In a 1995 report to the United Nations (UN) on verification, a group of experts pointed out that ‘it is only in recent years that verification *per se* has been recognized as a normal part of peace and security operations’.¹ Five years later that statement still rings true. Relatively little research on the role of verification in peace operations has been conducted, even though such procedures have played an increasingly prominent role in high profile UN missions.

The purpose of this chapter is to survey both the verification techniques and mechanisms used to monitor the military aspects of peace accords, and the changing context in which these instruments are being used. The chapter takes UN peacekeeping operations as its starting point, beginning with the establishment of the UN Truce Supervision Organization (UNTSO) in 1948.²

Annex 1 (see pp. 283–288) provides a chronological listing of the operations examined for this chapter. While most of these were UN-authorised, verification missions are also undertaken by organisations or states outside UN processes. The fact that there are relatively few examples demonstrates the extent to which some form of UN involvement has become a key element in the implementation of peace agreements. Moreover, not every example has a direct link to a peace accord in a formal sense: a number of operations are associated with straightforward cease-fires and measures introduced and monitored in anticipation of a peace deal. The basic criterion used to select the cases is a connection to a peace agreement or cease-fire arrangement.

Peace accords can include a variety of military measures:

- a cease-fire;
- troop withdrawals from specified areas;
• cantonment of forces;
• demilitarisation of certain areas;
• demobilisation of armed units from warring factions and/or government;
• reductions in arms and equipment; and
• reintegration of troops into a new or existing armed force.

The accord might comprise only a cease-fire, a combination of a cease-fire and some other initiatives, or all of the above in conjunction with political elements, such as election monitoring and government transitions. Verification involves the use of observers to monitor and, in some cases, to supervise and oversee these processes in a framework tailored to the political, geographic and military situation. Verification is increasingly concerned not just with monitoring troops and weaponry, but also with the cantonment, demobilisation, and re-integration of official and unofficial armed groups, as well as the collection, storage, destruction, and/or decommissioning of weapons. This has placed an additional heavy burden on verification personnel and procedures. In some instances, such as the peace-keeping operations in Bosnia-Herzegovina and Somalia, these aspects of the mandate have been particularly contentious and have led to the use of force.

The changing context
One of the clearest trends in the period being studied is the change in nature of the mission. From 1948–89 the main and sometimes only purpose of an operation was to monitor an agreed cease-fire. With the end of the Cold War, though, many missions became responsible for a multitude of different military tasks, derived from detailed and complex peace accords.

The characterisation of the earlier period obscures some of the nuances. Not all cease-fires were created equal: in some cases, the mission was also involved in overseeing the withdrawal of troops or the establishment of buffer zones. Depending on the solidity of the cease-fire, extensive liaison activities were sometimes required. The presence (since 1978) of the UN Interim Force in Lebanon (UNIFIL), for example, did not deter Israel from invading the country in June 1982.³ The 1960–64 UN Operation in the Congo (ONUC) was also a significant exception to the nature and experiences of UN missions in this period.⁴ Nonetheless, it is fair to say that verification of the military aspects of peace accords during the Cold War was primarily concerned with monitoring cease-fires and troop withdrawals.
Monitoring and verifying the military aspects of peace accords

A second characteristic of most Cold War operations was their limited connection to the political processes of negotiating and implementing peace agreements or cease-fires. The general pattern was that the cease-fire or peace accord would be put in place, and the UN would then be asked to supervise it. Where the cease-fire was intended to pave the way for a more comprehensive peace deal or political resolution, those negotiations and efforts occurred quite separately from the monitoring operation. For instance, the talks between Egypt and Israel, which occurred during the deployment (1973–79) of the Second UN Emergency Force (UNEF II), took place under the aegis of the United States, rather than of the UN. In addition, the UN Peacekeeping Force in Cyprus (UNFICYP) has been present on the island since 1964, while unsuccessful efforts have been made, under UN and non-UN auspices, to resolve the conflict.5

Post-Cold War peace accords

Peace operations, and the verification tasks associated with them, underwent a distinct change after the end of the Cold War. The extension of superpower rivalry into regional wars was abruptly terminated, making possible the resolution of some of these conflicts. This development was coupled with willingness on the part of the US and the then Soviet Union to involve the UN more actively and comprehensively in conflict situations.

Some missions continued to have the straightforward monitoring of cease-fires as their principal function.6 However, the verification tasks assigned to new peace operations—beginning with the UN Transition Assistance Group (UNTAG) in Namibia (1989–90) and the UN Observer Group in Central America (ONUCA) (1989–92)—expanded, as did the complexity and scope of their mandates. In both these cases, as well as with the UN Angola Verification Mission (UNAVEM) (1989–97) and the UN Transitional Authority in Cambodia (UNTAC) (1992–93), verification responsibilities went well beyond monitoring a cease-fire to include assessing and assisting with the demobilisation and disarmament of troops. Furthermore, these operations, with the exception of ONUCA, which dealt with a group of countries, were concerned with single nations emerging from internal conflict. Verification functions were thus part of the same peace agreements that dealt with all aspects of societies in transition, including the election and installation of a new government.

As peace processes became more integrated, the UN became increasingly involved in all related tasks, ranging from assisting with the negotiation of accords and
overseeing their implementation, to post-conflict peace-building. The detailed negotiations provided opportunities to refine the verification provisions of peace agreements before they were finalised. In the case of Mozambique, for example, UN military observers provided technical advice on the cease-fire monitoring aspects of the peace deal while it was still being debated, and technical teams offered additional input as the negotiations neared conclusion. This arrangement helped to ensure that the agreement contained conditions that were verifiable and manageable within the envisaged timeframe, and contributed, at least in theory, towards getting the operation underway faster once an accord was signed.

The use of force

Another significant change in the international community’s approach to peace accords has been its willingness to use force. The UN Protection Force (UNPROFOR) in Bosnia (1992–95) and the second UN Operation in Somalia (UNOSOM II) (1993–95) were authorised under Chapter VII of the UN Charter, and were permitted to use force beyond self-defence to fulfil their mandates. In both cases, an agreed peace deal was not in place when the operations began, and force was used in response to violations of UN Security Council resolutions and of the military aspects of informal agreements reached with the parties. By contrast, the UN Transitional Authority in Eastern Slavonia, Baranja and Western Sirmium (UNTAES) (1996–98), the NATO-led Implementation Force (IFOR) in Bosnia (1995–96), and its successor, the Stabilization Force (SFOR)—established under Chapter VII of the UN Charter—were given responsibility for the implementation of full-scale negotiated peace accords. Although force was authorised beyond self-defence, it was never used by UNTAES and IFOR, and, to date, has not been used by SFOR.

For those verifying the implementation of an agreement, the use of force complicates the monitoring environment. This is especially true of peacekeeping operations that are impartial in nature, but which have been authorised to use force beyond self-defence. During the UNOSOM II mission, for instance, peacekeepers had the task of monitoring the arms situation and carrying out coercive disarmament measures, as well as facilitating political reconciliation. With UNOSOM given the additional responsibility of arresting individuals who had carried out attacks on peacekeepers, and the deployment of American troops outside UN command, the situation became extremely complex for the monitors and for local parties. UNOSOM II was terminated in 1995 without achieving its objectives.
Difficult issues are raised by the involvement of observers in operations that may require the use of force by peacekeepers, or in areas where conflict is continuing or is imminent. For example, Bosnian Serb troops paralysed the UNPROFOR operation by holding UN observers hostage in retaliation for the use of force against them. And while the UN Assistance Mission for Rwanda (UNAMIR) (1993–96) was able to confirm that the situation was escalating to the level of genocide, it was not mandated to take measures to stop it, including the confiscation of arms or the use of force.

Not only does the use of force complicate the role of military observers, but they may themselves come under attack. This has happened with greater frequency over the past 10 years, and is primarily related to the Security Council’s willingness to authorise operations where the consent of the parties is uncertain or where it could later be withdrawn. In these situations the parties to the conflict may decide to risk the consequences and attack the peacekeepers if they believe that the outside presence is hindering the achievement of their goals.

Not only must verifiers carry out their tasks in complex and difficult political situations, but their undertakings may also be directly connected to controversies over the use of force. The success of the entire mission may rest on their accomplishments. Unarmed military personnel can act as military observers in some instances, but in more sensitive cases there is a requirement for armed observers.

There are so many factors affecting the successful implementation of a mandate in which the use of force beyond self-defence is permitted that it is impossible to draw a conclusion about what connection, if any, there might be between success and failure and the role of verification. The important point for the monitoring and verification of peace agreements is that not only are the requirements and tasks of post-Cold War operations becoming more complex, but also that they are taking place in very different circumstances.

**Techniques and mechanisms**

Despite the shifts that have occurred in the nature and context of operations, the techniques and mechanisms used to verify the military aspects of peace accords have remained remarkably consistent. One example of change is the expansion of techniques involving air forces. For instance, the UN imposed, in 1992, a ban on military flights over Bosnia-Herzegovina and delegated the task of monitoring (and later enforcing) the restriction to NATO.
Similarly, air surveillance continues to make a vital contribution to monitoring and implementing the various restrictions on Iraq. Naval forces have also played critical roles in both of these operations, particularly in imposing arms embargoes and sanctions regimes. Air and naval forces’ expanded involvement in monitoring tasks reflects the increased complexity of both the operational environment and missions in the post-Cold War world.

**Observers**

The military observer is central to all the operations examined in this chapter, no matter how basic or how elaborate the mission, or how difficult the verification task. The physical presence of a third party can be a powerful factor in conflict amelioration: observers are able to monitor, record, and report parties’ actions and interpret those activities in the broader context of the situation. The presence of observers also symbolises the commitment of the international community, gives even greater gravity to violations, and can halt or deter future acts. In Rwanda, the mere presence of unarmed workers from the International Committee of the Red Cross stopped some members of the *Interahamwe* from continuing their genocidal activities in the immediate vicinity.

**Technology**

While technological progress has provided new ways to carry out various verification tasks, there has not been any significant technological development that has altered the fundamental nature of the monitoring process. The equipment being used in monitoring operations has been upgraded and improved, and some operations have incorporated technology that minimises the level of intrusiveness, such as unmanned ground-based sensors. The role of the observer, however, remains critical, and the basic techniques used to monitor buffer zones, demilitarisation, and the control of arms, remain the same.

In future, though, technological developments may make it possible to supplement, and, in some cases, to replace, the military observer with highly capable, 24-hour means of observation. Improvements in speed and information technology (IT), combined with progress in aerial and space surveillance, may allow, in the near term, development of more capable and less intrusive means of mechanical (rather than human) monitoring. The British army, for instance, is developing a multi-function electronic sensor that detects movement, vibration, magnetic
fields and sound. This may replace human sentries in some situations, including monitoring of dangerous frontiers or cease-fire lines when the required personnel are unavailable. Similarly, technological advancements may make possible remote surveillance of weapon storage areas, production facilities, and other military sites. There have also been dramatic improvements in the ability of to synergise data from these and other sources in order to establish a comprehensive picture of events on the ground.

In recent years, access to the Global Positioning System (GPS) operated by the US military has become widely available and has been used for a variety of tasks. The GPS gives peacekeepers the capacity to determine the exact location of cease-fire and territorial boundaries, as well as their own locations when on patrol or based in remote areas. They are able to communicate this information with other peacekeepers and their headquarters.

In post-conflict situations, one task often given to peacekeepers is to detect, identify, monitor and/or carry out the destruction of anti-personnel landmines and other unexploded ordnance. A number of recent technological developments mean that peacekeepers will be more certain that areas have been de-mined, and they will be able to conduct mine-clearing with much greater efficiency and safety.

**Multilayered verification packages**

A basic ‘package’ of mechanisms and procedures for monitoring and verifying the implementation of peace agreements has been established for some time and continues to provide the basic framework for operations. Each of the different mechanisms has a specific verification purpose, but draws from and supports the other instruments. In the peace operations examined in this chapter, this multilayered package includes:

- observers;
- information provided by the parties (baseline data);
- inspections to confirm the accuracy of the information (baseline inspections);
- data provided by outside parties;
- inspections;
- patrols and observation to ensure the maintenance of cease-fires and/or agreed troop levels or positions;
- aerial surveillance; and
- a joint commission process.
When an agreement involves the separation of forces, buffer zones are often created from which troops may be gradually withdrawn over specified periods. Similarly, cantonment sites are used when fighters are being demobilised or disarmed. And, depending on the terms of the agreement, a dual-key arms storage system is sometimes used, to which both the parties and mission personnel have access.

Space does not permit a detailed discussion of each of these mechanisms. For present purposes, the important point to note is that these verification instruments, or some combination of them, have been in use since the UN began undertaking peace operations more than 50 years ago.

**Joint commissions**

Roughly defined, a joint commission is an organisation involving representatives of the parties to a peace accord and an official from the UN or another third party who acts as chair. The commission is a forum for parties to raise concerns about implementation and for monitoring the progress of the peace operation. It is generally, although not always, established under the peace deal.

Joint commissions—often used in operations during the Cold War—have become almost a matter of course in the 1990s. In part this may be a reflection of the increasing complexity and scale of the operations: the larger and more intricate the mission, the stronger the requirement for a forum that serves as a general overseer. In multifaceted operations, sub-commissions often supplement the joint commission. In Angola and Mozambique, for instance, sub-commissions were responsible for monitoring the cease-fires. In Cambodia, a Military Mixed Working Group, comprising military representatives of all the parties, permitted the UN to liaise with them collectively regarding the monitoring and implementation of various military aspects of the peace agreement.

**The role of information**

It almost goes without saying that the thread tying together the various layers of a verification package is information. Data provided by the parties, confirmed by inspection and monitoring, and supplemented by information from outside organisations and/or states, plays a crucial role in the verification process. As operations have become more intricate, this data has increased in complexity and volume.

At the same time, verification teams' information needs have also expanded, raising a difficult issue for the UN. The efficiency and effectiveness of its missions
would certainly be enhanced if they could collect and analyse information about a situation both before and during the operation. But UN member states harbour an inherent cautiousness and resistance to the idea of providing the organisation with anything resembling the intelligence capabilities that they themselves possess.\textsuperscript{15} For many member states the thought of the UN compiling information on them comes too close to international government and intrusion into sovereign internal affairs. As long as this resistance remains (and there is no reason to think it will change) verification tasks will continue to start from scratch each time an operation begins. However, many peace missions, such as ONUC and UNTAC, found intelligence so vital that they began their own unofficial operations. Individual troop contingents have often provided, or have been supplied with, their own intelligence data.

**Regional organisations and other actors**

A recent trend, which was evident primarily in the former Yugoslavia, is the involvement of regional organisations in the verification process. In 1991, for instance, the European Community Monitoring Mission (ECMM) was established to oversee an agreed cease-fire between Croatia, Slovenia and the former Yugoslavia. This mission later undertook joint monitoring tasks with UNPROFOR in Bosnia. Similarly, in 1998, the Organisation for Security and Co-operation in Europe (OSCE) set up a verification mission to monitor the situation in Kosovo.\textsuperscript{16} Both of these operations were established in connection with agreements reached outside the UN, although the UN did eventually authorise its own missions in the region.

The other example of this pattern is NATO’s implementation (under a UN mandate and in association with other states) of the 1995 Dayton Peace Accord through IFOR and then SFOR.\textsuperscript{17} All of these cases, though, relate to the conflicts in the former Yugoslavia, and, as such, the trend may be very specific. One of the advantages of using a regional organisation like NATO was that it could provide, at relatively short notice, well-equipped and technologically advanced multinational forces. In addition, the Alliance could draw on considerable intelligence assets that were otherwise unavailable to the UN.

A related and even more recent trend is the growing involvement of regional organisations or other groups in overseeing cease-fires and associated measures or peace accords in their region. This is done in combination with a UN operation, which monitors the organisation or group as it carries out its verification tasks. The monitoring of the regional peacekeepers provides reassurance about the conduct
of the operation, since there is a possibility that members of a regional organisation might have their own interests to advance in a particular conflict. For example, the responsibilities of the UN Mission of Observers in Tajikistan (UNMOT)—set up in 1994—include cease-fire monitoring, chairing the Joint Commission, and overseeing the role of peacekeepers from the Commonwealth of Independent States (CIS). And the UN Observer Mission in Liberia (UNOMIL) (1993–97) involved working with the Economic Community of West African States’ Monitoring Group (ECOMOG) to implement the 1993 Cotonou Peace Agreement.

Groups or organisations completely outside of the UN framework have also verified peace accords. But there are relatively few examples, a testament to the important role of the UN in implementing peace agreements. The ones that do exist include:

- the Multinational Force and Observers (MFO) in the Sinai (1982–)
- the Commonwealth Observation Force in Zimbabwe (1979)
- the Peace Monitoring Group in Bougainville (1997–)
- the International Force for East Timor (INTERFET) (1999).18

Characteristically, they have occurred when one of the major or regional powers has had an interest in the situation. The examples are so different in their political contexts, however, that it is difficult to draw any conclusions about whether this implies anything regarding the advantages or disadvantages of choosing a verification and monitoring process outside the UN framework.

Summary and conclusions
The discussion has focused on two general characteristics associated with monitoring the military aspects of peace accords:

- the procedures involved; and
- the context in which they are conducted.

The end of the Cold War resulted in a definite change in the context of these operations, and the UN became more deeply engaged in all aspects of peace processes. By contrast, the verification mechanisms remained surprisingly constant. While some of the procedures and instruments have been expanded or adapted to deal with differing circumstances, and greater use is being made of technology, the
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basic framework—from which those implementing and verifying an accord can choose—has stood the test of time.

This overview suggests a number of issues for further study and consideration. First, although technology has yet to result in revolutionary changes to the basic framework, it may contribute to making procedures more efficient and/or effective. For example, the increasing availability of commercial satellite imagery at reasonable prices is one way in which technology might be used to assist verification. Similarly, aerial surveillance technology is also readily available and can provide valuable monitoring information. Given widespread concern about costs and the difficulties of obtaining troop contributions from UN member states, it is surprising that more effort has not been made to use technology to supplement and, in some instances, replace observers. This trend may alter, though, as more of these technologies become widely available.

Second, some of the post-Cold War changes raise questions about the role of observers in the new environment. In particular, the greater use of monitors in situations in which force might be used (either by the mission itself or by the parties to the conflict) raises the question of whether the advantages gained by the observers’ presence still outweigh the potential downsides and dangers. The effect of the greater use of force on the role of observers is an issue for further study.

Third, it is inherent in the nature of these operations that they begin from scratch each time one is created. This means that there is a limited transfer—from one operation to another—of experience and lessons learned. As missions have increased in complexity, and other organisations have become involved, the need and the possibilities for developing some form of centralised body that can be drawn on by each mission becomes more compelling.

At the process level, one possibility is the development of verification protocols and packages of mechanisms designed for different situations. Another is to establish standard training procedures for troops and other personnel who are likely to be used as military observers. The UN is the most obvious candidate to undertake this work, but there is no reason why some other organisation or group of countries could not initiate it.

A natural offshoot is the concept of a centralised agency to deal with information relating to verification, although such an idea will inevitably raise traditional fears about ‘intelligence gathering’ by the UN. Such an agency could, for example, collect and interpret data from sources outside the mission and from other organisations
involved in the operation. The agency could act as a point of liaison with the Situation Centre at UN headquarters, New York, and as a centre for a lessons-learned process on verification. This could contribute to the improvement of future missions and the development of standard verification protocols or methodologies.

Another problem resulting from the ad hoc nature of peace operations is that it is often impossible to deploy a force as quickly as required by the peace accord. The connection between the speed of response (or lack of it) once an agreement is in place and the eventual success or failure of the accord is an issue needing further research. A preliminary analysis suggests that having an operation on the ground as soon as possible is better than a later response. To some extent, the pattern of UN involvement in the negotiation of peace accords is a positive step in overcoming this delay, but this does not guarantee that a mission will be created or that it will be dispatched in a timely manner. Furthermore, the operation will not necessarily have the required troops, equipment or personnel with appropriate skills.

The fact that the basic process of verifying peace accords has remained constant, at least in its essentials, while the context has changed significantly, points to the durability of the verification framework and to the central role that verification plays in peace processes. A cease-fire and the military aspects of peace accords are at the root of a commitment by the parties to a conflict to end the fighting. Verification of compliance with these measures confirms the commitment and may help build confidence. Verification, therefore, is not only critical to day-to-day implementation, but also has the potential to contribute to positive change in the long term. This is what makes the lack of study on this issue such an anomaly. As we enter the post–post-Cold War era, it is important that the international community deals with the issues raised in this chapter, recognises the importance of the verification process to peace accords, and works to ensure that verification is supported and implemented as effectively and efficiently as possible.

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Endnotes


2 Of course, verification of the military aspects of peace accords predates the creation of the UN.


5 A peace accord reached by Egypt and Israel in 1979, under US auspices, eventually brought an end to UNEF II.

6 The UN Good Offices Mission in Afghanistan and Pakistan (UNGOMAP), the UN Iran–Iraq Military Observer Group (UNIMOG), and the first UN Angola Verification Mission (UNAVEM I) all had the monitoring of cease-fire arrangements and the withdrawal of troops as core functions.


9 These missions are often called peace enforcement operations.


12 For example, verification of the Sinai agreements involves unmanned ground sensors. See, for example, Brian S. Mandell, The Sinai Experience: Lessons in Multimethod Arms Control Verification and Risk Management, Arms Control Verification Studies, number 3, Department of External Affairs, Ottawa, 1987. Also see the outline of various technological options for monitoring functions found at the Co-operative Monitoring Center website at www.cmc.sandia.gov.


15 The Office for Research and Collection of Information (ORCI), which was established by UN Secretary-General Perez de Cuellar, was very unpopular with UN member states because of the implication that it would be involved in intelligence gathering. The ORCI was disbanded by Secretary-General Boutros Boutros-Ghali when he took office.

16 For more information on this mission see the OSCE website at www.osce.org.

17 Good information about the nature of the IFOR and SFOR mandates and the implementation process can be found on the NATO website at www.nato.int and on the links listed there.

18 See annex 1 for more details. MOMEP involved Argentina, Brazil, Chile and the US, and ran from 1995–99. The Peace Monitoring Group in Bougainville involves Australia, Fiji, New Zealand and Vanuatu.

19 This proposal was put forward by the UN group of experts. See Verification in All Aspects, paragraph 279.