Disarming Iraq?

The United Nations Special Commission 1991–98

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Contents

Abbreviations...............................................................................................5
Acknowledgments.........................................................................................6

Chapter 1
Introduction ..................................................................................................7
Summary of conclusions.............................................................................13

Chapter 2
Iraq's CBW programmes and international responses prior to 1991....17
Iraq's pursuit of chemical weapons...........................................................17
Iraq's pursuit of biological weapons..........................................................20
CBW in Iraqi security and strategy.............................................................21
International reactions before and after the Gulf War in 1991....25
Changing threat assessments.....................................................................28
Efforts to counter Iraq's pursuit of NBC prior to 1991.........................29

Chapter 3
UNSCOM: Background, characteristics and overview ......................32
UNSCOM: designed to disarm?.................................................................33
UNSCOM's mandate..................................................................................34
UNSCOM - a unique organisation.............................................................36
The impact of Iraq's partial cooperation................................................38
Monitoring disarmament..........................................................................43
UNSCOM's role: adaptation and pressures.........................................47
Diminishing prospects of success.............................................................49
Erosion and failure....................................................................................51

Chapter 4
Resolution 687: 'Mission Impossible'?..................................................53
Objectives ..................................................................................................55
Determining disarmament?......................................................................56
Security Council: eroding consensus.......................................................59

Chapter 5
UNSCOM's achievements in accounting for Iraq's disarmament...62
Chemical weapons ....................................................................................63
Biological weapons...................................................................................67
Proscribed ballistic missiles ....................................................................71
UNSCOM's achievements........................................................................74
Chapter 6
Ongoing Monitoring and Verification............................................82
  OMV: Characteristics................................................................84
Underpinning assumptions ..........................................................89
OMV architectures ......................................................................92
OMV and containment ...............................................................93
Risk management and OMV .........................................................95

Chapter 7
Coping with the challenges in Iraq .................................................97
  Remaining disarmament issues ................................................105
Why and how did the unresolved issues emerge? .......................108
The implications of the remaining issues ....................................109
Residual risks ............................................................................111

Chapter 8
Conclusion ...................................................................................114
  Limitations of enforced disarmament ......................................116
Unresolved issues .......................................................................119

Bibliography .................................................................................121
Appendix A ..................................................................................134
Appendix B ..................................................................................147
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>BM</td>
<td>Ballistic Missiles</td>
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<tr>
<td>BW</td>
<td>Biological Weapon</td>
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<tr>
<td>CAFD</td>
<td>Currently Accurate, Full, and Complete Declaration presented to the UN by Iraq December 7 2002</td>
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<td>CW</td>
<td>Chemical Weapon</td>
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<td>CBW</td>
<td>Chemical and Biological Weapons</td>
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<td>CWC</td>
<td>Chemical Weapons Convention</td>
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<td>IAEA</td>
<td>International Atomic Energy Agency</td>
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<td>ISG</td>
<td>Iraq Survey Group</td>
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<td>NBC</td>
<td>Nuclear, Biological and Chemical Weapons</td>
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<td>NW</td>
<td>Nuclear Weapon</td>
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<td>NPT</td>
<td>Nuclear Non-Proliferation Treaty</td>
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<tr>
<td>OMV</td>
<td>Ongoing Monitoring and Verification</td>
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<td>P5</td>
<td>Permanent five (members of the UN Security Council)</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<td>UNSCOM</td>
<td>United Nations Special Commission</td>
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<tr>
<td>UNMOVIC</td>
<td>United Nations Monitoring and Verification Commission</td>
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<tr>
<td>WMD</td>
<td>Weapons of Mass Destruction</td>
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Chapter 1

Introduction

After the Gulf War in 1991, United Nations (UN) Security Council Resolution 687 demanded that Iraq completely disarm of nuclear, chemical and biological (NBC) weapons and infrastructures, as well as ballistic missiles with a range in excess of 150 kilometres. The United Nations Special Commission (UNSCOM) was set up to assess Iraq’s compliance with these requirements in the areas of chemical and biological weapons and ballistic missiles. According to Resolution 687, Iraq was obliged to disarm in a manner that could be confirmed by UNSCOM. Moreover, once the disarmament had been completed UNSCOM would monitor Iraq’s continued compliance with the disarmament obligations. A monitoring system would be set up to ensure that Iraq did not try to rebuild proscribed capabilities. Both elements – disarmament and monitoring – were necessary to ensure that Iraq remained completely disarmed of the proscribed weapons and infrastructures. However, in 1998 UNSCOM left Iraq without having been able to confirm that Iraq had completely disarmed of chemical and biological weapons (CBW), ballistic missiles (BM) with a range of more than 150 km, and the infrastructures used to produce these weapons.

In December 1998 the Security Council’s consensus on how to respond to Iraq broke down. This breakdown, and the
resulting inability to reinstate a disarmament and monitoring regime in Iraq after 1998, was rooted in opposing views on whether the Iraqi regime and the unresolved disarmament issues posed a threat to international security. These differences were manifested in the split that emerged in the Security Council over the future of the disarmament and monitoring regime in Iraq. China, Russia and France proposed that a monitoring agency ought to replace UNSCOM, while the United States and Britain argued that the new agency had to focus on both disarmament and monitoring. There were significant political and technical differences between these two activities. Disarmament focused on ensuring the destruction of existing Iraqi chemical and biological weapons and proscribed missiles, along with the infrastructures used to develop and make these weapons. Monitoring was intended to ensure that Iraq did not acquire or rebuild CBW or proscribed BM infrastructures. The opposing factions in the Security Council disagreed on whether it was possible to monitor to ascertain whether Iraq stayed disarmed unless all remaining disarmament questions had been resolved. However, the breakdown of the Council's consensus meant that UNSCOM inspectors never returned to Iraq.

The concerns about remaining disarmament issues later changed dramatically. After the terrorist attacks on September 11, 2001, the George W. Bush administration cast the unsolved Iraqi disarmament issues and the possibility that Iraq could have resumed proscribed weapons production after 1998 in terms of a threat of global proportion. The focus on international terrorism lowered the threshold for what capabilities were considered to pose a threat to international security. As a result of changes in the United States' threat perception, the question whether Iraq had or was able to acquire nuclear, chemical or biological weapons returned to the centre stage of international politics in 2002.
This renewed focus on the unresolved disarmament issues in Iraq revived the UN disarmament process, and with the passing of Security Council Resolution 1441 a new inspection process was initiated. UNSCOM’s successor organization, the United Nations Monitoring and Verification Commission (UNMOVIC), was sent to Iraq in order to assess whether Iraq would make use of this ‘final opportunity to comply with its disarmament obligations under relevant resolutions of the Council’.\(^1\) UNMOVIC stayed in Iraq between 27 November 2002 and 18 March 2003, when all UN staff were withdrawn due to the impending war. An international coalition heavily dominated by American and British troops then attacked Iraq, arguing that Iraq since 1991 had retained stockpiles of chemical and biological weapons, that Iraq was acquiring more of these weapons and that the Saddam Hussein regime was pursuing a nuclear weapons capability. However, after the war the coalition’s search team, the Iraq Survey Group (ISG), first led by David Kay and subsequently Charles Duelfer, has concluded that no large storages of chemical or biological weapons have been found. No unequivocal evidence that such weapon-production, or a nuclear weapons programme, had been reinitiated after UNSCOM left in 1998 has been found. Although Iraq had undertaken a number of activities with the aim of developing missiles of proscribed ranges since 1998, none of these projects included efforts to develop warheads for chemical or biological weapons.\(^2\)

The UN disarmament and monitoring process between 1991 and 1998 had led to substantial destruction of Iraq’s biological and chemical weapon arsenals, as well as the destruction of the known infrastructure for development and production of nuclear, biological and chemical warfare capabilities. UNSCOM’s disarmament achievements had a long-lasting impact shaping Iraq’s prospect of rebuilding CBW

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\(^2\) Charles Duelfer (2004b).
capabilities after 1998, although it is not yet clear what
UNSCOM's exact impact was in relation to other political
and economic factors. Several questions about what happened
in Iraq between 1998 and the war in 2003 remain
unanswered. Because of what is now known about
UNSCOM's impact, it is increasingly argued that the UN
disarmament and monitoring effort, which was downplayed
and underestimated in American and British pre-war
assessments, was more effective than many had believed prior
to the war in 2003.  

This study will examine what the UN sought to achieve in
Iraq between 1991 and 1998, UNSCOM's role in the
disarmament regime and its achievements, and the unsolved
disarmament issues that emerged in this process. The UN-led
disarmament effort will be analysed for two main reasons,
both related to current challenges.

First, the case of UNSCOM played an important role in
debates leading to the war in 2003. Prior to the war in 2003,
the United States and Britain downplayed UNSCOM's
achievements in accounting for Iraq's disarmament and the
impact of the UN disarmament process on Iraqi capabilities. It
now seems that several claims made by the United States
deputy secretary for defense Paul Wolfowitz and vice-
 president Dick Cheney about the limitations of what UN
inspections could possibly achieve were wrong. Because of the
role of these claims in the process leading to war in 2003, it is
necessary to learn the appropriate lessons from the UNSCOM
experience.

Second, the UNSCOM experience points to the possibilities
and inherent limitations of enforced chemical and biological
weapons (CBW) disarmament. An examination of
UNSCOM's experience in Iraq can improve our
understanding of what can be achieved in terms of disarming
a sovereign country of such weapons and capabilities. The

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3 Joseph Cirincione et al. (2004); Daryl G. Kimball (2003).
lessons thus learned can be applied beyond the specific case of Iraq. By improving our understanding of the crucial variables in the case of Iraq, the factors that define the possibilities for successful NBC disarmament can be appreciated in different contexts.

**Within this general framework, this study will examine three sets of main questions. The first set of questions focuses on the implications of the wide-ranging objective of complete NBC disarmament, defined in Security Council Resolution 687, for the UN disarmament regime that was set up in Iraq. To what extent was it possible to achieve complete NBC disarmament in Iraq? Furthermore, what is ‘complete’ NBC disarmament, and how could this be achieved and measured in the case of Iraq? The cease-fire resolution required Iraq to fully comply with the objectives of the disarmament regime in terms of completely disarming of the specified weapon categories, and at the same time fully cooperate with UNSCOM’s accounting and monitoring of Iraq’s disarmament. In light of these demands, what was the impact of Iraq’s incomplete cooperation on UNSCOM’s accounting for Iraqi compliance with Resolution 687? One consequence associated with Iraq’s incomplete cooperation were the unresolved disarmament issues that came to play a central role in the *casus belli* of the coalition that went to war on Iraq in 2003. What was the nature of these unresolved issues, how did they emerge in the disarmament accounting process, and what was their impact?

The second set of questions concerns the nature of the disarmament regime that was set up after the Gulf War. The design of the disarmament process, and UNSCOM’s role within it, suggests that the disarmament regime was a ‘technical fix’ applied to an essentially political problem. What were UNSCOM’s prospects of success given the political
nature of this disarmament regime and its objectives? What impact did UNSCOM have on the disarmament process in light of the decisive role of the main political actors – Iraq and the Security Council? The UN disarmament regime in Iraq has generally been considered a technical success but a political failure. However, to what extent is it feasible to distinguish between political and technical aspects when assessing the disarmament regime in Iraq and its outcomes?

The third set of questions concerns the role UNSCOM played in the ‘containment’ of Iraq, a political strategy that emerged in the United States after it was clear that Saddam Hussein’s regime would survive the defeat in the 1991 Gulf War. Could the threat that Saddam Hussein’s regime could pose by deploying NBC weapons be contained by the disarmament and non-proliferation regime? What was the impact of the US ‘containment’ strategy on the UN disarmament regime?

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The first chapter will focus on the evolution of Iraqi NBC programmes and the responses to those developments at the international level up to the Gulf War in 1991. The second chapter will examine the background for creating a UN disarmament regime in Iraq after the Gulf War, the process of setting up UNSCOM, and provide an overview over the main developments between 1991 and December 1998. The third chapter will focus on UNSCOM’s mandate of accounting for all Iraq’s destroyed weapons and capabilities as well as monitoring Iraq’s compliance with the disarmament objectives in the future. In the fourth chapter, UNSCOM’s achievements in accounting for Iraqi disarmament will be assessed, while the following fifth chapter will consider UNSCOM’s monitoring of Iraq to ensure that prohibited capabilities were not retained or re-established. The sixth chapter will consider how
UNSCOM adapted to the working conditions in Iraq, as these conditions differed from what had been expected when UNSCOM’s mandate was designed in 1991. The seventh chapter will examine the unsolved disarmament issues that remained when UNSCOM was evicted from Iraq in 1998. Finally, the conclusion will summarize the main points of the analysis.

Summary of conclusions

It will be argued that UNSCOM’s effort to account for Iraq’s disarmament raised a number of questions about how to define the scope of ‘complete’ disarmament. In the case of Iraq 1991–98 the disarmament effort focused on destroying ‘hardware’ (weapons and items specifically designed or imported for proscribed purposes). While this definition enabled UNSCOM to define a numerical target against which the disarmament ‘sum total’ could be measured, it did not include anything that could feasibly contribute to proscribed activities. Thus, even ‘complete’ disarmament would not be irreversible, as the risk that the proscribed capabilities could be rebuilt (by drawing on existing know-how and diverting ‘dual-capable’ items from civilian undertakings) remained. The case of UNSCOM and Iraq illustrated the difficulties in deciding on the scope of ‘complete’ disarmament, and the balance that has to be struck between reducing the risk that the proscribed capabilities are not rebuilt and the disarming country’s national security capabilities, industrial and socio-economic development.

Because the disarmament regime was an attempt to apply a ‘technical fix’ (verifying Iraq’s complete disarmament of proscribed weapons and items) in order to remove the threat Iraq posed to international security, UNSCOM faced a number of challenges in converting this political objective into technical definitions, assessments and benchmarks. The attempt to depoliticise the disarmament accounting process
was quickly undermined once UNSCOM commenced its efforts in Iraq. UNSCOM was designed to account for Iraq’s disarmament in purely technical terms. However, political decisions in Iraq and the Security Council shaped the disarmament accounting as well as the prospect of successfully achieving (and accounting for) ‘complete disarmament’. Iraq’s limited cooperation resulted in substantial politicisation of UNSCOM and its task. This politicisation had implications for UNSCOM’s actual undertakings, as the chairman had to diplomatically engage with Iraq and other Security Council members to ensure the agency’s ability to perform its task, and ultimately served to undermine the disarmament regime’s credibility. This politicisation also contributed to the premature discontinuation of UNSCOM and its efforts after Operation Desert Fox in December 1998. Notwithstanding the impact of the politicisation on UNSCOM and its efforts, the agency served a crucial role in the disarmament regime by clarifying the commitment of Iraq and the Council to achieve the objective of complete disarmament of CBW and proscribed BM.

Finally, concerning the disarmament regime’s role in the US policy of containing the potential threat from Iraq, it will be argued that UNSCOM was able to ascertain that Iraq was not retaining or rebuilding proscribed weapons or capabilities that could pose a threat to international security. As long as the Security Council was perceived to be committed to the objective of complete disarmament the OMV system could serve as a deterrent against Iraqi efforts to rebuild proscribed capabilities. However, disagreement in the Security Council concerning when the sanctions regime could be lifted weakened the credibility of the disarmament regime and ultimately dissuaded Iraq from cooperation with UNSCOM.

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This study of the case of UNSCOM and Iraq identifies two crucial variables in the effort to verify complete CBW and BM disarmament, the first set concerning the relation between the disarming country and the auditing agency whereas the second relates to other countries' perception of this process and its outcomes.

The first set of variables consists of the level of cooperation from the disarming country in allowing an external agency to confirm disarmament, and the auditing agency's ability to independently assess claims made by the disarming country. The agency's mandate of accounting for all of Iraq's proscribed programmes, weapons and items required Iraq to submit complete declarations that were audited by UNSCOM. However, wide-ranging capabilities to investigate omissions and misleading statements in those declarations enabled the agency to uncover information that Iraq sought to withhold. Thus, the level of cooperation from the disarming country and scrutinizing auditing to ascertain the scope of the country's compliance with the disarmament objectives are variables that define how much confidence can be held in the impact of the disarmament process.

The second variable, whose importance was clearly demonstrated after 1995 in the case of UNSCOM and Iraq, concerns the level of confidence held by other countries as to whether the disarming country is in fact committed to disarmament. Between 1991 and December 1998, UNSCOM verified substantial disarmament in Iraq. However, a number of unresolved disarmament accounting issues prevented UNSCOM from reporting that Iraq had 'completely' disarmed. Although there were a number of different reasons why these issues emerged, which would not be unexpected in any accounting effort at a nation-wide level, these issues introduced significant uncertainties into the disarmament accounting. Because of Iraq's demonstrated efforts to retain proscribed weapons, items and capabilities, several countries
perceived the uncertainties as manifesting Iraq’s intentions to retain other weapons and items.

In the case of UNSCOM and Iraq, decreasing confidence in Iraq’s intentions to disarm had crucial implications for the disarmament regime and the subsequent war in 2003. The Security Council was unable to agree whether Iraq continued to pose a risk to international security. The Council’s inability to agree whether Iraq posed a threat in these terms, and the mounting concerns of United States and Britain leading to the military operation known as Operation Desert Fox in December 1998, caused the premature withdrawal of UNSCOM from Iraq.
Iraq’s CBW programmes and international responses prior to 1991

UNSCOM uncovered information that was unknown to the outside world about the scope and achievements of the Iraqi CBW programmes. It then became clear that Iraq’s CBW programmes were far more advanced and extensive than what was believed before the Gulf war in 1991. However, there are still unsolved questions that limit our understanding of the origin, evolution and military purposes of these programmes.

The early stages of Iraq’s interest in CBW capabilities and the emergence of Iraq’s own CBW programmes were influenced by the regime’s perception of its role in the Middle East, and especially Iraq’s relations with Iran and Israel. It is generally believed that Saddam Hussein played an important role in the evolution of Iraq’s efforts to acquire chemical and biological warfare capabilities.

Iraq’s pursuit of chemical weapons

The Iraq Survey Group (ISG) has traced the origins of Iraq’s interest in chemical warfare capabilities to the early 1960s, and the Iraq Chemical Corps was established in 1964. The ISG report places the initial stages of Iraq’s CW considerably

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4 Duelfer (2004b), Section 3: Iraq’s Chemical warfare program, p. 5.
earlier than previous assessments. UNMOVIC, UNSCOM’s successor organization, assessed that Iraq’s CW programme was initiated in 1968 or 1969. Anthony Cordesman and Abraham Wagner have argued that Egypt’s deployment of chemical weapons (CW) in Yemen between 1963 and 1967 triggered Iraq’s active interest in acquiring CW. With regard to actual CW development activities, UNSCOM found evidence of Iraqi activities in this area dating back to the early 1970s. Iraq’s declaration to the UN in December 2002 stated that the Iraqi Chemical Corps began to build laboratories in 1971 in order to synthesize small amounts of CW agents (Mustard, Tabun, and Tear Gas) for familiarization. When Iraq started to establish indigenous CW facilities in the early 1970’s, other countries in the Middle East (Syria, Israel and Egypt) were also actively developing CW capabilities.

Two key events appear to have had a clear impact on the Iraqi pursuit of CW warfare capabilities. First, the programme appears to have been shaped by lessons drawn from the 1973 October war. Cordesman and Wagner argue that the October War sparked Iraqi interest in developing an indigenous offensive CW capability to match the Israeli and Egyptian chemical warfare capabilities. The second factor, the Iran-Iraq war, became the catalyst for the increasing role of CW warfare for Iraq’s security, and the resulting growth of Iraq’s CW infrastructure.

The Iran-Iraq war had a crucial impact on the role of CW in Iraqi strategic and tactical doctrines, deployment and production. Iranian allegations that Iraq had used CW emerged already in the opening stages of the war in 1980. After the Iraqi army was forced to take defensive positions, CW began to be seen as the solution to cope with Iranian conventional superiority. This led to the development of an

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5 UNMOVIC (2003).
7 Duelfer (2004b), Section 3: Iraq’s Chemical warfare program, p. 5.
industrial-scale, strategic chemical weapons programme, which was launched on 8 June 1981. This effort covered all stages from research to production and storage. Iraq began large-scale production of various chemical weapons agents, including nerve gas, and chemical munitions. In this process, Iraq sought to reduce dependence on foreign suppliers by developing production of the chemicals necessary for making chemical weapons indigenously. The infliction of large casualties on the Iranian army and the weakening of Iranian morale that resulted from the use of CW were perceived as important achievements in countering the superior Iranian conventional capabilities. Iraqi leaders began to consider that CW could have a decisive impact on the outcome of the war. Iraq’s systematic use of CW appears to have started after they were forced on the defensive, and took place mainly during 1982–84 and 1986–88. During these years Iraq developed its expertise in chemical warfare. Iraq’s use of the nerve agent Tabun against Iranian forces in 1984 was the first known case where this weapon (nerve agents are the most toxic of CW agents) has been used on the battlefield. These experiences influenced the direction of Iraq’s efforts to improve its CW capability, and led to an effort to create an infrastructure that could deliver CW for battlefield use.

By the closing stages of the Iran-Iraq war, Iraq had acquired an infrastructure producing large amounts of chemical agent that could be filled into munitions shortly before use. Iraq accelerated its efforts in CW research and development, imported missile technology and equipment that could be used for chemical and biological agent production. The ISG reported that Iraq weaponized the nerve agent VX in 1988.

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11 Duelfer (2004b), Section 3: Iraq’s Chemical warfare program, p. 6.
12 Ibid., p. 8.
14 Ibid., pp. 513–17.
15 Duelfer (2004b), Section 3: Iraq’s Chemical warfare program, p. 9.
17 The main overviews are UNSCOM (1999), UNMOVIC (2003), Duelfer (2004b).
and that Iraq dropped three aerial bombs filled with VX on Iran that year.\textsuperscript{18} After the end of the Iran-Iraq war in 1988, Iraq stopped CW production and focused on developing and refining their CW capabilities. However, CW production was restarted in 1990.\textsuperscript{19}

**Iraq’s pursuit of biological weapons**

Iraq was most reluctant to provide UNSCOM information about its efforts to develop a biological warfare capability, and denied this effort until 1995. Therefore, not much is known about Iraq’s efforts and achievements in BW and the role of these weapons in Iraqi security doctrine. However, UNSCOM traced the earliest indication of an actual Iraqi BW programme back to 1974.\textsuperscript{20} It appears that these initial efforts did not lead to very much. However, following a reorganization in 1979, Iraq’s BW research infrastructure was expanded. In 1985 BW research was revitalized and focused on gas gangrene and botulinum toxin.\textsuperscript{21} By the final stages of the Iran-Iraq war, a large infrastructure for BW agent production was being developed in Iraq. In 1986, a ‘5-year plan’ was set up with the aim of weaponizing BW agents. In 1987 the BW programme focused on the pursuit of large-scale production of BW agents. In the following year, a dedicated production plant, Al-Hakam, was set up.\textsuperscript{22} This facility developed an impressive production capability over the next couple of years.

In 1990, prior to the invasion of Kuwait, Saddam’s son-in-law Hussein Kamel gave the order to weaponize BW agents as soon as possible.\textsuperscript{23} By the time of Desert Storm, Iraq was able to produce large quantities of anthrax, aflatoxin, botulinum

\textsuperscript{18} Duelfer (2004b), Section 3: Iraq’s Chemical warfare program, p. 33.
\textsuperscript{19} Ibid., pp. 9–10.
\textsuperscript{20} UNMOVIC (2003).
\textsuperscript{21} Duelfer (2004b), Section 1: Regime Strategic Intent, p. 28.
\textsuperscript{22} UNMOVIC (2003).
\textsuperscript{23} Duelfer (2004b), Section 1: Regime Strategic Intent, p. 28.
toxin, and clostridium perfringens, as well as small quantities of ricin. Some of these agents were weaponized into missiles, aerial bombs, artillery shells, and aircraft spraytanks. What is known about Iraqi weaponization of BW agents suggests that by the time of the invasion of Kuwait, BW were intended to serve as retaliation weapons for deterrence purposes.

Iraq did not fully succeed in developing a method of delivery that could unleash the potentially enormous lethal power of BW agents. UNSCOM later discovered that Iraq had filled BW agents into missile warheads and high altitude delivery bombs in 1990. On the eve of the Kuwait invasion, BW agents placed inside R-400 aerial bombs originally developed for delivering CW were deployed in Western Iraq. These were rather ineffective weapons in terms of their lethal yield, but if opponents feared that Iraq could retaliate with BW this could create a deterrent impact despite the poor quality of the BW weapons.

CBW in Iraqi security and strategy

Although Iraq has never fully disclosed its strategic rationales or tactical doctrines for CBW to the United Nations or the Iraq Survey Group, a number of statements made by Saddam Hussein and senior Iraqis to UNSCOM, UNMOVIC and the ISG are informative. The ISG assessed that Saddam Hussein’s rationale for developing NBC capabilities was based on concerns about national and regime survival as well as a desire for regional influence and prominence. ISG further reports that Saddam Hussein considered NBC weapons as symbols and a consequence of modern statehood. More specifically, Iraq’s development of CBW and BM programmes since 1988 appears to have been defined by Iraq’s experiences in the Iran-Iraq war and its future regional ambitions. These

24 Ibid.
included warfighting capabilities, deterrence of hostile neighbours, control of internal opposition, and increasing Iraq's strategic influence in the Arab world. After the war in 2003, Saddam Hussein and some of his senior officials still considered that chemical weapons and ballistic missiles had proved crucial for the regime's survival. First and foremost, this conclusion was based on lessons drawn from the Iran-Iraq war, but they also argued that the possibility that Iraq could retaliate with chemical weapons in response to a nuclear attack had deterred coalition forces from entering Baghdad in 1991.

The ISG report states: 'The former Regime viewed the four WMD areas (nuclear, chemical, biological, and missiles) differently. Differences between the views are explained by a complex web of historical military significance, level of prestige it afforded Iraq, capability as a deterrent or a coercive tool, and technical factors such as cost and difficulty of production.' Chemical weapons were considered crucially important, based on their role in the Iran-Iraq war and in fighting internal enemies of the regime, and the strategic role they were to play against other countries in the region. Similarly, ballistic missiles had played a crucial part in the Iran-Iraq war, particularly during the War of the Cities, and enabled Iraq's development of strategic CW regional deterrent capabilities. However, the ISG report does not include new information on how the Iraqi regime viewed the strategic role and purpose of BW.

The ways in which Iraq made use of its CBW warfare capabilities indicate that these served a number of roles in Iraqi security and strategy. By the end of the 1980s, Iraq's systematic and large-scale use of CW against Iranian forces demonstrated that CW had served a central role for Iraqi

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26 Ibid.
27 Ibid., p. 23 and p. 33.
28 Ibid., p. 24.
national security and military strategy in the war. It was likely that CW would continue to be important for Iraq's defence against an Iranian attack for the foreseeable future, as the superior numbers of the Iranian armed forces would remain a strategic challenge. Iraq's CBW efforts were also dedicated to protecting the regime against 'internal enemies'. From the outset, elements of Iraq's CBW programmes appear to have been focused on developing poisons (e.g. cyanide and ricin) for clandestine activities, such as assassinations of enemies of the regime.

Cordesman and Wagner have argued that there is evidence that Iraq used CW in campaigns against Kurdish villages between 1973 and 1975.\textsuperscript{29} Iraq's widespread and systematic deployment of CW against its civilian population during the Iran-Iraq war was unprecedented.\textsuperscript{30} Both the Iranian and the Iraqi regimes used chemical weapons against the Kurdish villages Halabjah and Dojaila on 26 February, 1988. For unclear reasons, an Iraqi mustard-gas attack was followed by an Iranian attack with the more poisonous hydrogen cyanide gas.\textsuperscript{31} Over 5000 Iraqi Kurdish civilians were killed.\textsuperscript{32} The Iraq Survey Group discloses that Iraq had dropped bombs filled with CW from helicopters on rebel groups in southern Iraq in early March 1991, while coalition forces were in the country. Hussein Kamel had originally ordered that the nerve agent VX should be used, but as this was not available Sarin and Tear Gas were used.\textsuperscript{33}

By the end of the 1980s the Iraqi CW had acquired a central strategic role in Iraqi security. The demonstration of Iraq's CW warfare capabilities during the Iran-Iraq war had established a deterrent to Iraq's potential enemies in the Middle East. Saddam Hussein hinted at the possibility of

\begin{footnotes}
\item[32] Ibid.
\item[33] Duelfer (2004b), Section 1: Regime Strategic Intent, p. 25.
\end{footnotes}
using binary CW for retaliation purposes against Israel in a threatening speech delivered on 2 April 1990. Saddam Hussein stated: ‘spare us your evil [...] We do not need an atomic bomb. We have the dual chemical. Let them take note of this. We have the dual chemical. It exists in Iraq’. This illustrates how Saddam Hussein sought to award a deterrent role to Iraqi chemical weapons at this point in time.

One of the main purposes of Iraq’s BW appears to have been to deter NW attacks by enabling Iraq to retaliate in response to such attacks – at least as long as Iraq was unable to retaliate ‘in kind’ with NW. Even though these weapons could not match the destructive power of NW, the fear and national disruption that would follow a BW attack could exercise a significant deterrent effect. After the Gulf war it was discovered that CBW had been deployed in western Iraq with delegated orders to be used in case Iraq was attacked by Israeli or American NW.

The pursuit of an indigenous capability to develop and produce longer-range BM facilitated Iraq’s development of a strategic retaliatory capability. In 1974 Iraq started to import surface-to-surface SCUD missiles with a range up to 300 km. Iraq then went on to modify some of those missiles, increased their range to 615 km in 1987, and then pursued indigenous development and production of engines for missiles with even longer ranges. The role of Iraqi missiles in the War of the Cities was considered to have been very important in the final stages of the Iran-Iraq war. However, the lessons from Iraq’s difficulties in replacing missiles during this war led to Iraq’s pursuit of indigenous ballistic missile production capabilities.

Cited in Duelfer (2004b), Section 2, cover page.
UNMOVIC (2003).
International reactions before and after the Gulf War in 1991

Prior to 1991, several countries suspected that Iraq was pursuing the development of CBW capabilities. After Iraq deployed CW in the Iran-Iraq war, it became obvious to the outside world that CW had obtained a central role in Iraqi security. Much less was known about Iraq’s efforts in the area of BW. In 1988, western media wrote that United States intelligence agencies had uncovered Iraqi imports of equipment that could be used in a BW programme. However, such information did not reveal how far Iraq had progressed in their efforts to produce BW. In fact, Iraq was pursuing nuclear, biological and chemical weapon programmes despite having signed international non-proliferation and disarmament treaties (the 1925 Geneva Convention, the 1970 Nuclear non-Proliferation Treaty and the 1972 Biological and Toxin Weapons Convention). Even though the use of chemical weapons against Iranian soldiers and Kurdish villages was known outside Iraq, this did not cause significant problems for the Iraqi regime in the international community. Statements of concern by the Security Council were not backed by actions.

The inaction at the international level reflected the relatively low priority of CBW on the Cold War security agenda. During the Cold War Iraq’s CBW programmes were mainly considered to be a regional problem with no obvious implications for international security. At the level of international politics, many countries in the Middle East and in the West were more concerned about the challenge of post-revolutionary Iran than Iraq during the 1980s. Prior to the

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37 Jean E. Krasno and James S. Sutterlin (2003), p. 3.
38 The Geneva Convention prohibits use of chemical and biological weapons in warfare. The Chemical Weapons Convention did not exist at that point, and this regime came into force in 1997.
39 Krasno and Sutterlin (2003), p. 3.
invasion of Kuwait, Saddam Hussein was not generally seen as the unreliable and aggressive leader he was considered after the invasion. Iraq’s containment of Iran during the Iran-Iraq war had suited several countries in the West and in the Middle East.

With the invasion of Kuwait, on 1 August 1990, this situation changed dramatically. The assumptions that had guided US policy on Iraq were proven fundamentally wrong by this invasion and the ensuing war. Prior to the Gulf war, the Bush administration’s policy toward Baghdad was guided by two basic and related assumptions. The first was that Baghdad, having battled Iran to a standstill at great cost in lives and treasure, was a punch-drunk fighter who was tired of war and needed a respite to rebuild. Iraq would continue to update its arsenal of conventional weapons and try to develop weapons of mass destruction, but diplomatic coercion and subversion would the primary levers of power, not war. [...] The second key assumption [...] held that Saddam Hussein’s behaviour could be moderated through diplomacy and by encouraging American companies to become involved in rebuilding Iraq. The idea was that Saddam Hussein would emerge as a ruthless but pragmatic leader that would deal with Washington out of self-interest.  

After the invasion of Kuwait, the American administration came to the conclusion that Saddam Hussein’s regional ambitions could not be tackled through diplomatic means. The invasion created concerns in the United States that Saddam Hussein could destabilise the Middle East by launching new attacks on neighbouring countries. Two of the three countries that were most immediately threatened by Iraqi CBW, Israel and Saudi Arabia (the third being Iran), were important allies of the United States. The American administration feared that Saddam Hussein might invade Saudi Arabia. The consequences for the global oil market

would be of serious concern to the United States. If the West were to interfere with Saddam Hussein's apparently growing regional ambitions, their forces would have to face the risk that the Iraqi regime would order deployment of CBW on the battlefield. Because of the changed perspectives of the threat of Saddam Hussein's regime after the Kuwait invasion, the issue of Iraq's NBC arsenals and programs was widely perceived as an important challenge to international security and stability when the subsequent Gulf War ended.

The expectations in the United States of what would happen in Iraq after the defeat in the Gulf War had implications for the terms of the disarmament regime that was set up to cope with a potential future Iraqi threat. The Gulf War ended with Saddam Hussein still in power, which made the challenge of coping with Iraqi CBW a pressing issue. It has been argued that the objective of 'undermining the post-Gulf war Saddam Hussein regime – an implicit goal of the allied military campaign – was contradicted by the impulse to withdraw, disengage, and avoid any military links to the insurgents.'\(^{41}\) The frustration that was entailed by this sense of an 'incomplete ending' was reflected in comments made by President Bush two days after the cease-fire in 1991: 'I haven’t yet felt this wonderfully euphoric feeling that many of the American people feel. [...] I think it’s that I want to see an end. And now we have Saddam still there – the man that wreaked this havoc on his neighbours.'\(^{42}\) The fact that Saddam remained in power after the Gulf War required that the challenge of Iraqi CBW be tackled as part of the cease-fire.

When the Gulf War ended, the American administration believed that precision bombing had destroyed the main facilities of the Iraqi NBC programmes. Brent Scowcroft, President Bush’s national security advisor, assessed that Iraq’s non-conventional capability had been largely destroyed. It

\(^{41}\) Ibid., p. xv.
\(^{42}\) Ibid., p. xv.
later turned out that this assessment substantially underestimated Iraqi capabilities. In addition, a number of Iraqi NBC facilities had escaped bombing. It is worth noting that despite the belief that Iraq’s NBC facilities had been largely destroyed, the risk that Saddam Hussein could reconstruct those capabilities and once again threaten international stability was considered by the United States to require the establishment of a disarmament and monitoring regime.

**Changing threat assessments**

Within a decade, the assessments of the threat of Iraq’s CBW changed from considering Iraqi CBW as a regional problem to ultimately a threat of global proportions. The assessments of the risk that Iraqi WMD posed to international security were interlinked with different countries’ perception of Iraq’s role in regional and international security more generally. Before the invasion of Kuwait, Iraqi CBW were considered a regional problem that mainly concerned Iran and Israel. Since 1991 there have been significant changes in how countries have perceived the threat of Iraqi CBW. In 1991, the prospect of facing CBW in Iraq made the United States come to the conclusion that Iraqi CBW were not a regional problem confined to the Middle East.

The invasion of Kuwait was seen to signal a more aggressive Iraq that could require interventions to other Iraqi invasions in the future. Therefore, Iraqi CBW were seen as a threat with international ramifications. This was demonstrated by the decision to set up the UN disarmament regime under Chapter 7 in the UN Charter, which made it clear that Iraq’s NBC programmes were considered threats to international security. A decade later, the attacks on September 11, 2001, led to changes in how the George W. Bush administration viewed the threat of the remaining unsolved NBC disarmament issues in Iraq. The possibility that
international terrorists could acquire NBC weapons from Iraq changed the United States' threat assessment of Iraq to one of global proportions.

**Efforts to counter Iraq’s pursuit of NBC prior to 1991**

The threat assessments of CBW in the hands of the Iraqi regime during the Cold War are key for understanding the weak responses to Iraq's use of CW and development of NBC programmes at the international level prior the Gulf War. The relatively low concern about CBW held by the Cold War superpowers meant that there were few mechanisms in place that could deny Iraq the acquisition of CBW. At the time of UNSCOM's creation in 1991, the only international inspection regime in the area of non-proliferation of NBC weapons was run by the International Atomic Energy Agency (IAEA).

While Iraq’s nuclear efforts fall outside the scope of this report, the country’s experience with the IAEA is important in order to understand Iraqi expectations of what an international inspection regime was capable of achieving. This experience also illustrates to what extent Iraq was able to hide information about large-scale programmes from the outside world by deceiving an international inspection regime. IAEA inspections were negotiated between Iraq and the IAEA, and conducted in sites designated for inspection on agreed dates in a consensual manner. The negotiated nature of the inspections in Iraq led to inspection procedures that were not sufficiently intrusive and scrutinizing to uncover clandestine nuclear weapons-related research and development. Saddam Hussein came to the conclusion that the IAEA’s negotiated inspection procedures offered an opportunity to continue the development of a NW programme, while appearing to fulfil the requirements of the international community represented by the IAEA.
In 1974, Saddam Hussein approved a deception-by-cooperation scheme that enabled Iraq to pursue a NW capability while the IAEA inspections could provide a false sense of security to other countries. In fact, the IAEA actively defended Iraq against accusations that Iraq had a NW programme. A former senior researcher in Iraq’s NW research programme, Khidir Hamza, has argued that Iraq’s membership in the IAEA justified Iraqi import of technology for developing nuclear energy. Iraq imported items that were used to develop a NW research programme. As long as these imports appeared to be intended for peaceful purposes, Iraq would be able to obtain resources that could be used to build a NW infrastructure. This consensual nature of the inspection regime, not least the predictability of when inspections would take place, significantly reduced the probability of detection. Even though suspicions grew in other countries, such as Israel, that Iraq was developing NW and CW, the terms of the IAEA regime did not enable more investigative inspections or punitive responses. Iraqi deception and manipulation of IAEA’s confidence-building measures undermined the international inspection regime’s effort to certify that Iraq was not developing NW.

Signs that Iraq was developing a NW programme led to unilateral actions from countries in the region. Israeli intelligence had assessed that there was a NW-related weapon programme in the Osiraq facility. Israeli leaders felt threatened by the signs that Iraq was developing a NW capability. In September 1980, at the outset of the Iran-Iraq war, Israel encouraged Iran to bomb the Iraqi nuclear research reactor (Osiraq). The Iranians attacked the reactor in September 1980, but did not inflict particularly significant damages on the reactor. Israeli airplanes bombed and

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43 Paul Leventhal and Steven Dolley (2001).
45 Federation of American Scientists: ‘Osiraq/Tammuz I’.
destroyed Osiraq in June 1981.\textsuperscript{46} The Security Council condemned the strike.\textsuperscript{47} It was subsequently debated whether the Israeli action was self-defence, permitted under international law and the UN Charter, or whether the Israeli allegations of an Iraqi NW programme were not justified and the attack was therefore an act of aggression.\textsuperscript{48}

Neither the IAEA nor the Israeli strike destroyed Iraq's ambition or efforts to develop NW. As argued above, the IAEA inspections did not deter Iraq from pursuing a NW capability. In fact, Iraq's IAEA membership appears to have made Iraq's acquisition of nuclear technology and equipment easier. As long as Iraq did not change its fundamental WMD policy, it was not possible for the Israeli destruction of Iraq's nuclear reactor in Osiraq to achieve irreversible impacts on Iraq's nuclear programme. It was difficult to identify facilities that were crucial 'nodes' in Iraq's WMD capabilities, and if these were destroyed by military strikes it would be possible to build new facilities.

\textsuperscript{46} Ibid.
\textsuperscript{48} Federation of American Scientists: 'Osiraq/Tammuz I'. 
Chapter 3

UNSCOM: Background, characteristics and overview

The desire to award the UN a more central role in international security after the end of the Cold War led to the decision to put the Security Council in charge of Iraq’s disarmament. After the Gulf War, the Security Council found Iraqi NBC programmes to constitute a threat to international security. The disarmament regime that was established by the cease-fire agreement, Security Council Resolution 687 (1991), stands unique in the history of disarmament. A number of analysts agree with the United States vice president Dick Cheney in his description of this disarmament regime as ‘the most intrusive system of arms control in history’.49

This was the first time that the UN set up a country-specific NBC disarmament regime. It signalled a more general change in how the Security Council considered the threat of NBC weapons. On 31 March 1992, a Security Council summit meeting issued a statement defining for the first time NBC weapons proliferation as a threat to international peace and security.50 Iraq’s defeat in the Gulf War enabled the Security Council to formulate a widely encompassing set of

disarmament objectives, demand complete Iraqi cooperation, and give UNSCOM the ability to critically assess Iraqi compliance with these demands, as part of the cease-fire agreement (Security Council Resolution 687).

**UNSCOM: designed to disarm?**

The disarmament regime comprised two assessment agencies and the Security Council. Security Council Resolution 687 (1991) defined the objectives of the disarmament regime and UNSCOM’s role in the disarmament process. This resolution obliged Iraq to destroy all NBC weapons and ballistic missiles with a range of more than 150 km, associated items and production facilities used to produce or develop these weapons. Even though the extent of Iraq’s efforts and achievements in the areas of BW and NW were not known at the time, the resolution was formulated in order to ensure that it would cover all three areas.\(^1\) Iraq’s disarmament would be audited (‘verified’) by UNSCOM and the IAEA who reported to the Security Council. The Security Council would determine whether or not Iraq could be declared ‘completely’ disarmed.

UNSCOM had to account for Iraq’s destruction of any existing CBW and the associated infrastructures, and oversee that Iraq only made BM of ranges below 150 km. However, simply destroying the existing proscribed infrastructures did not suffice to remove the NBC-based risk from Iraq in the long term because the destroyed capabilities could later be re-established. Some equipment and resources used in various civilian industries or research facilities (e.g. breweries and in vaccine production) could be diverted to enable CBW production. Moreover, Iraq was allowed to make BM with a range below 150 km so it would be able to defend itself against attacks. This inherently enabled Iraq to make missiles with a range over 150 km. The risk that legal activities could

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\(^1\) Yale Oral History Project interview with Hannay, p. 4–5.
be diverted for proscribed purposes had to be managed in order to ascertain that Iraq stayed disarmed. A long-term monitoring system would be set up to confirm that this risk did not become a threat to international security in the future. This system would enable UNSCOM to detect Iraqi attempts to rebuild parts of CBW infrastructures or produce BM of proscribed ranges. By facilitating oversight to the international community over whether Iraq reconfigured equipment used in civilian undertakings to produce CBW, the monitoring system played an important role as a potential confidence-building measure.

The Security Council offered Iraq a combination of 'carrots' and 'sticks', designed to persuade Iraqi leaders to disarm despite their likely reluctance to abolish the proscribed weapons and associated production capabilities. Resolution 661 (1990) had implemented sanctions limiting Iraqi export and import to persuade Iraq to withdraw from Kuwait. After the Gulf War, most of these sanctions were retained in Resolution 687 as means to persuade Iraq to comply with the cease-fire conditions. Full Iraqi compliance with the disarmament objectives would result in the Security Council's decision to lift the wide-ranging ban on trade with Iraq. This offered Iraq a strong economic incentive to comply with the disarmament objectives. If Iraq failed to comply with the objective of complete NBC disarmament or refused to cooperate with UNSCOM, this would constitute a 'material breach' of the cease-fire terms. If the Security Council found Iraq to be in material breach, this would revert the situation to that prior to the cease-fire resolution, and open for the use of military force under Chapter 7 in the UN Charter.

UNSCOM's mandate
UNSCOM was a unique agency whose mandate, auditing Iraq's complete and enduring disarmament of proscribed weapons and items, is unequalled in the history of
disarmament. Because UNSCOM was created as part of a cease-fire resolution, its mandate did not conform to the consensual principle that governed most previous UN interventions.\textsuperscript{52} UNSCOM was set up to audit Iraq’s declarations about the proscribed NBC programmes, weapons and their disarmament. For this purpose, UNSCOM had been given rights and technologies that enabled the agency to critically assess Iraqi statements. Several of these information-gathering capabilities were ‘cutting edge’ and more intrusive than the capabilities of other UN agencies at this point. Similarly, the amount of information that UNSCOM received from national governments, and its organisational capacity to assess and make use of this information, was unprecedented in the UN system.\textsuperscript{53} UNSCOM’s use of intelligence provided by friendly governments introduced a number of challenges in terms of analysis and handling. UNSCOM had to establish procedures for processing this intelligence in a secure and confidential manner in order to encourage intelligence agencies to provide further information.\textsuperscript{54}

When UNSCOM was established, three organizational features were designed to make the agency independent of external political influence and thus more able to effectively fulfil its mandate. First, UNSCOM was set up as an organ of the Security Council, which it was answerable to, whereas the UN Secretary General or the General Assembly exercised no direct influence. Second, the agency was not funded by the UN per se, but from contributions from individual countries and Iraqi funds in foreign banks that had been frozen after the Kuwait invasion.\textsuperscript{55} When the oil-for-food resolution (Security Council Resolution 986) was accepted by Iraq in 1996, UNSCOM received some funds from Iraqi oil sales to cover

\textsuperscript{51} Tim Trevan (1999), pp. 213–14; Yale Oral History Project interview with Hannay, pp. 18–19.
\textsuperscript{54} Tim Trevan (1999), pp. 213–16; author’s interview with Ekéüs (2003).
their expenses. These two factors, UNSCOM’s financing and independence of the UN Secretary General and the General Assembly, were intended to insulate the agency and its reporting from political influences and controversies. Finally, the wide-ranging powers of the executive chairman gave UNSCOM considerable independence and freedom of action. These powers enabled the chairman to implement the full range of rights that had been negotiated between Iraq and the UN in 1991, and decide how to pursue UNSCOM’s very general mandate in Iraq.

**UNSCOM – a unique organisation**

UNSCOM’s headquarters was housed in the UN main building in New York. The bulk of the strategic operational planning, analysis and external relations took place in the UN headquarters. UNSCOM was divided into two major units. The ‘operations unit’ planned upcoming inspections, while the ‘information and assessment unit’ dealt with information collection and analysis of data obtained from inspections or supporting governments. UNSCOM’s inspections and monitoring were conducted from field offices in Iraq by resident staff and experts provided to UNSCOM by national governments. The fact that UNSCOM’s staff did not consist of UN employees contributed to the development of a distinct UNSCOM ‘team spirit’. Another important factor in creating an *esprit de corps* was the relative isolation from other UN staff, which was necessary, given the sensitive nature of UNSCOM’s work in Iraq.

UNSCOM’s staff consisted of diplomats and experts equipped with specific skills or knowledge required for upcoming tasks in Iraq. In addition to the experts and diplomats, supporting staff in various roles was crucial for the

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daily running of UNSCOM’s activities in Iraq. For specific inspection missions, it was necessary to obtain expertise outside UNSCOM’s core of inspectors to assist with forensic investigations. For example, construction engineers were recruited to help safely locate archives in buildings that had been destroyed by bombing in the Gulf War. Another example was the use of computer scientists for establishing whether substantial amounts of files had been deleted from computers prior to an UNSCOM inspection.

Another unique feature of this disarmament regime was the auditing bodies’ extensive rights of access when collecting information about Iraq’s compliance with the disarmament requirements of Resolution 687. In negotiations between Iraq and the UN in 1991 after the passing of resolution 687, UNSCOM was given wide-ranging rights of access to collect information on the disarmament of Iraq’s proscribed weapons and items as well as monitoring sites where proscribed capabilities could be re-established. Because UNSCOM’s rights in pursuing their mandate were negotiated as part of a cease-fire agreement, these were far more intrusive and wide-ranging than those in other inspection regimes. At that point, the future implications of UNSCOM’s rights of access were probably not fully realized by all members of the Security Council. UNSCOM had wide-ranging rights of access in Iraq under the ‘any-time, anywhere’ principle, enabling UNSCOM to inspect sites in Iraq without giving prior notice of the inspection. It is now generally accepted that UNSCOM’s extensive rights of access and cutting-edge technologies and tools enabled UNSCOM to achieve a level of insight unprecedented in the history of disarmament. The degree to which UNSCOM would make use of the extensive rights of

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59 This view has been expressed by a number of UNSCOM inspectors. Author’s interview with Smidovich (2004).
60 This view is also widely held among UNSCOM inspectors. For example: author’s interviews with Smidovich (2004) and Igor A. Mitrokhin (2004 a).
access depended on the agency’s confidence in Iraqi cooperation and compliance with disarmament. In the following years, UNSCOM’s executive chairman, Rolf Ekeus, used these negotiated rights to create an organizational capability to collect and analyse information of a scope that had not been foreseen in 1991.61

The conflicts that emerged during the seven years UNSCOM was in Iraq, particularly in 1997-98, turned UNSCOM into a highly controversial UN agency. Because Iraq’s declarations of the proscribed weapons, programmes and their disposition were incomplete (and in some cases sought to mislead the disarmament accounting), investigations of the omitted issues concerning Iraq’s proscribed programmes and weapons led to several stand-offs between UNSCOM and Iraq. In 1997 and 1998, the agency started to investigate various activities seen as part of a systematic Iraqi effort to retain proscribed items and capabilities. This resulted in more conflicts between UNSCOM and Iraqi officials who accused UNSCOM of violating Iraq’s national security interests. Allegations also emerged in the American media that UNSCOM’s information gathering was ‘tapped’ by the CIA. The negative attention that resulted from these and other issues created controversies that became part of the wider debate over the sanctions on Iraq and the Iraqi NBC disarmament.

The impact of Iraq’s partial cooperation

The disarmament regime was designed based on the assumption that the combination of economic incentives and the threat of military punishment would persuade Iraq to disarm of NBC weapons and capabilities, as well as cooperate with UNSCOM’s disarmament accounting efforts. However, Iraq’s failure to fully comply with Resolution 687’s extensive

61 Author’s interview with Nikita Smidovich (2004); Yale Oral History Project interview with Hannay, p. 10.
demands of disarmament and cooperation had crucial implications for UNSCOM and the disarmament regime’s prospect for success.

In 1991 UNSCOM’s executive chairman Rolf Ekeüs expected that the economic incentives would convince Saddam Hussein to comply with the disarmament requirements and cooperate with UNSCOM. Therefore, Ekeüs set up UNSCOM as an organization capable of verifying Iraq’s disarmament in technical terms, expecting that this could be achieved within 12 months.62 Thus UNSCOM’s initial design was based on the expectation that its main occupation would be to verify Iraqi disarmament and assist in the disarmament process. At this point, UNSCOM expected that its main tasks would be to verify Iraqi declarations, assist with Iraq’s disarmament of CBW and proscribed ballistic missiles, and develop a monitoring system.63

Between 1991 and December 1998, UNSCOM audited Iraq’s compliance with the political objective of ‘complete’ disarmament by accounting for the disposal of all of Iraq’s proscribed weapons and items. The so-called ‘material balance’ approach was designed to enable UNSCOM to establish the net sum of Iraq’s proscribed items and weapons and deduct the sum of proscribed objects whose destruction had been verified. UNSCOM depended on Iraqi cooperation to establish what proscribed weapons and capabilities existed in Iraq prior to the Gulf War and verify whether these had been destroyed.

It became clear already in 1991 that Iraq’s cooperation with UNSCOM was far from complete. Iraq did not provide complete and accurate declarations of its former weapons programmes, omitting significant information with the aim of retaining proscribed weapons and capabilities. After months

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63 Author’s interview with Buchanan (2004).
of hiding retained CBW, proscribed missiles and items, Iraq destroyed the majority of these objects unilaterally in the summer of 1991. This decision followed a number of rigorous inspections, and the ISG reported that this was triggered by an IAEA inspection led by David Kay where Iraqi concealment of proscribed items was documented by the inspectors.\textsuperscript{64} This secret retention, and the subsequent unilateral destruction, both violated Resolution 687's demands.

Iraq's incomplete cooperation gave rise to a number of unanswered questions about the proscribed CBW and BM programmes. For example, for several years Iraq denied the offensive BW programme, its advanced achievements in (VX) nerve gas research and weaponization, and its efforts to indigenously manufacture ballistic missiles (Al-Hussein). Therefore, UNSCOM was not able to map the totality of Iraq's proscribed capabilities or the exact number of all proscribed weapons and items Iraq had possessed. Iraq's denials and omissions made UNSCOM unable to set up a full and verified material balance of Iraq's proscribed weapons and their destruction. Iraq's incomplete cooperation made the prospect of fully achieving the disarmament objectives of Resolution 687 seem less than promising.

When the full scope of Iraq's deception was revealed after the August 1995 defection of Hussein Kamel, the former director of Iraq's Military Industrialization Corporation, UNSCOM was forced to undertake investigations and forensic work to audit Iraq's claims at a level that had not been originally intended.\textsuperscript{65} Iraq's incomplete cooperation had important implications for how UNSCOM assessed Iraq's declarations about proscribed weapons and programmes. Iraq's withholding of important information about the current status of proscribed weapons and programmes introduced

\textsuperscript{64} Duelfer (2004b), Section 3: Iraq's Chemical Warfare Program, p. 31.
\textsuperscript{65} UNSCOM (1999).
uncertainties and unknowns into UNSCOM’s disarmament accounting.

Iraq’s cooperation with UNSCOM was considered an indicator of the level of Iraq’s compliance with the disarmament objectives in Resolution 687. UNSCOM audited the declarations submitted by Iraq, and subsequently launched investigations that uncovered information about Iraq’s proscribed weapons and programmes that had been omitted or misrepresented in these declarations. These discoveries enabled UNSCOM to verify the destruction of proscribed items and weapons, including those that Iraq had sought to retain in secret in 1991. UNSCOM’s investigations pressured Iraq to disclose more information about the proscribed programmes, and led to the destruction of additional weapons and items. UNSCOM’s verification of Iraqi destruction of proscribed weapons and items mainly took place during 1991–93, but was followed by a second series of disarmament verification efforts after the Hussein Kamel defection in August 1995.

Iraq’s ‘incremental approach’ to disarmament and declaring information about their proscribed programmes suggested a pattern where some proscribed items or information were always withheld by Iraq. The unilateral destruction of proscribed weapons in 1991 raised the question whether Iraq had retained other proscribed weapons, items or missiles. For example, initially Iraq only declared around half of their CW and one third of their ballistic missiles to UNSCOM. This pattern was demonstrated over a number of years, which established an impression in several countries that Iraqi declarations concerning NBC disarmament were ‘inherently’ incomplete.66

Iraq’s incomplete cooperation was evident in Iraq’s declarations concerning disarmament or their former programmes. Iraqi declarations had clearly identifiable and

conspicuous omissions, in terms of the information on the proscribed programmes and the evidence Iraq offered to back these claims. Iraq’s admission in the autumn of 1995 that it had been able to retain proscribed weapons and items for several months in 1991 proved Iraq’s ability to hide such items despite the presence of inspectors. UNSCOM took the view that Iraq’s unilateral disarmament in 1991 was in part an attempt to hide Iraq’s achievement in their proscribed programmes, such that UNSCOM would not be able to identify and destroy all of Iraq’s production and development capabilities. After realizing in 1995 the scope of Iraq’s past efforts to withhold information and proscribed items and weapons, UNSCOM’s accounting task turned into a complex and large-scale investigation into Iraq’s proscribed programmes and weapons. It is still an open question to what extent Iraq’s omissions and incomplete documentation in their declarations was a deliberate attempt to mislead UNSCOM and retain proscribed capabilities.

UNSCOM’s effort to account for the disposition and destruction of all of Iraq’s proscribed weapons and items in the face of Iraq’s incomplete cooperation gave rise to a number of unresolved disarmament issues. UNSCOM was unable to resolve these questions about Iraq’s proscribed programmes, weapons and their disarmament for various reasons. These included cases where Iraq was unable or refused to offer evidence to back their statements, claims that were disproved by physical evidence, and instances where the available evidence could not fully confirm Iraq’s declarations. In UNSCOM’s material balance accounting, all these issues were categorised as ‘unaccounted for’ or ‘unverified’. UNSCOM was not arguing that all these issues were results of Iraqi retention of proscribed weapons and items. However, it became an important question for the disarmament

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67 UNSCOM 1999, Annex D: Section on disarmament.
68 Ibid.
accounting whether the unresolved issues were symptoms of a systematic Iraqi attempt – a so-called ‘concealment mechanism’ – to retain information, proscribed weapons and items.

By the end of 1998, UNSCOM had accounted for the destruction of large amounts of proscribed weapons and facilities that had been identified as having been part of Iraq’s CBW and proscribed BM programmes. However, because of Iraq’s partial cooperation there remained significant uncertainties in the accounting for Iraq’s disarmament. These concerned UNSCOM’s understanding of Iraq’s proscribed programmes and capabilities, and whether Iraq had destroyed all proscribed weapons and items. These unresolved issues made it impossible for UNSCOM to report that Iraq had been ‘completely’ disarmed. Whether this uncertainty meant that Iraq still posed a threat to international security was a question for the Security Council to consider.

**Monitoring disarmament**

In addition to verifying the destruction of Iraq’s proscribed weapons and programmes, UNSCOM was to oversee that Iraq remained disarmed. For this purpose UNSCOM would set up a long-term monitoring system. It was assumed from the outset that there would be an element of overlap between the disarmament stage and the monitoring stage (e.g. in Security Council Resolution 715, 1991). The Ongoing Monitoring and Verification (OMV) system was intended to ascertain that Iraq’s civilian undertakings were not diverted for proscribed activities. OMV enabled the disarmament regime to control the residual risk that the proscribed capabilities could be reconstituted and served as a confidence-building measure.

The OMV system was underpinned by the assumption that the incentive of lifting the sanctions and the risk of punishment if prohibited activities were discovered by OMV
would persuade Iraq to refrain from undertaking proscribed activities in monitored sites.\(^6^9\) However, Iraq’s disarmament was never fully verified by UNSCOM. In spite of resolutions 687 and 715 (1991), Iraq resisted the setting up of such a monitoring system until November 1993. Iraq’s lacking cooperation meant that OMV had to operate under different conditions than the Security Council had intended when the system was created as part of the disarmament regime in 1991.

From the outset, UNOCOM assumed that Iraq would disarm and provide a verifiable and complete declaration of its proscribed programmes. In order to be effective, the OMV system depended on Iraqi access and cooperation. When Iraq failed to fully cooperate with UNOCOM, this had important implications for OMV. An important question became, given that Iraq’s disarmament was never fully verified by UNOCOM, what kind of conclusions could be drawn about Iraq’s ‘continued disarmament’ based on the findings from the OMV system.

OMV enabled UNOCOM to monitor whether specific sites were diverted for proscribed purposes. Even though this system was not considered able to discover all attempts to undertake proscribed activities in these sites, or attempts to do so in clandestine sites, it was likely that UNOCOM would discover systematic or large-scale attempts to divert dual-capable items for proscribed purposes.

Iraq’s incomplete cooperation and attempts to undermine UNOCOM’s efforts to account for and verify disarmament made OMV a very important tool in the effort to ensure that Iraq did not rebuild proscribed capabilities. OMV’s primary role was to enable UNOCOM to detect anomalies at specific sites that could be investigated to establish whether proscribed activities had been taking place.\(^7^0\) As doubt about Iraq’s

\(^6^9\) UNOCOM (1999), Section on Ongoing Monitoring and Verification.

\(^7^0\) Author’s interview with Smidovich (2003a).
commitment to disarmament increased, UNSCOM's main monitoring aims became to deny Iraq the possibility of diverting capabilities for proscribed purposes, and increase the risk of diverting proscribed or dual-capable items and activities to sites that were not part of the monitoring system. With regard to possible diversion of proscribed items or activities to clandestine sites, this would become vulnerable for detection and could allow UNSCOM to locate such clandestine sites. Concerning the possible diversion of dual-capable items to sites that were not under monitoring, if this was discovered it would be more difficult for Iraqis to prove that this was not undertaken for legal purposes. This increased the risk Iraq faced if it were caught retaining declarable items and activities outside the OMV system.

Trying to monitor all activities that could contribute to some aspect of the proscribed capabilities and programmes would be an unmanageable task. Therefore, UNSCOM focused on detecting diversions that could contribute to actual production of proscribed items, rather than trying to be able to identify all signs of any proscribed activities. UNSCOM checked Iraq's declarations of dual-capable sites against its own information gathering, which enabled the organization to discover attempts to rebuild proscribed capabilities or retention of items that ought to be declared for monitoring by the UN.

OMV was an integrated system that focused individually on the biological, chemical and missile areas. It consisted of a complex of different surveillance and monitoring means, some of which focused on the use of particular equipment or site activities, while U2 photography and environmental sensors scanned for signs of proscribed activities outside the

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71 Ibid.
72 Ibid.
73 Author's interview with Smidovich (2003b).
monitored sites.\textsuperscript{74} Because the system was comprised of a number of different technologies and analytical tools, UNSCOM was confident that systematic attempts to re-establish proscribed capabilities in order to produce proscribed weapons would be detected over time.\textsuperscript{75} Overall, it is not possible to single out one particular tool that was more important than all others. It was the combination of the complex of monitoring technologies, the legal setting, UNSCOM's rights and the implementation of the resources available to UNSCOM that developed OMV into a good oversight mechanism.\textsuperscript{76}

The OMV system was implemented according to the risk that specific site features could be diverted for proscribed purposes, and was continuously updated to reflect changes in activities or features of the relevant sites. The intensity, frequency and style of monitoring was shaped according to the degree to which elements in each site could be used to create proscribed weapons.\textsuperscript{77} UNSCOM established oversight over dual-capable equipment that could be used for proscribed purposes, and focused its monitoring efforts on sites that posed the highest risk of converting rapidly to undertake proscribed activities. UNSCOM's knowledge about Iraq's proscribed capabilities was important for making OMV more effective. This information, and UNSCOM's assessment of the inherent capabilities of each monitored site, enabled UNSCOM to target OMV at 'bottlenecks' that had to be overcome to produce proscribed weapons rather than trying to monitor every type of site equally intensively.\textsuperscript{78}

Iraq's incomplete cooperation had the result that in the early stages of the disarmament accounting, intelligence information submitted by national governments was

\textsuperscript{74} Målfrid Braut (2003), pp.18–19.
\textsuperscript{75} UNSCOM (1999), Section on Ongoing Monitoring and Verification.
\textsuperscript{76} Author's interview with Mitrokhin (2004a).
\textsuperscript{77} Målfrid Braut (2003), p. 17.
\textsuperscript{78} UNSCOM (1999), Annex A: Missile Monitoring.
important for setting up UNSCOM’s initial investigations and inspections. However, once UNSCOM had established its own information gathering and analytical capabilities these became the agency’s most important source of information. In OMV, the combination of cutting-edge technologies with access to all sites that UNSCOM considered it was necessary to monitor, resulted in an intrusive monitoring capability. Through this system, UNSCOM developed a degree of oversight that enabled it to identify anomalies in a wide range of facilities. UNSCOM considered that it had better access to information and also had better analytical capacities than national intelligence services. Eventually, this information gathering and analysis provided an unequalled oversight in the monitored areas.

**UNSCOM’s role: adaptation and pressures**

UNSCOM’s role was to report technical assessment of Iraq’s disarmament to the Security Council. This ‘technical objectivity’ was important for the credibility of the disarmament regime. The attempt to insulate UNSCOM from political influences (from the Secretary General and the UN General Assembly) was intended to secure UNSCOM’s technical role. Thomas Pickering, the United States permanent representative to the UN in 1991, has argued that the ‘depoliticisation’ of UNSCOM embodied in Security Council Resolution 687 was intended to enable the agency to act independently and thus effectively. However, after UNSCOM inspectors arrived in Iraq, obstruction of a number of inspections and attempts to deny the agency access to information served to politicise UNSCOM’s role. Chairman

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79 Tim Trevan (1999), p. 218, p. 220. This is also a widely held view among UNSCOM inspectors, e.g. author’s interviews with Kelly (2003a) and Ekéus (2003).


81 Krasno and Sutterlin (2003), p. 5.
Ekéus took the view that Iraq's resistance made UNSCOM's task inherently political, and he sought to secure the agency's ability to account for Iraq's disarmament through negotiations with Iraqi leaders and Security Council members. Because of Iraq's incomplete cooperation, UNSCOM's ability to audit Iraq's disarmament depended on diplomatic efforts to ensure that UNSCOM could make use of the rights of access it had obtained in 1991.

As a result of Iraq's continuous resistance and the Security Council's weakening commitment to the objective of complete Iraqi NBC disarmament, UNSCOM's role in the disarmament regime increasingly came under pressure. By the end of 1998, UNSCOM's technical role had been politicised by Iraqi accusations, pressure from Security Council members and interventions by the UN Secretary General. Iraq challenged the scientific objectivity of some of UNSCOM's analyses, and accused UNSCOM inspectors of collecting other information concerning Iraq's national security. Security Council members encouraged UNSCOM to go beyond their technical reporting and assess the potential threat represented by the possibility that Iraq retained CBW and proscribed missile capabilities. In 1998 the UN Secretary General travelled to Iraq to resolve a conflict over UNSCOM's access. Unfortunately, this undermined UNSCOM's position because the Secretary General treated Iraq and UNSCOM as equal parties in a dispute, rather than confirming UNSCOM's superior position as a subsidiary agency of the Security Council. These developments undermined the intended distinction between the political and technical levels in the disarmament regime.

The disarmament regime's 'carrots and sticks' exercised a limited but substantial impact on Iraq's compliance with

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52 Author's interview with Ekéus (2003).
Resolution 687, as long as the Security Council appeared to be committed to enforce those disarmament objectives.\textsuperscript{85} If Iraq valued the NBC programmes as essential assets for the regime’s survival it was unlikely that economic incentives would convince Iraq’s leaders to abolish these weapons and capabilities. However, the ISG report argues that the Iraqi regime always struggled with striking a balance between cooperating with UN inspectors, so that sanctions would be lifted, and at the same time giving Iran the impression that NBC capabilities remained. This suggests that the Iraqi regime was unable to resolve the conflict between economic incentives and what it considered a security imperative – to deter Iran based on its NBC capabilities. The combination of incentives and deterrents appeared to be important factors influencing Iraq’s cooperation with UNSCOM.\textsuperscript{86}

As it turned out, the sanctions did not have the intended impact, i.e. full cooperation and compliance with Resolution 687, on Iraqi decision-making. Ultimately, disagreements within the Security Council undermined the deterrent impact that the Security Council could have continued to exercise over Iraq through this disarmament regime.

**Diminishing prospects of success**

The prospect of lifting the economic sanctions appears to have been important in persuading Iraq to offer a basic level of cooperation with UNSCOM’s efforts in disarmament verification and monitoring.\textsuperscript{87} However, the impact of these incentives was defined by the Security Council’s commitment to achieve complete NBC disarmament and UNSCOM’s investigatory skills demonstrating the extent of Iraq’s

\textsuperscript{85} For more on the ‘carrot-and-stick’ approach, please see Tim Trevan (1999), pp. 212–13.

\textsuperscript{86} For a view that sanctions were highly effective, please see Lopez and Cortwright (2004).

\textsuperscript{87} Lopez and Cortwright (2004), p. 91.
cooperation. The United States’ ambivalence concerning whether they would agree to lift sanctions if the stated objectives of the disarmament regime were achieved (but with Saddam Hussein remaining in power) weakened the credibility of the disarmament regime. When Iraq took the view that the United States would not endorse lifting of sanctions before Saddam Hussein was removed from power this incentive was no longer effective. Thus, the positive impact that the prospect of lifting sanctions had on Iraqi cooperation with UNSCOM was undermined. Madeleine Albright’s speech at Georgetown on 26 March 1997 made it clear that the United States would not lift sanctions until regime change had taken place in Iraq. This was followed by a clear reduction in Iraqi cooperation with UNSCOM in 1997–98, culminating in UNSCOM’s eviction and final departure prior to Desert Fox. It is noteworthy that the ISG report underplays the impact of this turning point, and explains Saddam Hussein’s decision to evict UNSCOM inspectors in terms of his personal anger after UNSCOM’s discoveries in 1997–98, specifically of VX remnants in 1997 and a document the following year suggesting that Iraq’s declarations of its CW holdings in 1991 had been substantially inadequate.86

The threat of military enforcement under Chapter 7 of the UN Charter underpinned the disarmament regime’s deterrent impact. However, the Security Council’s threshold for resorting to military enforcement action was high. Therefore, the low probability of military strikes being initiated by the Security Council to punish Iraq limited the scope of this deterrent influence to the most serious violations of Resolution 687. Adding to this, the increasing difficulty for the US to gather support to mobilise military strikes against Iraq made the threat of force a ‘diminishing asset’.89 In Baghdad, the Security Council’s failure to respond to Iraqi

non-cooperation with more than words was considered to reveal the Security Council’s inability to do so. UN Resolutions (and numerous Security Council statements) condemning Iraqi non-cooperation became increasingly unimpressive to the Iraqi regime.\textsuperscript{90}

The Security Council’s dependence on consensus in order to effectively respond to Iraqi cooperation or lack thereof gradually undermined the impact of the ‘carrot-and-stick’ enforcement on Iraq. In the case of Iraq and UNSCOM, the Security Council had diverging views on what was necessary to result in lifting sanctions. At certain points the Council differed on whether ‘complete’ NBC disarmament of Iraq would be sufficient to remove the Iraqi threat to its neighbours. In 1997–98, it emerged that the United States was committed to a policy of regime change in Iraq as a condition for lifting sanctions, while other Security Council members (France, Russia and China) would be satisfied with successful NBC disarmament. Gradually, the Council’s consensus eroded as a result of such differences.

**Erosion and failure**

The fragility of the Security Council consensus became evident prior to and after Operation Desert Fox in 1998. In 1997, Iraq expelled American UNSCOM inspectors arguing that they were ‘spies’, and only readmitted these inspectors after a military build-up by the United States and Britain.\textsuperscript{91} Iraq also refused UNSCOM access to Saddam Hussein’s residential palaces. Iraq’s repeated obstructions of UNSCOM’s inspections, and warnings from the United States and Britain that military strikes would be initiated, led to UNSCOM’s departure from Iraq in December 1998.\textsuperscript{92} Subsequently, the United States and Britain launched operation Desert Fox. The

\textsuperscript{90} Ibid.; author’s correspondence with Buchanan (2004).
\textsuperscript{91} Defenselink: Desert Fox.
\textsuperscript{92} Author’s correspondence with Ewen Buchanan.
US and the UK struck 97 facilities, most of which were related to Iraq’s military capability and fewer than ten contributed to missile-related activities.¹³ Eleven facilities that the United States defence secretary William Cohen claimed contributed to CBW production were attacked, but not destroyed.¹⁴

While the consensus in the Security Council had previously been weakened by disagreement on what was required to lift sanctions on Iraq, Operation Desert Fox undermined the Council’s consensus. In the aftermath, the Security Council failed to agree on the future of inspections in Iraq, specifically on the question whether the focus should be on a combination of monitoring and disarmament or a monitoring regime.

While the United States and Britain argued that it was necessary to undertake both disarmament and monitoring, another group consisting of Russia, France and China argued in favour of lifting sanctions and reinstating a monitoring regime in Iraq.¹⁵ Their inability to agree led to the premature discontinuation of UNSCOM.

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¹³ Ibid.
¹⁵ Diamond (1999a).
Chapter 4

Resolution 687: ‘Mission Impossible’?

In retrospect, the attempt to achieve complete NBC disarmament in Iraq through the UN-led disarmament regime might seem to have been a ‘mission impossible’ from the outset. The difficulties of defining and accounting for ‘complete’ disarmament of CBW and proscribed BM were considerable. Iraq’s limited cooperation and the eroding consensus in the Security Council reduced the probability that the disarmament regime would successfully achieve the objectives of Resolution 687.

Several analysts have pointed to the wide-ranging disarmament objectives and the weakening of the Security Council’s consensus as being the main reasons for UNSCOM’s premature withdrawal from Iraq. Scott Ritter has argued that the disarmament regime’s objective of ‘complete’ disarmament resulted in a ‘deadlock’ between Iraq and the Security Council that ultimately led to the discontinuation of UNSCOM’s efforts in Iraq. Stephen Black drew a contrast between UNSCOM’s substantial achievements and the Security Council’s weakening commitment to achieve the

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96 The use of this term in this context emerged in a discussion with Jeffrey Allen and others to whom I am grateful.

97 Scott Ritter (2000).
objectives of Resolution 687, and argued that the latter was the reason why the agency did not return to Iraq after Operation Desert Fox. Charles Duelfer pointed to inherent difficulties of achieving ‘complete’ NBC disarmament, and argued that a UN agency would not be able to enforce NBC disarmament on an unwilling sovereign country due to these actors’ differing abilities to maintain cohesion and commitment.

These explanations contribute to understanding the difficulties of achieving the disarmament objectives of Resolution 687 and why UNSCOM’s activities were discontinued after Operation Desert Fox. However, the disarmament regime’s outcome cannot be fully explained in terms of difficulties in accounting for ‘complete’ disarmament or a ‘structural’ inability to preserve consensus in the Security Council. It cannot be argued that the disarmament objectives ‘predetermined’ the regime’s failure, because the decision whether Iraq had satisfied the terms of Resolution 687 would be political. In fact, the Security Council did not formally depend on UNSCOM’s (or the IAEA’s) technical assessments when making this decision. The Security Council could pronounce that Iraq had completely disarmed when it was satisfied that the country no longer posed a threat to international security in terms of proscribed weapons and capabilities, regardless of any outstanding disarmament issues. The decision would draw on the Council members’ overall perception of Iraq’s intentions and commitment to comply with Resolution 687. The erosion of the Security Council’s consensus was not due to an ‘inherent’ inability to preserve agreement, but was caused by the emergence of different perceptions as to whether the unresolved disarmament

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98 Charles Duelfer (2002).
100 Author’s interview with Buchanan (2004).
questions meant that Iraq still posed a threat to international security.

**Objectives**

One of the most important and distinctive features of the disarmament regime was the wide-ranging scope of its objectives. Resolution 687 treated nuclear, chemical and biological weapons as equally threatening to international security, despite substantial technical and strategic differences between these types of weapons. Because Saddam Hussein had used CW against Iranian soldiers and Iraqi civilians, the three weapon categories were all considered to be potential threats to international security if they were in Saddam Hussein's hands.\(^{101}\)

Resolution 687's objective of complete NBC disarmament, and its demand of full Iraqi cooperation with the disarmament accounting, encompassed more than any previous disarmament efforts.\(^{102}\) The resolution required that Iraq destroy all CBW and limited the permitted range of BM to below 150 km. This would enable Iraq to defend itself against attack (which was considered necessary to preserve regional stability), although Iraq would not be able to launch missiles against the capitals of Iran or Israel. The resolution demanded that "all stocks of agents and all related subsystems and components and all research, development, support and manufacturing facilities" be destroyed.\(^{103}\) Iraq's capability to make proscribed weapons would be eliminated by destroying the physical equipment and resources used (or acquired) to make CBW and proscribed BM, while monitoring would ascertain that the destroyed capabilities were not reconstituted.

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\(^{101}\) Author's interview with Ekéus (2003).

\(^{102}\) Yale Oral History project interview with Sergey Lavrov, pp. 26-27.

UNSCOM’s mandate, verifying Iraq’s complete disarmament of CBW and proscribed BM and monitoring that these capabilities were not rebuilt, was an unprecedented task.\textsuperscript{104} With regard to Iraq, fully describing and documenting all proscribed programmes, weapons and capabilities was a difficult undertaking. Iraqi authorities had to provide complete declarations of highly secretive and compartmentalized CBW and BM programmes, backed by adequate documentation, to enable UNSCOM to verify Iraq’s statements. It was not unlikely that Iraq would not be able to provide sufficient and adequate documentation for all of these aspects. Therefore, the Security Council’s overall confidence in Iraq’s compliance with Resolution 687 would be crucial for whether gaps in the declarations or the supporting evidence would be perceived as indications of non-compliance.

Determining disarmament?

In 1995, Hussein Kamel’s defection exposed Iraq’s incomplete cooperation and subversive efforts on the disarmament regime. While this disarmament regime can be accused of being created as an attempt to apply a ‘technical fix’ to an essentially political problem, Iraq’s incomplete cooperation substantially politicised the disarmament accounting, with the result that accounting uncertainties became associated with the potential threat Iraq could pose to international security if it sought to retain or later rebuild proscribed weapons and capabilities. The politics in Iraq and in the Security Council influenced the disarmament accounting and determined whether sanctions would be lifted as a result of the Council members agreeing that Iraq had complied with Resolution 687.

In order to decide that Iraq had complied with Resolution 687, the Security Council would have to become convinced

\textsuperscript{104} Verify: confirm a claim after assessing it according to relevant evidence. For a good discussion, see Canada (1986).
that Iraq had decided to abolish the proscribed weapons and capabilities. However, Iraq’s limited cooperation with UNSCOM reduced the probability that the Council would be convinced that Iraq was not attempting to retain proscribed capabilities. Some Security Council members’ decreasing confidence in Iraq’s intentions meant that unresolved disarmament issues were interpreted as a potential threat to international security.

The process of determining whether Iraq was ‘completely disarmed’ would not, and could not, be decided by disarmament accounting alone. However, UNSCOM had to assess whether Iraq was disarming in compliance with Resolution 687 in technical terms to enable the Security Council to make informed decisions about Iraq. UNSCOM faced a number of challenges in how to define and assess whether Iraq was disarming according to the objectives of Resolution 687, for example defining the scope of ‘complete’ disarmament and drawing boundaries between permitted and proscribed items and capabilities.

There is no technical definition of ‘complete’ NBC disarmament, no ‘end point’ that can identify when such a stage has been achieved, or any ‘recipes’ describing how to achieve this objective. UNSCOM’s disarmament accounting focused on ‘hardware’: proscribed weapons and items used (or acquired for) the prohibited capabilities. UNSCOM sought to quantitatively account for all of Iraq’s proscribed weapons and items, based on a comprehensive understanding of Iraq’s proscribed programmes and capabilities. The destruction of all proscribed weapons and their development and production infrastructures had an identifiable end-point, and could be measured quantitatively. However, less tangible aspects of Iraq’s capabilities, such as ‘know-how’ that had been established after decades of research, challenged the effort to achieve ‘complete’ disarmament. While the accounting

105 Author’s interview with Ekeus (2003).
approach was designed to be quantitatively ‘measurable’, any effort to account for all such weapons and items in a country would face significant challenges in terms of uncertainties that could emerge during the accounting.\textsuperscript{105}

In the area of ballistic missiles, UNSCOM faced a number of technical challenges in defining and distinguishing proscribed from permitted BM features. For example, different variables had an impact on the range of ballistic missiles (e.g. the weight of the warhead, which would differ according to whether it was filled with CBW agents or explosives). The difficulties of translating the objective of ‘complete’ disarmament into measurable categories and benchmarks meant that it would be difficult to devise a technical declaration stating that complete NBC disarmament had been achieved. An attempt to do so would encounter several difficulties in defining and proving the ‘completeness’ of the disarmament result.

UNSCOM’s disarmament accounting looked increasingly like a ‘mission impossible’ once it became clear after August 1995 that Iraq’s cooperation was limited, and that the agency had been substantially misled by Iraq’s subversive efforts. The inherent difficulties of verifying complete disarmament of proscribed weapons and capabilities, in numerical and qualitative terms, were aggravated by Iraq’s incomplete cooperation. This also reduced UNSCOM’s confidence in the comprehensiveness of its accounting and auditing, which was based on Iraq’s declarations, which in turn led to increased concerns from individual countries about Iraq’s intentions in relation to disarming itself of CBW and proscribed BM.

Iraq’s limited cooperation gave rise to doubts whether UNSCOM was actually accounting for all proscribed weapons, items and capabilities, or whether Iraq retained aspects of their former programmes, weapons, and capabilities. The outstanding issues from UNSCOM’s

\textsuperscript{105} Amorim panel (1999).
accounting of Iraqi disarmament were increasingly interpreted as indicators of Iraq's intentions, particularly once UNSCOM realized how much it had been misled by Iraq between 1991 and 1995. Subsequently, Iraq's limited cooperation continuously raised the threshold for the Security Council's decision that Iraq had fully complied with Resolution 687.

Security Council: eroding consensus

There were concerns within the Security Council that Saddam Hussein continued to retain elements of NBC programmes with the aim of re-establishing the proscribed capabilities at a future point. Iraq claimed that these activities ceased after Hussein Kamel's defection, but offered no evidence of such a decision. Although doubts emerged in the Security Council about whether Iraq would comply with Resolution 687, the disarmament regime was nonetheless considered as a tool that could limit the Iraqi threat to international security. As it became clear that Saddam Hussein remained in power and that Iraq's cooperation in the disarmament accounting process was limited, Security Council members reassessed the disarmament regime's role and prospect of success.

The 'utility' of the UN disarmament regime in Iraq was not confined to the outcome of complete NBC disarmament in Iraq. Countries that were concerned about Iraq's intentions regarding the proscribed capabilities valued other gains from the disarmament accounting and OMV. Even if the regime could not achieve complete disarmament in Iraq, as demanded in Resolution 687, it had achieved the destruction of substantial amounts of proscribed weapons and infrastructures. Moreover, the regime enabled the international community to deter Iraq's leaders from rebuilding the proscribed capabilities. The disarmament regime enabled the Security Council to contain Iraq in a legitimate and low-cost manner. If the threat of Iraqi NBC
capabilities could not be completely removed, it could be managed through the disarmament regime.

The decision-making process in the Security Council ensured that a consensus was required to determine that Iraq had been irreversibly disarmed. Therefore, no country would be forced into 'acquitting' Iraq, while it would not be possible to lift sanctions if the US and Britain were not satisfied that the threat from Iraq had been eliminated. The widely encompassing scope of the disarmament objectives ensured that the technical process could be continued until the entire Security Council was satisfied that Iraq was completely disarmed. However, differences of opinion weakened the Security Council's ability to enforce disarmament on Iraq, which in turn decreased the deterrent impact of the threat of military punitive strikes.

The difficulties in defining, assessing and achieving 'complete' NBC disarmament turned out to be instrumental for those in the Security Council who wanted to continue the disarmament regime and sanctions until there had been regime change in Iraq. However, in the long term, the strategy of containing Iraq through the restraints posed by sanctions and UN inspections (the so-called 'containment strategy) was irreconcilable with the stated objective of the disarmament regime: to ascertain that all of Iraq's proscribed weapons and items had been destroyed and then lift the sanctions.

The Security Council's consensus eroded due to differing opinions concerning the importance of fully achieving complete disarmament in Iraq. Moreover, the political nature of the disarmament objective made this regime inherently vulnerable to contending interpretations of this objective and the risk posed by any residual Iraqi NBC capabilities. The American and British ambiguity on whether they would be satisfied with Iraqi NBC disarmament while Saddam Hussein ruled Iraq caused frustration among other Security Council members. Russia, China and France did not want to endorse a
policy of regime change or perpetuate the UN disarmament regime indefinitely. These policy positions were irreconcilable in the longer run, and undermined the credibility of the disarmament process because it became unclear whether sanctions would be lifted if Iraq did in fact disarm. The consensus that underpinned the Security Council’s ability to enforce disarmament in Iraq became increasingly fragile, while Iraq appeared determined to retain as much of their proscribed capabilities as possible.  

As argued in the previous chapter, from the outset in 1991 the Security Council attempted to de-politicise the disarmament accounting process and agencies. The essentially political nature of the disarmament regime’s objectives, introduced significant challenges to the attempt to de-politicise UNSCOM’s role and mandate faced with Iraqi resistance. Because UNSCOM’s mandate was defined in Resolution 687, its efforts in Iraq were defined and shaped by political influences. However, Iraq’s non-cooperation made it impossible to maintain the attempt to insulate UNSCOM and its task from political influences and controversies. While this had been clear to UNSCOM’s executive level for a while, when the impact of Iraq’s non-cooperation and subversive efforts on the disarmament accounting effort became known after the Hussein Kamel defection it was increasingly realized that the attempt to depoliticise the disarmament accounting was failing.

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107 For more on this aspect, see Duelfer (2002).
UNSCOM's achievements in accounting for Iraq's disarmament

In this chapter, UNSCOM's achievements in accounting for Iraq's disarmament will be assessed. Individual sections will first examine UNSCOM's achievements in accounting for the disarmament of Iraq's CW, BW and proscribed BM respectively. Then, this will be followed by an overview over UNSCOM's approach to accounting for Iraq's disarmament, its achievements in doing so, and the impact of Iraq's limited cooperation on the disarmament process.

By December 1998, UNSCOM considered Iraq's disarmament as substantial, but not complete. Between 1991 and 1994 UNSCOM verified the destruction of Iraq's known proscribed weapons and facilities dedicated to making or developing CW and BM of proscribed ranges. After the Hussein Kamel defection in August 1995 another round of disarmament verification was initiated that lasted until 1997. This consisted of verifying the destruction of Iraq's known BW facilities and equipment, CW production equipment and precursor chemicals, and six units of proscribed BM production equipment.  

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Despite these substantial disarmament achievements, the disarmament regime faced a number of unresolved questions about Iraq's proscribed weapons, capabilities and programmes. UNSCOM's final report in 1999 argued that 'UNSCOM has achieved considerable progress in establishing material balances of Iraq's proscribed weapons. Although important elements still have to be resolved, the bulk of Iraq's proscribed weapons programmes has been eliminated'.

In the following, UNSCOM's achievements in accounting for the chemical, biological, and proscribed BM areas (and the risk that the capabilities could be subsequently re-established) will be examined.

**Chemical weapons**

Prior to the Gulf War, it was well known to the outside world that Iraq possessed a considerable chemical warfare capability. However, Iraq's most recent and advanced achievements in the CW area, and the details of its CW capabilities, remained unknown. Existing intelligence enabled the coalition to direct bomb attacks against Iraq's chemical warfare capability. Precision-bombing raids substantially damaged several of Iraq's CW production facilities. However, UNSCOM later discovered that the bombing attacks had not had as damaging an impact as the coalition had believed at the time.110

Perhaps because Iraq's chemical warfare capability was known to the outside world, Iraq provided some information about the CW weapons and programme to UNSCOM. However, Iraq did not provide complete declarations about its CW, the CW programme or capabilities. Iraq did not disclose the military concepts for the use of CW or information about the most recent and advanced achievements of the CW programmes. Iraq's partial declarations and UNSCOM's own investigations enabled UNSCOM to gradually map the general

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aspects of Iraq's CW programme, its evolution and scope. For example, initially Iraq did not admit to their development of VX, the most poisonous and persistent nerve agent in Iraq's CW arsenal. However, UNSCOM managed to uncover Iraq's effort to make this nerve agent (and obtained indications that VX had been loaded into BM warheads) after investigating this issue between 1995 and 1998.\textsuperscript{111}

UNSCOM managed to uncover aspects of Iraq's CW research and development, as well as information about Iraq's procurement for this programme, that Iraq had sought to hide.\textsuperscript{112} These discoveries were important for identifying the direction that Iraq's CW programme was heading in, understanding Iraq's capabilities and the level of 'self-sufficiency' in the area of CW. For example, UNSCOM's understanding of Iraq's CW research, development and procurement networks was important for understanding the direction that Iraq's CW programme was heading towards at the time of the Kuwait invasion.

Between 1991 and 1998 UNSCOM verified the destruction of large quantities of CW and items that had been part of the infrastructure developing and producing these weapons. UNSCOM reported Iraq's destruction of over 88000 filled and unfilled chemical munitions (aerial bombs, rockets, artillery shells and missile warheads), over 600 tonnes of CW agents, some 4000 tonnes of chemicals for CW agent production ("precursor chemicals"), over 980 pieces of key production equipment, and more than 300 pieces of analytical instruments.\textsuperscript{113} UNSCOM also verified the dismantling of Iraq's main CW development and production complex.\textsuperscript{114}

However, Iraq's incomplete cooperation with UNSCOM's accounting efforts left significant questions unanswered.

\textsuperscript{111} Krasno and Sutterlin (2003), pp. 167–69.
\textsuperscript{112} Amorim panel (1999).
\textsuperscript{113} Ibid.
\textsuperscript{114} Ibid.
Initially, Iraq declared approximately half of the chemical agents and weapons that UNSCOM eventually verified as destroyed. Iraq’s unilateral destruction of CW in the summer of 1991 could only be partially verified based on the amount of evidence Iraq provided to UNSCOM. Moreover, UNSCOM’s detection of traces of VX on BM warheads contradicted Iraq’s claim that VX was not weaponized. In October 1997 UNSCOM reported to the Security Council that Iraq’s declarations on CW agents could not be verified because the evidence provided was insufficient to fully confirm Iraq’s claims.

In the process of verifying Iraq’s CW programmes and capabilities, UNSCOM obtained insights that were subsequently useful for assessing the risk of the remaining disarmament issues. For example, UNSCOM discovered that Iraq’s CW agents did not have a long ‘shelf-life’. Since the final stages of the Iran-Iraq war Iraq had focused on the capability to rapidly produce large amounts of agents that could be loaded into delivery vehicles immediately prior to actual deployment, rather than producing caches of CW for storage. Therefore, most Iraqi CW from prior to 1991 would not be effective weapons for very long.

During UNSCOM’s accounting for Iraq’s CW disarmament, concerns arose whether Iraq’s declared sum total of CW, associated resources and equipment was accurate. An important event in this respect was UNSCOM’s discovery of the so-called ‘Air Force document’ in July 1998. The content of this document suggested that Iraq had provided false declarations to UNSCOM, overstating the number of CW used in the Iran-Iraq war by some 6000-6500

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115 UNSCOM (1999), Section on Disarmament: Annex B (Table 1).
116 UNSCOM (1999), Section on Disarmament: Annex B.
118 Ekéus (2003).
munitions. This document was seized from the UNSCOM chief inspector, which left an open question mark as to whether Iraq's declaration of CW existing in Iraq by 1991 could be trusted. At the time, this suggested that a number of proscribed munitions could have been left out of UNSCOM's accounting 'baseline', and thus that this could have been an Iraqi attempt to avoid accounting for (and possibly also avoiding the destruction of) thousands of CW munitions. Years later, Iraq provided this document to UNMOVIC.

A number of issues concerning the disposition of all of Iraq's CW activities and related infrastructure remained unresolved when UNSCOM departed from Iraq in December 1998. Several of these issues had significant implications for UNSCOM's confidence in the Iraqi declaration of the sum total of CW and production equipment existing in Iraq in 1991, which constituted the baseline against which the disarmament was measured. The degree to which UNSCOM had been able to verify Iraq's declarations was an important issue in UNSCOM's final assessment that was circulated in the Security Council in January 1999. UNSCOM established the final accounting for Iraq's CW programme based on Iraqi declarations that were not fully verified by UNSCOM.\(^{120}\)

The uncertainties in UNSCOM's disarmament accounting made it difficult for the Security Council to assess the exact impact of the disarmament regime on Iraq's CW capabilities. These difficulties concerned Iraq's declarations of their CW and programmes, and the question of whether Iraq had ceased to conceal CW and CW production equipment. Iraq had proved able to retain such equipment for several years. For example, Iraq had retained chemical agent production equipment from its main production facility prior to UNSCOM's arrival in 1991, and had moved this equipment around until it was finally handed over to the agency in 1996. However, Iraq did not explain how it had managed to hide

\(^{120}\) UNSCOM (1999), Section on Disarmament.
these items until July 1998.\textsuperscript{121} This raised concerns whether other CW production equipment could have been removed and remain hidden.

The risk that Iraq could re-establish CW development and production was not eliminated by the disarmament regime. Notwithstanding the destruction of Iraqi CW facilities and equipment, some of the equipment and resources used in civilian undertakings could be reconfigured in order to make CW agents. In an internal UNSCOM working paper, cited in an article by former UNSCOM inspector Scott Ritter, it was pointed out that all production equipment used to make chemical agents have legitimate roles in industry.\textsuperscript{122} As Rolf Ekéus argued in an interview in 1997, these items did not essentially constitute a threat as long as UNSCOM could certify that they had not been reconfigured from their legitimate purposes to chemical agent production.\textsuperscript{123} If Iraq was committed to reacquiring an indigenous CW capability, this could be achieved by using 'dual-capable' equipment. Without the OMV system in Iraq there was a considerable risk that Iraq could start to rebuild CW capabilities with a low risk of detection. In the case of some CW agents, re-establishing a production line could be achieved within months.

**Biological weapons**

Prior to the Gulf War, very little about Iraq's efforts in the BW area was known to the outside world. Therefore, in the BW area only one facility (Salman Pak, near Baghdad) was targeted by the coalition's precision bombing.\textsuperscript{124} In 1991, Iraq's leadership decided to conceal their BW programme from UNSCOM in order to retain this capability. Initially,

\textsuperscript{121} UNSCOM (1999), Section on Disarmament: Annex B.

\textsuperscript{122} Ritter (2000).

\textsuperscript{123} Arms Control Today (1997).

\textsuperscript{124} Barton (1998).
Iraq denied the existence of an (offensive) BW programme, and only admitted to have undertaken research on defence against BW attacks. Despite some suspicions among UNSCOM inspectors in 1991 that there might in fact have been a BW programme in Iraq, UNSCOM focused on verifying the content of Iraq’s declarations in the CW and BM areas before the focus shifted to Iraq’s omissions. Another reason was that UNSCOM’s executive level did not consider it was likely that there had been a large BW programme in Iraq, because this did not seem to make ‘military sense’ at that time.

However, in 1994 extensive investigations were set up that uncovered a number of indications of a BW programme. UNSCOM’s mapping of Iraqi sites with technologies and materials that could be used for BW purposes, and tip-offs from Israeli intelligence, eventually brought about Iraq’s admittance on 1 July 1995 that a BW programme existed. However, despite having admitted to the existence of a biological warfare programme, Iraqi leaders denied that the biological agents had been weaponized. Iraq later admitted to having weaponized BW in R-400 aerial bombs, as well as having researched various methods of delivery (e.g. attempts to spread BW agents from spray tanks on airplanes).

UNSCOM obtained detailed information about certain aspects of Iraq’s BW programme, but was unable to develop an overview of its scope or general content. Investigations uncovered information about the early stages of the BW programme, and the developments and achievements that shaped Iraq’s biological warfare capabilities by 1991. UNSCOM was also able to retrieve some information about

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125 Author’s interview with Kelly (2003a); author’s interview with Ekéus (2003).
126 Author’s interview with Ekéus (2003).
128 Author’s interview with Kelly (2003b).
129 Amorim panel (1999).
Iraq’s procurement activities for its BW programme.\textsuperscript{136} UNSCOM acquired a detailed understanding of Iraq’s delivery systems for BW.\textsuperscript{131} However, because of Iraq’s incomplete declarations the agency was not able to determine the overall scope of Iraq’s BW programme. Between 1991 and 1998, Iraq consistently provided less information about the BW programme than about the other proscribed programmes.

Between 1991 and July 1995, Iraq’s main BW facility (\textit{Al Hakam}) was maintained and developed under a civilian cover. After Iraq’s admission of having a BW programme, this facility was destroyed in 1996. UNSCOM also confirmed the destruction of some 60 pieces of equipment collected from three other sites involved in BW-activities. 22 tonnes of growth media collected from four sites, were destroyed under UNSCOM supervision.\textsuperscript{132} However, several questions about Iraq’s BW and the BW programme remain unsolved. For example, there were many unresolved issues concerning Iraq’s achievements in research and development, its procurement efforts and the intended purpose of various biological agents Iraq had acquired for the BW programme.\textsuperscript{133}

Despite the inherent limitations of what UNSCOM could discover about the BW programme, given Iraq’s poor level of cooperation, the uncovering of this programme is widely considered as being UNSCOM’s most important success.\textsuperscript{134} As Christian Seelos has pointed out, UNSCOM is the first organization to have uncovered an existing, hidden BW programme.\textsuperscript{135}

Iraq’s limited cooperation prevented UNSCOM from even attempting to construct a material balance in the BW area in the report that was circulated in the Security Council in

\begin{footnotes}
\item[130] Ibid.
\item[131] Ibid.
\item[132] Ibid.
\item[134] Author’s interview with Ekëus (2003).
\item[135] Christian Seelos (1999).
\end{footnotes}
January 1999. Frequent changes and omissions in Iraqi declarations and lacking evidence to support these claims weakened the credibility of Iraq’s claims in the BW area. In January 1999, UNSCOM assessed that it had ‘no confidence’ that all BW agents had in fact been destroyed, that no BW remained in Iraq, or that a BW capability did not remain in Iraq.\textsuperscript{136}

Although UNSCOM could not construct a material balance of Iraq’s BW, in the report circulated in the Security Council in 1999 it assessed the credibility of Iraq’s declarations about the BW programme. UNSCOM claimed it had a ‘degree of confidence’ in the accounting for some items that Iraq presented to the agency for verification, destruction or monitoring. This included the destruction of the main biological weapons production site (Al Hakam) and the equipment and resources inside, that facility which Iraq destroyed under UNSCOM supervision in 1996.\textsuperscript{137}

UNSCOM had ‘less confidence’ in Iraq’s declaration that it had unilaterally destroyed a number of BW and BW agents (e.g. Iraq’s claim about the quantity of unused aerial bombs and biological warfare agent).\textsuperscript{138} Finally, UNSCOM had ‘little or no confidence’ in declarations where no (or inadequate) physical or other forms of evidence were presented to back Iraq’s claims. This concerned types of munitions that were filled with biological weapons agent, how much (and what kind of) biological agents were produced and destroyed, and the disposition of growth media used to produce the biological agents.\textsuperscript{139} In 1998, a meeting of technical experts from outside UNSCOM was set up to assess the agency’s findings endorsed its assessments, and pointed to other issues where Iraq’s declarations appeared to be conspicuous (e.g. the

\textsuperscript{136} UNSCOM (1999), Section on Disarmament: Annex C.
\textsuperscript{137} Ibid.
\textsuperscript{138} Ibid.
\textsuperscript{139} Ibid.
lacking credibility of Iraq’s stated BW production capacity and output in the area of BW).\textsuperscript{140}

The unsolved issues from the verification of Iraq’s disarmament resulted in a considerable risk that BW and BW-related items had been retained by Iraq. It was equally (if not more) disconcerting that dual-capable elements embedded in Iraqi civilian capabilities represented a considerable risk that Iraq’s BW capabilities could be reestablished. Iraq’s civilian industry contained dual-capable instruments, which meant that Iraq possessed ‘hardware’ and ‘software’ (knowledge from previous research in their biological weapons programme) that enabled rapid restitution of production of biological warfare agents.\textsuperscript{141} The risk that Iraq’s BW programme could be re-established was perceived as more serious after UNSCOM inspectors had left Iraq in December 1998. Restarting elements of Iraq’s BW programme or BW production would not take long, and would be difficult to detect without UN inspectors present in the country.

**Proscribed ballistic missiles**

The international community was aware of the existence of Iraq’s BM capability before the Gulf War. In the course of the Gulf War some of Iraq’s main missile engineering sites were destroyed by precision bombing, while other ballistic missile facilities were left unharmed.\textsuperscript{142} However, in the area of BM Iraq’s obligations and UNSCOM’s task differed from the CBW disarmament. Iraq would still be allowed to have BM and BM capabilities, but only within the permitted range. UNSCOM sought to verify that Iraq did not retain missiles exceeding the permitted range, that Iraq did not modify permitted missiles so these could reach 150 km or above after

\textsuperscript{140} Krasno and Sutterlin (2003), p. 169.

\textsuperscript{141} Barton (1998); UNSCOM (1999); Amorim panel (1999).

\textsuperscript{142} UNMOVIC (2003).
production, or try to retain capabilities specifically designed to create such missiles.

Initially, Iraq appeared to be quite cooperative with UNSCOM. However, it turned out that Iraq had sought to conceal the nature and achievements of its BM programme.\textsuperscript{143} Iraq failed to disclose a number of other aspects of its BM programme and capabilities to UNSCOM. Initially, Iraq only declared 1/3 of the BM it possessed at the end of the Gulf War. Iraq failed to declare its indigenous capability to produce BM of proscribed ranges, information that was not fully admitted until after Hussein Kamel's defection in 1995. Iraq sought to retain items for indigenous proscribed missiles production, and unilaterally destroyed BM in the summer of 1991.\textsuperscript{144} By December 1998, UNSCOM had established a broad understanding of Iraq's BM programme. However, there were several missing pieces in this puzzle, for example which CBW agents the proscribed BM warheads had been filled with. Another unresolved issue was the nature and whereabouts of seven indigenously produced missiles.\textsuperscript{145}

Despite Iraq's incomplete cooperation UNSCOM was able to verify the destruction of almost all (817 out of 819) imported operational missiles of proscribed ranges, 56 fixed launch sites and all declared mobile launchers for proscribed missiles.\textsuperscript{146} Further, UNSCOM verified the destruction of almost all (73 to 75) chemical and biological BM warheads; and the majority of conventional BM warheads declared by Iraq (83 of the 107 imported and some 80 of the 103 indigenously produced).\textsuperscript{147}

In this area, like in the CBW areas, a number of outstanding disarmament questions emerged as a result of Iraq's unilateral destruction and incomplete declarations. When it emerged

\textsuperscript{143} UNSCOM (1999), Section on Disarmament: Annex A.
\textsuperscript{144} Ibid.
\textsuperscript{145} Ibid.
\textsuperscript{146} Amorim (1999).
\textsuperscript{147} Ibid.
that Iraq had indigenously produced BM of proscribed ranges this complicated UNSCOM’s accounting process, because without adequate Iraqi documentation it was even more difficult to track indigenously acquired materials than imported ones. The omissions in Iraq’s declarations had implications for UNSCOM’s understanding of the country’s BM capabilities and degree of ‘self-sufficiency’. For example, Iraq did not assist with the accounting for proscribed BM engine parts that UNSCOM suspected might have been retained. These particular items would have been crucial for developing new proscribed missiles, or could indicate that some of Iraq’s older BM had been retained. UNSCOM’s inability to verify the destruction of a number of these and similar issues (such as Iraq’s amount of proscribed BM propellants and warheads) therefore appeared conspicuous. In 1996 UNSCOM assessed that if Iraq had actually retained the items that had not been accounted for, Iraq would have been able to make two ballistic missiles.

After Hussein Kamel’s defection, UNSCOM became aware of Iraq’s attempts to substantially undermine its efforts to account for the proscribed BM programme, capabilities and the disposition of proscribed BM. At this point, UNSCOM also learned that after 1991 Iraq had secretly undertaken activities for development of the proscribed BM capabilities in parallel with its permitted BM activities. Iraq had continued to work on proscribed projects, including indigenous production of missile guidance and control systems.148 Finally, after the Kamel defection, UNSCOM learned that Iraq had retained equipment for production of BM of proscribed ranges.149 UNSCOM discovered that several attempts had been made to import items clandestinely.150 While Iraq stated that these projects and procurement activities had been terminated

149 Ibid.
150 Ibid.
quickly after they started, it did not offer UNSCOM evidence proving that this was the case. 151

Iraq’s non-cooperation and subversive efforts made it impossible for UNSCOM to present a fully verified material balance of Iraq’s proscribed BM. There were a number of unresolved disarmament issues and inadequate supporting evidence for some of Iraq’s claims. In some cases, Iraq’s methods of unilateral destruction (such as melting) made it impossible for UNSCOM to numerically account for specific items. As a result, Iraqi declarations were used as the basis of UNSCOM’s accounting – with the uncertainties this entailed.

Under Resolution 687, Iraq was allowed to make BM with ranges not exceeding 150 km. Therefore, Iraq’s BM programme and capabilities were maintained and improved between 1991-1998. There was a latent possibility that Iraq could divert its BM activities to improve its BM capabilities that could reach proscribed ranges. After UNSCOM left Iraq in December 1998, Iraq would be able once again to create a capability to make BM of ranges exceeding 150 km.

UNSCOM’s achievements

UNSCOM’s achievements in accounting for Iraq’s proscribed programmes are particularly impressive in light of Iraq’s incomplete cooperation. Despite the substantial resistance that UNSCOM faced in Iraq, it successfully accounted for the disposition and destruction of large numbers of proscribed BM, CBW and associated facilities. 152 UNSCOM’s most important achievements were the uncovering of Iraq’s BW programme and aspects of the CW and proscribed BM capabilities that Iraq had tried to hide. UNSCOM assessed its results in a report circulated in the Security Council in January 1999, where it stated that ‘notwithstanding the very considerable obstacles placed by Iraq in the way of the

151 Ibid.
152 Cleminson (2003); UNMOVIC report (2004), Appendix III. A.
Commission’s work, a great deal has been achieved in: verifying Iraq’s frequently revised declarations; accounting for its proscribed weapons capabilities; and in destroying, removing or rendering harmless substantial portions of that capability.\textsuperscript{133}

The disarmament achievements in Iraq between 1991 and 1998 appear to have had lasting implications beyond UNSCOM’s departure, as no proscribed weapons or capabilities have been found after the war in 2003. However, UNSCOM had not been able to report that Iraq was completely disarmed of all proscribed capabilities, weapons and items. Therefore, at the time the disarmament regime was widely considered to have failed.

UNSCOM has been considered as highly successful in accounting for Iraq’s disarmament of proscribed weapons and capabilities, and even exercised a positive impact on Iraq’s disarmament because of their investigative skills, while the UN disarmament regime as a whole was considered to have failed to achieve the objective of complete disarmament.\textsuperscript{134} The key to this apparent contradiction lies with the unresolved disarmament questions that emerged during UNSCOM’s accounting for Iraq’s proscribed weapons and capabilities. Complete disarmament required more than accounting for the number of proscribed weapons and items that had been destroyed. UNSCOM’s task was to account for Iraq’s compliance with Resolution 687, i.e. complete disarmament of CBW, proscribed BM and capabilities and the demand that Iraq fully cooperated with UNSCOM.

For UNSCOM, assessing whether Iraq had been completely disarmed required an analysis of the probability that Iraq had enabled UNSCOM to verify Iraq’s declarations and destruction of all proscribed weapons, items and programmes. This analysis would be based on mapping Iraq’s cooperation

\textsuperscript{133} UNSCOM (1999), Section on Disarmament.

\textsuperscript{134} For example Black (1999).
with UNSCOM in terms of providing full declarations and enabling the organization to verify Iraq’s statements, and assessing the scope of UNSCOM’s quantitative accounting for the destruction of all proscribed weapons and items in light of the level of Iraqi cooperation.

As argued in the previous chapter, although the disarmament regime’s objective was ‘complete’ Iraqi NBC disarmament, the disarmament effort did not aim to remove everything that could enable Iraq to re-establish proscribed capabilities. The disarmament effort focused on weapons, equipment and materials that had been acquired for or used in the proscribed programmes. The disarmament regime did not attempt to ‘remove’ the scientific and technological knowledge (‘software’) that had been established over decades of research. Even if UNSCOM fully verified the destruction of all these items, Iraq’s proscribed infrastructures would be eliminated but there would remain a considerable risk that the proscribed capabilities could be rebuilt.

UNSCOM could not be certain that their accounting had included all of Iraq’s proscribed capabilities and weapons. Iraq’s partial declarations about its proscribed weapons, programmes and capabilities increased this uncertainty. For example, Iraq never provided a complete account of its BW programme and failed to disclose all aspects of its CW and proscribed BM programmes. Iraq declared what its leaders believed UNSCOM was already aware of. As UNSCOM’s investigations discovered more about Iraq’s proscribed weapons and programmes, Iraq gradually admitted to capabilities and activities that had been omitted from the previous declarations. This pattern was discernable from the outset in 1991. Because the outside world knew a fair amount about Iraq’s CW and BM after the Iran-Iraq and Gulf wars, Iraq declared some information about their CW and the BM programmes in the early stages. However, it would take several years of UNSCOM investigations before Iraq admitted
to its BW programme and aspects of Iraq’s CW and BM weapons and programmes that were initially omitted.

Iraq’s general cooperation with UNSCOM was shaped by the Iraqi regime’s assessment that such cooperation could achieve desirable objectives for Iraq. Iraq retained information about the most recent and advanced achievements in all proscribed programmes. However, there were distinct patterns in Iraq’s declarations about the CBW and BM programmes. Iraq’s disclosures about these programmes and weapons varied significantly between the CW, BW and BM areas. Iraq denied the offensive BW programme until July 1995, when this was admitted after UNSCOM had gathered various indications of such a programme. Even after this point, out of the three areas Iraq was more reluctant to provide UNSCOM with information about the BW programme.

In a report to the Security Council submitted in April 1997, UNSCOM’s chairman Ekeus stated: ‘not much is unknown about Iraq’s retained proscribed weapons capabilities. However, what is still not accounted for cannot be neglected.’ The unsolved questions about Iraq’s proscribed capabilities had crucial implications for UNSCOM and the Security Council’s level of confidence in the completeness and accuracy of Iraq’s declarations. This included long-standing concerns as to whether certain proscribed items or weapons had been retained by Iraq, or whether information about Iraq’s proscribed capabilities was withheld to make OMV less effective. Iraq’s documented efforts to subvert UNSCOM’s disarmament accounting, and the fact that UNSCOM had not received evidence enabling it to verify that all of Iraq’s proscribed weapons were destroyed and proscribed programmes fully dismantled, fuelled these concerns.

UNSCOM’s effort to verify Iraq’s disarmament produced information that influenced its assessment of the probability

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156 UNSCOM (1999), Section on Disarmament.
that Iraq was fully disarming of proscribed weapons and capabilities. UNSCOM discovered several omissions in Iraq’s declarations, and identified the extent to which Iraq offered evidence that enabled UNSCOM to independently verify Iraq’s declarations. In this process, UNSCOM could assess the level of Iraq’s cooperation with its accounting and auditing. The level of Iraq’s cooperation was important for assessing the credibility of Iraqi claims, and the degree of confidence UNSCOM had in whether its findings were likely to cover all relevant aspects of Iraq’s disarmament of CBW and proscribed missiles. Therefore, these issues were fundamentally important for UNSCOM in answering whether or not Iraq could be considered completely disarmed.

UNSCOM’s confidence in Iraq’s declarations decreased when the agency learned that Iraq had managed to retain significant amounts of CBW and production equipment and secretly destroyed these in the summer of 1991. Iraq admitted to UNSCOM that it had been decided in 1991 that Iraq would submit partial declarations as part of a strategy aiming to retain substantial prohibited weapons and capabilities.\textsuperscript{157} This illegally undertaken destruction was difficult for UNSCOM to verify years later, particularly in terms of how many proscribed weapons had been destroyed, because of the difficulties in recovering adequate and quantifiable evidence.

As a result of Iraq’s incomplete cooperation and subversive efforts, UNSCOM was never able to establish a fully verified baseline of Iraq’s proscribed weapons, items and capabilities against which Iraq’s disarmament efforts could be measured. Unless Iraq declared all aspects of its proscribed programmes, UNSCOM could not be certain that all proscribed capabilities had been destroyed. Iraq’s incomplete cooperation gave rise to a number of uncertainties in UNSCOM’s accounting, and was perceived to increase the risk that Iraq was retaining capabilities in order to re-establish the proscribed capabilities

\textsuperscript{157} Ibid.
at a later stage. Significant elements of Iraq’s proscribed capabilities were never located or destroyed. For example, the manuals that had been used in agent production (so-called ‘cook-books’) were never found. Another concern was that the scientific teams that had worked in the proscribed programmes were maintained intact after 1991.\footnote{Author’s interview with Cees Wolterbeek (2003); author’s interview with Ekeus (2003).}

Iraq’s incomplete cooperation and subversive efforts strongly affected UNSCOM and the Security Council’s confidence in the scope of Iraq’s disarmament and the resulting impact on the proscribed capabilities. Charles Duelfer, former deputy executive chairman of UNSCOM, assessed that

> On a technical level ... [UNSCOM] accomplished a lot in the face of a very difficult opponent. Iraq, as it turns out, clearly wanted to retain some portion of its capabilities... UNSCOM caused Iraq to get rid of a lot of these weapons. Percentage-wise, we will never know if it was seventy percent, eighty percent, ninety percent...\footnote{Yale Oral History Project interview with Duelfer, p. 64.}

As Duelfer suggests, it is difficult to assess the scope and impact of UNSCOM’s accounting on Iraq’s proscribed programmes and capabilities, because there is still no complete picture against which UNSCOM’s verified results can be measured.

Iraq’s limited cooperation, and specifically the subversive efforts between 1991 and August 1995, had crucial implications for UNSCOM’s confidence in the scope and accuracy of Iraq’s declarations that formed the basis of the disarmament accounting. In UNSCOM’s overall assessment of Iraq’s disarmament in 1999, the agency evaluated the
credibility of Iraqi declarations by assessing the evidence Iraq had offered to substantiate its claims.

Without full Iraqi cooperation the disarmament regime would be unable to verify complete Iraqi disarmament. Iraq could not be demonstrated to have completely disarmed by UNSCOM unless the Iraqi regime demonstrably decided to comply with Resolution 687. A totalitarian government in a sovereign country had infinitely more possibilities to hide items and information than UNSCOM’s hope of uncovering Iraq’s hiding places. It was not impossible that Iraq could have retained proscribed weapons or items, or limited its declarations about proscribed capabilities.

The question of Iraq’s intentions was at the core of Security Council members’ concerns about the incomplete disarmament accounting. For countries suspecting that Iraq intended to later rebuild proscribed capabilities, the residual risk posed by the unresolved disarmament questions overshadowed the substantial disarmament achievements. The disarmament regime was considered an instrument that could hopefully remove, or at least contain, the risk that Iraq could retain or rebuild proscribed weapons and programmes.

The Security Council’s concerns about Iraq’s intentions became increasingly obvious as the outstanding disarmament issues remained unresolved. After a Security Council emergency meeting in November 1997 UNSCOM was encouraged to focus on so-called ‘key’ disarmament issues. If Iraq would help UNSCOM to settle these specific questions, that would encourage overall confidence in Iraq’s intentions. This could, in turn, make other outstanding verification issues seem less disquieting. The logic of this approach was primarily political, because it focused on Iraqi intentions rather than numerical verification of complete disarmament of Iraq’s proscribed weapons and items. Despite this more limited approach, Iraq’s cooperation deteriorated further (as a result

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160 Author’s interview with Taylor (2004).
of the impression that it was the policy of the United States that sanctions would only be lifted as a result of Iraqi regime change).

Once UNSCOM had left Iraq in late 1998, it was very difficult to obtain reliable (or verifiable) information about subsequent NBC-related developments.\textsuperscript{161} A substantial cause for concern in the longer-term was that Iraq could rebuild proscribed capabilities. Any such efforts would be affected by UNSCOM and the IAEA’s dismantling of Iraq’s NBC infrastructures of 1991. However, it was difficult to assess the impact of UNSCOM’s substantial disarmament on the risk that the proscribed capabilities could be rebuilt. The focus on the outstanding disarmament questions, which were described as the ‘greatest threat’ by the last UNSCOM chairman, Richard Butler, resulted in rather bleak assessments of the impact of the disarmament regime in Iraq.\textsuperscript{162}

\textsuperscript{161} Martin Woollacott (2004).
\textsuperscript{162} Richard Butler (2000).
Ongoing Monitoring and Verification

As argued in the previous chapter, the destruction of Iraq's existing proscribed weapons and infrastructures was not irreversible, as destroyed capabilities could be rebuilt. The Ongoing Monitoring and Verification (OMV) system was intended to enable UNSCOM to ascertain whether Iraq was rebuilding proscribed capabilities, and UNSCOM would in turn inform the Security Council whether Iraq was complying with the disarmament objectives of Resolution 687. In this chapter, the OMV system and its achievements will be examined in more depth. First of all we will look at OMV's purpose and characteristics, paying particular attention to the challenges UNSCOM faced in designing OMV in relation to the three proscribed weapon categories. Subsequently, we will analyze the role of the OMV system in the political efforts to contain Iraq through the UN regime. We will see how OMV served as a political instrument to contain the risk that Iraq could pose to international security.

In the original plan for OMV, which was adopted by the Security Council by Resolution 715 (1991), the system's purpose is defined as:

\[\text{For detailed analyses of OMV, see Pål Aas (1997); or Jonathan Tucker (1996).}\]
monitoring]Iraq's compliance with its unconditional obligation not to use, retain, possess, develop, construct or otherwise acquire any weapons or related items prohibited under paragraphs 8 and 9 of resolution 687 (1991). Thus, monitoring and verification will need to cover not only military but also civilian sites, facilities, material and other items that could be used or activities that could be involved in contravention of Iraq's obligations under resolution 687 (1991).  

The OMV system was to be implemented immediately after the Security Council passed Resolution 715 on 11 October 1991. While UNSCOM's disarmament accounting would clearly not have been completed when OMV was intended to be established, it would be important to ascertain whether Iraq was rebuilding proscribed capabilities while the original proscribed infrastructures were destroyed. The OMV system was intended to be operational for as long as the Security Council considered necessary. However, Iraq refused to accept the OMV system until 26 November 1993, in spite of its obligations under Resolution 687.

The OMV system was intended to enable UNSCOM to detect Iraqi efforts to retain dual-capable equipment in monitored sites, or make use of dual-capable civilian facilities to restart production of CBW. By increasing the probability that efforts to rebuild proscribed capabilities would be detected, OMV could enable the Security Council to deter Iraq from undertaking such efforts.

Monitoring Iraq's compliance with the wide-ranging objectives of Resolution 687 was a potentially vast task. Because UNSCOM had finite monitoring and information-processing resources, OMV was focused on detecting signs of proscribed weapons production. Other types of activities

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164 UN Secretary General (1991), Paragraph 3.
165 Ibid., Paragraph 4.
prohibited by Resolution 687, such as research and development, were less prioritized. The focus on detecting proscribed weapons production was in line with the disarmament regime’s main purpose – ascertaining whether Iraq posed a threat to international security in terms of proscribed weapons or capabilities. This focusing of efforts also made OMV’s information gathering and assessment more manageable.

In setting up and running OMV, UNSCOM drew from world-leading expertise, cutting-edge information-gathering technologies, and unprecedented rights of access. The agency used its ‘anytime, anywhere’ right to inspect any facility and request any information that would help to verify Iraq’s declarations. OMV combined different technologies, regular on-site inspections and no-notice inspections at sites that were not under regular monitoring, in order to undertake both intensive and more broadly focused monitoring. The purpose of the focused monitoring was to detect (and thus, deter) diversion of specific dual-capable equipment or resources, while surprise inspections and aerial photography (from U2 planes) was intended to similarly deter Iraq from undertaking proscribed activities or retaining dual-capable items in sites that were not regularly monitored. This combination was intended to increase the risk of non-compliance in monitored sites, which could enable production of proscribed missiles and agents, as well as establish a risk that proscribed activities outside monitored sites would be detected.\(^{166}\)

**OMV: characteristics**

OMV was designed to function as an auditing system. It was set up as an integrated system that focused individually on the biological, chemical and proscribed BM areas. OMV provided UNSCOM with a widely encompassing overview that made it

\(^{166}\) Author’s interview with Smidovich (2003 b).
increasingly unlikely that attempts to reestablish proscribed capabilities in monitored sites would not be detected. Put simply, UNSCOM’s verification of Iraq’s declarations consisted of comparing the content with information gathered from on-site inspections, interviews with Iraqi personnel connected to the proscribed programmes, and relevant information submitted from UN member states.¹⁶⁷

UNSCOM assessed a variety of indicators gathered through inspections and monitoring instruments (such as interviews, document searches, air samplers, U2 flights, sampling equipment, satellite imagery, ground-penetrating radar) and information submitted by friendly governments to verify Iraq’s claims about the monitored sites.¹⁶⁸ This combination enabled the agency to crosscheck indications of anomalous activities, to ensure that suspicion was warranted before an explanation was demanded from Iraq. Some of OMV’s most useful tools were intrusive on-site inspections, import control, tracing of dual-capable materials and equipment, and imagery from satellites or U2 over-flights.¹⁶⁹

One of the most important lessons from OMV was the successful way in which UNSCOM combined different capabilities to an overall system.¹⁷⁰ The OMV system consisted of a complex of different means and technologies that would, as a whole and over time, enable UNSCOM to detect anomalies from the normal activities on the monitored sites.¹⁷¹ Several of the tools and technologies used in OMV were being discussed in relation to international arms control and non-proliferation regimes, but UNSCOM was the first agency to utilize these and newly emerging technologies.¹⁷² For international non-proliferation regimes, it would be difficult

¹⁶⁷ UNSCOM (1999).
¹⁶⁸ Aas (1997).
¹⁶⁹ Aas (1997).
¹⁷⁰ Barton (1998).
¹⁷¹ UNSCOM (1999), Section on OMV.
¹⁷² Yale Oral History Project interview with Smidovich, p. 17.
to obtain an agreement to use such intrusive means for verification.

UNSCOM monitored over three hundred sites, with different frequencies and intensities. The activity of all of these sites had to be declared at regular intervals, and these declarations would then be verified by UNSCOM inspectors. The frequency and style of monitoring were determined according to the type of capabilities and activities taking place in each site. UNSCOM focused its most intrusive monitoring instruments and inspector teams to sites that posed the highest risk of converting rapidly to undertake proscribed activities. Sites that posed a smaller risk in terms of contributing to proscribed activities were primarily monitored through technical means.\(^\text{173}\) As we shall see, OMV’s efforts were focused on those sites that could be rapidly reconfigured in order to undertake proscribed activities, thus distributing the risk of detection according to the possibility that facilities could contribute to proscribed weapons production.

Iraq’s efforts to hide equipment and continue proscribed programmes between 1991 and August 1995 increased the importance of having a system in place capable of identifying the sites to which dual-capable items or resources could have been moved. If proscribed items or activities were forced underground, this would probably constitute a smaller potential threat than if resources in the monitored sites were diverted for proscribed purposes \textit{in situ}, because such clandestine sites were unlikely to possess production capabilities that existed in monitored facilities.\(^\text{174}\)

UNSCOM arranged ‘surprise’ inspections to ascertain whether proscribed activities emerged outside the regularly monitored sites.\(^\text{175}\) These other sites could be identified by

\(^{173}\) Author’s interview with Smidovich (2003a).

\(^{174}\) Author’s interview with Smidovich (2003 b).

\(^{175}\) In one sense, these were better described as ‘very short notice’ inspections than ‘surprise inspections’, because the Iraqis soon suspected which sites were to be inspected because of clues such as the direction in which
information provided by friendly governments, but increasingly such surprise inspections were triggered by information that emerged during UNSCOM’s inspection activities or U2 overflights. Such inspections added to OMV’s deterrent aspect, and increased Iraq’s risk of hiding dual-capable items or activities.

In 1996, an ‘export-import mechanism’ was established, obliging UN member-states to notify UNSCOM and the IAEA of all exports to Iraq of specified items. The so-called ‘export/import mechanism’ enabled UNSCOM to track and monitor any equipment and materials entering Iraq that could be used for proscribed activities. This system was useful for identifying and tracking imports, procurement networks and end destinations for these items. However, the system was somewhat hampered by the fact that some countries failed to declare export of items to Iraq. In addition, it only covered items on the open market. The size of the Iraqi borders meant that it was impossible to prevent black market trade or smuggling e.g. via Jordan or Syria. UNSCOM uncovered several attempts of illegal procurement.

In OMV’s mandate, established in the OMV plan and Resolution 715 (1991), there was no differentiation or guides to prioritize among the range of proscribed activities that could be undertaken in Iraq. However, UNSCOM focused the OMV system to enable detection of proscribed weapons production. A more focused approach warranted a higher level of confidence than a widely cast but thinly spread OMV system. This was based on the view that it was more

UNSCOM inspectors were travelling, the composition of the team (the skills of the inspectors), and other details indicating where the next inspection was headed.

177 UNSCOM (1999).
178 For the example of the import of ballistic missiles equipment from Russia uncovered in December 1995, see Vladimir Orlov and William C. Potter (1998).
important to be able to detect efforts to rebuild proscribed capabilities than to detect any type of activity prohibited by Resolution 687.

The degree of Iraqi cooperation was important for the targeting and operation of these monitoring systems. For example, UNSCOM's information about Iraq's proscribed capabilities was used to target OMV on certain 'bottlenecks' rather than trying to cover every site and equipment in equal measure. Another example was UNSCOM's dependence on using rights of access that had been agreed between Iraq and the Security Council in 1991. Although Iraq had accepted that the OMV system would be set up with such wide rights of access, the Iraqi regime repeatedly tried to restrict UNSCOM's access to facilities and information.

Provision of intelligence information from foreign governments was important for UNSCOM, particularly in the years before the monitoring system was fully operational. Iraq's limited declarations increased the importance of such information supplied from friendly governments in support of UNSCOM's efforts. Because the agency received information from different countries and could follow up this information on the ground, it was able to effectively assess and use the intelligence. Over time, OMV evolved to a system whose information-gathering and analytical capabilities on issues concerning Iraq's proscribed programmes, capabilities and compliance with Resolution 687 were unequalled.

The limitations of particular monitoring instruments meant that there were some gaps in the scope of the monitoring system. The deterrent impact that OMV could distribute is likely to have concentrated on production activities that were clearly detectable by the OMV system. It is therefore prudent to assume that OMV might have exercised a smaller deterrent

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179 UNCOM (1999).
180 Author's interview with Kelly (2003a).
181 Tim Trevan (1999); author's interview with Ekéus (2003).
to activities that were less detectable (primarily research and development). However, it is possible that if the Iraqi counterpart was not aware of the limitations of UNSCOM’s monitoring instruments, the OMV system could have exercised a more general deterrent impact than the sum of the technical monitoring capabilities.

Underpinning assumptions

The OMV system depended on access and Iraqi cooperation, as demanded by the Security Council in Resolution 687. From the outset, UNSCOM assumed that Iraq would comply with Resolution 687’s demands, and provide complete and verifiable declarations. Another assumption was that Iraq would be persuaded, by the incentive of lifting the sanctions and the risk of detection and punishment, to refrain from undertaking any proscribed activities.

However, it turned out that Iraq’s limited cooperation and compliance contradicted these assumptions. As argued in the previous chapter, UNSCOM was unable to fully verify Iraqi disarmament due to the lack of Iraqi cooperation. UNSCOM’s inability to verify Iraq’s complete disarmament made the task of monitoring more complex and demanding than what would otherwise have been the case. An UNSCOM report from 1995 argues that

Uncertainties relating to the accuracy or completeness of this accounting will consequently lead to uncertainties as to whether the ongoing monitoring and verification system is indeed monitoring all the materials, items, and equipment which should be monitored.  

Although disarmament and monitoring were designed as distinct efforts, they turned out to be of mutual benefit to UNSCOM in coping with Iraq’s incomplete declarations of its

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proscribed facilities, capabilities and programmes. As UNSCOM mapped facilities that were capable of contributing to proscribed programmes, anomalies were discovered about Iraq’s declarations. Moreover, on-site inspections could uncover information about proscribed or dual-capable sites as well as capacities that had not been declared by Iraq.\textsuperscript{183}

Incrementally, UNSCOM discovered information about issues that had been omitted from previous Iraqi declarations.

An important question was whether the monitoring system could detect significant diversion from legitimate undertakings, without first having fully mapped and verified Iraq’s proscribed capabilities. By combining Iraqi declarations with identifying which Iraqi facilities contained dual-capable resources, UNSCOM was able to create a monitoring system that covered the facilities and items that could be diverted to create a large-scale proscribed production capability.

UNSCOM could not guarantee that this system could catch all potential infractions, but was nonetheless confident that over time it would detect systematic or large-scale violations of Iraq’s obligations not to rebuild proscribed capabilities.\textsuperscript{184}

The monitoring ‘architectures’ in each area were configured according to information provided by Iraq’s declarations and UNSCOM’s own mapping of site capabilities. UNSCOM’s ability to maximize the probability of detection varied between the proscribed activities, as a result of different proscribed production processes and its varying amount of information about Iraq’s proscribed capabilities. In the January 1999 report, UNSCOM argued that:

\begin{quote}
The extent of Iraq’s cooperation is the key determinant for the level of OMV procedures employed, and the resulting confidence in the system. Iraq has provided varying degrees of cooperation since 1991. The better the information and access
\end{quote}

\textsuperscript{183} Author’s interview with Smidovich (2003b).

\textsuperscript{184} Author’s interview with Ekéus (2003); author’s interview with Kelly (2003b).
provided by Iraq, the less intrusive the OMV procedures and the higher the confidence in the resulting assessments of Iraq’s compliance.\footnote{UNSCOM (1999).}

OMV’s focus on the risk that dual-capable equipment could be diverted for production of CBW agents or missiles of proscribed ranges required adapting the monitoring approaches to the features of the sites covered by the system.

In the BM area, OMV’s main challenge consisted of checking that permitted BM production was not diverted to produce proscribed missiles, and to check that the produced BM were not subsequently changed to enable these to reach proscribed ranges. Before 1991, Iraq relied on imports for the more technologically demanding components of BM, such as specific engine parts and guidance and control instruments. However, in 1998 UNSCOM assessed that Iraq was able to indigenously manufacture, from indigenous and foreign parts, a limited number of Scud-type engines and missiles. UNSCOM decided to concentrate monitoring on ‘bottlenecks’ that had to be overcome in order to produce proscribed BM, rather than trying to cover any equipment that could contribute to proscribed BM research and development.\footnote{UNSCOM (1999).}

In the chemical area, numerous dual-capable resources and equipment throughout a number of industrial and research facilities were placed under UNSCOM’s monitoring. A far greater number of facilities, of a diverse nature, had to be monitored in comparison with the more limited number of BM sites.

However, the most widely encompassing monitoring system was established in the biological area. This was a result of the large number of sites with dual-capable equipment that could be diverted for proscribed BW purposes, and Iraq’s incomplete declarations.
OMV architectures

The design of the OMV system faced a number of challenges in ascertaining whether ‘dual-capable’ equipment was diverted for proscribed purposes. Because Iraq's industries were of a relatively limited scale, the information gathered by monitoring dual-capable equipment could be managed and analysed by UNSCOM. UNSCOM targeted on-site monitoring instruments and decided how often on-site inspections would be undertaken according to the rate at which specific facilities could be converted for proscribed purposes. UNSCOM's inspections were undertaken within the time it would take to convert the dual-capable resources. At the same time, in order to enhance the deterrent influence from the OMV system, UNSCOM inspectors attempted to devise unpredictable patterns and approaches to on-site auditing inspections.

The monitoring in the BM area posed distinct challenges. As previously explained, the decision to limit the range of Iraq's BM to less than 150 km was governed by political considerations. There are no clear-cut technical characteristics that distinguish research or production of missiles with a range of more than 150 km from missiles that can reach slightly below that range. UNSCOM was not able to develop a definition that considered the impact of all relevant variables (including weather conditions) on the range of BM's. However, some unequivocal technological and physical missile features that would increase its yield over the permitted range were identified and used to distinguish proscribed from permitted missiles.

The difference between legal and illegal activities was not always clearly identifiable. For example, UNSCOM found some indications that Iraq pursued research that would also be applicable to proscribed missiles, but these activities were kept within the 'dual-capable' realm and could not be
determined as being 'proscribed activities'. Although several suspicious findings and possible violations were detected through OMV, UNSCOM never reported a clear violation of Resolution 687 to the Security Council.

**OMV and containment**

The OMV system was an important element of the political 'containment' strategy that became associated with the UN disarmament regime. Through OMV, UNSCOM enabled the Security Council to continuously assess whether Iraq reconstituted proscribed capabilities. This system was also meant to enable the Security Council to deter Iraq from any such attempts. This deterrent impact was based on a high risk of detection and a high probability of punishment if any proscribed activities or items were discovered.

Notwithstanding the remaining uncertainties about Iraq's disarmament, OMV appears to have facilitated the ability to detect attempts to undertake prohibited activities in monitored facilities. UNSCOM primarily sought to achieve a direct deterrent against activities in monitored facilities, and a 'spill-over' deterrent to prevent the emergence of proscribed activities outside these facilities.

OMV's deterrent potential was underpinned by the commitment of the Security Council to punish material breaches of Resolution 687. Iraq's level of cooperation with UNSCOM appeared to be shaped by the Iraqi regime's perception of the probability that the Security Council would punish denials of access to sites and information. The high threshold of military punishment may have limited the scope of OMV's potential deterrent impact. For example, UNSCOM detected evidence that Iraqi scientists had conducted calculations that could be useful for making ballistic missiles

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187 Author's interview with Corinne Heraud (2004).
188 Author's interview with Mitrokhin (2004 a).
of proscribed ranges. Such violations were not considered grave enough to warrant military strikes by the Security Council. However, for UNSCOM this was disturbing because it implied that Iraq could undertake other similar proscribed activities with relative impunity.

It is difficult to assess to what extent OMV might have exercised a deterrent impact on Iraqi decision-making. Until we have better knowledge of Iraq’s policies between 1991 and 1998, it is difficult to draw final conclusions about OMV’s precise impact. It is possible that Iraq maintained activities that could contribute to proscribed capabilities at a level where these activities could not be clearly defined as illegal. As previously argued, given the dual-capable nature of many aspects of CBW and proscribed missiles development and production, drawing the line between legal and proscribed activities was not always straightforward.

First of all, proscribed actions that were prevented by the OMV system have not been identified – indeed, this would be difficult to detect and prove. However, UNSCOM discovered that Iraq did continue proscribed R&D activities as well as proscribed procurement. Between 1994 and 1998, UNSCOM discovered several instances of non-compliance with the OMV system, such as failures to declare relevant activities and items to UNSCOM, and attempts to import proscribed items without notifying UNSCOM. These activities were clearly not deterred by OMV, but the fact that they were detected might subsequently have increased OMV’s deterrent impact. UNSCOM uncovered attempts to divert dual-use capabilities from permitted and declared activities, but no evidence of development of actual CBW in the monitored sites. After the war in 2003, no information has emerged suggesting that Iraq managed to subvert the OMV system by systematically

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169 Author’s interview with Smidovich (2003 b).
190 Author’s interview with Kelly (2003 b).
191 Author’s interview with Heraud (2004).
rebuilding or retaining proscribed capabilities in dual-capable sites.

**Risk management and OMV**

The OMV system is an interesting example of how the attempt to establish a purely technical role to UNSCOM was undermined by political realities, such as Iraq’s limited cooperation. OMV was established as a system monitoring whether Iraq complied with the demand to not rebuild proscribed capabilities. However, as Iraq’s non-cooperation and subversive efforts became known, an increasingly important objective for UNSCOM was that OMV be able to deter Iraq from deviating dual-capable resources from their legitimate purposes.

This is reflected in UNSCOM’s effort to channel the risk of any proscribed activities away from dual-capable facilities to clandestine sites. Thus, OMV’s purpose shifted from the intended auditing role to one of risk management. In fact, it could be argued that UNSCOM’s attempt to reduce the overall risk that the proscribed capabilities could be reconstituted by seeking to deny Iraq the possibility to divert the dual-capable facilities also minimized the risk that Iraq could pose a threat to international security.

For some Security Council members, concerns about Iraq’s intentions in relation to the proscribed capabilities increased OMV’s importance for the effort to contain the threat from Iraq through the UN regime. It became clear that Iraq’s intentions, residual knowledge and dual-capable resources could not be eradicated by the effort to verify complete disarmament of proscribed weapons and the associated infrastructures. However, OMV enabled UNSCOM to ascertain that Iraq did not re-establish these capabilities in a way that could threaten international security. As long as OMV was underpinned by a credible threat of enforcement, Iraq could be deterred from systematic and large-scale efforts
to re-establish proscribed capabilities. If Iraq’s proscribed capabilities could not be completely eradicated, these capabilities could be kept under control if UNSCOM remained in the country.\textsuperscript{192} Thus, the OMV system became considered a ‘risk management’ instrument for this political strategy.

However, some UNSCOM inspectors feared that the monitoring system could provide a false sense of security unless Iraq’s complete disarmament had been verified.\textsuperscript{193} This rightly points out that UNSCOM’s inability to verify complete disarmament in Iraq limited the conclusions that could be drawn from OMV’s findings. The information gathered through OMV could not be interpreted as proof of Iraq’s ‘continued compliance’ with Resolution 687, unless there was a verified disarmament baseline against which Iraq’s compliance could be measured. However, OMV enabled UNSCOM to ascertain whether Iraq was rebuilding proscribed production capabilities. OMV’s role in deterring Iraq from rebuilding proscribed production capabilities in monitored sites, made the system an important confidence-building measure even if UNSCOM had not fully verified Iraq’s complete disarmament.

\textsuperscript{192} For more on risk management in international relations, see Christopher Coker (2003).
\textsuperscript{193} Seelos (1999).
Coping with the challenges in Iraq

In this chapter, we will examine the way in which UNSCOM adapted to the challenges from Iraq’s limited cooperation and subversive efforts. This will include a brief consideration of how UNSCOM and Security Council members perceived Iraq’s non-cooperative actions. We will then look at the way in which UNSCOM adapted its disarmament verification and monitoring efforts in order to fulfil its task, despite the challenges that emerged in Iraq.

When UNSCOM became aware of Iraq’s limited cooperation, the agency had to adapt its disarmament accounting and monitoring efforts in order to cope with Iraq’s behaviour. From the outset in 1991, Iraq attempted to limit UNSCOM’s access, obstructed its inspections, and concealed items and information from the agency. However, the unilateral destruction of retained weapons and items in the summer of 1991 suggests that Iraq’s leaders came to the conclusion that UNSCOM’s multifaceted investigative capabilities substantially increased the risk that clandestine, proscribed activities would be detected.¹⁹⁴

Nonetheless, Iraq continued to limit its declarations about the proscribed capabilities and programmes (including the

¹⁹⁴ UNSCOM (1999).
entire offensive BW programme). Iraq also retained proscribed weapons and items and continued prohibited activities in the BM area. In addition to the clear cases of Iraqi non-cooperation, there were other reasons to doubt Iraq's intentions to comply with the objectives of Resolution 687. For example, Iraq never presented any evidence of a decision to destroy the proscribed weapons and capabilities. Nor did Iraq implement laws that prohibited legal and natural persons from participating in proscribed activities. Over time, a pattern of the scope of Iraq's cooperation with UNSCOM could be discerned. Jonathan Tucker, a former UNSCOM inspector, has argued that Iraq tailored their non-cooperative actions to a level that, if detected, was unlikely to result in military punitive strikes.

UNSCOM required Iraq's cooperation in order to be able to fully map Iraq's proscribed programmes, weapons and capabilities, verify the destruction of all proscribed items and capabilities, and monitor all activities and items that could be used to re-establish proscribed capabilities in an optimal manner. Therefore, Iraq's limited cooperation had implications for UNSCOM's prospect of fulfilling its mandate.

As explained in chapter three, UNSCOM's initial round of verification of Iraq's destruction of proscribed BM, CW and items used or acquired for production of proscribed weapons took place between 1991 and mid-1994. After Hussein Kamel's defection to Jordan in August 1995, the scope of Iraq's non-compliance with Resolution 687 was exposed. After the Kamel defection, the Iraqi government admitted that it had withheld information about their entire offensive BW programme as well as other information and materials for the purpose of retaining proscribed capabilities. Subsequently, UNSCOM's verification efforts became far more skeptical and intrusive. UNSCOM developed a far more investigative

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approach to verify Iraq's declarations than had been intended or foreseen by the Security Council in 1991.

The Hussein Kamel defection has raised considerable debate – even prior to the war in 2003. At that point, US officials started questioning UNSCOM's ability to uncover information about Iraq's proscribed programmes and disarmament without complete Iraqi cooperation. The defection was undoubtedly crucial in uncovering the scope of Iraq's non-compliance with Resolution 687. UNSCOM realized that Iraq had withheld information, retained proscribed capabilities, undertaken unilateral destruction of proscribed weapons, and continued proscribed activities in the BM area. There is no question that the defection resulted in UNSCOM obtaining more information, e.g. about weaponization in the BW programme, and confirming a number of UNSCOM's suspicions. However, as previously explained, UNSCOM had obtained an admission from Iraq that an offensive BW programme existed in July 1995, i.e. one month before Kamel's defection. In other words, UNSCOM had achieved one of its most important discoveries prior to this defection.

After the Hussein Kamel defection, the term 'concealment mechanism' was conceived by UNSCOM in reference to a number of phenomena that inspectors suspected were orchestrated efforts to retain proscribed capabilities by not declaring relevant information and items.

A number of different phenomena were interpreted as being part of this 'mechanism', whose most widely documented feature was incomplete declarations of proscribed programmes, weapons and items. Less is known about the second category of subversive actions, namely removing proscribed items from facilities and transporting these around the country in order to avoid detection. The third element, Iraqi counterintelligence efforts targeting UNSCOM in the UN
building as well as in Iraq, was perhaps less surprising.\textsuperscript{196} Former IAEA inspector David Kay's claim that Iraq managed to penetrate UNSCOM to the extent that Iraq was aware and prepared for the upcoming inspections is difficult to prove. In many cases, Iraq would be able to narrow down the options for inspection when inspectors were traveling to a specific area. While there were examples of all three elements that have been described between 1991-1998, it remains unknown how much of the sum total UNSCOM suspected was in fact part of a subversive 'concealment mechanism'.

Once UNSCOM had verified the content (and noted conspicuous omissions) from Iraq's declarations, the so-called 'concealment mechanism' became the focus of dedicated UNSCOM investigations from 1997. In that year, Richard Butler assumed his position as UNSCOM's new executive chairman. His predecessor, Ekeus, had considered that this issue had to be fully investigated in order for UNSCOM to ever be able to report to the Security Council that Iraq had complied with Resolution 687.\textsuperscript{197} UNSCOM's investigations into the 'concealment mechanism' included inspections that led to increasing confrontations with Iraq and subsequent crises over UNSCOM's access to sites in Iraq.

After the Kamel defection, UNSCOM became more focused on key disarmament issues when pursuing its broadly encompassing mandate. Its approach to verify Iraqi claims, and investigate gaps and apparent omissions in the Iraqi declarations, also became increasingly intrusive. UNSCOM's adaptations to the realities on the ground in Iraq gradually changed the agency's efforts from what had originally been intended. UNSCOM underwent two main changes. First, UNSCOM gradually adopted a far more investigative approach than the Security Council had originally intended.\textsuperscript{198}

\textsuperscript{196} Author's interview with Smidovich (2004).
\textsuperscript{197} Author's interview with Ekeus (2003).
\textsuperscript{198} UNSCOM (1999).
In response to Iraq's subversion and partial declarations, UNSCOM's investigations became far more scrutinizing of the evidence proving Iraq's claims. In addition, UNSCOM's own efforts to verify Iraqi claims drew on forensic tools such as ground-penetrating radar, digging up proscribed items from where they had been buried along with other items, uncovering archives from buildings that had been demolished during the Gulf War, searches to recover proscribed items from rivers, computer searches etc.

The second change in UNSCOM's activities was that the executive chairman had to undertake an increasing amount of diplomatic efforts in order to secure UNSCOM's ability to perform its task in Iraq. The Security Council was reluctant to escalate the responses to Iraq's non-cooperation and non-compliance to military strikes, with the result that UNSCOM engaged in seeking political solutions with Iraq. UNSCOM's executive chairman had to engage directly with Iraq and the governments of the Security Council members in order to secure UNSCOM's right of access and to secure support in the Council for these rights. Charles Duelfer argued that UNSCOM ultimately ended up 'at the junction of technical and political worlds' because of the impact of Iraq's limited cooperation on the agency's role in the disarmament regime.199 What started out as a technical verification agency thus ended up doing much more than pure technical accounting.200

As long as Iraq offered a basic level of cooperation, in terms of submitting declarations and allowing verification of the claims therein, UNSCOM's intrusive investigative capabilities enabled the agency to obtain information that Iraq had attempted to hide. Even if Iraq's cooperation was partial, UNSCOM's scrutinizing verification efforts (drawing from a range of investigative means) proved highly capable of

199 Duelfer (2002).
200 Author's interview with Buchanan (2004).
mapping Iraq's past achievements and capabilities. The investigations of omissions or misleading statements in Iraq’s declarations proved to be very rewarding.

Iraq’s limited cooperation had substantial impacts on OMV’s approach and focus. As argued in the previous chapter, an important objective was to deny Iraq the possibility of diverting dual-capable resources on civilian sites, and simultaneously increase the risk of diverting activities to clandestine sites. UNSCOM monitored Iraq’s responses to UNSCOM’s activities, such as attempts to divert items from monitored sites, to assess whether Iraq was systematically moving such items to undisclosed sites.

As previously argued, another impact of UNSCOM’s inability to confirm Iraq’s disarmament was OMV’s increasing importance as a tool to certify (and deter) Iraqi efforts to rebuild proscribed capabilities. OMV enabled UNSCOM to continuously update the Security Council whether Iraq attempted to rebuild proscribed capabilities. Iraq’s partial cooperation had a number of implications for the intended role of the OMV system and the confidence UNSCOM had in OMV’s scope and coverage. These implications centered on the question whether complete disarmament – a so-called ‘zero baseline’ – was necessary for OMV to ascertain whether or not Iraq remained disarmed.

However, as was argued in the previous chapter, OMV had a positive impact on the disarmament investigation. Because UNSCOM’s efforts in disarmament and monitoring used similar instruments and ran simultaneously, these two activities reinforced each other to a larger extent than had originally been imagined. Information gathered through monitoring turned out to be useful for UNSCOM’s disarmament investigations, because this provided information

201 Tucker (2002).
202 Author’s interview with Smidovich (2003a).
203 Author’s interview with Smidovich (2003 a).
about Iraqi capabilities and detected suspicious sites that could be thoroughly inspected. Thus, despite its dependence on the disarmament process, OMV assisted with the separate disarmament investigation.

In contrast to UNSCOM, the Security Council was unable to adapt its enforcement tools or policies in the face of Iraq’s incomplete cooperation. UNSCOM’s ability to implement its rights in Iraq depended on the commitment of the Security Council, which was also crucial for Iraq’s willingness to cooperate with the agency. During the seven years that this regime was in place, UNSCOM’s executive chairman Ekeus considered that both Iraq and UNSCOM continuously refined their methods to prevail over each other’s tactics. However, UNSCOM’s achievements in adapting to Iraq’s policy of partial cooperation were not matched at the enforcement level.

Iraq’s cooperation with UNSCOM varied substantially, in reflection of the Iraqi regime’s perception of the Security Council’s commitment to fully achieving NBC disarmament in Iraq. Rolf Ekeus has described Iraq’s main political strategy as discrediting UNSCOM and their work in order to drive a wedge between UNSCOM and the Security Council. Iraq exploited the increasing divisions between the technical and the political elements of the disarmament regime by exploiting the differences of opinion in the Security Council. As these differences emerged more clearly, the political element of the disarmament regime became unable to pursue the disarmament objectives set down in 1991.

Ultimately, the politicisation of UNSCOM’s activities undermined the basic roles of UNSCOM as stipulated in Resolution 687. Charles Duelfer, former deputy executive chairman of UNSCOM, has argued that:

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204 Author’s interview with Ekeus (2003).
The dynamics between Iraq and the Security Council, with the weapons inspectors inbetween, proved inconsistent with the objective of forcing Iraqi disarmament. Immediately after inspectors arrived in Iraq, Baghdad began a pattern of only partially complying with Resolution 687 and testing the will of UNSCOM, the IAEA, and the Security Council. The response was tepid enough to convince Iraq that it could obstruct inspections without triggering a military response.\footnote{Duelfer (2002).}

Duelfer further argued that Iraq realized already in 1991 that the Security Council would not easily resort to military enforcement to secure compliance with Resolution 687. The differences among Security Council members on the necessity to achieve complete disarmament in Iraq, and the gradually increasing importance of other political concerns (such as the humanitarian consequences of the sanctions), enabled Iraq to further deepen the differences of opinion in the Security Council.

In 1998, after Iraq had accused UNSCOM of serving the interests of the United States first and foremost, UN Secretary General Kofi Annan traveled to Iraq to negotiate directly with Saddam Hussein. Later that year the UN Secretary General proposed to undertake a comprehensive review of UNSCOM, which undermined UNSCOM’s role in the disarmament regime by equaling their position to that of Iraq as parties in a dispute.\footnote{For an analysis of the Secretary General’s visit to Baghdad and its aftermath, see Krasno and Sutterlin (2003), pp. 122–35.} The inability of the Security Council to maintain cohesion and remain committed to the objective of complete disarmament undermined the deterrent impact of the disarmament regime, and eventually resulted in the discontinuation of UNSCOM inspections after Operation Desert Fox.
Chapter 8

Remaining Disarmament Issues

As previously argued, in 1997 and 1998 Iraq's cooperation with UNSCOM declined in tandem with the erosion of the consensus in the Security Council. Although some significant breakthroughs in verifying Iraq's past programmes did occur during those two years (e.g. VX weaponization), as Iraq's limited cooperation declined further it became increasingly difficult for UNSCOM to attempt to solve remaining issues. As we saw in the third chapter, several unresolved disarmament issues that were defined as 'key issues' in 1997 remained 'unaccounted for' when UNSCOM left Iraq in 1998.

Rolf Ekeus has explained that even if Iraq had substantially disarmed, UNSCOM's task required 'to clean up all the weapons in Iraq. That meant that even if you didn't see any more weapons, that did not mean there were no more weapons. [...] we had to understand their weapons programs, their decisions, the resources they had put into them, and where these items were.'

As discussed in earlier chapters, the so-called 'unresolved', 'unverified' or 'unaccounted for' issues concerned the disposition of proscribed weapons and items that UNSCOM

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208 This argument differs from that of UNSCOM's own historian, who argued that UNSCOM's investigations were becoming increasingly effective. See e.g. Black (1999).
had not been able to fully account for, as well as questions about Iraq's proscribed programmes that UNSCOM had been unable to settle. Resolving these issues would require complete accounts of Iraq's proscribed capabilities, including Iraq's achievements in research and production, the intended military purpose of Iraq's CBW, and Iraq's associated procurement efforts.

UNSCOM required adequate evidence to be able to fully verify Iraq's unilateral destruction of proscribed weapons and items that had taken place in 1991. Iraq would also have to provide evidence that the proscribed capabilities had indeed been destroyed, e.g. by enabling UNSCOM to verify that the CW production instruction manuals no longer existed. Verifying a full Iraqi explanation of the unresolved issues was necessary for UNSCOM's accounting for Iraq's complete disarmament, as required by Resolution 687, but was also important for the optimal design and targeting of UNSCOM's monitoring. UNSCOM's achievements in accounting for Iraq's disarmament were measured against the original disarmament objective defined in Resolution 687. Therefore, because of UNSCOM's inability to resolve the remaining issues, many considered that the UN regime was not able to achieve the disarmament objectives of Resolution 687. As previously argued, the increasing scepticism among some Security Council members concerning Iraq's intentions had implications for their confidence in the extent to which Iraq had actually disarmed of the proscribed weapons and capabilities.

In the area of BW, the key remaining issue was to obtain and verify a complete account of Iraq's BW programme. In a report that was circulated in the Security Council in January 1999, UNSCOM stated that the agency had 'no confidence' that all bulk biological agents had been destroyed, that no BW munitions or weapons remained in Iraq, or that a BW
capability did not still exist in Iraq at that point.\textsuperscript{216} Thus, the unresolved issues prevented UNSCOM from even attempting to create a material balance in the BW area.

In the area of CW, Iraq had also failed to provide a full account of its programme and capabilities. For example, UNSCOM’s limited understanding of Iraq’s CW research efforts that had not progressed beyond the research and development stage prevented the agency from obtaining a full understanding of the direction of Iraq’s CW programme at the time of the Gulf War. Further, Iraq had not provided documents to UNSCOM that would enable the agency to verify Iraq’s declarations concerning its procurement efforts. The material balance that UNSCOM presented in the report circulated in the Security Council in January 1999 was not fully verified. Iraq had provided insufficient evidence for some of the declarations that were included in the material balance information.\textsuperscript{211} Further, UNSCOM had not been able to fully verify Iraq’s claims that thousands of chemical warheads had been used, lost or unilaterally destroyed.\textsuperscript{212} Therefore, UNSCOM had not been able to fully verify that all of Iraq’s proscribed weapons and items had in fact been destroyed by December 1998.

Finally, in the area of proscribed BM Iraq had not provided a complete and verifiable account of its programme and capabilities. UNSCOM could not verify that Iraq had destroyed all components and capabilities it claimed to have destroyed, partly because of difficulties in verifying Iraq’s claims regarding the unilateral destruction of BM in 1991, and partly because evidence was absent in some areas.\textsuperscript{213} For example, UNSCOM was unable to verify Iraq’s claims concerning the number of missile warheads that had been destroyed.

\textsuperscript{210} UNSCOM (1999), Section on disarmament.

\textsuperscript{211} ASA special report (2002).

\textsuperscript{212} Ibid.

\textsuperscript{213} Ibid.
produced to carry CBW, the destruction of 50 conventional BM warheads and seven indigenously produced missiles.\textsuperscript{214} In addition, UNSCOM was not able to verify Iraq’s claim that key components for production of missiles had been unilaterally destroyed.\textsuperscript{215}

**Why and how did the unresolved issues emerge?**

As was argued in chapter 3, there were several reasons why UNSCOM had not been able to account for all proscribed weapons, items and capabilities. First of all, it would be very difficult, if not impossible, for any country to account for all details and aspects of research programmes running for decades, as well as the entire infrastructure used (and weapons produced).\textsuperscript{216} Iraq was the first case where this had been demanded. The case of Iraq stands in contrast to cases of CBW disarmament following regime change (e.g. Russia and South Africa in the early 1990s). As the Amorim Panel pointed out in 1999, any nationwide disarmament effort will inevitably result in some uncertainties.\textsuperscript{217} However, the underlying reason why so many unsolved issues arose was that the material balance approach to account for Iraq’s complete disarmament presumed full cooperation, while Iraq’s cooperation turned out to be selective and partial.

Former UNSCOM inspector Scott Ritter has argued that the effort to account for complete disarmament through a material balance approach resulted in the ‘deadlock’ that emerged between Iraq and the Security Council in 1997–98.\textsuperscript{218} The quantitative arms control approach was criticized on the basis that it lacked an identifiable end-point.\textsuperscript{219} Ritter

\textsuperscript{214} Ibid; UNSCOM (1999).

\textsuperscript{215} ASA special report (2002); UNSCOM (1999).

\textsuperscript{216} Author’s interview with Smidovich (2004). This point is rarely made in relation to the case of Iraq.

\textsuperscript{217} Amorim Panel (1999).

\textsuperscript{218} Ritter (2000).

\textsuperscript{219} Ibid.
advocated a qualitative approach to account for Iraq’s disarmament (focusing on capabilities rather than seeking to numerically account for each and every proscribed weapon and item) in order to overcome the ‘deadlock’ between Iraq, UNSCOM and the Security Council.\(^{220}\) However, a so-called qualitative approach would also face problems in identifying the limits of what ought to be verifiably disarmed. Another unavoidable problem is that it is nearly impossible for any country to provide complete declarations with supporting evidence for complex and compartmentalized activities such as CBW programmes. Whether the disarmament accounting took a qualitative or a quantitative approach, ‘unaccounted for’ issues would probably still have emerged.

However, when the effort to account for disarmament is hampered by obstruction and subversive efforts, coping with the resulting uncertainty ultimately becomes a political challenge. The pattern of Iraq’s non-disclosure and deception made these uncertainties become highly concerning for Security Council members (primarily the United States and Britain) and required that UNSCOM had to critically assess Iraq’s claims in the declarations. In the ‘deadlock’ that emerged over the outstanding disarmament issues in 1997–98, the Security Council’s inability to agree on how to respond to the unresolved disarmament questions proved to be more problematic for the disarmament regime than the technical accounting approach.

The implications of the remaining issues
The unresolved issues were perceived as indicators of the level of cooperation and compliance Iraq offered in the disarmament process, and had significant implications for how Iraq’s intentions were assessed by the Security Council members. The perceptions of Iraq’s intentions regarding

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\(^{220}\) Ibid.
disarmament of proscribed weapons and capabilities shaped how Security Council members assessed the risk that Iraq could have retained CBW and proscribed production capabilities. Because Iraq never made an official decision to abolish these capabilities, and had managed to retain proscribed weapons and items from UNSCOM prior to 1995, looming suspicions emerged that Iraq could have kept ‘unaccounted for’ items and capabilities.

Some of the unresolved issues had emerged from Iraqi declarations that had been found inaccurate and incomplete by UNSCOM, or from UNSCOM’s discovery of documents years after Iraq claimed it had ceased to hide documents (after the Hussein Kamel defection). Iraq’s deception tactics, the continuation of prohibited programmes for years after Resolution 687 was passed, and its selective cooperation were considered strong indications that the residual risks represented by the unresolved disarmament issues could become threats in the future.

The resolution of the remaining issues was fundamentally important for the Security Council’s confidence in Iraq’s intentions, and how it assessed the risk that Iraq had retained proscribed weapons and items and would re-establish the proscribed capabilities. Notwithstanding UNSCOM’s achievements, Iraq’s decreasing cooperation and the erosion of the consensus in the Security Council made the settling of the unresolved questions increasingly unlikely. Iraq’s demonstrated ability to successfully retain weapons and items meant that UNSCOM could not rule out the possibility that Iraq could still be undertaking such activities with the intention of retaining proscribed capabilities. The unresolved issues were interpreted as manifestations of Iraq’s failure to comply with Resolution 687, and thus the risk that Iraq could

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221 This argument differs from the analysis of UNSCOM’s official historian, see Black (1999).
have retained some proscribed items with the intention to rebuild CBW or proscribed missile capabilities at a later stage.

The uncertainties that were associated with the unresolved issues in UNSCOM’s accounting for Iraq’s disarmament dramatically reduced the likelihood that the Security Council would decide that Iraq had completely disarmed. For UNSCOM, these uncertainties made it impossible to report that the accounting for Iraq’s disarmament was complete in any sense. The Security Council was divided over the importance of these unresolved issues, and therefore failed to agree whether the outstanding disarmament questions posed a threat to international security.

Years later, the ‘unaccounted for’ issues played a central role in the United States and Britain’s casus belli, that Iraq could have retained or rebuilt proscribed weapons and capabilities, prior to the war in 2003. That said, the American and British threat assessments of the remaining disarmament issues cannot be explained in terms of UNSCOM’s disarmament accounting, because of the changed political and security environment after 2001.

**Residual risks**

As discussed in chapter 5, the destruction of the physical components of Iraq’s CBW and proscribed missile capabilities could not eliminate the risk that Iraq could rebuild similar infrastructures at a later stage. After December 1998 the residual risk was considered to consist of two main aspects. Firstly, that Iraq could re-establish proscribed BM development and production, and secondly, that Iraq could have retained CBW, missiles and parts of their infrastructure from before 1991.\(^{222}\)

UNSCOM never obtained evidence of an Iraqi decision to permanently discontinue the proscribed activities and abolish

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CBW and proscribed BM capabilities.\textsuperscript{223} When UNSCOM left Iraq there was a real risk that the CBW programmes could be 'resuscitated', and that Iraq could reconstruct CBW and proscribed missile capabilities. Although the known components of Iraq's CBW and proscribed BM production infrastructure had been dismantled, Iraq's 'know-how' and dual-capable items remained. Without UN inspectors in the country, Iraq would be able to re-establish elements of its chemical or biological weapons programmes.

Lawrence Freedman has distinguished between threat assessments prior to the war in 2003 that emphasized the risk that Iraq might intend to rebuild the destroyed capabilities, and others emphasizing the risk that Iraq could have retained items and resources.\textsuperscript{224} If the 'unaccounted for' materials had actually been retained by Iraq, this could have included two proscribed BM and CBW in addition to equipment and 'know-how' for producing proscribed BM and chemical and biological agents in a matter of months.

However, as previously explained, if the biological and chemical weapons and material that had not been accounted for did still exist, it was unlikely that the majority of these weapons and materials could be used as effective weapons after 1998.\textsuperscript{225} At this point, the risk that Iraq's biological and chemical weapons programmes could be re-established was becoming more important as a potential threat to international security than the risk that old caches of CBW could have been retained. Because the majority of any caches remaining from 1991 would have been 'outdated', the possibility that weapons made before 1991 remained in Iraq was very unlikely to constitute an 'imminent threat' to international security.\textsuperscript{226}

\textsuperscript{223} UNSCOM (1999).
\textsuperscript{225} Ekeus (2003).
\textsuperscript{226} Ibid.
Iraq already had some of the basic equipment and know-how for chemical and biological agent production, and would probably be able to procure items to replace what UNSCOM had destroyed on the regional ‘black market’.\footnote{Author’s interview with Spertzel (2004).} Indeed, the Iraq Survey Group reported in 2003 that Saddam Hussein had enquired about the time it would take to re-establish chemical weapons production, and had been reassured that this would be a matter of months.\footnote{Kay (2003).} Therefore, after 1998 the fact that Iraq was able to develop some chemical and biological weapons without inspectors in the country could prove to be a far more threatening possibility for the region than caches of such weapons remaining from 1991.\footnote{Ekéus (2003).} However, Iraq’s starting point for re-establishing the proscribed capabilities would have been substantially impaired by the combined impact of the disarmament and monitoring between 1991 and 1997.
Chapter 9

Conclusion

The disarmament regime established after the Gulf War in 1991 appears to have been an attempt to apply a technical ‘fix’ to solve a political problem. Resolution 687’s demands that Iraq completely disarm of NBC weapons, capabilities and resources were in essence an attempt by the Security Council to remove the threat Iraq could pose to international peace and stability. Thus, the disarmament objectives were governed by political (rather than technical) concerns.

Therefore, it seems paradoxical that several, including UNSCOM’s own historian Stephen Black, conclude that the UN disarmament regime was a technical success, but a political failure. It is undoubtedly true that the Security Council was ultimately responsible for UNSCOM’s discontinuation after December 1998, as this violation of the ceasefire agreement enabled the Council to resort to ‘all necessary means’ to ensure that Iraq did not once again become a threat to international peace and security. It is also true that UNSCOM’s substantial achievements in verifying Iraq’s disarmament of CBW and proscribed BM are unequalled in the history of NBC disarmament.

However, at a more general level, a sharp separation between the roles and performance on the technical and

political agencies appears problematic for three main reasons. First, this distinction does not accurately describe the disarmament regime dynamics. The disarmament regime divided the technical assessment and the political decisions whether Iraq was disarmed between UNSCOM and the Security Council. Iraq's systematic non-cooperation (including attempts to limit UNSCOM's capabilities and to discredit UNSCOM), and pressure from some Security Council members to change UNSCOM's reporting into becoming more like threat assessments, contributed to undermine the intended division between the technical and political levels of the disarmament regime. Despite the attempts to insulate UNSCOM from political influence in 1991, UNSCOM's actual role in the disarmament regime was undoubtedly politicised as a result of the agency's diplomatic efforts and influences from Iraq and Security Council members.

Second, this distinction makes it difficult to explain how the political level of the disarmament regime shaped UNSCOM's working conditions and prospect of success. UNSCOM's effort to verify and monitor Iraq's disarmament was underpinned by the political relations between the Iraqi regime and the Security Council. When the Security Council's consensus eroded, Iraqi cooperation decreased. It was increasingly difficult, particularly after 1997, for UNSCOM to maintain their technical capabilities without Iraqi cooperation or full backing from the Security Council.

Third, when assessing the outcome of the disarmament regime it is ultimately futile to distinguish between the technical and political aspects. In 1997–98, it became increasingly clear that Iraq and Security Council members sought to politicise UNSCOM's technical role in the disarmament regime. The politicisation of UNSCOM's work was exploited by Iraq by driving a wedge between the political (Security Council) and technical (UNSCOM) elements of the
This made it more difficult for UNSCOM to perform its role, and discredited the ‘objective’ element of the disarmament regime. Between 1997 and December 1998, Iraq’s declining cooperation prevented UNSCOM, despite its technical brilliance, from resolving the remaining ‘unaccounted for’ issues.

One conclusion that can be drawn beyond the case of UNSCOM and Iraq is that while any effort to disarm a sovereign country of CBW and proscribed BM entails significant technical challenges, enforcing disarmament of proscribed weapons categories on a sovereign country in order to remove a threat to international security and stability is essentially a political endeavour. Therefore, political concerns will shape and influence the accounting and verification process and determination whether the objective has been achieved.

Limitations of enforced disarmament

Assessing what this disarmament regime actually achieved in Iraq between 1991 and December 1998 depends on how ‘complete disarmament’ is defined. There are two different perspectives for assessing what the UN disarmament regime achieved in Iraq, namely technical assessments (accounting for destroyed items and assessing to what extent this accounting appears to be complete and accurate) and threat assessments (considering what Iraq might have retained in terms of capabilities and items as well as its policies and intentions).

Charles Duelfer has argued that ‘the permanent disarmament goals imposed on Iraq were out of proportion with the inspectors’ tools and the rewards and punishments the Security Council could practically impose. The result was a political and military muddle with the inspectors caught in the middle.’

Duelfer here points to the friction between the

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231 This process is illustrated in Krasno and Sutterlin (2003).
212 Duelfer (2002).
disarmament objectives, whose achievement depended on full Iraqi cooperation, and UNSCOM's mandate to account for Iraq's complete disarmament with only limited Iraqi cooperation. Iraq's limited cooperation substantially reduced UNSCOM's prospect of verifying Iraq's complete disarmament, and introduced uncertainties concerning Iraq's intentions as well as the scope of Iraq's disarmament.

UNSCOM's technical assessment of Iraq's disarmament faced a number of challenges in terms of how to define 'complete' disarmament, and how to implement and measure this objective in technical and quantitative terms. After UNSCOM arrived in Iraq, it soon emerged that a direct challenge for its effort to obtain a material balance establishing the disposition of all proscribed weapons and items consisted of the uncertainties that emerged in the disarmament accounting. As long as Iraq did not offer complete declarations and evidence to back their statements, or enable UNSCOM to trust Iraq's declarations by demonstrating full commitment to complying with Resolution 687, the agency would not be able to resolve the remaining disarmament uncertainties.

Between 1991 and 1998 UNSCOM verified Iraq's destruction of large amounts of proscribed weapons and items. After the known elements of Iraq's proscribed infrastructures had been destroyed, Iraq would not be able to pose a military CBW threat to international security. Nonetheless, UNSCOM was never convinced that Iraq had disarmed completely of the proscribed weapons and capabilities, and had ample reason to doubt that Iraq had declared everything it ought to. Because UNSCOM could not verify all of Iraq's claims concerning disarmament, the agency's level of confidence concerning various aspects of the final material balance presented in 1999 varied significantly. Moreover, the disarmament regime's focus on destroying existing proscribed weapons and the physical infrastructure
used to produce such weapons left a residual risk that existing know-how and dual-capable resources could be used to rebuild proscribed capabilities at a later stage.

The Security Council’s decision as to whether Iraq continued to pose a potential threat to international security in terms of proscribed weapons and capabilities would be based on a wider assessment of Iraq’s intentions. Iraq’s limited cooperation and subversive efforts made it seem highly unlikely that complete NBC disarmament could be achieved by this disarmament regime as long as Saddam Hussein remained ruler of Iraq. However, the risk that any residual NBC capabilities continued to pose could be managed by OMV, which could deter Iraq from re-establishing the proscribed capabilities. Thus, for the Security Council members who were concerned that Iraq could retain or rebuild proscribed weapons and capabilities the OMV system could serve as a ‘risk management’ tool that enabled the international community to contain Saddam Hussein’s Iraq. However, the United States’ policy to maintain sanctions as long as Saddam Hussein ruled Iraq, even if the disarmament obligations were satisfied, undermined UNSCOM’s role as well as the credibility of the disarmament regime. The United States policy contradicted the objectives of the disarmament regime, antagonized other Security Council members and led to Iraq’s increasing disengagement with the disarmament process in 1997–98.

The uncertainties about the scope of Iraq’s disarmament were considered unacceptable by some members of the Security Council, while for other members different political concerns became more important than the unresolved issues. These differing political and threat assessments created a division in the Security Council that fragmented the consensus that was required to continue the disarmament regime and UNSCOM’s role within it.
The case of UNSCOM and Iraq illustrates that disarmament in terms of destruction of the physical components constituting the infrastructure for developing and producing CBW and BM of specific ranges is not essentially irreversible. Unless the disarmed country demonstrates that it is committed to enduring disarmament of these weapon categories, a residual risk (in terms of established know-how and available dual-capable resources) must be overseen and managed.

**Unresolved issues**
The reason why this disarmament regime left behind unresolved questions was partly political (the Iraqi regime’s policies and the Security Council’s differing threat assessments) and in part a consequence of the objective to destroy *all* of Iraq’s proscribed weapons and infrastructures (based on a demand of complete cooperation).

The emergence of ‘unaccounted for’ disarmament issues was unavoidable given Iraq’s incomplete cooperation and UNSCOM’s mandate to account for all weapons, items and activities that had been associated with Iraq’s NBC programmes. However, the implications of the resulting uncertainties in relation to the final decision whether Iraq had disarmed was determined by the Security Council.

In order to satisfy the Security Council that Iraq did not (and would not) pose a threat to international security, evidence of a political decision by the Iraqi regime to abolish the proscribed weapons and capabilities would be required. However, Iraq’s non-compliance and subversive efforts led to the emergence of significant question marks about the scope of Iraq’s disarmament and intentions in this area. The ‘unaccounted for’ weapons and items included items that were necessary for re-establishing the destroyed infrastructures and developing proscribed CBW or missiles. The United States and Britain’s most significant concern, namely Saddam Hussein’s
intentions, could not be 'disarmed' by the UN regime. Iraq's refusal to enable UNSCOM to resolve the outstanding disarmament issues entrenched concerns that the Iraqi regime intended to rebuild the proscribed capabilities at a future point in time.

The Iraqi regime's limited cooperation with UNSCOM, and the erosion of the Security Council's consensus, made it seem unlikely that this disarmament regime could successfully achieve and verify complete disarmament of proscribed BM and CBW in Iraq. As long as Iraq did not fully cooperate with UNSCOM, and the Security Council was divided on what would constitute an 'end point' for this disarmament regime at which point sanctions would be lifted, the Council was unlikely to agree that Iraq had been completely disarmed and no longer posed a threat to international security.

The implications of the unresolved disarmament issues for the premature ending of the disarmament regime illustrate the importance of how other countries perceive the credibility of the disarming country's commitment and cooperation with the disarmament process. In the case of UNSCOM and Iraq, the uncertainties that emerged in Security Council's assessments of Iraqi disarmament from the disarmament verification process reflected the various perceptions of Iraqi intentions. The threat assessments of the Security Council members were naturally influenced by their foreign policy concerns, because the question whether Iraq posed a threat to international security in terms of proscribed weapons and capabilities entailed far more than technical and numerical balances.
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Appendix A

RESOLUTION 687 (1991)
Adopted by the Security Council at its 2981st meeting,
on 3 April 1991.

The Security Council, Recalling its resolutions 660 (1990)
(1990) of 16 September 1990, 669 (1990) of 24 September
of 29 November 1990 and 686 (1991) of 2 March 1991,

Welcoming the restoration to Kuwait of its sovereignty,
independence and territorial integrity and the return of its
legitimate Government,

Affirming the commitment of all Member States to the
sovereignty, territorial integrity and political independence of
Kuwait and Iraq, and noting the intention expressed by the
Member States cooperating with Kuwait under paragraph 2 of
resolution 678 (1990) to bring their military presence in Iraq
to an end as soon as possible consistent with paragraph 8 of
resolution 686 (1991),

Reaffirming the need to be assured of Iraq’s peaceful
intentions in the light of its unlawful invasion and occupation
of Kuwait,

Taking note of the letter sent by the Minister for Foreign
Affairs of Iraq on 27 February 1991 and those sent pursuant
to resolution 686 (1991),

Noting that Iraq and Kuwait, as independent sovereign
States, signed at Baghdad on 4 October 1963 ‘Agreed Minutes
Between the State of Kuwait and the Republic of Iraq
Regarding the Restoration of Friendly Relations, Recognition
and Related Matters’, thereby recognizing formally the
boundary between Iraq and Kuwait and the allocation of
islands, which were registered with the United Nations in accordance with Article 102 of the Charter of the United Nations and in which Iraq recognized the independence and complete sovereignty of the State of Kuwait within its borders as specified and accepted in the letter of the Prime Minister of Iraq dated 21 July 1932, and as accepted by the Ruler of Kuwait in his letter dated 10 August 1932,

Conscious of the need for demarcation of the said boundary,

Conscious also of the statements by Iraq threatening to use weapons in violation of its obligations under the Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925, and of its prior use of chemical weapons and affirming that grave consequences would follow any further use by Iraq of such weapons,

Recalling that Iraq has subscribed to the Declaration adopted by all States participating in the Conference of States Parties to the 1925 Geneva Protocol and Other Interested States, held in Paris from 7 to 11 January 1989, establishing the objective of universal elimination of chemical and biological weapons,

Recalling also that Iraq has signed the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, of 10 April 1972,

Noting the importance of Iraq ratifying this Convention, Noting moreover the importance of all States adhering to this Convention and encouraging its forthcoming Review Conference to reinforce the authority, efficiency and universal scope of the convention,

Stressing the importance of an early conclusion by the Conference on Disarmament of its work on a Convention on
the Universal Prohibition of Chemical Weapons and of universal adherence thereto,

Aware of the use by Iraq of ballistic missiles in unprovoked attacks and therefore of the need to take specific measures in regard to such missiles located in Iraq,

Concerned by the reports in the hands of Member States that Iraq has attempted to acquire materials for a nuclear-weapons programme contrary to its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons of 1 July 1968,

Recalling the objective of the establishment of a nuclear-weapons-free zone in the region of the Middle East,

Conscious of the threat that all weapons of mass destruction pose to peace and security in the area and of the need to work towards the establishment in the Middle East of a zone free of such weapons,

Conscious also of the objective of achieving balanced and comprehensive control of armaments in the region,

Conscious further of the importance of achieving the objectives noted above using all available means, including a dialogue among the States of the region,

Noting that resolution 686 (1991) marked the lifting of the measures imposed by resolution 661 (1990) in so far as they applied to Kuwait,

Noting that despite the progress being made in fulfilling the obligations of resolution 686 (1991), many Kuwaiti and third country nationals are still not accounted for and property remains unreturned,

Recalling the International Convention against the Taking of Hostages, opened for signature at New York on 18 December 1979, which categorizes all acts of taking hostages as manifestations of international terrorism,

Deploring threats made by Iraq during the recent conflict to make use of terrorism against targets outside Iraq and the taking of hostages by Iraq,
Taking note with grave concern of the reports of the Secretary-General of 20 March 1991 and 28 March 1991, and conscious of the necessity to meet urgently the humanitarian needs in Kuwait and Iraq,

Bearing in mind its objective of restoring international peace and security in the area as set out in recent resolutions of the Security Council,

Conscious of the need to take the following measures acting under Chapter VII of the Charter,

1. Affirms all thirteen resolutions noted above, except as expressly changed below to achieve the goals of this resolution, including a formal cease-fire;

2. Demands that Iraq and Kuwait respect the inviolability of the international boundary and the allocation of islands set out in the 'Agreed Minutes Between the State of Kuwait and the Republic of Iraq Regarding the Restoration of Friendly Relations, Recognition and Related Matters', signed by them in the exercise of their sovereignty at Baghdad on 4 October 1963 and registered with the United Nations and published by the United Nations in document 7063, United Nations, Treaty Series, 1964;

3. Calls upon the Secretary-General to lend his assistance to make arrangements with Iraq and Kuwait to demarcate the boundary between Iraq and Kuwait, drawing on appropriate material, including the map transmitted by Security Council document S/22412 and to report back to the Security Council within one month;

4. Decides to guarantee the inviolability of the above-mentioned international boundary and to take as appropriate all necessary measures to that end in accordance with the Charter of the United Nations;

5. Requests the Secretary-General, after consulting with Iraq and Kuwait, to submit within three days to the Security
Council for its approval a plan for the immediate deployment of a United Nations observer unit to monitor the Khor Abdullah and a demilitarized zone, which is hereby established, extending ten kilometres into Iraq and five kilometres into Kuwait from the boundary referred to in the 'Agreed Minutes Between the State of Kuwait and the Republic of Iraq Regarding the Restoration of Friendly Relations, Recognition and Related Matters' of 4 October 1963; to deter violations of the boundary through its presence in and surveillance of the demilitarized zone; to observe any hostile or potentially hostile action mounted from the territory of one State to the other; and for the Secretary-General to report regularly to the Security Council on the operations of the unit, and immediately if there are serious violations of the zone or potential threats to peace;

6. Notes that as soon as the Secretary-General notifies the Security Council of the completion of the deployment of the United Nations observer unit, the conditions will be established for the Member States cooperating with Kuwait in accordance with resolution 678 (1990) to bring their military presence in Iraq to an end consistent with resolution 686 (1991);

C

7. Invites Iraq to reaffirm unconditionally its obligations under the Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925, and to ratify the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, of 10 April 1972;

8. Decides that Iraq shall unconditionally accept the destruction, removal, or rendering harmless, under international supervision, of:
(a) All chemical and biological weapons and all stocks of agents and all related subsystems and components and all research, development, support and manufacturing facilities;
(b) All ballistic missiles with a range greater than 150 kilometres and related major parts, and repair and production facilities;

9. Decides, for the implementation of paragraph 8 above, the following:
(a) Iraq shall submit to the Secretary-General, within fifteen days of the adoption of the present resolution, a declaration of the locations, amounts and types of all items specified in paragraph 8 and agree to urgent, on-site inspection as specified below;
(b) The Secretary-General, in consultation with the appropriate Governments and, where appropriate, with the Director-General of the World Health Organization, within forty-five days of the passage of the present resolution, shall develop, and submit to the Council for approval, a plan calling for the completion of the following acts within forty-five days of such approval:
(i) The forming of a Special Commission, which shall carry out immediate on-site inspection of Iraq’s biological, chemical and missile capabilities, based on Iraq’s declarations and the designation of any additional locations by the Special Commission itself;
(ii) The yielding by Iraq of possession to the Special Commission for destruction, removal or rendering harmless, taking into account the requirements of public safety, of all items specified under paragraph 8 (a) above, including items at the additional locations designated by the Special Commission under paragraph 9 (b) (i) above and the destruction by Iraq, under the supervision of the Special Commission, of all its missile capabilities, including launchers, as specified under paragraph 8 (b) above;
(iii) The provision by the Special Commission of the assistance and cooperation to the Director-General of the International Atomic Energy Agency required in paragraphs 12 and 13 below;

10. Decides that Iraq shall unconditionally undertake not to use, develop, construct or acquire any of the items specified in paragraphs 8 and 9 above and requests the Secretary-General, in consultation with the Special Commission, to develop a plan for the future ongoing monitoring and verification of Iraq's compliance with this paragraph, to be submitted to the Security Council for approval within one hundred and twenty days of the passage of this resolution;

11. Invites Iraq to reaffirm unconditionally its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons of 1 July 1968;

12. Decides that Iraq shall unconditionally agree not to acquire or develop nuclear weapons or nuclear-weapons-usable material or any subsystems or components or any research, development, support or manufacturing facilities related to the above; to submit to the Secretary-General and the Director-General of the International Atomic Energy Agency within fifteen days of the adoption of the present resolution a declaration of the locations, amounts, and types of all items specified above; to place all of its nuclear-weapons-usable materials under the exclusive control, for custody and removal, of the International Atomic Energy Agency, with the assistance and cooperation of the Special Commission as provided for in the plan of the Secretary-General discussed in paragraph 9 (b) above; to accept, in accordance with the arrangements provided for in paragraph 13 below, urgent on-site inspection and the destruction, removal or rendering harmless as appropriate of all items specified above; and to accept the plan discussed in paragraph 13 below for the future ongoing monitoring and verification of its compliance with these undertakings;
13. Requests the Director-General of the International Atomic Energy Agency, through the Secretary-General, with the assistance and cooperation of the Special Commission as provided for in the plan of the Secretary-General in paragraph 9 (b) above, to carry out immediate on-site inspection of Iraq's nuclear capabilities based on Iraq's declarations and the designation of any additional locations by the Special Commission; to develop a plan for submission to the Security Council within forty-five days calling for the destruction, removal, or rendering harmless as appropriate of all items listed in paragraph 12 above; to carry out the plan within forty-five days following approval by the Security Council; and to develop a plan, taking into account the rights and obligations of Iraq under the Treaty on the Non-Proliferation of Nuclear Weapons of 1 July 1968, for the future ongoing monitoring and verification of Iraq's compliance with paragraph 12 above, including an inventory of all nuclear material in Iraq subject to the Agency's verification and inspections to confirm that Agency safeguards cover all relevant nuclear activities in Iraq, to be submitted to the Security Council for approval within one hundred and twenty days of the passage of the present resolution;

14. Takes note that the actions to be taken by Iraq in paragraphs 8, 9, 10, 11, 12 and 13 of the present resolution represent steps towards the goal of establishing in the Middle East a zone free from weapons of mass destruction and all missiles for their delivery and the objective of a global ban on chemical weapons;

D

15. Requests the Secretary-General to report to the Security Council on the steps taken to facilitate the return of all Kuwaiti property seized by Iraq, including a list of any property that Kuwait claims has not been returned or which has not been returned intact;

E
16. Reaffirms that Iraq, without prejudice to the debts and obligations of Iraq arising prior to 2 August 1990, which will be addressed through the normal mechanisms, is liable under international law for any direct loss, damage, including environmental damage and the depletion of natural resources, or injury to foreign Governments, nationals and corporations, as a result of Iraq's unlawful invasion and occupation of Kuwait;

17. Decides that all Iraqi statements made since 2 August 1990 repudiating its foreign debt are null and void, and demands that Iraq adhere scrupulously to all of its obligations concerning servicing and repayment of its foreign debt;

18. Decides also to create a fund to pay compensation for claims that fall within paragraph 16 above and to establish a Commission that will administer the fund;

19. Directs the Secretary-General to develop and present to the Security Council for decision, no later than thirty days following the adoption of the present resolution, recommendations for the fund to meet the requirement for the payment of claims established in accordance with paragraph 18 above and for a programme to implement the decisions in paragraphs 16, 17 and 18 above, including: administration of the fund; mechanisms for determining the appropriate level of Iraq's contribution to the fund based on a percentage of the value of the exports of petroleum and petroleum products from Iraq not to exceed a figure to be suggested to the Council by the Secretary-General, taking into account the requirements of the people of Iraq, Iraq's payment capacity as assessed in conjunction with the international financial institutions taking into consideration external debt service, and the needs of the Iraqi economy; arrangements for ensuring that payments are made to the fund; the process by which funds will be allocated and claims paid; appropriate procedures for evaluating losses, listing claims and verifying their validity and resolving disputed claims in respect of Iraq's liability as specified in
paragraph 16 above; and the composition of the Commission designated above;

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20. Decides, effective immediately, that the prohibitions against the sale or supply to Iraq of commodities or products, other than medicine and health supplies, and prohibitions against financial transactions related thereto contained in resolution 661 (1990) shall not apply to foodstuffs notified to the Security Council Committee established by resolution 661 (1990) concerning the situation between Iraq and Kuwait or, with the approval of that Committee, under the simplified and accelerated ‘no-objection’ procedure, to materials and supplies for essential civilian needs as identified in the report of the Secretary-General dated 20 March 1991, and in any further findings of humanitarian need by the Committee;

21. Decides that the Security Council shall review the provisions of paragraph 20 above every sixty days in the light of the policies and practices of the Government of Iraq, including the implementation of all relevant resolutions of the Security Council, for the purpose of determining whether to reduce or lift the prohibitions referred to therein;

22. Decides that upon the approval by the Security Council of the programme called for in paragraph 19 above and upon Council agreement that Iraq has completed all actions contemplated in paragraphs 8, 9, 10, 11, 12 and 13 above, the prohibitions against the import of commodities and products originating in Iraq and the prohibitions against financial transactions related thereto contained in resolution 661 (1990) shall have no further force or effect;

23. Decides that, pending action by the Security Council under paragraph 22 above, the Security Council Committee established by resolution 661 (1990) shall be empowered to approve, when required to assure adequate financial resources on the part of Iraq to carry out the activities under paragraph
20 above, exceptions to the prohibition against the import of commodities and products originating in Iraq;

24. Decides that, in accordance with resolution 661 (1990) and subsequent related resolutions and until a further decision is taken by the Security Council, all States shall continue to prevent the sale or supply, or the promotion or facilitation of such sale or supply, to Iraq by their nationals, or from their territories or using their flag vessels or aircraft, of:
   (a) Arms and related materiel of all types, specifically including the sale or transfer through other means of all forms of conventional military equipment, including for paramilitary forces, and spare parts and components and their means of production, for such equipment;
   (b) Items specified and defined in paragraphs 8 and 12 above not otherwise covered above;
   (c) Technology under licensing or other transfer arrangements used in the production, utilization or stockpiling of items specified in subparagraphs (a) and (b) above;
   (d) Personnel or materials for training or technical support services relating to the design, development, manufacture, use, maintenance or support of items specified in subparagraphs (a) and (b) above;

25. Calls upon all States and international organizations to act strictly in accordance with paragraph 24 above, notwithstanding the existence of any contracts, agreements, licences or any other arrangements;

26. Requests the Secretary-General, in consultation with appropriate Governments, to develop within sixty days, for the approval of the Security Council, guidelines to facilitate full international implementation of paragraphs 24 and 25 above and paragraph 27 below, and to make them available to all States and to establish a procedure for updating these guidelines periodically;

27. Calls upon all States to maintain such national controls and procedures and to take such other actions consistent with
the guidelines to be established by the Security Council under paragraph 26 above as may be necessary to ensure compliance with the terms of paragraph 24 above, and calls upon international organizations to take all appropriate steps to assist in ensuring such full compliance;

28. Agrees to review its decisions in paragraphs 22, 23, 24 and 25 above, except for the items specified and defined in paragraphs 8 and 12 above, on a regular basis and in any case one hundred and twenty days following passage of the present resolution, taking into account Iraq's compliance with the resolution and general progress towards the control of armaments in the region;

29. Decides that all States, including Iraq, shall take the necessary measures to ensure that no claim shall lie at the instance of the Government of Iraq, or of any person or body in Iraq, or of any person claiming through or for the benefit of any such person or body, in connection with any contract or other transaction where its performance was affected by reason of the measures taken by the Security Council in resolution 661 (1990) and related resolutions;

30. Decides that, in furtherance of its commitment to facilitate the repatriation of all Kuwaiti and third country nationals, Iraq shall extend all necessary cooperation to the International Committee of the Red Cross, providing lists of such persons, facilitating the access of the International Committee of the Red Cross to all such persons wherever located or detained and facilitating the search by the International Committee of the Red Cross for those Kuwaiti and third country nationals still unaccounted for;

31. Invites the International Committee of the Red Cross to keep the Secretary-General apprised as appropriate of all activities undertaken in connection with facilitating the repatriation or return of all Kuwaiti and third country
nationals or their remains present in Iraq on or after 2 August 1990;

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32. Requires Iraq to inform the Security Council that it will not commit or support any act of international terrorism or allow any organization directed towards commission of such acts to operate within its territory and to condemn unequivocally and renounce all acts, methods and practices of terrorism;

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33. Declares that, upon official notification by Iraq to the Secretary-General and to the Security Council of its acceptance of the provisions above, a formal cease-fire is effective between Iraq and Kuwait and the Member States cooperating with Kuwait in accordance with resolution 678 (1990);

34. Decides to remain seized of the matter and to take such further steps as may be required for the implementation of the present resolution and to secure peace and security in the area.
Appendix B

RESOLUTION 715 (1991)
Adopted by the Security Council at its 3012th meeting, on 11 October 1991

The Security Council,
Recalling in particular that under resolution 687 (1991) the Secretary-General and the Director General of the International Atomic Energy Agency (IAEA) were requested to develop plans for future ongoing monitoring and verification, and to submit them to the Security Council for approval,
Taking note of the report and note of the Secretary-General (S/22871/Rev.1 and S/22872/Rev.1), transmitting the plans submitted by the Secretary-General and the Director General of the International Atomic Energy Agency,
Acting under Chapter VII of the Charter of the United Nations,
1. Approves, in accordance with the provisions of resolutions 687 (1991), 707 (1991) and the present resolution, the plans submitted by the Secretary-General and the Director General of the International Atomic Energy Agency (S/22871/Rev.1 and S/22872/Rev.1);
2. Decides that the Special Commission shall carry out the plan submitted by the Secretary-General (S/22871/Rev.1), as well as continuing to discharge its other responsibilities under resolutions 687 (1991), 699 (1991) and 707 (1991) and performing such other functions as are conferred upon it under the present resolution;
3. Requests the Director General of the International Atomic Energy Agency to carry out, with the assistance and cooperation of the Special Commission, the plan submitted by him (S/22872/Rev.1) and to continue to discharge his other
responsibilities under resolutions 687 (1991), 699 (1991) and 707 (1991);

4. Decides that the Special Commission, in the exercise of its responsibilities as a subsidiary organ of the Security Council, shall:

(a) Continue to have the responsibility for designating additional locations for inspection and overflights;

(b) Continue to render assistance and cooperation to the Director General of the International Atomic Energy Agency, by providing him by mutual agreement with the necessary special expertise and logistical, informational and other operational support for the carrying out of the plan submitted by him;

(c) Perform such other functions, in cooperation in the nuclear field with the Director General of the International Atomic Energy Agency, as may be necessary to coordinate activities under the plans approved by the present resolution, including making use of commonly available services and information to the fullest extent possible, in order to achieve maximum efficiency and optimum use of resources;

5. Demands that Iraq meet unconditionally all its obligations under the plans approved by the present resolution and cooperate fully with the Special Commission and the Director General of the International Atomic Energy Agency in carrying out the plans;

6. Decides to encourage the maximum assistance, in cash and in kind, from all Member States to support the Special Commission and the Director General of the International Atomic Energy Agency in carrying out their activities under the plans approved by the present resolution, without prejudice to Iraq’s liability for the full costs of such activities;

7. Requests the Committee established under resolution 661 (1990), the Special Commission and the Director General of the International Atomic Energy Agency to develop in cooperation a mechanism for monitoring any future sales or
supplies by other countries to Iraq of items relevant to the implementation of section C of resolution 687 (1991) and other relevant resolutions, including the present resolution and the plans approved hereunder;

8. Requests the Secretary-General and the Director General of the International Atomic Energy Agency to submit to the Security Council reports on the implementation of the plans approved by the present resolution, when requested by the Security Council and in any event at least every six months after the adoption of this resolution;

9. Decides to remain seized of the matter.
Disarming Iraq?

The United Nations Special Commission 1991–98

Målfrid Braut-Hegghammer

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Disarming Iraq?
After the Gulf War in 1991, the United Nations Security Council’s ‘ceasefire resolution’ obliged Iraq to destroy all weapons of mass destruction (WMD) and associated infrastructures. The United Nations Special Commission (UNSCOM) was established to oversee Iraq’s disarmament. However, Iraq’s partial cooperation led to the emergence of several unresolved disarmament questions concerning Iraq’s intentions in the area of WMD. After operation Desert Fox in 1998, the disarmament regime fell apart.

UNSCOM is now considered a major success of the United Nations. The case of UNSCOM and Iraq uniquely illustrates challenges and difficulties facing an effort to enforce (WMD) disarmament on a sovereign country.

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