

*Return to an Address of the Honourable the House of Commons  
dated 14th July 2004  
for the*

**Review of Intelligence  
on  
Weapons of Mass Destruction**

**Report of a Committee  
of  
Privy Counsellors**

**Chairman:**

**The Rt Hon The Lord Butler of Brockwell KG GCB CVO**

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The Rt Hon The Lord Butler of Brockwell KG GCB CVO  
(Chairman)

The Rt Hon Sir John Chilcot GCB

The Rt Hon Field Marshal The Lord Inge KG GCB DL

The Rt Hon Michael Mates MP

The Rt Hon Ann Taylor MP



# TABLE OF CONTENTS

	Paragraphs	Pages
<b>MEMBERS OF THE COMMITTEE</b>		i
<b>TABLE OF CONTENTS</b>		iii
<b>TERMINOLOGY AND GLOSSARY</b>		ix
<b>INTRODUCTION</b>		1
<b>Our Terms of Reference</b>	1	1
<b>Our Work</b>	2-7	1
<b>Our Approach</b>	8-12	3
<b>Definitions and Usage</b>	13	3
WMD	14	3
CBW	15-16	4
CBRN	17	4
<b>Our Thanks</b>	18-19	4
<b>Chapter 1 THE NATURE AND USE OF INTELLIGENCE</b>		7
<b>1.1 Introduction</b>	20-22	7
<b>1.2 Collection</b>	23-26	8
<b>1.3 Validation</b>	27-29	9
<b>1.4 Analysis</b>	30-32	10
<b>1.5 Assessment</b>	33-40	10
<b>1.6 The Joint Intelligence Committee</b>	41-46	12
<b>1.7 The Limitations of Intelligence</b>	47-52	14
<b>1.8 Risks to Good Assessment</b>	53-58	15
<b>1.9 The Use of Intelligence</b>	59	16
<b>Chapter 2 COUNTRIES OF CONCERN OTHER THAN IRAQ AND GLOBAL TRADE</b>		17
<b>2.1 Introduction</b>	60-63	17
<b>2.2 AQ Khan</b>		17
Introduction	64	17
What Was Known	65-72	18
Validation	73	19
Conclusions	74-75	19
<b>2.3 Libya</b>		20
Introduction	76-78	20
What Was Known	79-80	20
Use of the Intelligence	81-82	21
Validation	83	21
Conclusions	84	22

	<b>Paragraphs</b>	<b>Pages</b>
<b>2.4 Iran</b>		22
Introduction	85-87	22
What Was Known	88-92	22
Validation	93-94	23
Conclusions	95-96	24
<b>2.5 North Korea</b>		24
Introduction	97-98	24
What Was Known	99-102	25
Validation	103-104	25
Conclusions	105-106	26
<b>2.6 General Conclusions</b>	107-109	26
<b>Chapter 3 TERRORISM</b>		29
<b>3.1 Scope</b>	110	29
<b>3.2 The Period up to 1995</b>	111-114	29
<b>3.3 1995-1997</b>	115-116	31
<b>3.4 1998-1999</b>	117-121	31
<b>3.5 2000-2001</b>	122-124	33
<b>3.6 The Aftermath of 9/11</b>	125-127	34
<b>3.7 Intelligence on UBL's Capabilities and its Validation</b>	128	35
Nuclear	129	35
Chemical	130	35
Biological	131-132	35
<b>3.8 Intelligence Responses to International Terrorism</b>	133-136	36
<b>Chapter 4 COUNTER-PROLIFERATION MACHINERY</b>		37
<b>4.1 Introduction</b>	137	37
<b>4.2 Departmental Responsibilities</b>	138-142	37
<b>4.3 Co-ordination</b>	143-147	37
<b>4.4 The Role of Intelligence</b>	148-150	38
<b>Chapter 5 IRAQ</b>		41
<b>5.1 Introduction</b>	151-154	41
<b>5.2 1990-1998</b>	155	42
Iraq's Nuclear Weapons Programme	156-171	42
Iraq's Chemical Weapons Programme	172-182	45
Iraq's Biological Weapons Programme	183-189	48
Iraq's Ballistic Missile Programme	190-206	49
Summary	207-209	52
<b>5.3 1998-March 2002</b>		53
The Policy Context	210-217	53
Iraq's Nuclear Weapons Programme	218-225	55

	<b>Paragraphs</b>	<b>Pages</b>
Iraq's Chemical Weapons Programme	226-235	56
Iraq's Biological Weapons Programme	236-245	58
Iraq's Ballistic Missile Programme	246-254	60
Summary	255-258	63
<b>5.4 March-September 2002</b>		<b>64</b>
The Policy Context	259-269	64
Iraq's Prohibited Programmes	270-281	67
Policy Development, April-August 2002	282-288	70
JIC Assessments, August-September 2002	289-307	71
<b>5.5 The Government's Dossier of September 2002</b>		<b>76</b>
Introduction	308-312	76
The Genesis of the Dossier	313-319	77
Presenting Intelligence to the Public	320-327	78
The Intelligence Behind the Dossier	328-332	79
The Accuracy of the Dossier	333-341	82
Lessons for the Future	342	87
<b>5.6 September 2002-March 2003</b>		<b>87</b>
The Scope of JIC Assessments	343-345	87
Iraqi Capabilities	346-351	87
Deception and Concealment	352-354	89
Reliability of Human Intelligence Reports	355	89
Use of the Intelligence	356-364	89
Summary	365	92
<b>5.7 The Role of Intelligence in Assessing the Legality of the War</b>	366-387	<b>93</b>
<b>5.8 What Has Been Found in Iraq Since the War</b>		<b>97</b>
Introduction	388-392	97
What the Iraq Survey Group has Found	393-396	98
Conclusions	397	99
<b>5.9 Validation of Human Intelligence Sources</b>		<b>99</b>
Introduction	398	99
Context	399-401	99
SIS Main Sources	402-405	100
Liaison Service Sources	406-409	101
Summary of Main Sources	410	101
Other Sources	411-412	102
SIS Validation Procedures	413-423	102
<b>5.10 Conclusions on Iraq</b>		<b>104</b>
The Policy Context	424-432	104
The Sources of Intelligence	433-445	107
Assessment	446-448	109
The Treatment of Intelligence Material	449	110

	<b>Paragraphs</b>	<b>Pages</b>
	The Effect of Departmental Policy Agendas	450 110
	Access to Technical and Other Expertise	451-452 110
	Quality of JIC Assessments	453-459 111
	The Use of Intelligence	113
	The Government's Dossiers	460-469 113
	Intelligence and the Legality of the Use of Military Force	470-472 115
	Validation of the Intelligence	473-474 116
<b>Chapter 6</b>	<b>IRAQ: SPECIFIC ISSUES</b>	119
6.1	<b>Introduction</b>	475 119
6.2	<b>Links between Al Qaida and the Iraqi Regime</b>	476 119
	The 'Poison Cell' in Kurdish Northern Iraq	477-480 119
	Co-operation between the Iraqi Regime and Al'Qaida	481-484 119
6.3	<b>Operation Mass Appeal</b>	485-489 120
6.4	<b>Uranium from Africa</b>	490-503 121
6.5	<b>The 45-Minute Claim</b>	504-512 125
6.6	<b>Mobile Biological Weapons Laboratories</b>	513 127
	Intelligence on Mobile Biological Agent Production Facilities	514-523 127
	Validation	524-527 129
	Mobile Facilities Discovered Post-War	528-530 130
6.7	<b>Aluminium Tubes</b>	531 130
	Background	532-533 130
	The Emerging Intelligence Picture	534-545 131
6.8	<b>Plague and Dusty Mustard</b>	134
	Plague	546-559 134
	Dusty Mustard	560-565 136
6.9	<b>Dr Jones's Dissent</b>	566-568 137
	Use of the Available Intelligence Material	569-572 137
	The Handling of Intelligence	573-578 138
6.10	<b>Oil Supplies</b>	579 139
<b>Chapter 7</b>	<b>CONCLUSIONS ON BROADER ISSUES</b>	141
7.1	<b>General Conclusions About Intelligence and its Use</b>	580 141
	Other Cases	581-582 141
	International Co-operation	583-584 141
	Co-ordination of Counter-Proliferation Activity	585 142
7.2	<b>Intelligence Machinery</b>	142
	The Defence Intelligence Staff	586-590 142
	The Joint Intelligence Committee	591-597 143
	The Assessments Staff	598-601 144
7.3	<b>Intelligence Assessments</b>	145
	The Language of JIC Assessments	602-604 145
	JIC Assessments	605 146
7.4	<b>Machinery of Government</b>	606-611 146

	<b>Paragraphs</b>	<b>Pages</b>
<b>Chapter 8</b>	<b>SUMMARY OF CONCLUSIONS</b>	149
<b>Chapter 2</b>	<b>Countries of Concern other than Iraq and Global Trade</b>	1-2 149
<b>Chapter 3</b>	<b>Terrorism</b>	3-5 149
<b>Chapter 4</b>	<b>Counter-Proliferation Machinery</b>	6 150
<b>Chapter 5</b>	<b>Iraq</b>	150
	The Policy Context	7-12 150
	The Sources of Intelligence	13-19 151
	Assessment	20-29 152
	The Use of Intelligence	30-40 153
	Validation of the Intelligence	41 155
<b>Chapter 6</b>	<b>Iraq: Specific Issues</b>	156
	Links between Al Qaida and the Iraqi Regime	42-43 156
	Operation Mass Appeal	44 156
	Uranium from Africa	45 156
	The 45-Minute Claim	46 156
	Mobile Biological Weapons Laboratories	47 157
	Aluminium Tubes	48 157
	Plague and Dusty Mustard	49-52 157
	Dr Jones's Dissent	53-55 158
	Oil Supplies	56 158
<b>Chapter 7</b>	<b>Conclusions on Broader Issues</b>	158
	General Conclusions About Intelligence and its Use	57 158
	Co-ordination of Counter-Proliferation Activity	58 158
	The Defence Intelligence Staff	59-61 158
	The Joint Intelligence Committee	62-63 159
	The Assessments Staff	64-65 159
	The Language of JIC Assessments	66 159
	Machinery of Government	67 160
<b>ANNEXES</b>		
A	List of Witnesses	161
B	Intelligence Assessment and Presentation: From March to September 2002	163
C	Iraq: Military Campaign Objectives	177
D	Foreign Secretary's Letter of 17 March 2003	181



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## TERMINOLOGY

### 1. We use the following terms in this report:

Munitions	Projectiles, bombs, warheads or dispensing systems.
Weapons	Munitions and their delivery systems.
Chemical/Biological Agent	The non-explosive fill for chemical/biological munitions.
Programme	Means that people and resources are being allocated under a management structure for either the research and development of a WMD capability or the production of munitions. It does not necessarily mean that WMD munitions have been produced, as only when the capability has been developed can weapons be produced.
Capability	Means that a country has the technical knowledge, the production facilities and the necessary raw materials to: a) produce chemical and/or biological agents and weaponise them; and/or b) produce a nuclear device and weaponise it. Having a WMD capability means that chemical, biological and/or nuclear munitions could be produced if required. It does not mean that they have been produced.

## GLOSSARY

Ababil-100	Solid-propellant short-range (c. 150 km) Iraqi ballistic missile
Aflatoxin	A fungal toxin used as a BW agent
Al Abbas	900-km-range Iraqi development of the Scud B (see below) missile; not taken beyond the development stage
Al Hussein	650-km-range Iraqi development of the Scud B (see below) missile; several hundreds were fired during the Iran/Iraq war and the first Gulf war
Al Qaida	Literally translated, it means 'The Base'. Founded by Usama bin Laden, it is now a loose network of Islamist extremist groups
Al Samoud	Iraqi development of Soviet SA2 surface-to-air missile as a short-range surface-to-surface missile (150 km range, but Al Samoud 2 was being developed to attain significantly longer range)
Ansar al Islam	Literally, Supporters of Islam: an Islamist extremist group based in northern Iraq
Anthrax	A disease caused by the bacterium <i>Bacillus Anthracis</i> : used as a BW agent
BCW	See CBW
Botulinum toxin	A toxin used as a BW agent
BTWC	Biological and Toxin Weapons Convention
BW	Biological Weapons (or Biological Warfare)
CB	Chemical and Biological
CBR	Chemical, Biological and Radiological
CBRN	Chemical, Biological, Radiological and Nuclear
CBW	Chemical and Biological Weapons (sometimes "BCW")
Centrifuge	A piece of equipment containing a rotating device used to separate solid or liquid particles of different densities by spinning them at high speed in a tube.

	Many hundreds or thousands of centrifuges are connected in 'cascades' to enrich uranium
CIA	Central Intelligence Agency, US
CIG	Current Intelligence Group, UK
Clostridium perfringens	A BW agent
CPC	Counter Proliferation Committee (UK)
CPIC	Counter Proliferation Implementation Committee (UK)
CW	Chemical Weapons (or Chemical Warfare)
CWC	Chemical Weapons Convention
Cyclosarin	A CW nerve agent (sometimes referred to as GF)
Desert Fox	US and UK air campaign against key military targets in Iraq in December 1998, shortly after UNSCOM inspectors had left the country
Desert Storm	The military operation undertaken by the allied coalition in 1991 to liberate Kuwait from Iraqi occupation
DIA	Defense Intelligence Agency, US
DIS	Defence Intelligence Staff, UK
DTI	Department of Trade and Industry (UK)
ECO	Export Control Organisation, part of the Department of Trade and Industry (UK)
EMIS	Electromagnetic Isotope Separation (one of several routes to uranium enrichment)
EU3	Informal name for the UK, France and Germany in the context of their 2003 demarche to Iran
FCO	Foreign and Commonwealth Office, UK
Fissile material	Material (eg, uranium) capable of undergoing nuclear fission
G7 (or G8)	The group of seven (or eight, including Russia) leading industrial countries: the US, UK, Canada, France, Germany, Italy and Japan
GCHQ	Government Communications Headquarters, UK
Ghauri	Pakistani medium-range ballistic missile (1,300 km range) based on North Korean No-Dong technology)
HEU	Highly Enriched Uranium
Humint	Human intelligence
IAEA	International Atomic Energy Agency
ICBM	Inter-continental Ballistic Missile
Imint	Imagery intelligence
ISC	Intelligence and Security Committee, UK
ISG	Iraq Survey Group
JIC	Joint Intelligence Committee, UK
Jihad	The usual translation 'holy war' is misleading; 'exertion' or 'struggle' is more accurate: "A general injunction to strive in the way of God" (Albert Hourani: A History of the Arab Peoples, Faber and Faber, 1992)
JTAC	Joint Terrorism Analysis Centre, UK
KAZ	Kurdish Autonomous Zone (of Iraq)

Key Judgement	In a paper produced by the JIC (see above), one of several judgements extracted from the main body of the text and listed on the front page of the paper
Liaison	Term used to indicate a collaborative relationship between the intelligence services of different countries, as in 'liaison service' or 'liaison source'
Masint	Measurement and Signature Intelligence
MOD	Ministry of Defence, UK
MTCR	Missile Technology Control Regime
NBC	Nuclear, Biological and Chemical (often used in describing defensive equipment, as in "NBC suits")
No-Dong	Western name for the North Korean Medium-Range Ballistic Missile (MRBM), with a range of 1,300 km
NPT	The Treaty on the Non-Proliferation of Nuclear Weapons
OPCW	Organisation for the Prohibition of Chemical Weapons
OSE	Official Committee on Strategic Exports (UK)
P5	The five permanent members of the UN Security Council (the US, the Russian Federation, China, the UK and France)
R&D	Research and Development
REU	Restricted Enforcement Unit, part of the Department of Trade and Industry, UK
Ricin	A toxin used as a BW agent, derived from the castor bean
Sarin	A CW nerve agent (sometimes referred to as GB)
SCR	Security Council Resolution (of the United Nations)
Scud	Western designation for a family of short-range ballistic missiles, originally of Soviet design but subsequently adapted and upgraded by North Korea
Scud B	Short-range ballistic missile, with a range of 300 km
Scud C	Short-range ballistic missile, with a range of 500 km
Scud D	Short-range ballistic missile, with a range of 800 km
Shahab	Family of Iranian ballistic missiles (literally, meteor or shooting star)
Sigint	Signals intelligence
SIS	Secret Intelligence Service, UK
Soman	A CW nerve agent
SSO	Special Security Organisation, Iraq
Tabun	A CW nerve agent (sometimes referred to as GA)
Taepo-Dong 1	Western name for a North Korean medium-range ballistic missile, with a range of 2,000+ km
Taepo-Dong 2	Western name for a North Korean inter-continental ballistic missile (ICBM) with an assessed range of up to 15,000 km (under development)
UBL	Usama bin Laden (see also Al Qaida)
UF6	Uranium hexafluoride (a compound used in the process of enriching uranium which may be used for a nuclear bomb)
UN	United Nations
UNMOVIC	United Nations Monitoring, Verification and Inspection Commission, set up by UNSCR 1284 of 17 December 1999 as a replacement for UNSCOM (see

	below)
UNSCOM	United Nations Special Commission, set up by UNSCR 687 of 3 April 1991 “to carry out immediate on-site inspection of Iraq’s biological, chemical and missile capabilities”
UNSCR	United Nations Security Council Resolution
VX	One of the most toxic CW nerve agents
WMD	Weapons of Mass Destruction (see Introduction for a description of the difficulties of using this term)
Yellowcake	Uranium ore concentrate

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## INTRODUCTION

### OUR TERMS OF REFERENCE

1. On 3 February 2004, the Foreign and Commonwealth Secretary announced in the House of Commons:

*My right hon. Friend the Prime Minister has decided to establish a committee to review intelligence on weapons of mass destruction. This committee will be composed of Privy Counsellors. It will have the following terms of reference: to investigate the intelligence coverage available in respect of WMD programmes in countries of concern and on the global trade in WMD, taking into account what is now known about these programmes; as part of this work, to investigate the accuracy of intelligence on Iraqi WMD up to March 2003, and to examine any discrepancies between the intelligence gathered, evaluated and used by the Government before the conflict, and between that intelligence and what has been discovered by the Iraq survey group since the end of the conflict; and to make recommendations to the Prime Minister for the future on the gathering, evaluation and use of intelligence on WMD, in the light of the difficulties of operating in countries of concern.*

*My right hon. Friend the Prime Minister has asked the committee to report before the summer recess. The committee will follow the precedent in terms of procedures of the Franks committee. It will have access to all intelligence reports and assessments and other relevant Government papers, and will be able to call witnesses to give oral evidence in private. The committee will work closely with the US inquiry and the Iraq survey group.*

*The committee will submit its final conclusions to my right hon. Friend the Prime Minister in a form for publication, along with any classified recommendations and material. The Government will, of course, co-operate fully with the committee.*

### OUR WORK

2. The Committee met for the first time on Thursday 5 February and four of us were sworn in as Members of the Privy Council on Wednesday 11 February. Mrs Taylor was already a Privy Counsellor.
3. In view of the very tight timetable for our Review, it was essential to make a rapid start. We are therefore especially grateful for the speed with which the Security and Intelligence Co-ordinator, Sir David Omand, supplied us with accommodation and an excellent team of support staff in the Cabinet Office. We are also grateful to the Intelligence and Security Committee and their staff for enabling us to use the Committee's room in the Cabinet Office for our hearings, and for the forbearance and co-operation they extended to us.
4. Since 5 February, we have met 36 times. We have visited Washington, where we met the co-Chairs of the President's Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction, Governor Charles S. Robb and Judge

Laurence H. Silberman and members of their Commission; General Brent Scowcroft, Chairman of the President's Foreign Intelligence Advisory Board; and senior members of the Administration and the Congress, including Senator Pat Roberts and Senator John Rockefeller, Chairman and Ranking Member of the Senate Intelligence Committee; Congressman Porter Goss and Congresswoman Jane Harman, Chairman and Ranking Member of the House Intelligence Committee; Dr Condoleezza Rice, National Security Adviser; General Colin Powell and Mr Richard Armitage, State Department; Mr George Tenet, Director, and staff of the Central Intelligence Agency; and Vice Admiral Lowell Jacoby and staff of the Defense Intelligence Agency. We are grateful to Sir David Manning, HM Ambassador at Washington, and his team for making the arrangements for this visit. We also visited Baghdad and we express our particular appreciation to Major General Keith Dayton, Brigadier Graeme Morrison and Mr Charles Duelfer and their staffs for being willing to receive and brief us at a very difficult and busy time, and to staff of the Ministry of Defence and the Royal Air Force for organising the visit and arranging our safe journey there and back. We also had useful discussions with representatives of a number of other countries.

5. The tight timetable for our Report has caused some difficulties for us. The main one is that the Iraq Survey Group, with whose findings our terms of reference require us to compare the intelligence received by the British Government, have not yet produced any publicly available report. They produced an interim report in September 2003 and a Status Report in March 2004. We have had access to these. We were very grateful to General Dayton and Mr Duelfer for also briefing us about their progress. We have undertaken not to anticipate their findings but, on the basis of the information they gave us, we believe that our conclusions are not inconsistent with what they have discovered so far. The much longer timetable given to the US Presidential Commission has had the result that, while we had useful initial discussions with them, we have not been able to fulfil the Foreign Secretary's statement that we would work closely with them.
6. On the other hand, we were greatly helped by the evidence given to Lord Hutton's Inquiry, by the report of the House of Commons Foreign Affairs Committee on "*The Decision to go to War in Iraq*" (HC 813) and above all by the report of the Intelligence and Security Committee entitled "*Iraqi Weapons of Mass Destruction—Intelligence and Assessments*" (Cm 5972). We should like to express particular thanks to the Intelligence and Security Committee for giving us access to the classified evidence which underlay their report. This saved us much spadework.
7. It may be asked what further we could add by going over such heavily traversed ground. One answer is perhaps that, as in the search for weapons in Iraq, one can never do too much digging. But others are that we have had the considerable advantage of the further passage of time which has allowed us to consider the evidence that has emerged since the war on Iraqi nuclear, biological, chemical and ballistic missile programmes and the results of post-war validation by the Secret Intelligence Service of their relevant human intelligence sources. More importantly, we have had much wider access to the Government's intelligence and policy papers. Even so, we do not pretend that ours can be the last word on every aspect of the issues we cover.

## OUR APPROACH

8. Our approach has been to start with the intelligence assessments of the Joint Intelligence Committee (JIC) and then to get from the intelligence agencies a full list of the underlying intelligence, both accepted and rejected, which was available to inform those assessments. We have then compared that intelligence with the JIC's assessments and considered whether it appears to have been properly evaluated. In the other direction, we, like the Franks Committee, have obtained from Government departments those policy papers which their Permanent Secretaries have certified as containing all the material relevant to our Review, to allow us to establish the use which was made of the intelligence. Finally, where outcomes are known, we have compared the prior intelligence and the assessments made of it with those outcomes.
9. We have received 68 written submissions from members of the public and have taken oral evidence from 47 witnesses, some of whom gave evidence more than once. Except where witnesses asked for their identity to be protected, we list our witnesses at Annex A.
10. We have focussed on the intelligence available to the British Government and the use made of it by our Government. Although that inevitably has led us to areas of UK/US co-operation, we have deliberately not commented in this Report on the actions of the US intelligence agencies, ground that is being covered by the Presidential Commission.
11. We have been conscious of the Foreign Secretary's statement that our report should be submitted to the Prime Minister in a form fit for publication. We have also been conscious of the overriding need not to prejudice continuing or future intelligence operations or to endanger sources and have shaped our report accordingly. We are confident that what is published here gives Parliament and the public a fair representation of our conclusions and views.
12. In furtherance of this, we have exceptionally included in our Report extensive quotations from assessments of the Joint Intelligence Committee. We have ensured that in all cases our quoting these will not have implications for national security. The Government has made clear that our action in doing so will not be accepted as a precedent for putting those assessments into the public domain in the future.

## DEFINITIONS AND USAGE

13. The Intelligence and Security Committee started their report with definitions of the terminology they used. We repeat their definitions in our 'Terminology and Glossary' and have tried to follow them. But we believe that there are problems with the term 'weapons of mass destruction' and with the shorthand 'chemical and biological weapons' (CBW) and 'chemical, biological, radiological and nuclear' (CBRN) weapons.

### 'WMD'

14. There is a considerable and long-standing academic debate about the proper interpretation of the phrase 'weapons of mass destruction'. We have some sympathy with the view that, whatever its origin, the phrase and its accompanying abbreviation is now

used so variously as to confuse rather than enlighten readers. Rather than adding to this debate and this confusion, we have in our Report chosen to spell out what we mean in full. In cases where it is used by others, most notably in JIC assessments, we have had in mind in interpreting those assessments the definition at paragraphs 8 and 9 of United Nations Security Council Resolution 687 of 3 April 1991, which defined the systems which Iraq was required to abandon:

*Nuclear weapons or nuclear-weapons-usable material or any sub-systems or components or any research, development, support or manufacturing facilities relating to [nuclear weapons].*

*Chemical and biological weapons and all stocks of agents and all related sub-systems and components and all research, development, support and manufacturing facilities.*

*Ballistic missiles with a range greater than 150 kilometres and related major parts, and repair and production facilities.*

#### **‘CBW’**

15. The abbreviation ‘CBW’ (often expressed as ‘BCW’) occurs regularly both in intelligence reporting and in related analysis and assessment. At a certain level of generality, ‘CBW’ can be a useful term to embody the concept of chemical and biological warfare. Thus, for example, in the face of a ‘CBW’ attack the tempo of military operations is significantly impeded by soldiers having to don cumbersome clothing whether facing chemical weapons or biological weapons. But for detailed technical intelligence assessments, the distinction is important. Chemical weapons and biological weapons involve very different technologies, and are usually developed by different people at different facilities. Delivery requirements, and hence doctrine, training, storage and handling, are different, as are the troops involved. One of our witnesses said that any report in which the terms ‘CW’ and ‘BW’ were interwoven or combined through the use of the single acronym ‘CBW’:

*. . . always makes me slightly suspicious.*

16. We agree that such use is confusing. Thus, although the term may have some value in some contexts, we have sought to avoid it altogether, although it does feature in some of the extracts from JIC assessments which we have taken in to our Report.

#### **‘CBRN’**

17. As well as nuclear, biological and chemical weapons, JIC assessments and intelligence reports, especially those on terrorism, also consider radiological weapons, which employ conventional, typically high-explosive means to distribute radioactive material. As a result, our Report includes where relevant the phrase ‘chemical, biological, radiological and nuclear weapons’, and its abbreviation ‘CBRN’.

#### **OUR THANKS**

18. Notwithstanding our short timetable, a massive amount of paper has been relevant to our Review. Sorting out and providing these papers has been a huge task for the intelligence

agencies and departments at a time when they have also had their vital day-to-day work to undertake. As noted above, we have relied on certificates from Permanent Secretaries that all papers relevant to our interpretation of our terms of reference have been supplied to us. While we have on some occasions been critical of the slow rate at which these have been supplied and by the coverage of those originally offered, we are now reasonably confident that we have obtained the papers relevant to our work. We are grateful to all those who have had the task of identifying them and providing them. We have also been greatly helped by the fact that the intelligence community co-operated in providing a co-ordinated service so that we did not receive separate streams of papers from each agency which we would subsequently have had to relate to each other.

19. We would like to express our particular thanks to Mr Daniel Thornton and his team who were our link with the Government for the supply of intelligence material, departmental papers and other evidence. The documents they provided and the other evidence have of course all come to rest on the desks of our Secretary, Mr Bruce Mann, and his team, Mr Michael Ryder, Mr Peter Freeman, Mr Nigel Pearce, Mr Patrick Sprunt, Ms Carol Hook, Ms Judith Freeman and an additional team of transcribers. They have been indefatigable and we cannot find words to praise their skill and commitment adequately. We thank and commend them above all.



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## CHAPTER 1

### THE NATURE AND USE OF INTELLIGENCE

“Much of the intelligence that we receive in war is contradictory, even more of it is plain wrong, and most of it is fairly dubious. What one can require of an officer, under these circumstances, is a certain degree of discrimination, which can only be gained from knowledge of men and affairs and from good judgement. The law of probability must be his guide.”

[Clausewitz, On War, Vol I, Bk I, Ch VI]

#### 1.1 INTRODUCTION

20. In view of the subject matter of our Review, and of what we have found in the course of it, we think that it may be helpful to the general reader to describe the nature of intelligence; the successive processes of validation, analysis and assessment which are necessary for using it properly; its limitations; and the risks which nevertheless remain.
21. Governmental decisions and actions, at home and abroad, are based on many types of information. Most is openly available or compiled, much is published, and some is consciously provided by individuals, organisations or other governments in confidence. A great deal of such information may be accurate, or accurate enough in its own terms. But equally much is at best uninformed, while some is positively intended to mislead. To supplement their knowledge in areas of concern where information is for one reason or another inadequate, governments turn to secret sources. Information acquired against the wishes and (generally) without the knowledge of its originators or possessors is processed by collation with other material, validation, analysis and assessment and finally disseminated as ‘intelligence’. To emphasise the point, the term ‘secret intelligence’ is often used (as, for instance, enshrined in the title of the Secret Intelligence Service), but in this Review we shall use the simple word ‘intelligence’.
22. The protective security barriers which intelligence collectors have to penetrate are usually formidable, and particularly so in the case of programmes which are the subject of this Review. Nuclear, biological and chemical programmes are amongst the ultimate state secrets, controlled by layers of security protection going beyond those applied to conventional weapons. Those of the greatest concern to governments are usually embedded within a strong apparatus of state control. Few of the many people who are necessarily involved in such programmes have a view of more than their own immediate working environment, and very few have comprehensive knowledge of the arrangements for the control, storage, release and use of the resulting weapons. At every stage from initial research and development to deployed forces, nuclear, biological and chemical weapons and their delivery systems are treated as being of particular sensitivity, often to the extent of the establishment of special command and control arrangements in parallel with, but separate from, normal state or military channels.

## 1.2 COLLECTION

23. The UK has three intelligence and security agencies ('the agencies') responsible for the collection of intelligence<sup>1</sup>: the Secret Intelligence Service (SIS), the Security Service and Government Communications Headquarters (GCHQ). The Defence Intelligence Staff (DIS), part of the Ministry of Defence (MOD), also manages some intelligence collection, notably that of imagery, but its main function is all-source analysis and assessment and the production of collated results, primarily to serve MOD requirements.
24. There is a panoply of collection techniques to acquire intelligence which do not exactly correspond to inter-departmental organisational boundaries. The three main ones are signals intelligence (the product of interception, generally abbreviated to 'Sigint'); information from human sources such as classical espionage agents (which is conveniently described, by extension from the previous category, as 'Humint'); and photography, or more generally imagery ('Imint'). Signals intelligence and human intelligence are of widespread and general applicability. They can produce intelligence on any topic (for example, the intentions, plans, negotiations, activities and achievements of people involved in the development, acquisition, deployment and use of unconventional weapons), since ultimately the data they acquire stem from the human beings involved. Imagery is more confined to the study of objects (buildings, aircraft, roads, topography), though modern techniques have extended its abilities (for example, infra-red photography can in some circumstances show where an object was, even though it may have gone by the time the photograph is taken).
25. There are also other, more specialised intelligence techniques, some of particular relevance to this Review<sup>2</sup>. For example, the development of nuclear explosives inevitably involves highly-radioactive materials, radiation from which may be detected. Leakage from facilities concerned with the development of chemical and biological agents, and deposits in testing areas, can provide characteristic indicators. Missile testing may involve the generation of considerable heat, which can be detected, and missiles may be tracked by radar.
26. In the case of the weapons covered by this Review, there is additionally another category of information which is frequently mentioned by the Joint Intelligence Committee (JIC) in its assessments. International inspection and enforcement bodies have been established, on a permanent basis (e.g. the International Atomic Energy Agency), or temporary basis (e.g. the United Nations Special Commission), to ensure compliance with international treaties or United Nations resolutions<sup>3</sup>. Some of the findings and reports of these bodies are published on an official basis to United Nations members and are of considerable importance. In Iraq between 1991 and 1998, in many ways they surpassed anything that national intelligence agencies could do, but since their work is carried out on behalf of the United Nations it can hardly be considered 'intelligence' by the definitions to which we are working. Data obtained in the course of work on export licensing can also be important.

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<sup>1</sup> They also have other functions not relevant here.

<sup>2</sup> The term 'Masint' (Measurement and Signature Intelligence) has been coined for at least some of these techniques, though they lack the unifying themes which characterise Sigint and Humint.

<sup>3</sup> Such bodies often also have a wider operational role in the implementation of treaties or Security Council Resolutions.

### 1.3 VALIDATION

27. Intelligence, though it may not differ in type or, often, reliability from other forms of information used by governments, operates in a field of particular difficulty. By definition the data it is trying to provide have been deliberately concealed. Before the actual content of an intelligence report can be considered, the validity of the process which has led to its production must be confirmed. For imagery and signals intelligence this is not usually an issue, although even here the danger of deception must be considered. But for human intelligence the validation process is vital.
28. Human intelligence reports are usually available only at second-hand (for example, when the original informant talks to a case officer<sup>4</sup> who interprets – often literally – his words to construct an intelligence report), and maybe third- or fourth-hand (the original informant talks to a friend, who more or less indirectly talks to a case officer). Documentary or other physical evidence is often more compelling than the best oral report<sup>5</sup>, and has the advantage of being more accessible to specialised examination, but is usually more difficult to acquire. Conventional oral reporting can be difficult enough if all in the chain understand the subject under discussion. When the topic is unfamiliar to one or more of the people involved, as can be the case when details of (say) nuclear weapons design are at issue, there is always the chance of misunderstanding. There is in such cases a considerable load on the case officer to be familiar with the subject-matter and sufficiently expert in explaining it. It need only be added that often those involved in providing intelligence may for one reason or another have deliberately mis-represented (or at least concealed) their true identities, their country of origin or their employment to their interlocutors<sup>6</sup>, to show how great is the need for careful evaluation of the validity of any information which eventually arrives.
29. The validation of a reporting chain requires both care and time, and can generally only be conducted by the agency responsible for collection. The process is informed by the operational side of the agency, but must include a separate auditing element, which can consider cases objectively and quite apart from their apparent intelligence value. Has the informant been properly quoted, all the way along the chain? Does he have credible access to the facts he claims to know? Does he have the right knowledge to understand what he claims to be reporting? Could he be under opposition control, or be being fed information? Is he fabricating? Can the *bona fides*, activities, movements or locations attributed to those involved in acquiring or transmitting a report be checked? Do we understand the motivations of those involved, their private agenda<sup>7</sup>, and hence the way in which their reports may be influenced by a desire to please or impress? How powerful is a wish for (in particular) financial reward? What, if any, distorting effect might such factors exert? Is there – at any stage – a deliberate intention to deceive? Generally speaking, the extent and depth of validation required will depend on the

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<sup>4</sup> An official responsible for handling and receiving reports from human intelligence sources.

<sup>5</sup> Such evidence is no more immune to deception or fabrication than is oral testimony, though of a different type.

<sup>6</sup> The ultimate in such deceptions is the classic 'double agent', who is infiltrated into an espionage network to discover, misinform, expose or pervert it.

<sup>7</sup> We have been assured that SIS has for half a century been viscerally wary of emigre organisations. We return to this below in the context of Iraq.

counter-intelligence sophistication of the target, although the complexity of the operational situation will affect the possibility of confusion, misrepresentation or deception.

## 1.4 ANALYSIS

30. The validation process will often have involved consideration of the coherence and consistency of intelligence being provided by an informant, as one of the ways in which that source's reliability can be tested. But at the next stage, analysis, the factual material inside the intelligence report is examined in its own right. This stage may not be required where the material is self-explanatory, or it may be readily subsumed into assessment and conducted by the same people. But much intelligence is fragmentary or specialised and needs at least a conscious analytic stage. Analysis assembles individual intelligence reports into meaningful strands, whether weapons programmes, military operations or diplomatic policies. Intelligence reports take on meaning as they are put into context. Analysis is also the process required to convert complex technical evidence into descriptions of real-world objects or events.
31. The department which receives the largest quantity of intelligence is the MOD, where analysis is carried out by the DIS<sup>8</sup> whose reports are distributed not only internally in the MOD but also to other relevant departments. Although the DIS is a component of the MOD, funded from the Defence Account and managed in accordance with defence priorities, it is a vital component of and contributor to the national intelligence machinery, and its priorities and work programme are linked with those of the Cabinet Office.
32. Analysis can be conducted only by people expert in the subject matter – a severe limitation when the topic is as specialised as biological warfare or uranium enrichment, or the internal dynamics of terrorist cells or networks. A special danger here can be the failure to recognise just what particular expertise is required. The British intelligence assessment of the German V-2 rocket during the Second World War was hindered by the involvement of the main British rocket expert, who opined that the object visible on test-stands could not possibly be a rocket. The unrecognised problem was that he was an expert only on *solid powder* rockets, of the type that the UK had developed for short-range artillery. It was true that a solid firework of the size of the V-2 was, with the technology then available, impracticable. But the Germans had developed *liquid-propellant* rocket engines, with the combustion chamber fed by powerful turbo-pumps. On that subject, there were no British experts.

## 1.5 ASSESSMENT

33. Assessment may be conducted separately from analysis or as an almost parallel process in the mind of the analyst. Intelligence reports often do not immediately fit into an established pattern, or extend a picture in the expected way. Assessment has to make choices, but in so doing runs the risk of selection that reinforces earlier conclusions. The risk is that uneven standards of proof may be applied; reports that fit the previous model

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<sup>8</sup> The DIS also has other management and intelligence collection responsibilities.

are readily accepted, while contrary reports have to reach a higher threshold. This is not only perfectly understandable, it is the way perception normally operates. But in the intelligence world in which data are scanty, may be deliberately intended to confuse and may sometimes be more inadequate than can be appreciated, normal rules do not apply.

34. In the UK, assessment is usually explicitly described as 'all-source'. Given the imperfections of intelligence, it is vital that every scrap of evidence be examined, from the most secret sources through confidential diplomatic reports to openly published data. Intelligence cannot be checked too often. Corroboration is always important but seldom simple, particularly in the case of intelligence on 'hard targets'<sup>9</sup> such as nuclear, biological or chemical weapons programmes or proliferation networks. The simple fact of having apparently coincident reports from multiple types of intelligence sources is not in itself enough. Although reports from different sources may say the same thing, they may not necessarily *confirm* one another. Is a human intelligence report that a factory has been put into operation confirmed by imagery showing trucks moving around it? Or are both merely based on the same thing – observation of physical external activity? Reporting of different but mutually consistent activities can be complementary. This can build up knowledge to produce a picture which is more than the simple sum of the parts. But it may be false, if there is no link between the pieces other than the attractiveness of the resulting picture. Complementary information is not necessarily confirmatory information.
35. Multiple sources may conflict, and common sense has to be used in evaluation. A dozen captured soldiers may have provided mutually consistent and supportive reports about the availability of chemical weapons to their neighbouring battalion. But if these were flatly contradicted by a single report from a senior member of that battalion, which should be believed?
36. It is incorrect to say, as some commentators have done, that 'single source' intelligence is always suspect. A single photograph showing missiles on launchers, supporting a division deployed in the field, trumps any number of agent reports that missiles are not part of a division's order of battle. During the Second World War, innumerable Allied command decisions were taken on the basis of intelligence reports from a single type of source (signals intelligence, providing decrypts of high-level German and Japanese military plans and orders), and quite often (e.g. re-routing convoys in the middle of the Atlantic) important decisions had to be taken on the basis of a single report. As before, common sense and experience are the key.
37. Assessment must always be aware that there may be a deeper level of reality at which apparently independent sources have a common origin. Multiple sources may have been marshalled in a deception campaign, as the Allies did in Operation Fortitude before D-Day to mislead the German High Command about the location of the landings. Although deception on so grand a scale is rare, the chance of being deceived is in inverse proportion to the number of independent sources – which, for 'hard targets', are few.

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<sup>9</sup> In a sense, almost all intelligence is conducted against 'hard targets'. If the information were readily available, it would not be necessary to call on intelligence resources to acquire it. But within the hierarchy of intelligence activities it is inevitable, given the protection afforded to nuclear, biological and chemical weapons programmes, that they are among the hardest targets.

38. Many of the manifestations of nuclear, biological or chemical weapons programmes can have innocuous, or at least non-proscribed, explanations – the ‘dual-use’ problem. Nuclear developments can be for peaceful purposes. Technologies for the production of chemical and biological agents seldom diverge from those employed in normal civilian chemical or bio-chemical industries. And, in the case of missile development, some procurement and development activities may be permissible.
39. Thus, the recipients of intelligence have normally to make decisions on the basis of the balance of probabilities. That requires, first, the most effective deployment of all possible sources and, secondly, the most objective assessment possible, as unaffected as may be by motives and pressures which may distort judgement.
40. In the UK, central intelligence assessment is the responsibility of the Assessments Staff. This comprises some 30 senior and middle-ranking officials on secondment from other departments, within the Cabinet Office, together with secretarial and administrative support.

## 1.6 THE JOINT INTELLIGENCE COMMITTEE

41. The agencies and the DIS are brought together with important policy departments in the JIC<sup>10</sup>. The JIC was established in 1936 as a sub-committee of the Committee of Imperial Defence. During the Second World War, it comprised the heads of the agencies and the three Services’ Directors of Intelligence, under the chairmanship of a senior member of the Foreign Office and was joined by other relevant departments such as the Ministry of Economic Warfare, responsible for the Special Operations Executive.
42. The JIC has evolved since 1945. It became part of the Cabinet Office rather than of the Chiefs of Staff organisation in 1957. To the original membership of the JIC (intelligence producers, with users from MOD and the FCO) were added the Intelligence Co-ordinator when that post was established in 1968, the Treasury (1968), the Department of Trade and Industry (1997) and the Home Office (2000). Other departments attend when papers of relevance to them are taken. Representatives of the Australian, Canadian and United States intelligence communities also attend as appropriate. In 1993, the post of Chairman of the JIC and that of the Head of the Cabinet Office’s Defence and Overseas Secretariat<sup>11</sup> were combined, the two posts remaining so until 1999. From 1992 to 2002, the chairmanship was combined with the post of Intelligence Co-ordinator. A new post of Security and Intelligence Co-ordinator was created in 2002, taking on the responsibilities of the previous Intelligence Co-ordinator together with wider responsibilities in the field of counter-terrorism and crisis management. The holder became a member of the JIC.

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<sup>10</sup> For a fuller description see *National Intelligence Machinery*, HMSO 2001, which puts the JIC into context within the structures of Parliamentary and Cabinet government.

<sup>11</sup> From 1984 to the end of 1993 the Chairman of the JIC was also the Prime Minister’s Foreign Policy Adviser. This title was revived in September 2001 and assumed by the Head of the Defence and Overseas Secretariat.

43. The JIC's main function<sup>12</sup>, on which its regular weekly meetings are centred, is to provide:

*Ministers and senior officials with co-ordinated intelligence assessments on a range of issues of immediate and long-term importance to national interests, primarily in the fields of security, defence and foreign affairs.*

The Assessments Staff are central to this role, and the Chief of the Assessments Staff is a member of the JIC in his own right. With the assistance of other departments, the Assessments Staff draft the JIC assessments, which are usually debated at Current Intelligence Groups (CIGs) including experts in the subject before being submitted to the JIC. The JIC can itself ask the Assessments Staff to draft an assessment, but the process is usually triggered by a request from a policy department. The forward programme of assessments to be produced is issued three times a year, but is revised and, when necessary, overridden by matters of more immediate concern. The JIC thus brings together in regular meetings the most senior people responsible for intelligence collection, for intelligence assessment and for the use of intelligence in the main departments for which it is collected, in order to construct and issue assessments on the subjects of greatest current concern. The process is robust, and the assessments that result are respected and used at all levels of government.

44. Intelligence is disseminated at various levels and in different forms. The agencies send reports direct to users in departments and military commands; these reports are used by civil and military officials in their daily business, and some of them are selected and brought to Ministers' attention. The JIC's co-ordinated intelligence assessments, formally agreed at their weekly meetings, are sent to Ministers and senior officials. In addition the JIC produces Intelligence Updates and Immediate Assessments whenever required, which are sent to a standard distribution throughout government.
45. A feature of JIC assessments is that they contain single statements of position; unlike the practice in the US, there are no minority reports or noted dissents. When the intelligence is unclear or otherwise inadequate and the JIC at the end of its debate is still uncertain, it may report alternative interpretations of the facts before it such as they are; but in such cases all the membership agrees that the interpretations they are proposing are viable alternatives. The JIC does not (and this is borne out by our examination of several hundred JIC assessments in the course of our Review) characterise such alternatives as championed by individual members who disagree with colleagues' points of view. While the JIC has at times been criticised for its choice of language and the subtlety of the linguistic nuances and caveats it applies<sup>13</sup>, it has responded that when the intelligence is ambiguous it should not be artificially simplified.
46. In the sometimes lengthy line that leads to the production of the JIC's output, all the components of the system – from collection through analysis and assessment to a well-briefed and educated readership – must function successfully. Problems can arise if the

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<sup>12</sup> The JIC also has other responsibilities, for the establishment of intelligence collection priorities and monitoring of agency performance.

<sup>13</sup> We have been told that some readers believe that important distinctions are intended between such phrases as "intelligence indicates . . .", "intelligence demonstrates . . ." and "intelligence shows . . .", or between "we assess that . . .", "we judge that . . ." and "we believe that . . .". We have also been told that there is in reality no established glossary, and that drafters and JIC members actually employ their natural language.

JIC has to make bricks without (enough) straw. Collection agencies may produce too little intelligence, or too much intelligence about the wrong subjects, or the right intelligence but too late to be of value. Although assessments generated under such circumstances may have proper caveats, with attention drawn to important gaps in knowledge and with the dubious steps in an argument clearly identified, they may reach misleading conclusions. Or – which is equally destructive of their purpose – even if they are correct they may be mistrusted. In either case, the reputation of the JIC product is at risk, and the Committee has on occasion refused to issue drafted papers which it has felt are not sufficiently supported by new intelligence or add nothing to the information already publicly available.

## 1.7 THE LIMITATIONS OF INTELLIGENCE

47. Intelligence merely provides techniques for improving the basis of knowledge. As with other techniques, it can be a dangerous tool if its limitations are not recognised by those who seek to use it.
48. The intelligence processes described above (validation, analysis, assessment) are designed to transform the raw material of intelligence so that it can be assimilated in the same way as other information provided to decision-makers at all levels of government. Validation should remove information which is unreliable (including reporting which has been deliberately inserted to mislead). Analysis should assemble fragmentary intelligence into coherent meaningful accounts. Assessment should put intelligence into a sensible real-world context and identify how it can affect policy-making. But there are limitations, some inherent and some practical on the scope of intelligence, which have to be recognised by its ultimate recipients if it is to be used wisely.
49. The most important limitation on intelligence is its incompleteness. Much ingenuity and effort is spent on making secret information difficult to acquire and hard to analyse. Although the intelligence process may overcome such barriers, intelligence seldom acquires the full story. In fact, it is often, when first acquired, sporadic and patchy, and even after analysis may still be at best inferential.
50. The very way that intelligence is presented can contribute to this misperception. The necessary protective security procedures with which intelligence is handled can reinforce a mystique of omniscience. Intelligence is not only – like many other sources – incomplete, it can be incomplete in undetectable ways. There is always pressure, at the assessment stage if not before, to create an internally consistent and intellectually satisfying picture. When intelligence becomes the dominant, or even the only, source of government information, it can become very difficult for the assessment process to establish a context and to recognise that there may be gaps in that picture.
51. A hidden limitation of intelligence is its inability to transform a mystery into a secret. In principle, intelligence can be expected to uncover secrets. The enemy's order of battle may not be known, but it is knowable. The enemy's intentions may not be known, but they too are knowable. But mysteries are essentially unknowable: what a leader truly believes, or what his reaction would be in certain circumstances, cannot be known, but can only be

judged. JIC judgements have to cover both secrets and mysteries. Judgement must still be informed by the best available information, which often means a contribution from intelligence. But it cannot import certainty.

52. These limitations are best offset by ensuring that the ultimate users of intelligence, the decision-makers at all levels, properly understand its strengths and limitations and have the opportunity to acquire experience in handling it. It is not easy to do this while preserving the security of sensitive sources and methods. But unless intelligence is properly handled at this final stage, all preceding effort and expenditure is wasted.

## 1.8 RISKS TO GOOD ASSESSMENT

53. It is a well-known phenomenon within intelligence communities that memory of past failures can cause over-estimation next time around. It is equally possible to be misled by past success. For 45 years of Cold War, the intelligence community's major task was to assess the intentions and capabilities of the Soviet Union and its satellite states<sup>14</sup>. As the details which had been sought became more accessible, first through *glasnost* and explicit exchanges of data under international agreements and then fairly readily through open sources after the dissolution of the Soviet empire, most of the intelligence community's conclusions were vindicated – at least in the areas in which it had spent the largest part of its efforts, the Soviet bloc's military equipment, capabilities and order of battle.
54. But it is risky to transfer one model to cases where that model will only partially apply. Against dictatorships, dependent upon personal or tribal loyalties and insensitive to international politics, an approach that worked well for a highly-structured, relatively cohesive state target is not necessarily applicable even though many aspects of the work may appear to be identical. The targets which the UK intelligence community needs to study most carefully today are those that structurally and culturally look least like the Government and society it serves. We return to this when we consider terrorism, at Chapter 3.
55. Risks in intelligence assessment will arise if this limitation is not readily recognised. There may be no choice but to apply the same intelligence processes, methods and resources to one target as were developed for and applied to others. But it is important to recognise that the resulting intelligence may need to be analysed and assessed in different ways.
56. A further risk is that of 'mirror-imaging' – the belief that can permeate some intelligence analysts that the practices and values of their own cultures are universal. The more diffuse range of security challenges of the 21<sup>st</sup> century means that it will not be possible to accumulate the breadth and depth of understanding which intelligence collectors, analysts and users built up over the years about the single subject of the Soviet Union. But the more alien the target, the more important is the ability of intelligence analysts to appreciate that their own assumptions do not necessarily apply everywhere. The motives

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<sup>14</sup> The intelligence community did, of course, have many other tasks during this period ranging from the consequences of the withdrawal from empire through the many facets of the conflicts and confrontations in the Middle East to the Falklands War.

and methods of non-state organisations built on a special interest (whether criminal, religious or political) can be particularly hard for members of a stable society to assess.

57. There is also the risk of ‘group think’ – the development of a ‘prevailing wisdom’. Well-developed imagination at all stages of the intelligence process is required to overcome preconceptions. There is a case for encouraging it by providing for structured challenge, with established methods and procedures, often described as a ‘Devil’s advocate’ or a ‘red teaming’ approach. This may also assist in countering another danger: when problems are many and diverse, on any one of them the number of experts can be dangerously small, and individual, possibly idiosyncratic, views may pass unchallenged.
58. One final point should be mentioned here, to which we return in our Conclusions. The assessment process must be informed by an understanding of policy-makers’ requirements for information, but must avoid being so captured by policy objectives that it reports the world as policy-makers would wish it to be rather than as it is. The JIC is part (and an important part) of the UK’s governmental machinery or it is nothing; but to have any value its product must be objective. The JIC has always been very conscious of this.

## **1.9 THE USE OF INTELLIGENCE**

59. In addition to the use of intelligence to inform government policy, which we describe in Chapters 2 and 3, there are important applications in the enforcement of compliance with national law or international treaties and other obligations, in warning of untoward events, in the support of military and law enforcement operations, and in long-term planning for future national security capabilities. The British Government’s machinery for the areas covered by our Review is described at Chapter 4.

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## CHAPTER 2

# COUNTRIES OF CONCERN OTHER THAN IRAQ AND GLOBAL TRADE

## 2.1 INTRODUCTION

60. Our terms of reference require us:

*To investigate the intelligence coverage available on WMD programmes of countries of concern and on global trade in WMD, taking into account what is now known about these programmes.*

61. We do so in this Chapter. This has allowed us to form an overall judgement of the UK's performance in obtaining intelligence on the nuclear, biological, chemical and ballistic missile programmes of a wide range of states and on sources of proliferation, whether by states or by trading networks. Given its significance for the activities of some states, we open this Chapter with the AQ Khan network.

62. Many of these countries remain of concern. Sensitive intelligence operations and diplomatic activity are continuing. So the information we include in this Report must necessarily be limited. But in some cases declarations by the countries concerned, and statements by the International Atomic Energy Agency (IAEA) and other bodies about the results of their activities, have made it possible to judge the work of the intelligence agencies against what is now known. (Indeed, the extent and accuracy of the knowledge gained by the intelligence agencies were in some cases significant factors in persuading the states concerned to abandon their covert programmes.) Although our Review has gone more broadly, we have deliberately chosen to report only on those cases where information about the extent of states' programmes or of illicit trading activity is now publicly available, so that comparison can be made with the judgements in prior intelligence assessments without damage to continuing operations.

63. We draw out broad Conclusions at the end of this Chapter.

## 2.2 AQ KHAN

### INTRODUCTION

64. AQ Khan directed Pakistan's nuclear programme for 25 years and is known as the 'father of the Pakistani nuclear bomb'. After studying in Europe, Khan worked for a company involved with the construction of an enrichment facility in the Netherlands. In 1976, he obtained Dutch and German designs for uranium centrifuges and took them to Pakistan. Based on these designs, Khan built a uranium enrichment facility at Khan Research Laboratories, where he successfully produced enough highly enriched uranium for Pakistan to test its first nuclear device in 1998. Khan subsequently exploited the supply network he developed to support the Pakistani programme in order to sell nuclear

technologies to countries of concern. In this Section of our Report, we describe the significant help his activities gave to the nuclear programmes of several countries of concern, particularly Libya, and actions taken by the British Government in conjunction with others to close down Khan's network.

## WHAT WAS KNOWN

65. During the 1990s, there were intermittent clues from intelligence that AQ Khan was discussing the sale of nuclear technology to countries of concern. By early 2000, intelligence revealed that these were not isolated incidents. It became clear that Khan was at the centre of an international proliferation network.
66. By April 2000, the Joint Intelligence Committee (JIC) was noting that there was an evolving, and as yet incomplete, picture of the supply of uranium enrichment equipment to at least one customer in the Middle East, thought to be Libya, and evidence linking this activity to Khan. By September 2000, it was pointing out that the network was expanding to mass-produce components for large-scale centrifuge cascades.
67. During 2001, the JIC continued to track AQ Khan's activities. An assessment in March 2002 pulled together all the strands of intelligence on AQ Khan then available. The conclusions showed the wide spread of Khan's network and that he had moved his base outside Pakistan and was now controlling it through his associates in Dubai. At the same time, intelligence showed that he had now established his own production facilities, in Malaysia. He was being helped in his activities by a network of associates and suppliers, including BSA Tahir (a Sri Lankan businessman operating out of Dubai).
68. By July 2002, the JIC had concluded that AQ Khan's network was central to all aspects of the Libyan nuclear weapons programme. Since Khan had access to nuclear weapon designs and had been involved in the development of Pakistani missiles, the Government feared that he might not only pass on the technology for enriching uranium but that he might also enable his customers to build nuclear warheads for missiles. As intelligence continued to build up, the JIC assessed that this was the first case of a private enterprise offering a complete range of services to enable a customer to acquire highly enriched uranium for nuclear weapons.
69. Intelligence also identified further individuals in the supply chain, and more intelligence was also becoming available on finance and transportation methods, including details of banks in a number of countries and the names of the shipping companies involved. Khan was also continuing to develop his business through his overseas facilities. By January 2003, the JIC was becoming particularly concerned at the progress Libya might be able to make as a result of the assistance it had received from the network.
70. Action to close down the network had until this stage been deferred to allow the intelligence agencies to continue their operations to gather further information on the full extent of the network. This was important to gain a better understanding of the nuclear programmes of other countries which Khan was supplying. But Khan's activities had now reached the point where it would be dangerous to allow them to go on.

71. At the tactical level, action was taken to interdict supplies of components moving from Khan's manufacturing facility in Malaysia to Libya. The various stages in this supply chain had been tracked through intelligence reports. In October 2003, the *BBC China*, a German-registered ship carrying centrifuge parts, was diverted to Italy as part of a carefully-planned intelligence operation in co-operation with the Italian and German authorities. On the basis of the material found on board the *BBC China*, in November 2003 the UK and US Governments approached the Malaysian authorities to investigate a Malaysian company run by BSA Tahir. According to the official Malaysian police report:

*His [Tahir's] involvement . . . started in 1994/1995. That year the [Pakistani nuclear expert] had asked B S A Tahir to send two containers of used centrifuge units from Pakistan to Iran. B S A Tahir organised the transshipment of the two containers from Dubai to Iran using a merchant ship owned by a company in Iran. B S A Tahir said the payment for the two containers of centrifuge units, amounting to about US\$3 million, was paid in UAE Dirham currency by the Iranians. The cash was brought in two briefcases.*

72. At the strategic level, action was taken in co-operation with President Musharraf of Pakistan to stop Khan from continuing his activities. Khan subsequently appeared on national television on 4 February 2004 to:

*. . . offer my deepest regrets and unqualified apologies to a traumatised nation . . .*

and admitted that an investigation by the Pakistani government:

*. . . has established that many of the reported activities did occur, and that these were inevitably initiated at my behest.*

## VALIDATION

73. Key individuals in the network have provided verification of the intelligence (for example, as indicated by the press release issued on 20 February 2004 by the Inspector-General of the Royal Malaysian Police after an investigation into BSA Tahir's activities). The discovery of centrifuge parts on the *BBC China* bore out the intelligence on the supply chain. Libyan co-operation following Colonel Qadhafi's decision to abandon his nuclear weapons programme has produced firm evidence that the intelligence on AQ Khan's support for this programme was accurate.

## CONCLUSIONS

74. The uncovering and dismantlement of this network is a remarkable tribute to the work of the intelligence agencies. As we looked at the reasons behind this success, several key points became apparent. First, a team of experts worked together over a period of years, overcoming setbacks and patiently piecing together the parts of the jigsaw. Although an element of luck was important in providing a breakthrough, this was not a flash in the pan. It was the result of a clear strategy, meticulously implemented, which included the identification of key members of the network and sustained work against their business activities. Secondly, there was close co-operation between UK and US agencies, with

both sides working to the same agenda. But most importantly of all, there was strong integration in the UK between all the agencies. A decision was taken early on that at working level all information, however sensitive, would be shared.

75. There was also a high degree of co-operation between the agencies and policy-makers in departments. This enabled swift and effective action to be taken at the right time. The action was intelligence-led. The agencies uncovered the activities of the network. The development of policy and action to close it down followed: by interdicting shipments; seeking co-operation from the Pakistani authorities; taking action with the recipients of AQ Khan's products, most notably Libya; and by encouraging legal action, where possible, against members of the network.

## 2.3 LIBYA

### INTRODUCTION

76. On 19 December 2003, in a public statement, the Libyan Government said that:

*. . . Libya has taken the initiative and has instigated among the countries of the world, especially the Middle East, Africa, and the Third World, the abandonment of WMD programmes . . .*

77. Colonel Qadhafi's dramatic change of policy should be viewed in the wider context of his decision in the late 1990s to move towards rapprochement with the West through, among other things, an attempt to resolve the Lockerbie issue. Much of Colonel Qadhafi's motivation for this rapprochement was economic. He recognised that he needed western, and especially US, investment in Libya's economy. The UK was important to him because it offered the best route to the US.
78. It is a matter of judgement how far the 'Iraq factor' was decisive in Colonel Qadhafi's policy change, but it seems likely that coalition action in Iraq in 2003 accelerated a process that was already under way. Nevertheless, between the late 1990s and 2003, Colonel Qadhafi may well have thought that he could achieve rapprochement with the West while retaining nuclear, chemical and ballistic missile programmes. If so, it took some time for him to recognise the incompatibility between these two objectives.

### WHAT WAS KNOWN

79. The principal JIC assessments on Libya between 1998 and 2003 paint a picture of steady progress in its nuclear and ballistic missile programmes. At first the JIC was not too concerned, judging that these programmes were not making any significant headway. But by mid-2000 the JIC was picking up signs of increased activity. By 2003, when the AQ Khan network was much better understood, Libya had been identified both as a prime customer and as one already in receipt of nuclear-related materiel. This was disturbing enough in itself, but was even more so when combined with knowledge of Libya's long-range ballistic missile aspirations. The JIC felt confident enough to conclude that Colonel Qadhafi was actively pursuing the acquisition and development of "*weapons of mass destruction*".

80. The various strands of intelligence on Libya's nuclear programme were precise, detailed and collectively strong. The intelligence on the AQ Khan network was extremely important, but it was backed up by other multi-agency reporting. Likewise, different strands of reporting combined to fill out the picture of Libyan ballistic missile and chemical weapons programmes. Most of the JIC's assessments were later borne out by validation of Libya's declarations of its nuclear, chemical and ballistic missile holdings and capabilities.

## USE OF THE INTELLIGENCE

81. One use of intelligence in the Libyan case has been to stimulate interceptions of goods destined for Libya's programmes. This has involved activity by HM Customs and Excise, co-operation with European partners and actions by other Governments.
82. A particularly notable example is that of the interception of the *BBC China* referred to above. The discoveries made enabled the UK and US Governments to confront Libyan officials with this evidence of their nuclear-related procurement at a time when Libya was still considering whether to proceed to full admission of its programmes.

## VALIDATION

83. Since Libyan Foreign Minister Shalgam's public statement, also on 19 December 2003, on his country's decision to eliminate:

*... the materials, equipments and programmes which lead to the production of internationally proscribed weapons ...*

and

*... to restrict itself to missiles with a range in line with the standards agreed in the MTCR [Missile Technology Control Regime] ...*

much progress has been made in validating Libya's declarations of its holdings of nuclear and chemical materiel, ballistic missiles and associated facilities. The inspection process for validation has been carried out by the relevant international organisations and by UK and US experts working closely with the Libyans. This in turn has helped to confirm the validity of many of the original intelligence concerns. The same intelligence that uncovered the Libyan programmes was helpful to the inspectors for another reason: it demonstrated to the Libyans how much was known about their programmes and helped to persuade them to be fully co-operative. As the 2003–04 Annual Report of the Intelligence and Security Committee<sup>1</sup> said in June 2004:

*The detailed intelligence on Libya and its procurement activities, collected by the UK and USA from all sources over a significant period of time, enabled the UK and USA to demonstrate to the Libyan authorities that they knew about their WMD programmes. Consequently, when the inspectors went to Libya the Libyan authorities, while they tried, were not able to hide their programmes and full disclosure was eventually achieved.*

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<sup>1</sup> Cm 6240. June 2004.

## CONCLUSIONS

84. Where intelligence is good it can create its own positive momentum. Successful interdictions, having been proved to be based on sound intelligence, increase confidence in the reliability of reporting from the sources. They will also often uncover new leads (from documents and questioning of those involved) that help to fill out an intelligence picture. This was a major intelligence success.

## 2.4 IRAN

### INTRODUCTION

85. Iran was attacked by Iraq at the beginning of the Iran/Iraq War in 1980, and suffered enormous casualties. Ballistic missiles were used by both sides in battlefield confrontations. Iran had considerably the worse of the strategic-level exchanges in the 'War of the Cities' in the final months of the war in 1988. It also suffered seriously from the Iraqi use of chemical warfare munitions on the battlefield, notably during the capture of the Fao Peninsula in early 1988.
86. During the Iran/Iraq war, Iran launched a chemical weapons programme and invested heavily to develop its ballistic missile capabilities. It now has a substantial and advanced indigenous ballistic missile industry. It has also been pursuing for many years a wide range of nuclear fuel cycle activities, which it claims are for entirely peaceful purposes but which could enable it to produce fissile material for nuclear weapons.
87. Despite Iran's recent engagement with the IAEA, the UK remains concerned by the potential dangers inherent in the combination of Iran's ballistic missile capabilities and its nuclear fuel cycle activities.

### WHAT WAS KNOWN

88. It is clear to us that, for the British Government, the greatest concern has been the development by Iran of a capacity to produce fissile material (which could be used to make a nuclear weapon); and ballistic missiles.
89. Iran acquired the Scud B missile from Syria (produced in the Soviet Union) and from North Korea (indigenously produced). After the Iran/Iraq war, North Korea sold to Iran production technology for first the Scud B and then the Scud C missile (an upgraded North Korean design with a range of 500km), as well as a number of complete missiles of both types.
90. In the mid-1990s, Iran bought a few examples of the then latest North Korean missile, known to the West as the No Dong 1 and with a range of some 1300km. Iran has since developed its own version of the No Dong 1, called the Shahab 3. The Shahab 3 brings within range the capitals and most of the territories of the states of the Near and Middle East; the Caucasus; Pakistan; most of Central Asia and Turkey; and part of India. Iran is now considering systems beyond the Shahab-3. Some of these longer-range systems are represented as space launchers rather than as ballistic missiles.

91. Iran's nuclear fuel cycle activities have developed slowly over more than two decades, but in recent years it has become apparent that it is developing facilities that will enable it to enrich uranium indigenously on a significant scale. Iran has announced or the IAEA has reported that Iran:
- a. Intends to mine indigenous uranium deposits near Yazd and to produce yellowcake from the ore.
  - b. Has constructed a large uranium conversion facility at Esfahan that is in the process of being commissioned and will be able to convert yellowcake into uranium hexafluoride (the feed material required for gas centrifuges).
  - c. Has constructed a large, underground facility at Natanz to house a Pilot Fuel Enrichment Plant and a full-scale Fuel Enrichment Plant, both using gas centrifuge technology.
  - d. Has indigenous facilities to manufacture centrifuge components.
  - e. Has engaged in work on both the P-1 gas centrifuge (work which led to the actual enrichment of uranium, an activity it did not declare to the IAEA at the time) and on the P-2 gas centrifuge, about which, important information as the IAEA has recently said, has in some cases been incomplete, and continues to lack necessary clarity.
  - f. Has had help with its gas centrifuge programme from a number of foreign sources. In particular, having reviewed the original P-2 technical drawings which Iran says it received from foreign intermediaries, the IAEA's experts concluded that the origin of the drawings was the same as that of the drawings provided to Libya<sup>2</sup>.
92. The IAEA has also reported that Iran:
- a. Has plans to produce a Heavy Water Research Reactor.
  - b. Has largely completed a Heavy Water Production Plant to provide the heavy water it will require.
  - c. Has plans for a Fuel Manufacturing Plant.
  - d. Has experimented in the past with plutonium separation, without declaring it at the time to the IAEA.

The IAEA has also raised concerns about work on laser enrichment and polonium-210.

## VALIDATION

93. France, Germany and the UK (sometimes known as the 'EU3') have worked together to support the IAEA on its activities. Intelligence supplements what the UK knows from the IAEA, and policy formulation and execution has made full use of both sets of information. Separately, since the National Council of Resistance of Iran publicised previously secret

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<sup>2</sup> That is, by AQ Khan.

facilities in August 2002 (the enrichment facility at Natanz and the Heavy Water Production Plant at Arak), the IAEA has sought to obtain a better understanding of all Iran's past and current nuclear activities. It has also called on Iran to accept additional safeguards obligations and urged it, as a confidence-building measure, to suspend some of its activities.

94. As regards the chemical weapons programme launched during the Iran/Iraq War, Iran has subsequently signed and ratified the Chemical Weapons Convention (in 1993 and 1997 respectively). Although Iran did not meet the declaration timetable specified by the Convention, it did later declare two former chemical weapons production facilities. The Organisation for the Prohibition of Chemical Weapons has since verified that this production capability has been eliminated.

## CONCLUSIONS

95. As with other cases we have reviewed, we have observed in the case of Iran that British policy is to promote the effective use of international processes. Hence Britain, with France and Germany, played an important role in October 2003 in persuading Iran to respond to the IAEA Board of Governors' calls on Iran to make a full declaration about its past and current activities, to commit itself to signing an Additional Protocol (and to apply its provisions while moving to ratification), and to suspend all enrichment-related and any reprocessing activities.
96. There are also clearly outstanding issues about Iran's activities. Iran has signed an Additional Protocol to its Safeguards Agreement and is making additional declarations to the IAEA as a result, but has still not ratified it. Furthermore, negotiations with Iran over the scope and verification of the activities to be suspended have been difficult. Most recently, Iran has decided to resume manufacturing of components and assembly of centrifuge machines under IAEA supervision, having earlier decided voluntarily to suspend them.

## 2.5 NORTH KOREA

### INTRODUCTION

97. We have focused mainly on the threat that North Korea poses as a proliferator. However, to put North Korean exports in context, we have kept in mind that North Korea itself could pose a nuclear threat not just to its neighbours but increasingly on a global scale. Agreements reached in the 1990s to suspend North Korean plutonium production in return for economic aid recently broke down when the North Koreans, confronted by the US, admitted that they had also embarked on a secret programme to enrich uranium.
98. In December 2002, under pressure to abandon this programme, North Korea expelled the IAEA inspectors who had been monitoring their suspended plutonium production facilities, and soon after announced its withdrawal from the Nuclear Non-Proliferation Treaty. The North Koreans probably have enough plutonium from their previous programme to make at least one nuclear weapon. Reprocessing their spent fuel stocks could produce plutonium for still more weapons. Their uranium enrichment programme

could potentially produce highly enriched uranium for yet more. At the same time, North Korea has engaged on an extensive missile development programme, based on original designs from the Soviet Union. During the 1990s, North Korea steadily increased the range and payload of these missiles and in 1998 it test fired a three-stage rocket on a trajectory which took it over Japan. While this could not deliver a nuclear warhead beyond a medium range, North Korea is now thought to be developing missiles capable of delivering nuclear weapons as far away as the continental United States and Europe.

## WHAT WAS KNOWN

99. North Korea is a particular cause for concern because of its willingness to sell ballistic missiles to anyone prepared to pay in hard currency. While the sale of the missiles themselves is not illegal, providing them to countries which are or may be developing nuclear weapons increases the global threat from such weapons. For this reason, tracking North Korea's role as a supplier of missile systems has been a top priority for the intelligence community since 1991.
100. We examined the JIC assessments and relevant intelligence reports from that date until 2003, and heard evidence from witnesses engaged in collecting intelligence on this subject. The picture that emerged was of a state-controlled, self-sustaining missile industry, which was able to fund further development by channelling profits from exports back into the programme. While the Middle East has been the main destination for North Korean missiles, we saw evidence of North Korean interest in sales on a global scale.
101. The JIC first noted in an assessment of February 1992 that North Korea had emerged as a major exporter of missiles and that it was also prepared to sell missile production technology. The sale of technology, while lucrative on a short-term basis, closed off options for future sales but, on a wider perspective, fuelled the cycle of onward proliferation, as North Korea's customers became producers themselves and developed their own export programmes.
102. Throughout the 1990s, the JIC followed details of North Korean missile sales to third world countries. It noted that, in addition to Scud B and C, which had been sold with production technology for local manufacture, North Korea had also offered the No Dong 1, a longer range version of the Scud, to foreign purchasers. By 2001, the JIC was noting that North Korea was also prepared to offer Taepo Dong missiles with an assessed range of up to 15,000 km. In its most recent assessment of 2003, the JIC assessed that North Korea was continuing its export programme, seeking new customers and offering upgrades to existing customers.

## VALIDATION

103. Intelligence has fed into the work of the Restricted Enforcement Unit, an inter-departmental organisation in the UK working to prevent the export of sensitive materials to North Korea and other countries of concern.
104. Apart from interdictions, which were the result of specific leads from intelligence, photographs of the Pakistani Ghauri missiles show that they are almost identical to the No

Dong, confirming intelligence that they were based on North Korean technology. Access to the Libyan missile programme has also confirmed earlier intelligence that the North Koreans helped the Libyans to develop an 800km-range Scud missile.

## CONCLUSIONS

105. We have studied the steady flow of intelligence on North Korean proliferation activities. North Korea is a difficult target because of tight state control. But the intelligence agencies have co-operated closely to tackle this problem, with cross-correlation of intelligence producing a total result which has been greater than the sum of the parts. The intelligence agencies have employed a range of ingenious tactics patiently and skilfully to piece together an intelligence picture of North Korean activity. This has provided important insights that have enabled the British Government to take decisive action to limit the extent of North Korean exports of missile delivery systems.
106. Intelligence continues to contribute to specific actions against missile exports in the context of the US-led Proliferation Security Initiative, which provides a framework for international co-operation aimed at disrupting the proliferation activities of states such as North Korea. Intelligence on specific activities is vital to the success of this operation. Close co-operation with liaison services is also important and we have seen clear evidence of this in the work of the intelligence agencies.

## 2.6 GENERAL CONCLUSIONS

107. **All four of the case studies we discuss were to a greater or lesser extent success stories. To a degree, that was inevitable – we chose those cases where intelligence about nuclear, biological, chemical and ballistic missile programmes and proliferation activities can be discussed precisely because it has contributed to disclosure of those activities. But that should not detract from what has clearly been an impressive performance by the intelligence community and policy-makers in each case, and overall.**
108. **A number of common threads have become clear from our examination of each case. The first and most obvious is the powerful effect of exploiting the linkages where they exist between suppliers (AQ Khan; North Korea) and buyers (Iran; Libya; others) for counter-proliferation activity. It is in the nature of proliferation that what can be discovered about a supplier leads to information about the customer, and vice versa. The second thread flows from this - the powerful multiplier effect of effective international (in many cases, multinational) collaboration.** This thread emerges, too, in the next Chapter, on terrorism.
109. **Third, this is painstaking work, involving the piecing together over extended timescales of often fragmentary information. There are the surprises and ‘lucky breaks’. But they often come from the foundation of knowledge developed over several years. It requires close collaboration**

**between all involved, in agencies and departments, to build the jigsaw, with teams able to have access to available intelligence and to make the most of each clue. It also depends on continuity of shared purpose amongst collectors and analysts, and between the intelligence and policy communities, in gathering, assessing and using intelligence in tackling proliferation and nuclear, biological and chemical weapons programmes which are destabilising in security terms.** We develop this theme further, in Chapter 4 on the UK's counter-proliferation machinery, and in Chapter 7 on our broader Conclusions.



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## CHAPTER 3

### TERRORISM<sup>1</sup>

#### 3.1 SCOPE

110. We have examined intelligence reports and assessments on the links between terrorism and chemical, biological, radiological and nuclear weapons, and the use made of that intelligence, from when it began in the early 1990s to emerge as a topic of interest to the Joint Intelligence Committee (JIC). For the purpose of illustrating the contribution made by intelligence to policy formulation by the Government and to actions taken on the basis of that policy, we have focussed on the scope and quality of intelligence reports and assessments on the use by terrorists and extremists of unconventional weapons, and the extent to which they were validated by subsequent discoveries in Afghanistan. To avoid prejudicing current operations, we do not cover in this Report more recent intelligence assessments or findings.

#### 3.2 THE PERIOD UP TO 1995

111. In the late 1980s, the possibility that terrorist groups might seek to use unconventional weapons was considered remote. In surveys of nuclear, biological and chemical weapons proliferation in 1989, the JIC dealt briefly with the possibility that such technology might be used by terrorists:

*We believe that even the most sophisticated and well-organised terrorist group is highly unlikely to be able to steal and then detonate a nuclear weapon within the foreseeable future. . . . At present the most feasible terrorist nuclear incident would probably be a credible hoax. A terrorist threat to detonate a nuclear device would be difficult to dismiss entirely in view of the increasing number of producers of fissile material in a variety of countries and the problems of accounting fully for all material produced. Terrorists might see a seemingly plausible and preferably well publicised warning of an imminent nuclear attack as potentially a very effective means of blackmailing governments.*

[JIC, 3 July 1989]

and:

*We have no intelligence that any terrorist group makes CBW agents, possesses any such agents or is currently contemplating attacks using CBW agents or other toxic chemicals. The use of CBW agents by terrorists would generate widespread fear and could cause large numbers of casualties. The mere threat of such use could be sufficient to cause panic.*

*A terrorist would need only small quantities of CW agents. The simpler ones could in principle be made by anyone with a knowledge of A-level chemistry using readily*

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<sup>1</sup> This section is limited to intelligence on the use by terrorists of chemical, biological, radiological and nuclear weapons. The large majority of terrorist actions employ conventional armaments and explosives, and are not relevant to this Review.

*obtainable materials. We believe that terrorist organisations could also readily obtain and handle without insurmountable difficulty, suitable bacteria, viruses and certain toxins.*

*Although CBW proliferation undoubtedly increases the risk that CBW agents could be stolen by or even supplied to terrorists by state sponsors . . . this prospect must be viewed against a background where many suitable agents can be manufactured in small quantities using easily available materials. So as far as terrorism is concerned, proliferation (if it comes about) may not necessarily be much affected by the actions of States with the relevant capability.*

[JIC, 26 June 1989]

112. The main strands in this assessment set the standard for the next few years. There was no credible evidence of terrorist interest in nuclear, biological or chemical weapons; hoaxes and threats might be more disruptive than actual use; terrorists were very unlikely to be able to acquire nuclear devices; and the fact that some states possessed nuclear, biological or chemical weapons was unlikely to affect the risk of their use by terrorists.

113. In April 1992<sup>2</sup>, in its first assessment specifically on the threat of attacks by terrorists using chemical, biological, radiological or nuclear weapons, the JIC considered the technical options, but emphasised the difficulties which were thought likely to render such methods unattractive options for terrorist groups:

*They may be deterred by the danger to their own members, or by the risk of alienating the public and especially their own supporters. They may also fear that an attack would cause international outrage leading to determined efforts on an international scale to bring them to book. By contrast, conventional weapons are cheaper, easier to procure, and offer equal or greater effectiveness against traditional targets (such as prominent individuals, members of the security forces, government buildings).*

[JIC, 23 April 1992]

This, too, was to become a feature of JIC assessments: for most terrorist uses, conventional weapons were better.

114. By October 1994, there had been a number of media reports – some correct – of fissile material being available on the black market. In the first of several such studies, the JIC did not consider that these affected its overall assessment:

*Despite the possibility which now exists of obtaining fissile material, it is extremely unlikely that a terrorist group could produce even a crude nuclear device; nor is there any evidence that any group has contemplated the use of nuclear weapons. A more plausible scenario might be the dispersal of radioactive materials by conventional explosives or other means to achieve radiological contamination. The actual danger to the public from radioactivity would probably be small – smaller in some cases than to the terrorists. But such an attack (or its threat) could be highly effective in causing panic and public concern.*

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<sup>2</sup> It was also in 1992 that a Kurdish terrorist group tried to poison the water supply of a Turkish airbase using cyanide.

*We believe that terrorists would not be able to acquire or deploy a nuclear weapon; radiological attacks are possible but unlikely. Attacks involving chemical or biological agents are also unlikely, though use of toxic chemical substances (for which there are some limited precedents) remains a possibility.*

[JIC, 13–19 October 1994]

### 3.3 1995–1997

115. By June 1995, the JIC was assessing the threat posed by Islamist extremists; the terrorist threat was spreading outside the Middle East. The JIC commented on the use of suicide tactics, a strand which was subsequently to become significant in such assessments:

*Selective interpretation of the Muslim faith enables such groups to justify terrorist violence and to recruit 'martyrs' for suicide attacks.*

[JIC, 8 June 1995]

116. However, the first serious use of chemicals by terrorists was not by Islamist extremists. The sarin gas attack in the Tokyo underground by the Aum Shinrikyo sect came in March 1995<sup>3</sup>. In a 1996 assessment of the nuclear, biological and chemical threat to the UK<sup>4</sup> (which responded to the G7 declaration at the Lyons summit in June that year that special attention should be paid to the threat of use of nuclear, biological and chemical materials for terrorist purposes) the JIC stuck to its previous line, though noting the Aum Shinrikyo attack:

*There is no indication of any terrorist or other group showing interest in the use of nuclear, biological or chemical (NBC) materials against the UK. For a number of reasons, conventional weapons are likely to remain more attractive for terrorist purposes. But last year's nerve agent attack in Tokyo will have heightened interest and, with ever more NBC information publicly available, hoaxes threatening NBC use are likely to become more difficult to assess.*

[JIC, 4 July 1996]

### 3.4 1998–1999

117. Usama bin Laden first became known as a high-profile supporter of Islamist extremism while fighting against Soviet forces in Afghanistan during the 1980s. Expelled from Saudi Arabia in 1991 and from Sudan in 1996, he returned to Afghanistan. Evidence of his interest in unconventional weapons accumulated, and was summarised by the JIC in November 1998:

*He has a long-standing interest in the potential terrorist use of CBR materials, and recent intelligence suggests his ideas about using toxic materials are maturing and being developed in more detail. . . . There is also secret reporting that he may have obtained some CB material – and that he is interested in nuclear materials. We*

<sup>3</sup> The sect had carried out sporadic and unsuccessful open-air attacks using a range of agents since 1990. One attack (using sarin) in Matsumoto in June 1994 caused 7 deaths and 264 people were hospitalised. These earlier attacks were little noticed outside Japan.

<sup>4</sup> Because of its limited ambit this paper did not take note of the then recent Chechen guerrilla operation to place minute quantities of caesium-137 in a Moscow park.

*assess that he lacks the expertise or facilities even to begin making a nuclear weapon, but he might seek to make a radiological device.*

[JIC, 25 November 1998]

118. Seven months later, in June 1999, the JIC had received more intelligence, and re-assessed the threat from Usama bin Laden's organisation accordingly:

*Most of UBL's planned attacks would use conventional terrorist weapons. But he continues to seek chemical, biological, radiological and nuclear material and to develop a capability for its terrorist use. There is insufficient evidence to conclude that he has yet acquired radiological or nuclear material. In contrast, we now assess that his followers have access to some unspecified chemical or biological material. Some have received basic training in its use against individuals or in confined spaces.*

*In April a leading Egyptian terrorist, apparently believing the information was already known to the authorities, told an Egyptian court that UBL had CB 'weapons' which he would use against US or Israeli targets.*

[JIC, 9 June 1999]

Intelligence reports of bin Laden's associates falling for nuclear materiel frauds suggested, however, that they were not well advised on nuclear matters.

119. A month later, in July 1999, the JIC explained an important change in one of the major assumptions underpinning its previous assessments – some terrorists were no longer reluctant to cause mass casualties, for example some Islamist extremist terrorists and Aum Shinrikyo:

*Over the 1990s there has been a significant increase in the quantity and quality of intelligence that some terrorists are interested in CBRN – and particularly in chemical and biological – materials as weapons. The risk of a CBRN terrorist incident has risen, albeit from a low base. In part this increase reflects the rise of Islamic extremism and ethnic hatred as terrorist motivations: some of the terrorists thus motivated are less constrained by considerations such as public support, casualties among innocent bystanders, or the prospect of retaliation. It may also reflect the increasing availability of information about making and using CB materials, and the publicity attracted by major incidents and hoaxes. Whether the attacker's aim is political or economic blackmail, or severe disruption, society's vulnerability to terrorist attack from CB or radiological materials is high, exacerbated by the lack of a tried and tested CB counter-terrorist response in some countries.*

[JIC, 15 July 1999]

120. In the same assessment, the JIC made its own judgement, in the absence of specific intelligence, that Usama bin Laden had after several years been successful in acquiring non-conventional weapons. That judgement was later shown to be correct:

*There have been important developments in [Islamist extremist] terrorism. It has become clear that Usama Bin Laden has been seeking CBRN materials . . . His wealth permits him to fund procurement, training and experimentation to an extent*

*unmatched by other terrorists. . . . Given the quality and quantity of intelligence about his interest in CB materials, the length of time he has sought them, and the relative ease with which they can be made, we assess that he has by now acquired or made at least modest quantities of CB materials – even if their exact nature and effectiveness are unclear. The significance of his possession of CB materials is that, in contrast to other terrorists interested in CB, he wishes to target US, British and other interests worldwide. There is also intelligence on training in the use of chemicals as weapons in a terrorist camp in Afghanistan, although it is not yet clear if this is under Bin Laden’s auspices. The CB threat is likely to be higher abroad than in the UK, reflecting the location of Bin Laden and his allies, the vulnerability of potential targets, and the effectiveness of local security authorities. Targets may include British official sites or related facilities overseas. That said, Bin Laden’s attacks remain more likely to employ conventional weapons than CB materials.*

[JIC, 15 July 1999]

121. However the JIC still retained its overall conclusion, that:

*. . . the indications of terrorist interest in CBRN materials have yet to be matched by a comparable amount of evidence about possession and intent to use CBRN. Most terrorists continue to favour conventional weapons, as easier to use, more reliable, safer and more controllable than CBRN materials.*

[JIC, 15 July 1999]

### 3.5 2000–2001

122. By January 2000, in an assessment of conventional threats, the JIC summarised bin Laden’s aspirations for non-conventional weapons:

*UBL retains his interest in obtaining chemical, biological, radiological and nuclear (CBRN) materials and expertise. In autumn 1999 there was intelligence that he had recruited . . . chemicals specialists . . . . Our assessment remains that UBL has some toxic chemical or biological materials, and an understanding of their utility as terrorist weapons. But we have yet to see hard intelligence that he possesses genuine nuclear material.*

[JIC, 12 January 2000]

123. By August 2000, the JIC was clear that, although there were other Islamist extremist groups<sup>5</sup> with an interest in non-conventional weapons, Usama bin Laden posed the most severe threat:

*Some [Islamist extremist groups] are interested in exploring the use of chemical or biological materials as weapons. In the forefront is UBL . . .*

[JIC, 9 August 2000]

124. In January 2001, the JIC reported at length on the terrorist threat from unconventional weapons and emphasised the unique nature of the threat from Usama bin Laden:

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<sup>5</sup> The JIC was a year later to comment that the word ‘groups’ can be misleading in the context of Islamist extremist terrorists. “There are established groups in different countries, usually working to a national agenda, but the networks associated with UBL are changeable ad hoc groupings of individuals who share his agenda, and who may come together only for a particular operation. Nevertheless, ‘groups’ is used as a short form for want of another available term.”

*The actual threat does not match the media hype. Almost all the available intelligence refers to terrorist interest in CB materials, rather than to specific attack plans. There is no credible intelligence that any terrorist except UBL has the capability or serious intent to explore the use of weapons-grade nuclear materials – nor, except for Chechen extremists, radiological material. Terrorists interested in CB are generally those least constrained by public opinion or their members' or supporters' sensitivities. Their resources and targets tend to be abroad rather than in Britain, so the risk of attacks using toxic materials has always been greater overseas.*

*UBL has sought CBRN materials for use as terrorist weapons . . . . From his public statements and interviews it is clear that he believes it is legitimate to use them as weapons and his wealth has allowed him to fund procurement, experimentation and training. There is plentiful intelligence that this interest is sustained, mostly relating to toxic materials.*

*In 1999 he sought equipment for a chemical weapons lab in Afghanistan, and claimed already to have . . . experts working there.*

[JIC, 10 January 2001]

### 3.6 THE AFTERMATH OF 9/11

125. In an important paper shortly after the attacks of 11 September 2001, the JIC made clear the way in which Usama bin Laden's philosophy, combined with suicide attacks, had changed the calculus of threat. This assessment summarised the new security challenge which, as we describe further in the context of Iraq at Chapter 5, was to become dominant in the thinking of British Ministers – the desire of terrorists and extremists to cause casualties on a massive scale, undeterred by the fear of alienating the public or their own supporters that had been noted as a constraining factor in JIC assessments in the early 1990s or by considerations of personal survival. To this fundamental shift in the JIC's judgement on the likely motivation and goals of terrorists and extremists was added a corresponding shift in its conclusions about the attractiveness of nuclear, biological or chemical weapons. Thus, in September 2001 the JIC noted that:

*Many defensive and preventive measures taken against terrorism (such as ensuring that passenger and luggage travel together) still presuppose that the terrorist will want to survive the attack. But suicide attackers, especially those backed by sophisticated planning and pursuing non-negotiable objectives, negate many security measures and widen society's vulnerability. New strategies are required to counter the threat of terrorists willing, or even eager, to sacrifice their lives as martyrs in Islamic extremist or other causes – although there can be no complete protection against them.*

*In the context of UBL's jihad, casualties and destruction could be an end in themselves as much as a means to an end (Footnote: UBL's stated objective is to secure US withdrawal from the Middle East or, failing that, to provoke a reaction which would further demonise the US in the eyes of Muslims and destabilise moderate Arab states that he perceives as un-Islamic). He has no interest in*

*negotiation and there is no indication that he can be deterred.*

[JIC, 18 September 2001]

126. The JIC also went on in this paper to note Usama bin Laden's interest in nuclear devices.
127. The British Government's dossier of 4 October 2001<sup>6</sup>, which attributed the attacks of 11 September 2001 to Usama bin Laden, also reflected the attractiveness to him of nuclear, biological and chemical weapons, saying that:

*From the early 1990s Usama bin Laden has sought to obtain nuclear and chemical materials for use as weapons of terror.*

and reminding its readership that:

*When asked in 1998 about obtaining chemical or nuclear weapons he said "acquiring such weapons for the defence of Muslims (was) a religious duty".*

[Government's dossier, 4 October 2001]

### 3.7 INTELLIGENCE ON UBL'S CAPABILITIES AND ITS VALIDATION

128. A considerable quantity of evidence of Usama bin Laden's capabilities in the nuclear, biological and chemical fields was uncovered after the US-led military action in Afghanistan in October 2001. This section compares these discoveries with JIC judgements beforehand.

#### NUCLEAR

129. In 1999, the JIC reported Usama bin Laden's claims to be setting up a laboratory in Afghanistan. Following the collapse of the Taliban regime, in January 2002 the United Nations Security Council listed a former Pakistani nuclear scientist Bashir Mahmood as associated with the Taliban or Al Qaida.

#### CHEMICAL

130. Intelligence reporting from 1999 onwards testified to the activities of Abu Khabbab, an explosives and chemicals expert who ran training courses which included information on how to make and use poisons. This was confirmed by discoveries in Afghanistan such as a video showing chemical experiments being carried out on animals, and by the finding of numerous training manuals.

#### BIOLOGICAL

131. In 1999, the JIC reported that:

*In February 1999 one of his followers claimed that UBL intended to attack US and UK targets in India, Indonesia and the US, by using means which even the US could*

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<sup>6</sup> "Responsibility for the Terrorist Atrocities in the United States, 11 September 2001".

*not counter, implying the use of chemical or biological material.*

[JIC, 9 June 1999]

132. Some work with biological agents was also attributed to Abu Khabbab, though the evidence was not detailed. However, the JIC's judgement that Al Qaida was developing biological weapons was confirmed by the discovery in Afghanistan of the Kandahar laboratory, and evidence that scientists had been recruited.

### 3.8 INTELLIGENCE RESPONSES TO INTERNATIONAL TERRORISM

133. Few of the measures being taken by the Government to improve the response to the terrorist threat are unique to attacks using chemical, biological, radiological and nuclear materials. The threat is international, and has motivated intelligence organisations to intensify both national and international collaboration on an unprecedented scale. **All of the UK intelligence agencies are developing new techniques, and we have seen clear evidence that they are co-operating at all levels.**
134. The most obvious embodiment of enhanced inter-departmental co-operation in the UK is the Joint Terrorism Analysis Centre (JTAC). This is a multi-agency organisation, hosted by the Security Service but staffed by personnel seconded from all of the agencies, law enforcement organisations and relevant departments. Its staff retain links to their parent departments and, operating on a round-the-clock basis, pool information to produce continuous assessments of threats within the UK, to British interests abroad and of terrorist activities generally. **JTAC has now been operating for over a year and has proved a success.**
135. The Security Service and Home Office are improving public education, through web sites and by other means, for both long-term and immediate appreciation of terrorist threats.
136. **International counter-terrorism collaboration has also been significantly enhanced in the past six or seven years. Though we understand that other countries have not yet achieved the same level of inter-departmental synthesis, considerable developments have taken place. Staff of the UK intelligence and security agencies are today in much wider contact with their opposite numbers throughout the world.** We have, for example, been briefed on a recent successful counter-terrorist operation which involved eight different countries working together. **We note these initiatives, but remain concerned that the procedures of the international community are still not sufficiently aligned to match the threat.**

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## CHAPTER 4

### COUNTER-PROLIFERATION MACHINERY

#### 4.1 INTRODUCTION

137. The proliferation of nuclear, chemical and biological weapons and their delivery systems has been recognised by successive British Governments as a major threat to the country's interests. Internationally, those concerns have been manifested not least through the UK's support for the Nuclear Non-Proliferation Treaty, the Chemical Weapons Convention, the Biological and Toxin Weapons Convention and the Missile Technology Control Regime. Since the Cold War, the UK has had a range of mechanisms to prevent or limit proliferation and sensitive technology transfers. In this Chapter, we describe the current UK counter-proliferation machinery in relation to countries of concern and non-state actors such as terrorist groups.

#### 4.2 DEPARTMENTAL RESPONSIBILITIES

138. The Foreign and Commonwealth Office (FCO) is responsible for advice on all aspects of counter-proliferation policy including treaties and conventions, sanctions and export control policy.
139. The Department of Trade and Industry (DTI) is responsible for the implementation of the UK's international obligations relating to the Chemical Weapons Convention and the International Atomic Energy Agency, and, through the Export Control Organisation (ECO), for processing all applications for export licenses. The DTI is also responsible for export control legislation and contributes to the formulation of general policy on United Nations sanctions.
140. The Ministry of Defence is responsible for the defence response to nuclear, chemical and biological threats and ensures that defence considerations are taken into account in the Government's counter-proliferation policy. The Defence Intelligence Staff provides detailed advice across the full range of counter-proliferation issues, including technical analysis of weapons, production programmes, delivery systems and procurement networks.
141. HM Customs and Excise are responsible for the enforcement of export licensing controls including the investigation and prosecution of suspected offences.
142. Within the Cabinet Office, the Joint Intelligence Committee, supported by the Assessments Staff, provides strategic national intelligence assessments which inform counter-proliferation policy decisions. The Head of the Defence and Overseas Secretariat of the Cabinet Office is responsible for co-ordinating policy on counter-proliferation across Whitehall through the Counter-Proliferation Committee (CPC), which he chairs.

#### 4.3 CO-ORDINATION

143. The CPC is the principal co-ordination mechanism for strategic counter-proliferation policy. It was formed in July 2002, bringing together policy and operational issues that had

previously been addressed by separate bodies. It includes senior officials from the relevant policy departments, and the intelligence community.

144. The Counter-Proliferation Implementation Committee (CPIC) is responsible for actions to put into effect the strategies and initiatives agreed by the CPC. Among its other functions, the CPIC co-ordinates more tactical or technical policy development and provides guidance on priorities for the work of individual Whitehall departments. Representation on CPIC is the same as the CPC with the addition of the Assessments Staff and HM Customs and Excise.
145. When Ministerial decisions are needed, the usual practice is for the department which leads on the particular issue to consult its own Secretary of State noting the views of the CPC and CPIC. As appropriate, the responsible Secretary of State may consult the Prime Minister and other Ministerial colleagues.
146. The Restricted Enforcement Unit (REU) is the working level group that acts on intelligence relating to attempted breaches of UK export controls or other attempts to supply sensitive items to countries of concern. It is chaired by the DTI and includes representatives of all CPIC member departments.
147. The Official Committee on Strategic Exports (OSE) has a very broad remit and membership. It does not address specific counter-proliferation issues, but deals with general aspects of the control of exports and the licensing of military goods and other goods of strategic importance.

#### 4.4 THE ROLE OF INTELLIGENCE

148. As we note in Chapter 1, proliferating states usually represent difficult targets for intelligence collectors, and weapons programmes are usually particularly difficult targets within them. Intelligence will as a result usually provide only a part of the picture, but the alternative is usually no picture at all. Countries of concern go to great lengths to conceal weapons programmes because they represent some of the most sensitive and secret work undertaken in those countries. For example, because procurement is illegal, they use networks of companies to conduct procurement; and production and storage facilities are often sited in remote locations.
149. **Intelligence performs an important role in many aspects of the Government's counter-proliferation work. It helps to identify proliferating countries, organisations and individuals through JIC assessments, DIS proliferation studies and operational intelligence. It can help to interdict or disrupt the activities of proliferators either nationally or in co-operation with other countries. It can support diplomatic activity by revealing states' attitudes to counter-proliferation or by informing the assessments of international partners. It can also support inspection, monitoring and verification regimes and on occasions military action.**
150. **Intelligence can play an important part in enforcing export controls, particularly in relation to 'dual-use' goods and technologies.** The ECO

processes some 10,000 intelligence reports a year and about 9,000 applications for individual export licences. The Restricted Enforcement Unit regularly considers the latest intelligence relating to potential breaches of export controls or other exports of concern and co-ordinates action by its member departments. These actions can include alerting UK exporters to the activities of proliferators, seizing goods, investigating potential breaches of UK export controls and informing the authorities in other countries of proliferation activities under their jurisdiction and encouraging them to take action against them.

