different criteria a few years back
than we did; absolutely. But life goes on and you have
to review constantly in the light of experience
whether your past judgements were right and that is
what we are doing now.5

107. Way before 11 September, the Secretary of
State was saying that there was a danger not just of
a single but multiple terrorist attacks using
sophisticated modes of attack. We were aware of that
as well, so why is interoperability between the
services only now emerging as a priority?
(Mr Gieve) It is not emerging as a new issue.

108. But it was not provided for in this.
(Mr Gieve) We have been aware of this issue and
in most emergencies the emergency services have to
communicate with each other. Something like the
King’s Cross fire was an example which brought that
home because the communications did not work well
under that. We had a report which set down
conditions which we are trying to meet. It is not a
brand new subject, but nonetheless experience in
New York and the scale of that disaster has caused us
to look again at it. You say that this has not
ensured it. I take it what you mean is that we could
have locked the Fire Service in to the same national
procurement as we launched for the police. I do not
think we could. It is a local service where we pay no
specific grants for technology to the fire authorities.

109. You could have done with the Ambulance
Service.
(Mr Gieve) We could have done for the
ambulances but we could not for fire. Secondly, we
had to take a judgement at the time whether we
should insist that only one procurement was done for
all emergency services and Ministers back in the mid-
1990s took the view that they were not so confident
that that was the only solution that they should do so.
We are looking at that again. I do not think we are
likely to conclude that everyone must take Airwave.
We may conclude that whoever does provide some
technology for the ambulances and fire has to make
it meet interoperability requirements.

110. The feature of 11 September in a way was that
it was simpler in one respect in that it was a focused
mass attack. You as a department, like your
counterparts have been preparing for years for types
of attack which are spread inevitably with
bacteriological or chemical weapons. Therefore the
problems of confusion in the emergency service
would actually have been greater if an attack of that

5 En 30.
Mr Rendel: Cont’d

their emergency services. There are other standards. The French have one called TETRAPOL, which also meets that standard.

113. Had the other countries decided to go with TETRA before us? Was that taken into account when we decided to go in for the TETRA system?

(Mr Gieve) I do not know.

(Mr Webb) There were examples, not on such a large scale by any means, in Europe before we finally placed the order. They were all doing that in parallel to us at the time but nothing as large as us, no.

114. It was not therefore one of the factors in choosing TETRA that there were other countries.

(Mr Webb) No, it was not a major factor but it was the technology which was emerging and was beginning to be taken up by other people so that did influence us at the time.

(Mr Gieve) It was a factor in that it was the European standard for emergency radio systems, but I think you are asking whether successful experience abroad was a factor in adopting Airwave.

115. Either successful experience or the fact that you might be able to come in line with other countries’ systems in some way. That might be useful.

(Mr Gieve) Yes; absolutely.

(Mr Webb) Interoperability is an issue and in fact there are more people taking up TETRA than there are the French standard of TETRAPOL.

116. Does this mean there is some chance some other countries might buy into our way?

(Mr Parris) The approach I am taking with Airwave and indeed O2 is taking with Airwave is to deliver the service here in the UK and to establish our credibility and track record and then look to expand our geographies into other areas. A number of countries in Europe have committed to the TETRA standard but have not yet chosen a particular service provider and indeed that is also the case in other geographies further afield, Africa and Australasia included. From my perspective, it is a possibility but only once we have successfully delivered here in the UK.

117. Figure 9 on page 23 shows the consortia which were considered in the first instance before two of them sadly dropped out. There do not seem to be any foreign suppliers here. Were people not supplying similar systems in Europe which could have been considered as potential suppliers in this country?

(Mr Webb) Ericsson, Nokia and Philips are all foreign companies.

118. But producing in this country, are they not, or are they not?

(Mr Webb) Yes, they have manufacturing plants here.

119. I was assuming that the systems we have been talking about here were being developed in this country. Is that wrong?

(Mr Webb) Some of them are being developed abroad. Motorola for instance is an American company.

120. Were others being developed across Europe in these other countries which are taking on TETRA systems which could have been considered and if so, why were they not included in this instance?

(Mr Webb) We had no control over what the consortia were. Over 70 people had originally responded expressing interest from all over Europe. In fact these were the three consortia which were formed to provide effective bids.

121. Coming back for a moment to the question of whether the system can be sold elsewhere—we already know that it may be sold to the Ambulance and the Fire Services in future—the decision was taken that a 17% profit level was a reasonable one. To what extent was the fact that there might be a lot more profit in it for the company because of the possibility of selling on without having to pay back any of that to the original buyer included in that decision that that was a reasonable profit level?

(Mr Webb) At the time we should have liked more people to have signed up but the only people we could deliver at the time were the Police Service. Any risk associated with selling on to any other authorities was down to O2 so it was a commercial decision as far as we were concerned.

122. But any profit was going to them as well.

(Mr Webb) Yes.

123. So in a sense there was no downside for them. All that could possibly happen was that the profit level would go up if they did manage to sell on either to foreign countries or to other emergency services in this country. It is only an upside.

(Mr Webb) Not necessarily. They did take a significant risk in the sense of the 17% return is assuming they actually get paid for it. At this moment, because there is a delay in the project and it is taking longer in some areas than necessary, they are not being paid, they are not earning revenue. There has been some retention of revenue as far as we are concerned, so they are not getting the full amount at this time.

124. The 17% was the profit they were expected to make if they concluded a successful system and sold it simply to the Police Service in this country.

(Mr Webb) Yes, that was what the plan was; 17%.

125. And 17% was considered to be reasonable. If that had been the end of it and they had sold to nobody else it would have been considered a reasonable profit to make.

(Mr Webb) That was the advice from our advisers at the time.

126. Yet we allowed them also to take on all the potential profit for selling to any other service within this country or indeed abroad without insisting on any sort of a clawback.

(Mr Webb) I am corrected here. An element of shares was an assumption which O2 made in terms of determining that profit was actually built into that 17%. They were taking the risk of assuming they would actually sell some shares to other people.

127. I am delighted to have that change of answer, if I may say so. If that had not been the new answer, I should have been seriously worried about the way that negotiation had been carried out. How much of the 17% is the risk, whatever risk, which has been transferred to the company from the public sector? This is a PFI deal after all.
22 April 2002

Mr John Gieve, Mr Vaughan Asque
Mr Phillip Webb and Mr Jeff Parris

[Continued]

[Mr Rendel Con]
(Mr Webb) It is a PFI deal so we have transferred the bulk of this to O2 in that they are responsible for providing the whole service, they are responsible for developing the service and a full capital investment is down to them.

128. To date my understanding is that they have spent in excess of £100 million in putting in the infrastructure, they have received nothing like £100 million in terms of revenue. If they say in a year or two’s time that they are very sorry but they cannot actually produce the system without getting a bit more money, do you say you are walking away and going back to your old system, picking up your handheld mobile phones again?

(Mr Webb) We would not necessarily do that. The first thing we would do is endeavour to ensure that they do deliver. They have a contract with us. There are liabilities associated with that contract in terms of delivery. We would also automatically try to negotiate a situation where they did deliver.

129. What you are saying effectively is that you are prepared to do something more for them in order to make sure they do deliver.

(Mr Webb) As far as we are concerned they are contractually obliged to deliver. Therefore our first recourse would be to ensure that they did do under contract. In terms of returning to our existing systems, by that time most of the analogue systems would have been withdrawn in the sense that they would have been replaced by the Airwave system so returning to an analogue system would be far more difficult. Almost certainly if TETRA did fail we would have to procure an alternative system and that may have to be done on a local basis if we could not do another national procurement.

130. That might then become very expensive.

(Mr Webb) That could become expensive.

131. So not all the risk has been transferred.

(Mr Webb) You could not ever mitigate risk against companies failing to deliver and going bankrupt. Quite frankly we would be looking to get a significant return on any investment we had made as a result of that.

(Mr Gieve) What risks are O2 taking? One risk is that they cannot produce the required level of performance for the investment they had assumed at the outset. For example, they may need to put in more masts than they had planned in order to provide the coverage and quality of performance. That will cost them a lot of money and that will reduce the 17%. They only get the 17% if they deliver the service to their cost.

132. I understand that they only get 17% profit if they do that. What I am asking is if they do not manage to do that and come back to you and say sorry they need more money whether in practice you are then over a barrel and have to say you cannot afford to go back to the old system. It would cost you a huge amount to ask somebody else to set up a new TETRA system now for us and therefore effectively you would be in a position where you were going to have to pay a little bit more to Airwave to make sure they do remedy the problems they still have.

(Mr Gieve) I certainly would not accept that if Jeff comes back and says he needs to change the contract we would just do so because we are over a barrel. We would force them to deliver on their contract and if they did not, there would be dire consequences. You then ask what happens if they are actually driven out of business and you have to find someone new. In that sense there is always a residual risk because we have to provide the service or at least the police authorities have to supply the service. That is true whether it is a PFI or a normal contract. There will be severe consequences for O2 if they cannot deliver.

133. Let me come back, if I may, to the £300 million extra. I do not quite understand about the £300 million extra that Airwave has cost us compared with a whole series of local systems. Is that £300 million over the total time life of the project, in other words is it £300 million out of the £1.5 billion?

(Mr Webb) Yes.

134. Effectively local systems would have cost £1.2 billion over 19 years.

(Mr Webb) That would be the estimate. If they actually went out and bought the systems. These would not necessarily be joined up, they would be local systems.

135. Sure. As I understand it, the advantage from that is that we are expecting to get the equivalent of about another 1,200 police officers.

(Mr Webb) That is the comparison the report made. As far as we are concerned, what we would actually get would be significant efficiencies in terms of how the police could operate and as a result of that it may generate income for 1,200 more officers.

(Mr Gieve) The NAO would be much more cautious than that. I do not think they were saying that it would. It was a classic NAO illustrative figure. We think we are going to get value for money for this.

136. How do you know?

(Mr Gieve) We have assessed what sort of service this will provide against the costs. We think that the extra service —

137. How have you valued the extra service? I can understand if it is going to save you 1,200 officers; there is a value to 1,200 officers. They cost £40,000 each a year or whatever. One could actually have a value on that. I am not quite clear how you have valued —

(Mr Webb) I do not know whether we have valued it. The pure cost saving from not requiring police time to be spent on X, Y and Z nugatory work is not the full benefit of this system. That is the point I was making. There are benefits in terms of the quality of service the police can provide.

138. So how have you valued that.

(Mr Webb) There has been some valuation but the greater extent was the additional functionality and capability of the police force and there was a general recognition that this was actually something which would provide significant benefit in terms of operational policing.

139. I am sure it does but I do not understand quite how you say that you have seen there are operational benefits and you believe that is worth £300 million. How do you decide that £300 million is the right cost for those operational benefits? Is it just a figure
plucked out of the air or do you think about it for a bit and there is a majority vote within the committee which says £300 million is about right?"

(Mr Webb) No, it was not plucked out of the air, it was a figure which came up during our analysis, £300 million extra. There is a long list of additional functionality including providing a national service and allowing interoperability between police forces which was a key requirement of the original ACPO need and the fact that we offer a service here which could exploit digital technology in terms of how they use that technology to download, therefore police officers could spend more time on the streets, plus the fact that we were able to offer a far range of additional safety measures for police officers, that they knew where they were, all these things.

140. What you are doing is listing the various advantages there are going to be out of the system. I understand that there are going to be advantages. My question is: how did you decide that those advantages were worth £300 million?

(Mr Gieve) We did not look at it as £300 million extra, we looked at it as the full cost of Airwave. This is not a different question from asking whether if we let the Airwave contract at £1.5 billion over ten years that is going to produce a service worth £1.5 billion. It is the same judgement. I do not think we did.

141. It is not necessarily the same judgement, is it? You might find that there was another potential service which you could get for £1.4 billion which you knew was a slightly worse service, but actually better value for money. It is not just a question of whether Airwave is worth £1.5 billion but it is a question of whether this is best value for money.

(Mr Gieve) Yes, it is a comparative judgement. The ACPO review was done on a different basis which did not have a national requirement, did not have right to roam. It was one among a different set of options. I suppose my answer to how we decide whether this is good value for money if we have not priced the benefits is that it is a political judgement, it is a judgement shared with the Police Service on what sort of services are worth doing. Is this a reasonable use of money compared with the other uses we could make of the police’s money in terms of the benefits, in terms of public order and crime and the service they provide?

142. What you seem to be telling me is that before you took this decision you had not actually priced the benefits at all.

(Mr Webb) I think that is stated in the report. In fact we are doing a benefits realisation exercise: we did start late in the day; it is now going on; we are putting in place measures to identify how current policing is done prior to Airwave going in and the benefits which are approved subsequent to its being delivered.

143. Is there anything in the contract which says if one of these benefits is not delivered a certain sum will come back to the Police Service?

(Mr Webb) The contract is not determined in terms of benefits; the contract is determined in terms of delivery of functionality.

144. May I just clarify the cost with you? Is it £1.4 billion fixed cost over the period of the contract and then £180 million of annual charges in addition to that? Is that right?

(Mr Gieve) No.

(Mr Webb) No.

145. How does that £180 million fit in?

(Mr Gieve) As I understand it the £1.47 billion is the net present cost of the stream of forecast payments over the lifetime of the project.

146. So £180 million is the net present value of 19 x £180 million.

(Mr Gieve) Not quite, because we are not paying anything like £180 million this year. I think £180 million is the steady state when everyone is up and running with the full functionality. It is a more complicated sum.

147. In addition to that there is £130 million in additional safety measures for police officers, And that?

(Mr Gieve) No.

(Mr Webb) It is all included in the £1.47 billion.8

148. I thought in answer to Mr Jenkins you said that the cost of buying the £1,000 hand-held radio sets was in addition to these.

(Mr Webb) Was down to the Police Service but in fact we have made an estimate within that as to how much that is likely to cost.

149. That is included in the figure. Is there any other capital equipment which has to be purchased?

(Mr Webb) There is some capital equipment in terms of control room configuration.

150. That is also all included.

(Mr Webb) That is all included. It is either the core charge or the two menu charges.

151. It is very helpful to have that clarified. What problems have there been with the police communicating with other emergency services?

(Mr Webb) In the past there is a variation of levels by which they actually communicate. In the past generally it has been done at command level rather than individual officer level and in fact that has generally worked reasonably well though there have been examples where it has not worked terribly well. What we are looking for here is providing an improved way of doing that. It needs to be interoperable with whatever the Fire Service have.

152. The proposal therefore is that the individual police officer is going to communicate with the individual fire, ambulance and other emergency services.

(Mr Webb) That is not something which the Fire Service said they want. The police officers can communicate with any other police officer at an incident, even if they come from a different force. That is not so at this moment with the Fire Service.

8 Ref footnote to Q 75.
153. When I asked you what problems there had been, you said the command structure seemed to work okay but this will enable police officers to communicate with each other. Now you are saying that is not wanted by the other services. (Mr Webb) It is not wanted by the Fire Service but it is desired in some cases by the Police Service, particularly for incidents at airports.

154. Who will pick up this call when a policeman makes a call to the Fire Service and they do not want to receive it? (Mr Webb) It will go to their command centre.

155. In the same way as under the existing structure. (Mr Webb) No, at the moment this can only be done command centre to command centre. Police officers have to get to their command, it will then pass across the Fire Service command and then it will pass down the chain.

156. So the advantage of this system is that the PC no longer goes via his own command centre. (Mr Webb) Yes, that could be the case; it could be the case if that were how they wanted to do it.

157. Is that extra facility worth £1.47 billion? (Mr Webb) We are not necessarily looking at that cost. The bulk of the £1.47 billion we have identified here is for interoperability between police forces. At this moment we have a number of different police forces operating across the country. There is a large amount of interoperability across borders of counties and there are areas where we have police forces like British Transport Police and a number of other police forces which operate across a number of police forces.

158. When has the lack of being able to do that caused a problem? What kind of problems does that give rise to currently? (Mr Webb) The sort of thing they are currently experiencing, particularly at airports and activities like this where you have a mixture of police forces, is their ability to be able to talk effectively to each other in an incident. (Mr Gieve) Brian Jenkins mentioned a case where his police force had to use public phones to communicate with the nextdoor police force.

159. Does that happen at the moment? (Mr Gieve) Yes.

160. Why can they not go to the command centre and be patched through? (Mr Gieve) They can do that too. I was just picking up his comment.

161. He was being flippant, he was not being realistic. Now you are citing that as a realistic example. Can you give us some examples? (Mr Gieve) I think police forces do use personal mobile phones to communicate with each other quite frequently.

162. Is that a problem? (Mr Gieve) Yes, it is not ideal because they do not have very good coverage, because they are an additional cost, they are an additional burden on the police. It is not ideal at all.

163. I just get the impression that things are not ideal but they are not actually worth £1.47 billion to sort out. That is the impression I get from this whole hearing. (Mr Webb) There are other features here in the sense that the prime reason for the provision of this service was to replace the ageing analogue system and provide a digital system for the future which we could build on, particularly in terms of providing digital services. That was the key thrust here and the key thrust from ACPO as well. At this time, using a mobile phone and other services, you cannot necessarily provide those services. What we are endeavouring to do is to provide a much more joined up environment so the police can do their job more effectively.

164. In my county you cannot even provide a service of turning out to a burglary yet you are talking about this very gold-plated service for these odd incidents across borders moving between police forces. You do not even attend a burglary of a 90-year old lady in my constituency, so why is this more important than that? (Mr Webb) Interoperability was only one feature of this. There are other features as well in terms of providing better coverage so that they can communicate when they are on the ground in responding to a call. In many cases, particularly in rural areas, that is impossible. With the current technology they cannot actually locate the policeman or talk to him if he is out in a black spot. This technology is there to deliver an improved service.

165. How do they deal with that problem at the moment? (Mr Webb) In many cases they do actually have to go to a phone box.

166. Is that a huge problem in those rural areas? What level of policing problems does that give rise to in rural areas? (Mr Webb) It is a concern to the Chief Constables with rural areas.

167. What magnitude of concern is it? (Mr Webb) Significant in a number of areas where we have been looking at other alternatives to provide those sorts of service with difficulty. (Mr Gieve) Coming back to the £1.47 billion, the cost of the complete system, we can only save that by not having any radio system.

168. How will this radio system assist the policeman on the beat in my constituency? (Mr Webb) It will provide better coverage, it will provide encryption so that it cannot be monitored, it will provide greater reliability, greater speech quality, it will enable him to speak directly to other police officers. He will have a facility to use it like a mobile phone to contact and receive calls from the public. He will be able to use it to download digital information and ultimately—

169. Will he need all those things when dealing with a group of yobbos at the corner of a school? (Mr Webb) Quite frankly if he is in a situation where he wants assistance, he also has an emergency button which he can press which goes to priority and there is support there immediately.
MR JOHN GIVE, MR VAUGHAN ASQUE
MR PHILLIP WEBB AND MR JEFF PARRIS

22 April 2002]  [Continued

[Mr Gibb Cont]

170. There is an example in paragraph 3.28 of 10% leading to 1,200 police officers and you said that is just an illustrative example. What is a realistic percentage figure that you think will be saved in police time? Is it more than 10% or less than 10%?

(Mr Webb) It is an illustrative example. Looking at some of the associated aspects out of Sir David O'Dowd’s task force, where they are looking at how they can improve this, the key issue here is removing the necessity for the policeman to return to the police station quite so often. With some of the digital services at the moment they would have to return to provide reports.

171. Across the national Police Service as a whole, what would that percentage be? Two%, 12%?

(Mr Gieve) The report in paragraph 3.28 talks about eventual efficiency gains of up to 30%.

172. Is that right? Is that your assessment?

(Mr Gieve) That is the best assessment of people working on the system.

173. You think you will save 30% of the average policeman’s time as a result of this system.

(Mr Webb) Potentially, yes.

(Mr Gieve) It may come in terms of outputs rather than savings. Efficiency is also about outputs as well as inputs.

174. Fair enough. So I shall see a 30% improvement in policing in my constituency in time as a result of this system. There will be more policemen on the beat. More attendances at burglaries, more making sure yobbos are not disrupting people’s quiet enjoyment of life.

(Mr Gieve) I cannot guarantee that in terms of a particular output of a particular service, but yes, this is intended to feed through into better dealing with the various things police do, including dealing with victims.

175. If the police had had £500 million themselves to spend, they would have happily contributed to the scheme if they had the freedom to spend the £500 million as a whole themselves.

(Mr Gieve) I do not know. It would have been quite difficult. We have 50-plus separate police authorities and the chances of all of them agreeing to spend it the way we want to spend it would be quite small.

176. But you think the majority would.

(Mr Gieve) Some significant ones would and indeed some police authorities, including the Met had already decided to take Airwave before we decided to pay the costs.

177. I spent a day with Littlehampton police and I discovered where all the police were. They were in a big office block in Durrington, which is outside my constituency but it is where the divisional headquarters are, where they operate from. It is absolutely packed with computers and rows and rows of desks and the police were all sitting at these computers doing that. This is not the communications centre, which is in Lewes, this is just a little sub-division full of computers and offices. What I am really asking you on the basis of that anecdote is whether we are not over-engineering the police process with all this equipment, all these computers in Sussex and all this very, very high tech communication system when policing is actually quite a low engineering process of being on the beat, deterring crime, attending burglaries. Do you not believe this money would be better spent on providing more officers rather than providing a less highly engineered policing process?

(Mr Gieve) No. I do not agree with that, although obviously it is a question of judgement. When you say policing is essentially fairly low tech, Bobbies on the beat, that is part of it, yes, absolutely. However, good communications are a key part of doing a decent job on the beat. There is also the more sophisticated end of policing: the security of not having your telephone calls listened to, for example, is absolutely vital in some parts of policing. Policing is a pretty complex business. On the question of whether we have too many police sitting in back offices and not out there doing the job, yes, we the Home Office, but also the police, would say we wanted to get more people out to the front line. One advantage of having a national system is that you do not have to have separate teams in each police force designing and supporting their own digital radio technology. That was one of the gains from going for national procurement.

178. Is this the most up-to-date technology that your company has to offer?

(Mr Parris) Yes, it is.

Mr Davidson

179. May I start off by agreeing with my colleague Alan Williams on the question of recognising the need for police radios to be improved? I certainly had a placement with Strathclyde police and I recognise they difficulties they face with radios which do not work, which do not cover the area and so on. I accept that there is a need, but I do have some questions. Does the Home Office generally have confidence in the ability of local police committees to understand the needs of their area and of their force?

(Mr Gieve) Yes.

180. I want to pick up the point about the extent to which this is over-engineered and gold-plated. I understand about having coverage and I understand the point about having encryption. What I am not certain about is the value which was added for the additional costs of some of the extra features. The gain that has been mentioned to us fairly consistently, and in paragraph 13 of the summary for example, is avoiding police officers having to go back to the station and all the rest of it. Surely they do not need the capacity to roam throughout the whole United Kingdom in order to be able to contact their headquarters. Very low-tech provision, indeed a secure land line almost could enable them to contact the station rather than having to travel back in again. May I just clarify a point on roaming? How many officers normally operate outwith their own force areas as a percentage?

(Mr Gieve) I do not have that.

181. Could you get that, please?

(Mr Gieve) Yes. I might be able to. I shall look for it anyway.9

9 Ev 24-25.
182. How many times as a percentage of calls does one headquarters at the moment have to contact another headquarters on an urgent issue which has to go across a force boundary?

(Mr Gieve) I do not have a figure as a percentage of all the calls made. I imagine that the bulk of all calls are local but it is a regular business that police headquarters will be dealing with.

183. How regular?

(Mr Gieve) I do not know. If you take for example the National Crime Squad, counter-terrorist operations, these are all nationwide operations and they all require this.

184. I understand that. I just do not have a feel from this what the additional cost is of having a roaming ability as compared to the number of officers who would actually use it. You have indicated nothing that would give me any idea as to what that would be.

(Mr Gieve) I shall come back as well as I can. Just to get the figures clear, the £1.47 billion is the cost over 20 years of supplying a radio system and any radio system would cost quite a lot.

185. I only have a limited amount of time, so I do not want you to go back and tell me all the things I know already. One of the gains from the system was intended to be interoperability which we are now going to have. Was interoperability between all the different emergency services really priced in at all in any way?

(Mr Gieve) We are going to have interoperability across the Police Service.

186. Across the emergency services.

(Mr Gieve) As far as the Fire Service is concerned, which was originally in, they withdrew before we got to the costing.

187. Was an estimate made of how much would be gained by the police in having interoperability with the Fire Service?

(Mr Gieve) In terms of putting a price on it?

188. Yes.

(Mr Gieve) No; I do not think so.

189. It just seemed like a good idea. If this was one of the main gains, I would have thought there was some sort of value attached to it, but no. We recognised early on that police authorities know their area, know the value of particular provisions. According to the summary in paragraph 13, “During the procurement, many police authorities considered that Airwave was prohibitively expensive”. Presumably then they were regarding it as over-engineered for their needs.

(Mr Gieve) For their local needs.

190. What other needs are there?

(Mr Gieve) They are part of a national Police Service, so it is quite possible that the sum of the local needs will not add up to a coherent and satisfactory total picture, which is why the Government have powers and are taking more powers to set a national policing plan, precisely to make sure that we do get a coherent picture.

191. Did you identify a value as being above and beyond the local advantages, which presumably the local authorities or the local police boards were pricing and saying this was too expensive? You identified a value from having this roaming ability and interoperability and all the rest of it. Can you tell me how much that was?

(Mr Gieve) The figure in the report is £300 million, although that was not hugely well supported. That was the cost difference between having Airwave and an estimated cost of having a set of local procurements.

192. With respect, that was not what I asked you. What I was asking was what the value to you was. You paid out £500 million to police authorities to enable them to buy this scheme which they thought was too expensive. Presumably then it must have been worth more than £500 million to you to pay £500 million out. Therefore you must have had some calculation that led you to believe that it was worth more than £500 million because presumably otherwise you would not have done it. What was the figure?

(Mr Gieve) Those are two separate questions. In terms of value for money for the country, the figure is £300 million or thereabouts, which is what it would cost to do this system rather than that system. The question for us on the £500 million was within our total budget, some of which might have been going to the police anyway, we found £500 million and channelled it through this means. That was worth doing as a means of getting them to apply a system which was worth having.

193. So you do not have an answer to the points I was raising. You can understand why I am a bit anxious when almost everybody else who looked at this scheme did not think it was value for money. None of the local police forces thought it was value for money, the Fire Service did not think it was value for money and the jury is out to some extent on the Ambulance Service. On reflection, do you not think that perhaps it has been gold-plated?

(Mr Gieve) I do not accept the first premise that no one thought this was value for money except the Home Office. Is that your starting point?

194. Not all that far away from that.

(Mr Gieve) Before we announced the £500 million I gather 39 of the police forces in England and Wales out of 43 had indicated they would proceed with Airwave. The specification you are talking about and saying is gold-plated is one drawn up by the police authorities. We had a major consultation.

195. If it was drawn up by the police authorities, why did many police authorities consider that Airwave was prohibitively expensive?

(Mr Gieve) Partly because they probably thought they were in a negotiation with us for funds.

196. So they were misleading us all really.

(Mr Gieve) No, I do not think so. They thought that if they had to use their money they would prefer or might be forced to do with less functionality.

197. Yes; absolutely. If they were using their money, they would have preferred to make do with less.

(Mr Gieve) Yes.
22 April 2002]  Mr John Gieve, Mr Vaughan Asque
Mr Phillip Webb and Mr Jeff Parris  [Continued

[Mr Davidson Cont]

198. But if they were spending your money, they
would take these extra features. There is an issue here
in terms of the local police authorities believing that
some of the add-ons were not value for money, basically.
(Mr Gieve) There was also, no doubt wrapped up
in that, the question of whether they thought it would
work, because this is an unproven technology. They
were taking a risk on this as well.

199. Mr Parris, the 17% profit. Anxieties have been
expressed here as to whether or not the add-ons will
give you much more. Are you prepared to open your
books to the Home Office to let them see how much
profit you are making as the contract goes on?
(Mr Parris) The 17% figure you quote and which
is in the report has been acknowledged as an estimate
of our return from this contract in isolation. What we
made clear at the time and we still stand by, is that we
would not have done this project in isolation for the
police at that return. We have taken this project on,
on the basis that it would give us an opportunity to be
able to market it to the Fire Service, the Ambulance
Service and such like.

200. Is that a yes or a no about open books?
(Mr Parris) This contract was not procured under
open-book accounting.

201. I understand that. I am asking whether, in
order to maintain good will, and as anxieties have
been expressed, you are willing to demonstrate on an
ongoing basis—we are talking about 15 years here—
by operating some sort of open book system to show
the Home Office that you are not profiteering.
(Mr Parris) There is a mechanism within the
contract which is similar to an open-book accounting
mechanism which requires us to prove value for
money on an ongoing basis. The broad answer to
your question is yes. The additional thing I would say
is that we have talked in this meeting about the
additional possible service to fire and ambulance and
such like. These are discussions and negotiations yet
to be had and I would fully expect to be able to
demonstrate the provision of a value for money
service to anybody else who joined up.

202. Somewhere in this report it mentions that they
were trying to estimate costs and so on. You were
refusing to provide cost information. That does not
sound like the actions of a partner and it does look
rather as though you are concealing something, does
it not?
(Mr Parris) When this procurement went down to
a single bidder we recognised that there was a need to
adopt and change our approach. Indeed there were
some advantages from being in a single-bidder
situation. We proposed and PITO accepted the
concept of the “should-cost” model, which is the
basis of what you are referring to. We also suggested
that in effect the bill of quantities would describe the
bits which go to make up this system and we would
make our own estimate of what those costs would be
and PITO could check whether they felt they were
appropriate estimates and such like. We did do that
and we did do it for six major cost items. If I am
reading your question correctly, there was some issue
during the negotiation when frankly our design had
not materialised, had not matured, to a level where
we could provide all the detail which was required at
that stage.

203. Perhaps I have picked this up wrongly or it
has been phrased wrongly in the writing. You would
have no difficulty about providing any cost
information which was sought either by the NAO or
by PITO or by anybody else in order to demonstrate
that you were not over-charging.
(Mr Parris) We have done that.

204. Mr Gieve, is that your impression?
(Mr Gieve) May I ask Philip as he was
negotiating that contract?
(Mr Webb) Yes, it was. During that period we
worked very closely with Airwave.

205. Thank you very much. I just wanted to clarify
that. One of the other issues which causes us concern
is this refusal to share profits from bringing in new
users. It seems to me that is counter-productive from
your perspective as well. If the Home Office and the
police forces were your partners and had to have a
profit-sharing arrangement they would have an
incentive to help you bring more people in, yet at the
moment you do not have that. Why is that?
(Mr Parris) The discussion which took place at
that time was very much around the way you have
just described, that is we were prepared to engage in
discussions about sharing benefits, sharing the
rewards, as long as the Home Office could bring those
users to the table, which unfortunately they could
do not, as events show, and if they were prepared to
share in some of the risks, which for the same reason
they were unprepared to do. I was quite prepared to
engage in a risk/reward type of arrangement, as is
fairly common in partnerships.

206. Mr Gieve, could you comment on that? Is that
your understanding of the position?
(Mr Gieve) I will ask Philip, because he was
negotiating the contract.

207. But you must have an impression.
(Mr Gieve) The impression is that we would have
liked to get a better deal than we did, but in a
commercial negotiation you have to settle for what
you can get in the end.

208. You have to settle for what you can get in the
end. That is presumably because at the stage when
you were discussing that really the O2 people had you
over a barrel and you are on “Take it or leave it”.
You had to have this radio, so they could play hard
to get and there was nothing else you could do but
accept it.
(Mr Gieve) No, it was not. The Home Office have
been held over various barrels in the past in that way
but it was not true in this case.

209. Usually for your own good.
(Mr Gieve) In this case O2 definitely had already
invested heavily in this project and phase 2 stood to
lose a lot if the project did not go ahead. It was more
even than you say. Having a single body is not ideal
and that is why we did the “should-cost” model and
so on, to try to ensure that we were getting a value for
money deal.
210. May I clarify one point on page 12 which mentions extra charges? In the nice picture at the bottom on the right hand side it says “Where the police force requires its officers to operate inside buildings on a regular basis” basically you have to pay more. As far as I know, there are no police forces with no buildings, therefore presumably all police forces will at some stage have to operate inside buildings and presumably all of them are going to have to pay an extra charge. Am I picking this up wrongly?
(Mr Webb) They would not necessarily have to pay an additional charge. The system does work reasonably well in most buildings, but in areas where they want a much higher level of coverage, like large shopping malls and airports, they would want a better service. What most police forces have done is look at the standard coverage and buy additional coverage for those areas which did not meet the full requirement.

211. You are wiring inside the airport or wherever it is to provide that service.
(Mr Webb) Yes.

212. When this wonderful scheme is being rolled out, why is Scotland last?
(Mr Webb) As part of the original arrangement Scotland chose to go last.

213. Do they get it cheaper?
(Mr Webb) Let us put it this way, we shall have rolled out to an awful lot of other forces and ironed out a lot of problems before we get to Scotland.

Mr Bacon

214. May I start by asking a question about the money? You said the £1.47 billion was the net present cost of the stream of forecast payments. Could you say what is the actual annual payment?
(Mr Gieve) It is £180 million.

215. Each year?
(Mr Gieve) The payment builds up as the service builds up. The full payment is £180 million.
(Mr Webb) Yes, of that sort of order.

216. What do you anticipate to be the total cash you would pay out over the 19 years?
(Mr Webb) Total cash over 19 years is of the order of £2.9 billion.

217. Which is why your website says £2.9 billion.
(Mr Webb) That is right.

218. Is that including an inflation assumption?
(Mr Webb) Yes.

219. Of what?
(Mr Webb) Six% return on capital.
(Mr Gieve) Six% is the discount rate.

220. Yes, six% would be the discount rate but what is the inflation assumption.
(Mr Webb) Two and a half%.
(Mr Gieve) May I just pause there and check? I have a feeling the £2.9 billion may be a real price. May I allow a consultation behind me to confirm we have the right answer there?

221. May I suggest that you send us a note on the exact amount? I am always interested in cash out of the door because I have this very simple, Mrs- Thatcher-corner-shop approach to economics. The net present cost of Treasury building for example is £169 million but the actual cash out of the door is £838 million. I am interested in how much cash you are going to have tied up. The answer appears to be about £3 billion, but if you can give us a note on that I should be very grateful and if you could confirm the discount rate and inflation assumptions as well, that would be great.10 Did the Home Office take legal advice on requiring the Fire Service to partake of Airwave?
(Mr Gieve) I do not know the answer to that. The Home Office was responsible for the Fire Service when this decision was taken. It was probably more a negotiated decision.

222. You do not think you took legal advice.
(Mr Gieve) On whether we could force the fire authorities to buy Airwave?

223. Yes.
(Mr Gieve) Did we?
(Mr Webb) Yes.

224. You did. And what was the answer?
(Mr Gieve) No.

225. The answer was that you could not. Is that correct? The answer is that you took advice on whether you could require them to and the answer was that you could not, at least you could not without further competition.
(Mr Gieve) At that point competition was not the issue.
(Mr Parris) As I understand it, relatively lately the advice you have received is that it would require an additional competition. I believe that is the situation.
(Mr Gieve) May I just clarify this? We have taken some legal advice on whether now we could require the Fire Service and Ambulance Service to buy into the contract we have. Your question was on whether we did that in 1996.

226. No. I was asking in general.
(Mr Gieve) In that case, we have taken advice.

227. Could you say whether your procurement was lawful or unlawful?
(Mr Gieve) I hope it was lawful.

228. You think it was lawful.
(Mr Gieve) Yes.

229. Are you sure about that?
(Mr Gieve) Yes. No-one is suggesting it was not.

230. Did Matra not take it to the European Court of Justice?
(Mr Webb) Matra took it because at that stage they did not believe we had specified a technology which —

231. Who won the case? Did Matra win?
(Mr Webb) Matra did not win the case in so far as they were not allowed subsequently to bid.

—

10 Ev 25.
22 April 2002

Mr John Gieve, Mr Vaughan Asque
Mr Phillip Webb and Mr Jeff Parris

[Continued

[Mr Bacon Cont] 232. No, I did not ask that. My question was whether your procurement was lawful or unlawful. If it were unlawful, it would be very obvious that you could do what you did again. Could you do what you did again in the way that you did it?
(Mr Webb) Following the court case with Matra, for future procurements we shall have to say “or alternative technology”, but they did not find that we had contravened any issues at that time. The Government decided to include those words so they did not get any future actions of that sort. As far as we were concerned we were within the guidelines.
233. If you were to try to do now what you did then in terms of the way you did the procurement, it would be unlawful.
(Mr Webb) No.
234. So you could do it.
(Mr Webb) The only aspect at that time was that we specified a technology which at that time was an emerging European standard of TETRA. Now we would have to specify TETRA for compatibility or any other system which could be made compatible.
235. And the OGC changed its guidelines, did it not?
(Mr Webb) Yes, it did.
236. May I ask you about the safety aspects? Paragraph 1.14 of the report refers to a review of operational effectiveness. It says, “The review could identify no potentially relevant mobile phone or dedicated mobile communications system available at the time or in the near future, that could provide an operationally acceptable service as cost effective as Airwave”. Did that review include health and safety aspects?
(Mr Asque) That review included the health and safety aspects which were relevant at the time.
237. Or were known about at the time.
(Mr Asque) Yes, that is right. Since, things have changed slightly, but yes, certainly at the time.
238. Paragraph 3.25 says you have done another review in July 2001, is that correct?
(Mr Asque) Yes.
239. This has “concluded that the current evidence suggests that it is unlikely that the special features of signals from TETRA mobile terminals and repeaters pose a hazard to health”.
(Mr Asque) That is correct.
240. How many policemen have complained that their radios are making them ill?
(Mr Asque) A number of people have expressed concerns on the health issues.
241. How many?
(Mr Asque) The numbers are not fed directly to us. We get representations from the Police Federation, which we have been in contact with, answering the concerns on behalf of their members. We have not dealt directly with policemen.
242. I am looking at a letter in the police magazine from March 2002 from a Mr Nigel Wood from Lancashire who writes that he knows personally of new cases of skin problems, sleeplessness, migraines, depression, difficulty in concentrating and headaches. In the December 2001 issue there is reference to TETRA causing a variety of things including potentially heart and blood disorders, affecting the brain electro-chemistry, increasing the risk of leukaemia and so on. What is the current state of play on the health research?
(Mr Asque) The current state is that we are addressing all of the recommendations which were made in the report you referred to. A list of recommendations was drawn up and we have research projects going on all of those recommendations, addressing them in great detail.
243. Do the research projects have people wearing these things and making them operate and then checking out whether they get migraine or depression or whether they lose concentration?
(Mr Asque) Projects are being developed which will have that sort of aspect. At the moment we do not have a user base. We are in negotiation with one of the police forces which has offered to participate in a trial of that order, but it has not started yet.
244. That was July 2001. It is now April 2002 and you have just said that at the moment you do not have a user base. Do you not have people you can test this on?
(Mr Asque) The issue is that there is no proof that there are any of these effects.
245. I did not say there was. Nine months after that July 2001 report and a more recent report you say you do not have a user base, you do not have a bunch of people on whom you can test it specifically not relating to operability or interoperability but specifically relating to health. Is that correct? You do not have a user base of such people?
(Mr Asque) The Airwave service is only now being rolled out. We have done work in the laboratory, we have done a lot of experimental work in the laboratory prior to the final trial which we are doing as part of a health programme which is not directly led by the Home Office. It is part of the mobile phone research.
246. Are you responsible for the Home Office’s input into health and safety on these issues?
(Mr Asque) Yes, we are and we are feeding into the wider programmes because we have more users involved and a wider base of information.
247. But you do not have a user base at the moment.
(Mr Asque) We have had discussions with one police force who are going to collaborate with us.
248. You have had discussions. I am just amazed. It was 1998 when you had the first review on effectiveness. Three years later you had a review on health safety specifically because of these concerns. Not quite a year later, but nearly a year later, you still do not have people to testify. Why not?
(Mr Asque) There are two issues here. We have to have people using the system. At the moment we have a trial system and now we are starting operational use. We also have to have a research programme in which we have to agree how we measure this. This is very subjective. People will have concerns about this; it is a very emotive topic —
249. These policemen are complaining about headaches and so on. You are in charge of health and safety. Have you thought of going along, getting on

THE PUBLIC ACCOUNTS COMMITTEE

Ev 21
a train, going up to Manchester, participating, using it yourself and seeing whether you get headaches? It would be a quick way to move the thing forward, and therefore there are large amounts of scientific trials to analyse these things because a lot of these things are so subjective.

250. I am just amazed you have not started yet.
(Mr Gieve) Vaughan is referring to a particular monitoring programme we are setting up with the forces which are starting to use Airwave. We actually have a whole programme of research, most of which has started, on the effects on rat brains and lots of biological stuff to try to find out whether, as has been alleged, features of this technology do have effects on animals and on biology. So far there is no reason to think they do.

(Mr Parris) We take health and safety very, very seriously. The Airwave service operates within national and international guidelines which are laid down after years of research. Sure, more research is going on and it is absolutely right and proper that it should go on.

251. If you want to send us a note on safety, I should be very pleased to see it. Are TETRA and TETRAPOL interoperable?
(Mr Webb) No, they are not fully interoperable.

252. Are they interoperable to a degree? Presumably the answer to that is yes.
(Mr Webb) If you provided an adequate interface, there is a degree of functionality which would be possible.

253. But you do not have an interface at the moment.
(Mr Webb) Right.

254. Mr Alistair Philips was giving advice to PITO, is that right?
(Mr Webb) No, he is not giving advice.

255. Was he not giving advice to PITO?
(Mr Webb) No.

256. Perhaps he was giving you advice in the sense that any person is entitled to give you advice rather than that you were paying for it.
(Mr Webb) I am sure he could have sent us an unsolicited letter.

257. Do you think he was giving you free advice? Mr Philips’ free advice says that he advised PITO to reconsider its backing for TETRA. He argues that TETRA carries proven health risks while the rival TETRAPOL technology is close to harmless. He also said that the proprietary nature of TETRA could have a detrimental effect on competition: suppliers do not like an open system, so this way the TETRA clique can set prices. Would you like to comment on that?
(Mr Webb) The TETRAPOL technology operates in the same sort of frequency band as TETRA does, therefore one would suspect it would have very similar health effects. In terms of the ability to interoperate with it, we have had no requirement to do so as at the moment. We have looked at the technology. It is not as functionally rich as TETRA and therefore there are large amounts of functionality which would not interoperate. There are also problems in the way it handles signals to enable it to operate at all. The level of functionality which we could actually share would be very low.

258. Are calls still dropping off?
(Mr Parris) No, the call dropping which was referred to in an earlier question has been cleared.

259. Call dropping is not happening any more.
(Mr Parris) Correct.

260. May I ask about responsibility for this within government? The Home Office are responsible for the police. The Department for Transport, Local Government and the Regions are responsible for the Fire Service. Health are responsible for ambulances. The Cabinet Office are responsible for emergency planning and for joined-up government. The OGC is responsible for competition and procurement at the DTI. The Radio Agency with yourselves are responsible for the emergency spectrum. Who do you see as the main champion in all of this for your main project?
(Mr Webb) For our project it is the Home Office.

261. Not the Cabinet Office?
(Mr Webb) No, not the Cabinet Office. We are delivering a service solely to the Police Service.

262. You are not looking for help or sponsorship or support from the Cabinet Office?
(Mr Webb) We have had discussion through the Home Office with the Cabinet Office, the same as we have had discussions with other enterprises. As far as we are concerned we are as keen as everyone else to provide a far more joined up environment.

263. Do you think this project represents a good example of joined-up government?
(Mr Webb) Not at this present time, but it is a good step on the way to that in the sense that for the first time we have provided a joined-up service for the Police Service which is a major step forward.

Chairman

264. If the research you are undertaking led to a belief or suspicion that the technology could be a health hazard, what effect would that have on the contract?
(Mr Gieve) If there were evidence that this was damaging to health, then we would have to change it. First of all the police authorities as employers would have their obligations under health and safety. Secondly, O2 as suppliers of the technology have to meet all health standards, which they currently do. If research led us to change those health standards because of new science, then we would have to change the system.

265. With a potential loss of up to £2.9 billion.
(Mr Gieve) No. The cost would fall on who pulled the plug and in what circumstances. If international health standards changed, our first response would be with O2 to see whether we could not make the system work consistent with the new health standards. You have
to understand that the main danger which is thought to arise from mobile phones arises more with the existing analogue system than with a digital system like Airwave. Nonetheless, if science moves on and we set new health standards, we will have to negotiate some changes, not necessarily at public cost.

**Chairman:** Thank you very much, gentlemen, for appearing before us. This is a very important contract. The whole Committee recognises the need for radios to be improved but, as you have heard, members of the Committee do have some serious questions about whether the system is over-engineered, whether it provides value for money and interoperability with other emergency services. We are very grateful to you for the way in which you sought to answer our questions. Thank you very much. Order, order.
APPENDICES TO THE MINUTES OF EVIDENCE

APPENDIX 1

Supplementary memorandum submitted by the Home Office

Question 53: Calculation of risk costs?

As part of the work developing the Public Sector Comparator (PSC) a workshop was convened to assess the risks, led by Masons Communications (technical consultants to PITO) who were developing the PSC for the Police Information Technology Organisation (PITO). Experienced engineers from the Home Office and three forces supported by operational police officers attended the workshop. Each of the 17 risk areas identified either previously or during the workshop was placed into one of four risk categories. The categories covered financial, technical including system design, programme related and commercial risks. There was little factual information available that could be used to assist the workshop in quantifying risk in particular that relating to the deployment of TETRA technology due to its newness. The workshop therefore had to rely on its collective experience and judgement to estimate the probability of the risk happening and the associated cost. The costed risk estimates (product of risk probability and cost) were then profiled over the system roll and operational phases of the project. Risk consists of that arising as risk to capital during the build of Airwave and that to on-going operation and support of the Airwave service. The former was only applied to costings during the initial five years' roll-out.

The total Net Present Cost (NPC—a method of assessing a series of future payment by discounting them back to a single value in today’s money terms) of the risk profiled over the life of the project was estimated at £170 million, approximately 10% of the total cost of the PSC. A risk value of 10% for a technically advanced and complex project is considered reasonable.

Questions 68–73: What is the cost per radio under this deal?

Typical costs of radios, inclusive of generally required accessories such as carrying cases and battery chargers etc., are approximately £800. Prices are dependent on quantities and exact equipment requirements as in any other procurement and the handsets can be obtained for less than £800.

Deployment of handsets is dependent on the operational practices of different forces. In some forces they are shared by officers, in others they are personal issue. This is an operational decision for the force and not for Airwave.

Question 181: How many [Police] officers normally operate outwith their own force areas?

No data is centrally held by the Home Office, HM Inspector of Constabulary or the Public Order Branch of the Met (which co-ordinates mutual aid) to say what numbers or proportion of officers operate outside their force boundary. Examples of officers operating outside their force boundary are given below.

The British Transport Police and Ministry of Defence Police each provide policing for organisations which requires them to interoperate with other forces nationally.

Members of the National Crime Squad will routinely operate across force areas, as well as officers on specialist units (Mounted Branch, Diving Unit, Air Support Unit, motorcycle teams) who are “loaned” to other forces for special events (football matches, Commonwealth Games). The East Midlands Air Support Unit has an aircraft shared by Leicestershire, Northamptonshire and Warwickshire. Diplomatic Protection officers accompany their subjects wherever they go.

Non-specialist officers are likely to work outside their forces on mutual aid in cases of major incident such as the Miner’s Strike, the Brighton Bomb or the Lockerbie air crash. The latter occurred in Dumfries and Galloway, the smallest force in Scotland, who were heavily reliant on mutual aid (not just from adjacent forces but from many in England including the Met) to assist in an incident they were unable to resource.

Major incidents are not necessarily contained within a single force area. Most air crashes, for example, occur on landing or take off and many airports are near force boundaries. Heathrow airport is policed by the Met but adjoins Thames Valley police area. Gatwick Airport is surrounded on three sides by the Surrey police area. The last aircraft to crash there, in 1967, was an Ariana Boeing 727 which came down on approach in Surrey one mile away. In December 1994 an Air Algerie Boeing 737, on approach to Coventry airport in Warwickshire, crashed in the West Midlands police area. Both forces (and fire brigades and ambulance services) were involved in the incident. The Kegworth air crash occurred near Junction 24 on the M1 motorway near East Midlands airport, where the boundaries of the Leicestershire, Derbyshire and Nottinghamshire forces meet. All three were involved, as were their respective fire and ambulance services. A typical Major Incident exercise at Gatwick Airport might involve Sussex and Surrey Police, Surrey, West
Sussex, East Sussex and the Airport Fire Brigades, Surrey and Sussex Ambulance, Gatwick Airport Limited (GAL) staff and the Army.

Officers working in areas adjoining another force will routinely cross into the other force area and liaise with officers from that force. Motorway patrol officers may have no choice but to do so because of the limited number of motorway exits and routinely patrol on adjacent force areas. In case of hot pursuit of a suspect vehicle or persons, the pursuing officers will notify the force into whose area they are crossing. Should the suspects be armed, this is imperative, because only with the express authority of a Chief Officer of the host force may firearms be deployed.

The old force radio systems have always been locally based and work well so long as, in radio terms, the handset can ‘see’ the mast. Once contact is lost—during a pursuit, for example, which takes an officer away from his local base to a neighbouring division, that officer must change to another radio channel. A pursuit of 15 miles in the same force area might require four or five changes of channel and rely on the officer’s knowledge of which to use. The same officer using Airwave could remain on the same talkgroup whether the pursuit remained in force or entered another (or several others).

Airwave gives officers the ability to communicate effectively within and outside their force boundaries. Derbyshire Constabulary, for example, adjoins eight other forces. One of these is Leicestershire, which itself adjoins eight forces. For all of these forces to be able to communicate through digital technology, a compatible national system is required. A single system is cheaper than four or six incompatible systems pocketed around the country where communications equipment has to be stockpiled in the event of major incident or cross-border incident. There will be other savings. Special facilities provided for police communications, such as at the motorway control centre for the M25 situated in Surrey, will be rendered unnecessary when Airwave is installed in those forces.

Questions 216–221: What do you anticipate to be the total cash you would pay out over the 19 years?

The Airwave contract payments are spread over 15 years for each force starting at the Ready for Service date. There was a planned progressive roll out starting in 2001 and the total life of the programme, including the roll-out and decommissioning phases, will be 19 years. When the system is fully rolled out the total annual charge at 1999–2000 prices will be around £180 million per year for core and menu service charges. This comprises £146 million for the core service and an estimated £34 million for menu exclusive services. As forces have local discretion for the amount of optional menu exclusive service they procure, their contract value can only be an informed estimate. On this basis, the total value of contract payments over 15 years at 1999–2000 prices is £2.7 billion. O2 may have a more optimistic estimate of the revenue they will receive from menu services provided to forces and have published a total contract value figure of £2.9 billion.

The start up including the provision of radios from third party suppliers is at an additional estimated cost of £280 million.

The net present cost (NPC) of the contract is derived from the contract payments and applying the Treasury recommended discount factor of 6 per cent. The NPC of the contract (excluding radios) is £1.47 billion.

The contract includes a complex indexation formula which takes account of RPI and the Electrical & Optical Equipment Earning Index and protects the public sector against any unregulated change in prices.

Question 251: Health and Safety

Two notes on Health and Safety submitted by the Home Office and by Airwave mmO2 are provided at Annex A and Annex B respectively.

Annex A

HOME OFFICE NOTE

In May 2000, an Independent Expert Group on Mobile Phones published a report that gave an assessment of the current state of research into possible health risks from mobile phones.

The Home Office asked the National Radiological Protection Board (NRPB) to provide comprehensive advice on possible health implications for users of Airwave. The NRPB commissioned a review from their independent Advisory Group on Non-ionising Radiation (AGNIR). This was published on 31 July 2001.

The report concludes that:

“Although areas of uncertainty remain about the biological effects of low-level RF radiation in general, including modulated signals, current evidence suggests that it is unlikely that the special features of TETRA mobile terminals and repeaters poses a hazard to health”.

The Home Office has accepted the report and is taking forward all its recommendations for further research.
In November 2001, Mr Barry Trower wrote a report for the Police Federation on TETRA health and safety issues. The Home Office responded to the questions raised in the Trower report and is now awaiting the response of the Police Federation.

RESEARCH PROGRAMME

A large part of the programme is about the possible biological effects of low intensity TETRA signal. The NRPB recommendations are very thorough and cover all aspects of the problem, from basic cell biology to possible effects on high level brain activity. The rest of the programme includes detailed assessment of the energy transmitted by TETRA base stations and terminals.

Most of the research is long term and requires a rigorous scientific programme. If at any stage the research indicates a possible hazard to health, the Home Office will immediately make the results available and take appropriate action.

Results already obtained by the Home Office indicate that the specific absorption rates of currently used Airwave terminals are well within international safety guidelines.

The Home Office have commissioned the Defence Science and Technology Laboratories (Dstl) to undertake an experimental programme on the possible biological effects of TETRA technology. The first results are expected in April 2002.

The Home Office has also commissioned Microwave Consultants Limited to make detailed assessments of body-worn Airwave equipment.

Further work within the framework of the Mobile Telecommunications Health Research programme is currently under discussion.

Annex B

AIRWAVE MMO2 NOTE

BACKGROUND

Airwave is a national system covering England, Scotland and Wales that will provide a modern, dedicated and fully integrated emergency communications system for the police. Once the infrastructure is in place across the country, the service has the potential to be extended to include the other emergency services—particularly fire and ambulance—to ensure joined up communication amongst all emergency services.

Airwave is not a commercial communications system. Its whole purpose is to improve the safety of the general public and, ultimately, save lives. Airwave has a duty to ensure that comprehensive coverage is achieved throughout the geography covered by the police force.

Airwave must site base stations (also called transmitters) in places that will deliver the coverage the police have said they require. There must not be any significant “dead spots” in radio coverage as these could put at risk not only individual police officers but also members of the public.

HEALTH AND SAFETY

As a responsible and ethical company, health and safety issues are very important to Airwave mmO2 Ltd. It is appreciated that a lot of concern has been expressed about potential health risks, often based on incomplete facts or opinion.

It is very important that people are presented with the full, unbiased and independent facts, not just selective or emotive views.

What should be understood is that the acknowledged experts in this field—internationally as well as nationally—have reviewed the whole body of scientific evidence on health and safety of wireless technologies which emit radio frequency signals and they keep this continually under review. On the basis of that evidence they have set safety standards—on a precautionary basis with substantial safety margins built in—designed to protect the general public. These standards also take into account the fact that there is still research ongoing in this field.

Airwave’s position is that it is for the relevant expert authorities, not the industry or individuals, to set the standards. Specifically, this is the task of the UK’s National Radiological Protection Board (NRPB) and the International Commission on Non-Ionising Radiation Protection (ICNIRP).

Both NRPB and ICNIRP set guidelines for radio emissions from aerials and handsets that are based on the precautionary principle. Independent testing of Airwave aerials and handsets shows that our system falls well within these guidelines—typically hundreds or even thousands of times below the thresholds.

The UK’s Radio Communications Agency—acknowledged experts in measuring radio frequency emissions—recently published a report on emissions from mobile telephone masts having tested at 100 sites.
across the country, where masts were located close to schools. This showed that all the transmitters were emitting at 100s and often 1,000s of times below the ICNIRP guidelines.

So to summarise:

— it is, rightly, not the job of the industry or individuals to set the standards;

— this is the job of the relevant, independent, expert authorities (NRPB and ICNRP) to set the guidelines;

— these are based on all relevant scientific evidence (World Health Organisation has over 600 studies on RF). Guidelines are set following a review of that evidence and using a precautionary approach. The guidelines have recently been reaffirmed following a major review; and

— over and above this, Airwave base stations typically operate at hundreds, if not thousands of times below these precautionary guidelines.

It might also be appropriate to correct some of the misconceptions that have been circulating in the media and elsewhere about Airwave.

First, Airwave base stations do not pulse. The latest research from the NRPB confirms that:

". . .TETRA base station signals are continuous and not pulsed over time intervals that could cause power modulation . . ."

Second, the signals from TETRA base stations are not more powerful than those of ordinary mobile telecommunications base stations. In fact, Airwave base station signals have a lower power output than GSM, which is the standard for most mobile phone base stations.

Airwave recently commissioned independent testing of telecommunications masts at a single site in Lancashire where there is a TETRA mast alongside an ordinary mobile phone mast, a TV transmitter and an FM radio transmitter. Measurements were taken of emissions from these masts at various distances from the base stations and these show that the TETRA transmitter has lower emission levels than any of the others.

Third, TETRA base stations do not transmit at frequencies similar to those used by the human brain. Some human brain frequencies operate at around 16Hz and the Stewart report on mobile phones expressed disquiet about the potential effects of AMPLITUDE MODULATED signals at around this frequency.

But Airwave base stations transmit at between 390 and 395 MGHz, nowhere near the frequency of the human brain, and as the NRPB has confirmed they are not amplitude modulated.

Fourth, TETRA is also not an untried and untested technology. Systems using the TETRA standard are already operated in the UK by Dolphin for commercial purposes, used by the police force in Jersey for the last six years, and have been in use in Europe and many other parts of the world for several years.

There has been extensive research into the effects of radio emissions over many years and the NRPB’s Advisory Committee on Non-Ionising Radiation published a specific report on TETRA in November of last year that stated:

“The exposures of the general public, at normally accessible positions in the vicinity of TETRA base stations, will be small fractions of the exposure guidelines and will be comparable with exposures due to the ambient field strengths arising from the operation of other telecommunications systems.”

In other words, the experts don’t see any difference between TETRA base stations and those of ordinary mobile operators.

Finally, it might be worth referring briefly to some of the views expressed about the TETRA standard—by people such as Barrie Trower who has received some publicity on the subject.

Mr Trower’s report contained no new research or evidence about Airwave or the TETRA system. He simply reviewed a number of previous studies that had raised health concerns about the TETRA standard. This material is well-known to the experts at NRPB and ICNIRP and it has either proved impossible to replicate in subsequent studies, or the methodology of the studies themselves has been called into question.

In conclusion, we need to respect the fact that people have concerns and it is right that these are openly acknowledged and addressed. But equally, it is important that people are given a fair and balanced view of the issues involved and that they understand the very real public safety benefits that the Airwave service brings. The tragic events of 11 September and—closer to home—the tragedies of recent years at Lockerbie, Hungerford, Hillsborough, Kings Cross and the rest all point to the need to ensure our emergency services have the communications services they deserve—fit for meeting the demands of the 21st century.
APPENDIX 2

Supplementary memorandum submitted by the Home Office

AIRWAVE BUSINESS BENEFITS

A number of organisations have set out to define how the process of benefits management should be approached and in defining the Airwave business benefit approach, such information has been taken into account.


Work on benefits realisation completed by certain forces in addition to the preliminary work carried out by the earlier PSRCP Business Benefits Sub-group has also informed the Airwave business benefit approach. Potential benefits have been identified from:

- PSRCP Business Benefits Analysis.

A Working Group was established in August 1997 to investigate and report on the potential benefits of the PSRC Service identified in the original Strategy and Business Case. The Group was asked to identify real and potential benefits and risks arising from the functionality on offer. The following benefits were included in the report:

- Multimedia communications device (telephony);
- Point to point radio contact;
- Mobile data (PNC access);
- Mobile data (other database access);
- Activity based costings (AVLS, MDT);
- Remote briefing;
- Officer safety;
- Encryption;
- Status update;
- Flexibility;
- Future technology;
- Information availability;
- Interoperability;
- Short text messaging;
- PSRCP Business Benefit Analysis (2).

Further analysis was completed in 1998. In contrast to the initial work, a phased, stepping stone approach to higher level, more strategic issues was adopted. The report made assumptions about what might be achievable in the immediate future, in the medium term, and then in the longer term. Three case studies were used as the vehicles to study and explain the issues raised.

The first of the papers concentrated on time spent by operational officers in police stations. Data was collected in Thames Valley Police, and analysed to show what proportion of an officer’s time was currently spent in police stations. The data was sub-divided to show which of the tasks undertaken in police stations would be impacted upon by PSRCP, and those tasks which would not.

Paper two discussed the issue of joint or shared control rooms or communication centres. TETRA technology would enable sharing of control functions far more easily than the current technology. This functionality, coupled with CAD (computer aided despatch) systems, and integration of radio and telephony, means that organisations can go as far down this route as they wish, whether that be merely sharing the same accommodation, or full integration of roles. The important point is that all options will be available, and can be considered.

Paper three discussed vehicle procedures. The report divided vehicle procedures into three areas, automatic cameras, vehicle-related criminal intelligence and the transmission of vehicle and driver details via mobile data. The paper took the most futuristic approach, and speculated on how police and other agencies’ actions might be different in the future, with a national communications infrastructure, and common systems designed under the National Strategy for Police Information Systems (NSPIS). It was acknowledged in the paper that PSRCP would not necessarily bring about the changes. It would require strong management and vision to reap the full benefits that were presented.

The paper concludes “... perhaps the two most important attractions of PSRCS are that it provides a level of flexibility to do things that may not otherwise be possible, and to do significantly more of the things that police forces do now, and are of proven value.”
— Benefits documentation provided by police forces including: Cumbria, Derbyshire, Essex, Suffolk, Thames Valley, West Mercia and the Metropolitan Police.

The Cleveland, Gloucestershire and Wiltshire Constabularies have each established a project to look at the sharing of control room and despatch services with the Fire and Ambulance Services. Whilst these projects have not been brought about as a direct result of Airwave, where relevant they will be considered as part of the Airwave business benefits work programme.

Project information is also being shared with organisations which have a common interest, such as the Home Office task force headed by Sir David O’Dowd which is examining measures that will increase the time spent on patrol by the police.

The Steering Group overseeing PITO’s benefits work represents the various national stakeholders ie the Treasury, Home Office, Association of Police Authorities (APA), Association of Chief Police Officers (ACPO), Association of Chief Police Officers in Scotland (ACPOS), Her Majesty’s Inspector of Constabulary (HMIC), the National Audit Office (NAO), the Superintendents Association, Unison and PITO. The Steering Group has responsibility for project direction and strategy and is responsible for final sign-off of project deliverables.

There are two working groups consisting of representatives from a cross section of police forces:
— Business Benefits Group which has agreed a set of high level or strategic business objectives derived from Ministerial, ACPO and force objectives and has identified potential benefits from Airwave technology enablers.
— Operational Guidance Group which is developing interim guidance on operational procedures which will be subject to review by the Police User Group (PUG) prior to final sign-off.

Two Business Benefit consultants, one from Cranfield University and one with experience in other government departments have confirmed that the project approach is sound and have not recommended any additional measures.

The project has considered the whole range of benefits available to users from localised benefits achievable within a specific, dedicated area such as the force control room; through to national benefits achievable across force boundaries and through working with other emergency services.

It has examined the technology enablers to determine what benefits are achievable from the core service and from the various Airwave applications, either individually or jointly. At the same time, the business drivers and organisational objectives have been considered in order to determine how these might best be achieved with the available technology.

Finally, since Airwave is primarily a carrier for other systems and services and has the potential to maximise benefits through the provision of remote access to other applications, the project has considered those benefits that might be accrued through the delivery of remote access to “linked systems”.

It will not be possible to measure benefits in every force, therefore forces have been invited to participate and 11–15 will be selected as a representative sample. The Superintendents Association has offered assistance in selecting forces as they are currently engaged in work of a similar nature. Baseline values and measurement methodologies will be recorded to ensure that future measurements compare like with like. Target levels will be set and agreed with the force in order to reflect anticipated achievement. Progress made in realising benefits can then be compared to the original target as well as the baseline. Results will also be used to support forces in bringing about change by sharing information and experience and will hopefully improve the future performance of Airwave. Where possible, metrics for the measurement of benefits will be based on existing national and local Best Value, Key Performance Indicators and other force statistics including:
— BVPIs, as captured by HMI;
— Data recorded on HR system;
— Data recorded on force Command & Control system; and
— Telephone call logging systems;
— Project representatives will capture data from a representative cross section of users via activity analysis, user satisfaction surveys and interviews;
— The level of improvement of benefits in different forces will be compared to identify trends and recommend where practices could be adapted to take increased advantage of Airwave.

The Airwave team will visit participating forces both before and after Airwave implementation to carry out a detailed assessment of their working practices and procedures. The team will examine how the recommended business changes might affect operations and performance and report conclusions, making further recommendations to maximise benefits. Once recommended changes have been successfully piloted, the Best Practice guidance will be updated and will be published.

The Business Benefits database has been created to capture the data on benefits and to track and generate reports on measurement and achievement. A record will be maintained for every benefit identified, providing profile details such as the areas of business affected, the actions and operational changes required to achieve them, the person or organisation responsible for making the benefit happen and external factors likely to
impact the achievement of benefits. Data from the representative sample of forces will be inserted. The
database may be used as a tool to affect benefit realisation in the remaining forces.

The process of Airwave Benefits Realisation project will be reviewed and evaluated. Lessons can be learned
that provide useful information for the management of future projects and the integration of benefits
realisation into other programme or project management processes.

APPENDIX 3

Supplementary memorandum submitted by the Office of the Deputy Prime Minister

EVIDENCE SESSION 22 APRIL 2002: AIRWAVE

In the note of 20 June John Gieve was asked for a note updating the position on the procurement of a radio
communications systems for the Fire Service in England and Wales.

My office agreed that we would reply, given ODPM’s responsibility for the Fire Service, and I am pleased
to attach a note meeting the Committee’s request.

We have consulted the Home Office and the Cabinet Office in preparing the attached response.

DEVELOPMENTS ON FIRE SERVICE RADIO PROCUREMENT

1. On 7 May 2002 the then Fire Service Minister, Alan Whitehead, announced the Government’s intention
to procure a national radio communications system for the Fire Service in England and Wales. He made clear
that the Government would fund a new national competition to supply the equipment and that work on that
would start immediately.

2. This decision followed a detailed evaluation of, and means of achieving, the level of interoperability
between emergency services’ communications systems that was necessary to be able to deal with events of the
scale of 11 September. In November 2001, the Home Secretary had commissioned the Civil Contingencies
Secretariat to research the options. That was done via an interdepartmental group of officials, including the
Office of Government Commerce, which reported to the Civil Contingencies Committee (CCC) in February
2002 on the strong case for interoperability.

3. The Presidents of the professional associations representing the Chief Officers of each service
subsequently agreed a joint requirement for communications interoperability and resilience between the
police, fire and emergency ambulance services. The associations’ agreement requires both same-service and
multi-service interoperability between wide-area radio systems. It does not extend to fire service at-incident
communications for which there are sound operational safety reasons. A further Ministerial meeting held in
April took the decision to adopt a national procurement strategy for the fire service in preference to the
previous regionally-based process, in the light of the Chief Officers agreement and professional advice on
operational, technical and procurement issues.

4. A new specification reflecting the enhanced requirement for interoperability is therefore in preparation.
It will be drawn up in terms of a functional rather than a technical requirement—with the contractor
responsible for achieving end-to-end functionality and performance. As far as is reasonably practicable, the
specification will build on the work done in relation to the previous regional procurement exercise. The
project will be taken forward by the existing project team, appropriately strengthened and restructured.

5. Preliminary discussions have already begun with fire authorities, via the Local Government Association
(LGA), the Chief and Assistant Chief Fire Officers’ Association (CACFOA) and the Fire Brigades Union
(FBU), on how best to implement the new strategy. ODPM will send a formal circular to fire authorities
explaining the change in strategy and how the national procurement will be taken forward.

6. The current outline timetable for the ‘Firelink’ procurement is:
   — Notice in the Official Journal of the European Communities—by December 2002;
   — Contract award—by April 2004;
   — Implementation starts—2005;
   — Implementation complete—by December 2007.

7. The project team is carrying out a risk assessment in the context of maintaining existing equipment and
considering options available for providing interoperability in the interim; and has briefed potential suppliers
on the background to the strategic change of focus.

Mavis McDonald CB
Permanent Secretary
Office of the Deputy Prime Minister

1 July 2002
<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Publication Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Managing Risk in Government Departments (HC 336)</td>
<td>23/11/01</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5393)</td>
<td>14/02/02</td>
</tr>
<tr>
<td>2</td>
<td>Improving Construction Performance (HC 337)</td>
<td>05/12/01</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5393)</td>
<td>14/02/02</td>
</tr>
<tr>
<td>3</td>
<td>The Cancellation of the Benefits Payment Card Project (HC 358)</td>
<td>06/12/01</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5393)</td>
<td>14/02/02</td>
</tr>
<tr>
<td>4</td>
<td>The Renegotiation of the PFI-type Deal for the Royal Armouries Museum in Leeds (HC 359)</td>
<td>12/12/01</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5450)</td>
<td>28/02/02</td>
</tr>
<tr>
<td>5</td>
<td>Ministry of Defence: Major Projects Report 2000 (HC 368)</td>
<td>28/11/01</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5450)</td>
<td>28/02/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5450)</td>
<td>28/02/02</td>
</tr>
<tr>
<td>7</td>
<td>Sale of Part of the UK Gold Reserves (HC 396)</td>
<td>19/12/01</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5470)</td>
<td>14/03/02</td>
</tr>
<tr>
<td>8</td>
<td>Office of Water Services (OFWAT): Leakage and Water Efficiency (HC 397)</td>
<td>04/01/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5470)</td>
<td>14/03/02</td>
</tr>
<tr>
<td>9</td>
<td>Tackling Obesity in England (HC 421)</td>
<td>16/01/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5477)</td>
<td>20/03/02</td>
</tr>
<tr>
<td>10</td>
<td>The Acquisition of German Parcel (HC 422)</td>
<td>11/01/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5477)</td>
<td>20/03/02</td>
</tr>
<tr>
<td>11</td>
<td>Office of Gas and Electricity Markets: Giving Domestic Customers a Choice of Electricity Supplier (HC 446)</td>
<td>17/01/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5481)</td>
<td>09/05/02</td>
</tr>
<tr>
<td>12</td>
<td>The Radiocommunications Agency’s Joint Venture with CMG (HC 447)</td>
<td>23/01/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5470)</td>
<td>14/03/02</td>
</tr>
<tr>
<td>13</td>
<td>Regulating Housing Associations’ Management of Financial Risk (HC 470)</td>
<td>09/01/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5470)</td>
<td>14/03/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5600) (Addendum)</td>
<td>03/10/02</td>
</tr>
<tr>
<td></td>
<td>Title</td>
<td>Date</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>14</td>
<td>The Millennium Dome (HC 516)</td>
<td>01/02/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5487)</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>How English Further Education Colleges can Improve Student Performance (HC 528)</td>
<td>07/02/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5487)</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Access to the Victoria and Albert Museum (HC 559)</td>
<td>14/02/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5487)</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Ministry of Defence: Maximising the Benefits of Defence Equipment Co-operation (HC 586)</td>
<td>15/02/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5487)</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Inland Flood Defence (HC 587)</td>
<td>01/03/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5512)</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Ship Surveys and Inspections (HC 608)</td>
<td>15/03/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5512)</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Educating and Training the Future Health Professional Workforce for England (HC 609)</td>
<td>08/03/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5512)</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Better Value for Money from Professional Services (HC 309)</td>
<td>14/03/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5512)</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>The Channel Tunnel Rail Link (HC 630)</td>
<td>21/03/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5512)</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Report on Inland Revenue Appropriation Account (HC 631)</td>
<td>22/03/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5524)</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Ministry of Defence: The Risk of Fraud in Property Management (HC 647)</td>
<td>20/03/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5512)</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Excess Votes 2000–2001 (HC 648)</td>
<td>07/03/02</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Better Regulation: Making Good Use of Regulatory Impact Assessments (HC 682)</td>
<td>12/04/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5524)</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>The Medical Assessment of Incapacity and Disability Benefits (HC 683)</td>
<td>10/04/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5524)</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Better Public Services Through Joint Working (HC 471)</td>
<td>18/04/02</td>
</tr>
<tr>
<td></td>
<td>Government Reply (Cm 5524)</td>
<td></td>
</tr>
</tbody>
</table>
29 Non-competitive Procurement in the Ministry of Defence (HC 370) ........ 19/04/02
Government Reply (Cm 5524) ........................................ 20/06/02

30 The Auction of Radio Spectrum for the Third Generation of Mobile
Telephones (HC 436) .................................................. 26/04/02
Government Reply (Cm 5524) ........................................ 20/06/02

31 Postcomm: Opening the Post (HC 632) ........................... 01/05/02
Government Reply (Cm 5549) ........................................ 16/07/02

32 The Implementation of the National Probation Service Information Systems
Strategy (HC 357) ..................................................... 03/05/02
Government Reply (Cm 5549) ........................................ 16/07/02

33 Income Tax Self Assessment (HC 296) ............................ 09/05/02
Government Reply (Cm 5549) ........................................ 16/07/02

34 Policy Development: Improving Air Quality (HC 560) ............ 24/05/02
Government Reply (Cm 5549) ........................................ 16/07/02

35 Losses to the Revenue from Frauds on Alcohol Duty (HC 331) .... 17/05/02
Government Reply (Cm 5549) ........................................ 16/07/02

36 Progress on Resource Accounting (HC 349) ....................... 19/06/02
Government Reply (Cm 5600) ........................................ 03/10/02

37 Handling Clinical Negligence Claims in England (HC 280) ...... 13/06/02
Government Reply (Cm 5600) ........................................ 03/10/02

38 NIRS 2: Contract Extension (HC 423) ............................. 07/08/02
Government Reply (Cm 5612) ........................................ 17/10/02

39 Giving Confidently: The Role of the Charity Commission in Regulating
Charities (HC 412) ..................................................... 03/07/02
Government Reply (Cm 5600) ........................................ 03/10/02

40 NHS Direct in England (HC 610) ................................... 10/07/02
Government Reply (Cm 5600) ........................................ 03/10/02

41 Ministry of Defence: Major Projects Report 2001 (HC 448) ...... 04/07/02
Government Reply (Cm 5600) ........................................ 03/10/02

42 Managing the Relationship to Secure a Professional Partnership in PFI
Projects (HC 460) ..................................................... 11/07/02
Government Reply (Cm 5600) ........................................ 03/10/02

43 The Use of Funding Competitions in PFI Projects: The Treasury Building
(HC 398) ............................................................... 17/07/02
44 The Misuse and Smuggling of Hydrocarbon Oils (HC 649) .......................... 18/07/02
   Government Reply (Cm 5612) .................................................. 17/10/02

45 Inpatient and Outpatient Waiting in the NHS (HC 376) ........................ 18/09/02

46 Inappropriate Adjustments to NHS Waiting Lists (HC 517) ..................... 18/09/02

47 The Landfill Tax Credit Scheme (HC 338) .................................... 25/07/02
   Government Reply (Cm 5612) .................................................. 17/10/02

48 Department for International Development: Performance Management—
   Helping to Reduce World Poverty (HC 793) ................................ 01/08/02
   Government Reply (Cm 5612) .................................................. 17/10/02

49 Ensuring that Policies Deliver Value for Money (HC 541) ....................... 31/07/02
   Government Reply (Cm 5612) .................................................. 17/10/02

50 Pipes and Wires (HC 831) ....................................................... 08/08/02
   Government Reply (Cm 5636) .................................................. 31/10/02

51 Agricultural fraud: The case of Joseph Bowden (HC 684) ..................... 22/08/02
   Government Reply (Cm 5636) .................................................. 31/10/02

52 e-Revenue (HC 707) ............................................................... 29/08/02
   Government Reply (Cm 5636) .................................................. 31/10/02

53 Reducing Prisoner Reoffending (HC 619) ...................................... 05/09/02

54 Improving Public Services through e-Government (HC 845) .................... 28/08/02
   Government Reply (Cm 5636) .................................................. 31/10/02

55 Fraud and Error in Income Support (HC 595) .................................. 11/09/02

56 Ministry of Defence: Combat Identification (HC 759) ......................... 21/08/02
   Government Reply (Cm 5636) .................................................. 31/10/02

57 The Operation and Wind-up of Teesside Development Corporation (HC 675) 14/08/02
   Government Reply (Cm 5636) .................................................. 31/10/02

58 Improving Student Achievement and Widening Participation in Higher
   Education in England (HC 588) ............................................... 12/09/02

59 Delivering the Commercialisation of Public Sector Science (HC 689) .......... 15/08/02
   Government Reply (Cm 5636) .................................................. 31/10/02

60 Royal Travel by Air and Rail (HC 529) ....................................... 04/09/02

61 The Management of Surplus Property by Trusts in the NHS in England
   (HC 765) ................................................................. 19/09/02
62 The New Deal for young people (HC 700) ............................. 09/10/02
63 Construction of Portcullis House, the new Parliamentary building (HC 851) . 24/07/02
64 Public Private Partnerships: Airwave (HC 783) ............................. 28/11/02