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INTELLIGENCE IN PEACE SUPPORT OPERATIONS

Pasi Välimäki

National Defence College Helsinki 2000

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FOREWORD

The work presented here began in the form of a report that I submitted on my return from a period spent as a UN military observer in the former Yugoslavia, and eventually grew into a final dissertation for the General Staff officers' course. The manuscript was published in Finnish by the Department of Strategic and Defence Studies at the National Defence College in 1999, whereupon Prof. Kalevi Ruhala offered me the opportunity early in 2000 of including an abbreviated version of it in the English-language journal Finnish Defence Studies. I wish to thank the staff of the department, and particularly the supervisors of my dissertation work, Lt.-Col. Erkki Pekonen, Lt.-Col. Harri Ohra-aho and Major Mika Kerttunen, for all the guidance and support that I have received. Similarly I would thank the staff of the Defence College library for all the help that they have given me.

Construction of the English version of this work was a particularly challenging and inspiring experience as it coincided for the most part with my preparations for serving as head of intelligence for the Finnish Battlegroup which was part of the Multinational Brigade Centre in Kosovo and with my period of service in that capacity. Especially warm thanks go to Major Ian Miller and Captain Ali Huston of the G2 MNB (C) HQ (7th Armoured Brigade) for finding the time alongside all their regular duties to go into my work in detail and comment on it. I am also very grateful to Lt.-Col. H.D.Allfrey, MBE, SCOTC DG, for his encouraging advice on the structure of the paper and its language. Without the fluent and stylish translation work of Malcolm Hicks, however, the ideas contained in this volume would probably have never reached the majority of readers and it would have remained to gather dust on an obscure shelf. Finally I must expressed my heartfelt thanks to my family and close friends who have shown such great understanding and have supported me at all stages in this endeavour.

I have been able over the past seven months to observe with some pleasure that only a few of the problems and deficiencies mentioned in this book have actually come to light. Opinions on the KFOR operation may vary, but it is clear that the intelligence

sector at the Multinational Brigade Centre is well functioning and supporting commanders at every level. I believe that in many respects we are now moving into an era when a multinational brigade, even one containing representatives of non-NATO countries, has a real chance of setting up an intelligence system that meets the requirements of both the commanders and the operational situation. The learning process is still going on, however, and there are still challenges to be met in terms of the passage of information, technology and working procedures. This is a rolling stone that will certainly never gather any moss, and it is to be hoped that it will with time create improved opportunities for intelligence services to respond to the demands of running a Peace Support Operation.

Lipljan, Kosovo, 1st September 2000

Major Pasi Välimäki

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1 INTRODUCTION

"....it is our job to make sure that propaganda does not provide the basis upon which policy is based. We have to ensure that the international community, in particular, understands the reality, not the rhetoric"

Lieutenant-General Sir Michael Rose,
Commander UNPROFOR[1]

1.1 BACKGROUND

The purpose of the UN's traditional peacekeeping operations during the Cold War period was to avoid open confrontation at the local level in crisis areas and to prevent such situations developing into armed conflicts between the major powers. The end of the Cold War led to a rapid and fairly radical alteration in the structure of the international system[2], and the reduction in tension between the major powers has allowed them to become more closely involved in peacekeeping efforts. Thus peace support operations that began in the 1990's were of a different type, broader-based and more demanding[3]. The UN responded to the new situation with the "Agenda for Peace" drawn up by former Secretary-General Boutros-Ghali in 1992 and its sequel, the "Supplement to an Agenda for Peace" of 1995.These represent the UN's attempt to create a strategy for the non-violent resolution of conflicts. Successful implementation of the former Secretary General's model calls for wide control over political, economic and military information. The strategy has not met with the hoped-for success, however, and certain UN member states have redefined their own national peacekeeping doctrines in the form of peace support programmes that suit their own ends. This means that the concepts and types of operations contained in these national doctrines differ to some extent from their UN counterparts.[4]

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The UN Charter of 1945 allows the Security Council to deploy a variety of measures to resolve conflicts. In order to do this, it must have in its possession the information necessary for carrying out the measures, ranging from identification of the conflict to targeting of an armed intervention. Reactions to regional conflicts have altered in the course of the last decade, moving away from peacekeeping in the conventional sense towards armed intervention by multinational troops[5]. The UN Security Council has issued mandates for both its own peacekeeping operations and those of regional security organizations such as NATO. Mandates have enabled them either to use military force or to threaten to do so[6]. These operations have at the same time served to reveal the weaknesses and deficiencies in the UN command structure, which has been criticized for being inefficient, slow and uncooperative. The requirements placed on the acquisition of intelligence for peacekeeping operations have now changed[7].

The results of an inquiry into the significance of intelligence for peacekeeping operations conducted in 1995[8] do not contain any great surprises. Repatriated peacekeepers laid emphasis on the key importance of intelligence as an element in both conflicts and their control. They regarded intelligence as poorly coordinated and highly secretive. The significance of intelligence services in support of decision-making can be expected to increase, however, as the principles of the information society come to be applied to conflict management.

The shift from the bipolar system to a multipolar environment has added to the uncertainties attached to the assessment of crisis situations and the prediction of subsequent developments[9]. The assertion by Kenneth Robertson that secret intelligence is essential to a democratic state if that state wishes to respond appropriately to external threats has met with criticism in virtually all democracies. It gives the impression that intelligence is amoral and criminal in nature and is in itself open to misuse as a political weapon. According to Robertson, the creation of a functional intelligence system calls for clearly defined political control and the designation of responsibilities. This will mean that the confidentiality of the information obtained will also conform to national expediency.[10] The significance of intelligence in peace support operations has thus

increased since the days of the Cold War as the situations have become more complex and more unpredictable. In a peace enforcement context, this may imply a combination of intelligence and fire power as an alternative to traditional peacekeeping operations, especially where the use of fire power in this way can enable the agreed political goals to be achieved without the involvement of ground troops[11].

Research into intelligence in a peace support context is not especially difficult, even though the official UN view is that no gathering of intelligence takes place[12], but all research into intelligence services is naturally something of a challenge. As military history will tell us, the nature of intelligence work and the manner in which rulers rule have meant that all operational matters, plans and intelligence have been implemented in the brains of the commanders, or at best in those of their closest aides.

Recently there has been all the more reason for attempting this work, on account of the increased participation by the Finnish defence forces in international co-operation. Partnership for Peace, the notion of a NATO Combined Joint Task Force (CJTF)[13] and the new types of peacekeeping operation such as IFOR and SFOR have raised the question of the use of efficient intelligence systems as part of the command process. As a consequence we are obliged to improve our conceptual and practical knowledge of the command and intelligence routines of other participant countries in order to be able to join in the command of international operations on an equal footing. Intelligence, like military peacekeeping itself, is grounded fundamentally in national doctrines, military training and interests. The examination of intelligence systems connected with peacekeeping is therefore tantamount to research into the national intelligence processes of individual states and the related organizations, products and methods. The principal possessor of operational information in the world order as we know it at present and in the foreseeable future is the United States. In the operational environment that prevailed after the end of the Cold War, armed forces were reduced considerably, but at the same time the operational environment in which national interests were to be safeguarded became more complex than ever. Thus the armed forces themselves became more complex and new tasks were

entrusted to them. They developed into networks of numerous specialized branches, so that more attention had to be paid to the planning, command and co-ordination of control over the functioning of these networks. Control over a network necessitates a command system, and the major problem that has now emerged is the burgeoning growth of this technical aspect and its development into an entity in its own right which is particularly difficult to master[14].

1.2 PROBLEMS TO BE STUDIED, AIMS AND SCOPE OF THE WORK

The aim here is to describe and analyse possible alterations in intelligence practices in connection with peace support operations carried out under a UN mandate in response to changes in the international operational environment and to assess whether intelligence practices observe the principle of neutrality advocated by the UN or that of military expediency. Attention will be paid to the special status of the UN, its problematic attitude towards intelligence, the changes that have taken place in peacekeeping environments and national determinants[15]. Particular emphasis will be placed on the Joint Task Force (JTF) level. A peace support operation may be carried out under a UN mandate or at the instigation of an individual state or regional security organization, and the concept covers such functions as traditional peacekeeping operations, crisis prevention, military assistance, the implementation of sanctions, such as embargoes, and peace enforcement operations. A more precise definition is provided in Chapter 2.

The first premise of this work is that the international political situation favours the continued use of the existing command structure, which forms the justification for setting out here from a NATO-centred viewpoint. The UN will retain its position as a key international actor, and operations will take place either under its command or with its mandate[16]. The headquarters for future operations are likely to be grafted onto a framework provided by the CJTF command structure or onto some other structure at the JTF level or possessing its capabilities, as has

happened in the case of some of the operations commenced since 1992. A second premise is that peace support operations will be initiated in situations in which the operating environment has been disrupted or there is a great danger of such a disruption. This means that the operating environment must be described via a definition of the types of operation involved, in which case the present research will be focused on intelligence practices in such a context[17]. At the same time an attempt will be made here to extend the study of intelligence services beyond the confines of the national perspective and compare it with the political programmes lying behind the operations concerned. The third premise is that those responsible for the decisions respond and act on the basis of subjective interpretation or assessment of the situation formed as a product of the command and intelligence process and are not simply omnipotent observers located externally to the situation. Thus the decisions that are made arise from views and images formed by the decision-makers on the basis of assessments of the situation, intelligence reports and other information concerning the general environment[18].

The main question to be answered in this work is whether the implicitly more or less non-existent intelligence practices of the UN should be developed into an explicit system that meets the demands of military operations, for the reason that UN peacekeeping operations have altered in nature along with their operating environments. It is possible to seek a solution to this problem by establishing **what is the significance of intelligence for peace support operations**.

This leads to two subordinate questions:

1. What is the nature of the interaction between intelligence and command?
2. How is intelligence organized in peace support operations?

In addition, we will be asking here how the national differences in doctrine between Great Britain, France and the United States are reflected in the intelligence practices connected with peace support operations and what policies in the implementation of intelligence work are detectable from the source material employed here.

The focus in terms of time is on peace support operations initiated under a UN mandate since 1992. On account of the depth of the inquiry, it has been essential to concentrate on operations for which sufficient material is available and which are typical of their times and represent this new phase of development. It can be claimed, of course, that there is no such thing as a typical crisis and that each one is unique in some sense. The historical approach adopted here, although narrow from the historiographical viewpoint, is an effective one as far as the analysis of intelligence practices is concerned[19], i.e. the work is limited to peace support operations sanctioned by the UN or regional organizations and under the command of these, NATO or the leading nations involved. No particular stand is taken with regard to Finnish peacekeeping operations or the intelligence work connected with these, and similarly the decision-making processes taking place at various levels of command within the UN and corresponding processes within national organizations are discussed only to the extent that is necessary for studying the intelligence services. The focus will be upon the evolution, structure and efficiency of the architecture of these services, but not on technical implementation or the technology available to them[20].

1.3 FRAME OF REFERENCE

In order to look into the problems mentioned above, a theory of command and intelligence is developed here, as set out in Chapter 2. This frame of reference is derived from the section of Joel J. Lawson's work "The State Variables of a Command and Control System" that deals with the interaction between intelligence and command functions[21]. The strength of Lawson's theory may be said to lie in its clarity and capacity for simplifying the complexities attached to the command process. The use of a theory developed by the American school for this purpose may be justified on the grounds that their research makes use of well-defined concepts and is of high quality and in keeping with the nature of the activity concerned, whereas British research has tended to adopt more of a historical viewpoint[22]. The scope of

the problems involved is reflected well in the fact that the authors of the papers have not even managed to reach an understanding over the definition of intelligence. Particular attention in the formation of the theory of command and intelligence has been paid to the ideas of Carl von Clausewitz on the connection between political decision-making and power projection and on the role of intelligence in the command process. Likewise, a full appreciation of the interaction between political and military considerations that belongs to peace support operations is essential for any examination or understanding of the process of commanding such operations. It was this connection that former UN Secretary-General Dag Hammarskjöld was alluding to when he said "Peacekeeping is not a soldier's job, but only soldiers can do it". Peace support operations are by nature political exercises and only secondarily military ones, and it is for this reason that the political decisions are made before the military ones in the UN organization, and before any military action is taken. The purpose of intelligence in the decision-making process, as in military command processes, is to do what it can to reduce "friction"[23] under conditions of impending hostilities.[24]

The factors affecting intelligence practices (Fig. 1) may be classified into three groups: (i) the direction of peace support operations and the intelligence requirements of each level in this, (ii) requirements imposed by operating environments and reflected in the phases of the operations and the types of operation, together with the intelligence practices adopted, and finally (iii) national determinants such as peacekeeping doctrines, intelligence practices and organizations and military training and traditions.

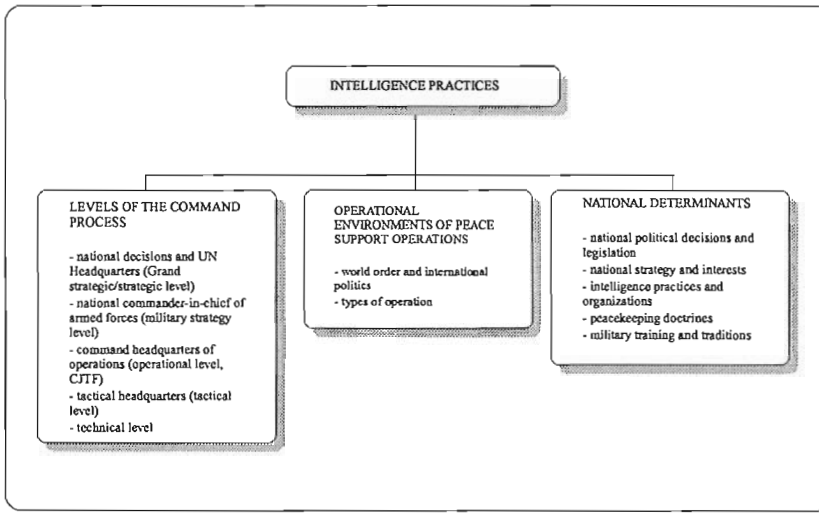

Figure 1. Factors supplementing the frame of reference and affecting intelligence practices

1.4 METHODS AND PROCEDURE

This research takes the form of a cross-disciplinary study of the relevant documents based on qualitative methods and analysis. It makes use of documentary evidence for the most part, but this is also filled out to some extent with experiences of peacekeeping operations and interviews with people who have been engaged in intelligence work. The procedural diagram (Fig. 2) indicates that a comparative analysis is made of three bodies of information.[25] At the same time as the comparison was taking place, evaluations were being made of the applicability of the theory, the procedure and the reliability and generalizability of the results and the quality of the sources used, for the purpose of identifying deficiencies in the theory or procedure and correcting these in After-action Reviews.

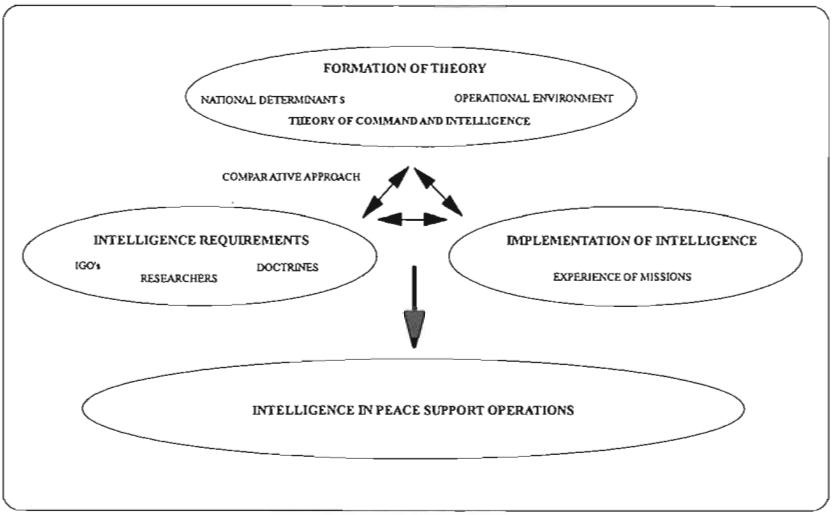

Figure 2. The procedural diagram.

The theories of Lawson and Orr which underlie this work are used to model the construction of a set of intelligence practices that support command functions. The theory employed for this is a combination of those of the two authors with ideas advocated by other researchers and leading nations regarding the organization of intelligence work. The resulting theory of intelligence practices covers (1) the linking of intelligence to command functions and (2) the principles, (3) processes, (4) organization, (5) products, (6) methods and (7) architecture of intelligence work. The factors affecting intelligence practices, such as the types and purposes of peace support operations and the impact of national doctrines on intelligence are defined by means of conceptual analysis. The aim of this theory is to provide a foundation for a comparative approach to the research.[26]

The requirements placed upon intelligence were analysed by comparing the ideas of international organizations such as the UN and NATO with the theory created here, the results of the analysis being presented in the form of a set of intelligence requirements for the decision-making process leading to the formation of a political policy[27]. At the same time an effort is made to put forward and take into account the effects of national

determinants on intelligence. Experiences of intelligence practices in actual operations were compared with the theory developed here, and the details introduced by the national determinants were compared with the requirements laid down. The outcome of the comparison is a set of principles for drawing inductive conclusions regarding developments in intelligence practices in the context of peace support operations[28].

1.5 SOURCE MATERIAL

The original sources for this work consisted of literature concerned with intelligence and command functions, codes of conduct, published programmes and research reports, chiefly dating from the 1990's. These were filled out by means of secondary sources and interpretations of the primary ones so as to extend the background to the investigation. The research reports, inquiries and articles in journals are mostly Anglo-American in origin. It is obvious that the confidential nature of intelligence work places certain restrictions on the acquisition of original source material, and it is for this reason that the material used here comprises mainly research publications.

The papers and books published on intelligence services tend to adopt one of two approaches: they are either (1) related to the political aspect or (2) related to the command process. The authors of works of the first type tend to be political scientists or strategists, while works of the latter type tend to be written by military personnel or people studying military leadership. The scientific sources are for the most part reports or books emanating from various countries' military academies. On the other hand, in order to generate new information by means of research, material has been included among the sources which does not represent the doctrines held at the present moment or the performance capabilities of current systems. The purpose of studying the history of military leadership is to gain an insight into the topic by explaining how technology and other changes in circumstances have affected command systems and leadership as such. A number of sources have been explored in detail. Adda Bozeman has investigated the impact of statesmanship and

cultures on intelligence arrangements, and van Creveld is a military historian whose work has focused largely on western military skills. Christopher Andrew and Kenneth Robertson are of the opinion that sources and original material for the study of intelligence services are best available for the Anglo-Saxon countries, but warn against placing too much trust in the results of American research, as the Americans are inclined to make sweeping generalizations. This difficulty is avoided here by considering the historical depth and geographical breadth affecting each context.

The Consortium for the Study of Intelligence (CSI) that met in the United States in 1987 defined the requirements to be placed on intelligence in the 1990's, which led to the publication of a series of articles on the subject in the book "Intelligence Requirements for the 1990's" edited by Roy Godson.[29] The obtaining of information on intelligence practices in Great Britain is hampered by the confidentiality of most of the relevant material, which Christopher Andrew believes is a consequence of the existing legislation and the tendency for government officials to over-classify documents as top secret. Thus, although customs are gradually changing, the organization of intelligence services in Britain is classified as a state secret and no official statistics on actual intelligence services are released for publication. It has been claimed that this makes it difficult for politicians to form any idea of what control they really have over the intelligence services.[30]

The fact that the sources used at the organization level are UN publications means that as far as this work is concerned, the official UN view of the gathering of intelligence data in the context of peacekeeping operations and its instructions for doing this are drawn up by UN officials themselves. The UN's published programmes do not make any mention of intelligence or the organization needed to gather it, nor of any instructions or mandates for any such operations, which is why especial weight is attached to the presentations and interviews of Franklin van Kappen and Colonel Muhammad Khattan[31].

The sources used at the national level comprise the peacekeeping doctrines, ordinances and instructions of various countries, and the interpretations and weightings attached to these have been derived from articles written by the commanders

of peacekeeping operations and interpretations published by national analysts. Information has been obtained both directly and indirectly on intelligence in connection with operations already implemented, the direct sources being articles, reports and papers on intelligence work and the indirect ones articles or the like in which reference is made to intelligence services or accounts are provided of activities or observations that presuppose their existence. These sources were used to extend the background to the present work, to confirm details or to obtain additional details.

2 THE OPERATIONAL ENVIRONMENT

"Global turbulence can be defined as a worldwide state of affairs in which the interconnections that sustain the primary parameters of world politics are marked by extensive complexity and variability"

James N. Rosenau,
Turbulence in World Politics[32]

2.1 THE WORLD ORDER AND INTERNATIONAL POLITICS

It is not a straightforward matter to account for the operational environment and the changes that are taking place in it. In Bozeman's view we are living in a divided world that is riddled with conflicts and anarchical by nature. This partly explains why international political theories have not been able to serve as instruments of global unity or to create norms according to which it would be possible to predict the actors on the international stage and the statecraft that they are likely to exercise in internal and external affairs even as far forward as the next day. International actors such as states and global organizations together form a system which we call here the "international system",[33] in which the state remains the principal unit, even though James Rosenau maintains in his new international system that state-centred actors are giving way to transnational ones. Rosenau confirms Kenneth Waltz' view that no actor has yet been able to challenge the crucial role of the nation-state in the international system.[34]

By statecraft, Bozeman refers to the sum of all doctrines, political programmes, institutions, processes and operations that are aimed at preserving the state as a human grouping moulded by elements of control, security and politics.[35] She includes intelligence within this notion of statecraft in a political sense, in that it is devoted to gathering information on other surrounding communities as required by the state. Thus intelligence starts out from the need to meet information requirements dictated by the

national interest. The national interest defines certain matters that affect the nation's sustained efforts to assure security, welfare and development as defined in terms of intellectual and ethical values, and is itself determined in each situation separately as a consequence of political decisions, being directed towards the promotion of national goals. There exists in turn a national strategy that sets out how the accepted goals are to be attained. As Barnett points out, the sudden changes brought about by the outcome of war place a substantial strain on the visionary capabilities of political decision-makers in their effort to ensure that the strategic goals, scenarios, doctrines and organizations that they conceive are in harmony with the latest technology available.[36]

Indeed, Bozeman stresses that all strategic thinking sets out from the assumption that the definitions of foreign policy and the national interest are based on possession by the state of a good knowledge of its own condition and a realistic view of the order prevailing in adjacent areas. In practical politics this does not always happen, but instead the national interest of a certain state may be manifested by an effort to declare and propagate an ideology of its own. The United States, for instance, "has confined itself to reiterating its unresearched trust in the universal validity of such basically Western values as law, democracy and peace."[37]

By an international crisis we mean here a situation in which a disturbance occurs in the international system or some part of it. In other words, a disturbance results if the foundations of the international system undergo a sudden change such as the dissolution of an internationally recognized sovereign federal state or the collapse of a constellation of major powers. Crises are almost without exception both isolated events and in some sense unique events,[38] and for this reason the operational environment is described in the context of this work in terms of both levels and types of operation.

The United Nations was founded to act as a global organization for ensuring collective security, and one of its principal active bodies was from the outset the Security Council, the jurisdiction of which was based on consensus - in that the major nations in the world had the power of veto over its resolutions. This meant that the states represented on it were able to act as was best for their own interests. International

security is still very much in the hands of the UN, even though there are nowadays many other active participants in the field, including NATO, the CCSE and the leading world powers, the United States, France and Great Britain. These actors exercise control over crisis situations through an extensive range of measures: diplomacy, economic and political sanctions, the threat of military action and in extreme cases military interventions such as peace enforcement operations.

The smaller the coalition that is involved, the faster, more efficient and more critical its decision-making capability is. Also, once certain states decide on intervention, it is probable that they will become parties to the conflict, on account of the fact that they are at the same time acting according to their own interests and agendas - for it is these that argue either for or against participation in the intervention - and are employing their own troops to bring the conflict to an end and to shape the outcome.[39] In the words of Clausewitz, "war is nothing more than a continuation of politics by other means". In practice, war implies organized parties deploying forces against each other. *Nowadays an alliance or state that implements an international intervention is liable to be regarded as a party to the conflict whether it likes it or not.* Defined in this way, peacekeeping is one of the "other means" and the peacekeepers can be regarded as a party to the conflict.[40]

In the light of the above, and in the Western view in any case, the distinction between war and peace is based on international law and is a very fundamental distinction. War is viewed as a violent conflict between two or more states, but modern-day conflicts or war arenas are more complex than they used to be, often involving several armed groups within a state, guerrilla warfare, urban warfare or civil war and being initiated or perpetuated by influences or ideologies coming from outside. In situations like this the legitimation of the use of force becomes problematical in the Western view. As Bozeman puts it, the trend is towards a degeneration of Western norms and institutions, a change which puts Western diplomacy and statecraft to a severe test in the effort to maintain control. The starting points adopted by the UN and in international law are "internationalized" versions of Western culture and institutions and fail to function as such for the analysis and control of non-Western low-level or high-level conflicts.[41]

2.2 PEACE SUPPORT OPERATIONS

In this study the term "peace support operations" is used to describe all military operations that employ multinational troops funded by the UN. These operations can be divided into three levels: peacekeeping, wider peacekeeping and peace enforcement.[42] They are primarily political in nature and not military endeavours. In the situation prevailing since the end of the Cold War it has been possible to give such peace support missions stronger and more clearly worded mandates. At the same time, however, the complexity of the tasks entrusted to the UN has outgrown traditional peacekeeping,[43] so that in addition to the conventional roles of monitoring and peacekeeping the troops can be expected to supervise ceasefires between paramilitary bodies, assist in maintaining law and order, ensure the delivery of humanitarian aid, contest the use of air space and ensure safe passage for goods or people. The peacekeepers by no means always have the support of the local authorities or inhabitants in this.[44] In an altered situation such as this the concepts and content of peacekeeping as we know it may be in danger of becoming obsolete.

The categorization of peacekeeping missions proposed in the Watson Institute's Second Generation Multinational Operations project has been employed in the British peacekeeping doctrine, for example,[45] and both Britain and the United States have attempted in their own peacekeeping ordinances to distinguish the types of mission from one another and to classify the military actions that apply to each. The titles used and their content nevertheless deviate from the corresponding concepts as used by the UN, and this causes difficulties for the commanders, troops and UN officials in the field. These are compounded further, of course, by the fact that the political decisions and actions necessitated by the situation are independent of the doctrines or ordinances of any one state. The outcome of all this has sometimes been the use of force against parties to the conflict in situations that are not a matter of self-defence[46].

Under the UN Charter of 1945, the differences between the types of operation arise from the article under which the mandate is issued, and the mandate itself should include a statement of the principle on which the task is to be executed, the areas into

which it is to be divided and the planned duration of the operation. One essential point as far as the UN and the participating states are concerned is whether the mandate is based on Article VI or Article VII of the charter, although even here the greatest difference lies in the preciseness of the definition rather than its content. The need for consent and the nature of this consent are reckoned to constitute the critical difference between peacekeeping and peace enforcement. One condition for achieving the correct policy with respect to peacekeeping is that this difference should also be interpreted doctrinally.[47] We shall invoke here the three-level categorization proposed by the Watson Institute, in which Level One operations consist of supervision and monitoring (Table 1). The success of such operations is dependent on the UN principle of consent and impartiality, so that considerable attention has to be paid to preserving the consent that has been achieved, even in tactical activities.[48]

TYPE OF OPERATION	DUTIES/NATURE	USE OF FORCE
Observation mission (civilian or military)	- supervision and/or monitoring and reporting of compliance with an agreement or situation - issuing of early warnings - production of up-to-date, impartial information for the UN on dangerous movements or developments	- no use of force, even in self-defence (unarmed)
Peacekeeping mission	- to assist under a UN mandate in preserving or restoring international peace without recourse to peace enforcement	- lightly armed - only in self-defence

Table 1. Level One operations.

Level Two operations then comprise crisis prevention, demobilization, military assistance, humanitarian aid and the permission or prevention of movement (Table 2). These operations usually arise as a result of internal conflicts within states rather than between states, but the main difference between Level One and Level Two lies in the level of military performance required in terms of both troops and weaponry. Level Two operations make up the dynamic area of peacekeeping, an area which is constantly increasing in complexity.[49]

TYPE OF OPERATION	DUTIES/NATURE	USE OF FORCE
Crisis prevention	- to create a buffer zone between the parties in the potential disputed area - does not necessarily require a ceasefire or peace treaty - requires consent, at least in principle, from the parties to the conflict	- armed primarily for self-defence purposes, but also to ensure completion of mission where necessary
Demobilization	- to restore and preserve it at an acceptable level and to ensure personal security in internal conflicts - success requires local support for a solution to the conflict - liaison between the parties - supervision of a ceasefire between the parties - disarmament and cantonment of armed forces - general disarmament - appropriation and custody of munitions - to supervise reorganization of local police and defence forces	- only for self-defence
Military assistance	- to assist the transfer from military activity to peacetime conditions - to help maintain general order and security - to help in establishing general order and security for the holding of elections - to support the provision of essential services (water, electricity etc.) - to assist in the planning and organizing of defence forces - to assist in the repatriation and resettlement of displaced persons - to supervise and assistance in the removal of unexploded ammunition and mines	- does not usually involve use of force
Humanitarian assistance	Duties belonging to the military component: - to set up a base - to guarantee the security of assistance posts in the affected area - to ensure the supply of tactical assistance	- armed primarily for self-defence purposes, but also to ensure completion of mission where necessary
Granting/denying of movement	- to guarantee or prevent the movement of ships, aircraft and vehicles in certain areas on along certain routes - action taken with respect to a given power or state - supervision of enforcement measures, closely associated with operations at level three	- may entail coordinated use of ships and aircraft - the operation may require the use of electronic warfare for offensive purposes

Table 2. Level Two operations.

Level Three operations involve laying down sanctions and restoring peace by the threat of force or even its use (Table 3). The troops deployed are heavily armed and prepared for military action. The principal difference relative to the previous levels is the greater likelihood of confrontations between the UN troops and the parties to the conflict.[50]

TYPE OF OPERATION	DUTIES/NATURE	USE OF FORCE
Enforcement	- denial of access to goods, diplomatic and commercial relations and freedom of movement for the party shown to be the aggressor, in accordance with the UN Charter - can reduce the performance capacity of the aggressor, although without directly forcing the cessation or illegalities or military activities - enforcement calls for a broad international consensus, especially among those occupying the same areas as the aggressor or adjacent areas	- may entail coordinated use of Navy vessels and military aircraft - the operation may require the use of electronic warfare for offensive purposes
High intensity operations	- as an extreme measure under the UN Charter, the Security Council can authorize a peace enforcement operation in order to remove a threat to world peace - one measure may be an extensive military operation against the aggressor state	- the most efficient force available may be deployed (land, naval and air forces), but an offensive is justified only to the extent necessary for discharging the mandate

Table 3. Level Three operations.

It is not always possible to distinguish clearly between the above tasks and types of operation, especially in the field, and UN troops may find themselves implementing tasks belonging to operation types at different levels under a single mandate. Likewise the escalation of operations in terms of the use of force or of the numbers of troops deployed does not necessarily take place in a systematic or stepwise fashion. As noted by Visuri, an indeterminately defined task inevitably places armed forces in a difficult situation, *as they have to act contrary to their traditional logic*. Activities that fall outside the sphere of actual hostilities, such as humanitarian interventions or peacekeeping, eat away at the troops' morale and teach them to act contrary to the spirit of their basic training, to fight for their country, which remains their principal *raison d'être*. Humanitarian interventions bring them face to face with all the conflicts of interest associated with intervention and the traditional giving of assistance. A clear distinction should be maintained at all times between military action and the giving of assistance, as these are opposed to each other both in the manner of their execution and in the ideology that lies behind them. As we are concerned here with intelligence in a peace support context, full-scale war as a conflict management method will be excluded from consideration.

2.3 NATIONAL DOCTRINES AND DIRECTIVES

A mandate issued by the UN Security Council confers legitimacy on international interventions in the internal conflicts of individual states, but in order to ensure adequate information on which the Security Council and the UN Secretary-General and his secretariat can base their decision, they must have a good knowledge of the operating environment that is developing and the conflict management instruments at their disposal. This knowledge can be demonstrated by means of an up-to-date doctrine.[51] The UN Charter of 1945 creates the basis for a doctrine that applies to the UN, but this has never be extended to form a doctrine of peacekeeping. The "Agenda for Peace" produced by Secretary-General Boutros-Ghali represents an attempt to remedy this lack, but it still does not provide the detailed clarifications desired by the military; it simply explains the terminology attached to UN mandates. In the context of national doctrines, the term "peacekeeping" no longer serves to describe the operations concerned or the tasks included in them in the altered operating environments of today, and if this term is retained and its content left unchanged this will inevitably give rise to political and juridical problems and place the troops in the field in extremely difficult situations, possibly life-threatening ones.[52]

An ideal doctrine is one that combines theory, practical experiences and the present day in a balanced, reasoned whole. A doctrine should attempt to explain, delimit and comprehend all the factors that make up a military action and the ethical, national and other factors that influence it. Although national doctrines reflect the military traditions and experiences that a state possesses, some movement towards integration of military doctrines has been detectable over the last decade, as a consequence of technological advances, international co-operation, economic integration and other coinciding interests.[53] In the best case, doctrines can be expected to develop in the spirit of information belonging to the "new age", experiences gained from previous operations and political goals and not merely be bound up in earlier doctrines. A military doctrine seeks not only to create a common basis on which troops can act in different situations, but also to create a certain mentality, while at the

same time modern military doctrines no longer content themselves with defining classic, full-scale warfare but also military actions appropriate to conflicts at a lower level than that of war.[54]

It is essential for operational success that the doctrine to which one adheres is compatible with achievement of the strategic goals set for the operations. In fact, success at the tactical level in particular, or how the objective is accomplished, is of greater importance in peacekeeping than in outright war, as circumstances and events on the tactical level can have repercussions at the strategic level. Many countries renewed their doctrines regarding peacekeeping and other operations at a lower level than actual war in the early 1990's to correspond to the new international situation, the changes being grounded both in theoretical research and in "lessons learned".[55] It is according to these directives that the military leadership lays down doctrinal demands for its regional headquarters and the commanders of its operations.

The doctrines existing in the British army are embedded in the nature of command and serve to define norms. The doctrine of Wider Peacekeeping has proved to be of high applicability and has thus met with broad acceptance and incorporates contributions from all branches of the Armed Services. Meanwhile the new naval doctrine states specifically that national interests may be pursued by taking part in peacekeeping operations. The British contribution in this field is developing in the direction of "robust peacekeeping", as Lieutenant-General Rose puts it.[56]

The French army is about to publish a new peacekeeping ordinance that is based in part on experiences gained in Yugoslavia, and this contains the term "active neutrality", which is comparable to the British "robust peacekeeping". The use of force implied in "active neutrality" must be in accordance with the mandates obtained and the goals set for the operation. The French have some reservations about the implementation of this "grey area", however, as it is extremely difficult to re-establish neutrality and consensus once force has been resorted to. The French model of conflict management has its roots in earlier interventions in its colonies and in the third world, and the French tradition is more humanitarian (*médecins sans frontiers, médecins sans monde*) and more combat-resistant than the American

equivalent.[57] National doctrines regarding intelligence set out the general framework and provide instructions on the principles for organizing intelligence services in combined operations. These directives also apply to multinational operations at a level below that of war, since no separate intelligence doctrine for peace support missions has yet been drawn up. The doctrines provide the framework within which intelligence services should be implemented and developed, and at the same time aim to guarantee that it meets the qualitative requirements set for it at all levels of command.[58]

3 THE THEORY OF COMMAND, CONTROL AND INTELLIGENCE

3.1 CONCEPTS

Command and control

"Essentially... the communications networks that radiate out from and back into central nodes of authority in a system, carrying information related to organizational maintenance, external and internal activity, plans and goals of central directors"

Roger Beaumont[59]

One of the main aspects of American research into changes in warfare has concerned the interaction between information and command and the importance of this for success in combat.[60] The effects of the changes will be felt above all at the operational level and may well lead to an integrated command system that extends from the tactical to the strategic level, enabling superior data management and the handling of combat situations in accordance with the principles of command and control warfare. Information as an instrument of warfare will create better chances of victory with smaller losses on one's own side and lower costs, and thus its management will emerge as the crucial factor for the centralized deployment of rapidly moving forces on a battlefield that is more complex than ever[61]. This development, referred to as information warfare, is not revolutionary in itself; what is revolutionary is the range of opportunities for the utilization of information afforded by technological progress. This technological progress must not become bogged down in a terminological wrangle over the definition of command structures: C2, C3, C3CM, C31 or C4I. These are primarily abbreviations for command system architectures, but a command system is an entity in itself that must take account of the complex, multidimensional nature of leadership and accept the consequences of the various dimensions. We refer here by command and control to all the measures by which a commander

sets out to accomplish his mission with the minimum loss of human life. These functions of command and control are backed up by communications and the use of computers and by intelligence.[62]

Our examination of systems of command and control will be divided into three levels in accordance with the proposals of Coakley and van Creveld, with each level comprising three aspects: organizations, processes and technical equipment. The foundation of every system consists of the national command and control practices and culture which have arisen through experience, common sense or a knowledge of military history and theory. The command and control culture forms a common knowledge base for the chain of command defining how one should act in different situations and creating joint principles of warfare for all the commanders.[63]

The highest level in the command structure according to the Anglo-Saxon tradition is the **Grand Strategic** level. In a peacekeeping context this is the level of the UN General Assembly and its executive arm, the members of the Security Council, who are committed to preserving peace not only by military action but by all means available. Since it is difficult both in theory and in practice to make any absolute distinction between the Grand Strategy and strategic levels of command, it will be done here only when specifically required by the context or some other circumstance. Otherwise we shall speak simply of strategic command.[64] Command and control at the national level seeks to promote and defend national objectives and has four functional elements at its disposal for doing this: diplomacy, economics, data management and military strength. It is this level of decision-making that is called **strategic command and control**. In the case of peace support missions this strategic level also incorporates collective organizations such as the UN, EU and NATO in addition to sovereign states. The resolutions of the UN Security Council constitute strategic decisions, because these lay down limits and duties for the member states with respect to their peacekeeping operations, while the states retain their own powers of operational command over their national contingents. This swells the number of people responsible for the decision and thereby complicates and slows down the decision-making processes governing peace support missions.[65]

The primary objective of strategic decisions is to prevent a crisis from developing into a violent encounter, and the military aspect of such decisions involves the use of military resources to these ends. The principal problems affecting the **operational level of command and control** in peace support operations are conflicts engendered by national interests and the lack of any consistent strategic directive. Operational command and control can vary from command over a particular theatre of war to command over an operation, depending on national practices.[66] The regional forces of the United States, for example, are responsible for assessing the situation in their area of operation and are expected to draw up a set of alternatives for military action without any continuous strategic guidance.

The NATO concept of a Combined Joint Task Force (CJTF), by comparison, is a military instrument of the future which is capable of commanding peace support operations. This is a multinational (combined) task force comprising different branches of the armed services (joint) which is formed for a particular purpose or operation,[67] and is commanded by a headquarters staff which can be assembled and deployed quickly. The CJTF principle also implies that non-NATO countries can participate in such operations, NATO troops can be deployed outside their actual area of operation and NATO resources can be made available to the WEU, for example. The principle is based on NATO permanent directives, modes of operation and standards, and the framework of each CJTF headquarters is built up around three or four existing NATO headquarters. The IFOR and SFOR operations have demonstrated the usefulness of this structure, even though they were not set up in strict accordance with CJTF principles.[68] **Tactical command and control** is concerned with the control of troops, warships and aircraft in combat, i.e. their use in a manner compatible with the demands of the operating environment and in accordance with the tasks designated by the operational command.[69]

Command and control can be examined from a theoretical viewpoint by modelling in the form of a multiphased reinterative cycle known as the **command and control process**. The purpose of the multiphased structure is to incorporate all the essential contributory factors in this process. These command process models can be criticized for the extreme simplification that they

entail - e.g. they do not take account of the effects of inessential or erroneous information - , their simplicity and their failure to take the multidimensional nature of combat situations into consideration. Numerous minor variations on descriptions of this kind are to be found in handbooks of business practice as well as in military manuals.[70] In spite of their defects, they nevertheless provide a fairly useful theoretical description of the command and control process.

Lawson's model C2 is based on a five-phase command and control process that is in interaction with its operating environment (Fig. 3). The model arrests the process, as it were, at a moment of time X, so that the subsequent phases can be explained. In the context of the present research a decision-making cycle is synonymous with a cycle of the command and control process. The operating environment feeds in unanalysed External Data, or information on the command and control process through the medium of various actors in the Sense phase, and the process reacts to this information and forms a description of the situation in the Process phase. The intelligence system can also feed information into the command and control process at this point. In the Compare phase the process compares the description of the situation with that of the Desired State produced by the command system in the form of either a prediction or an operational plan. This comparison then enables conclusions to be reached in the Decide phase as to the measures to be executed in order to achieve the Desired State. The Act phase is that in which the measures are applied in order to exert influence on the Environment. We assume here that all the command and control processes occur simultaneously and continuously at all levels of command.[71]

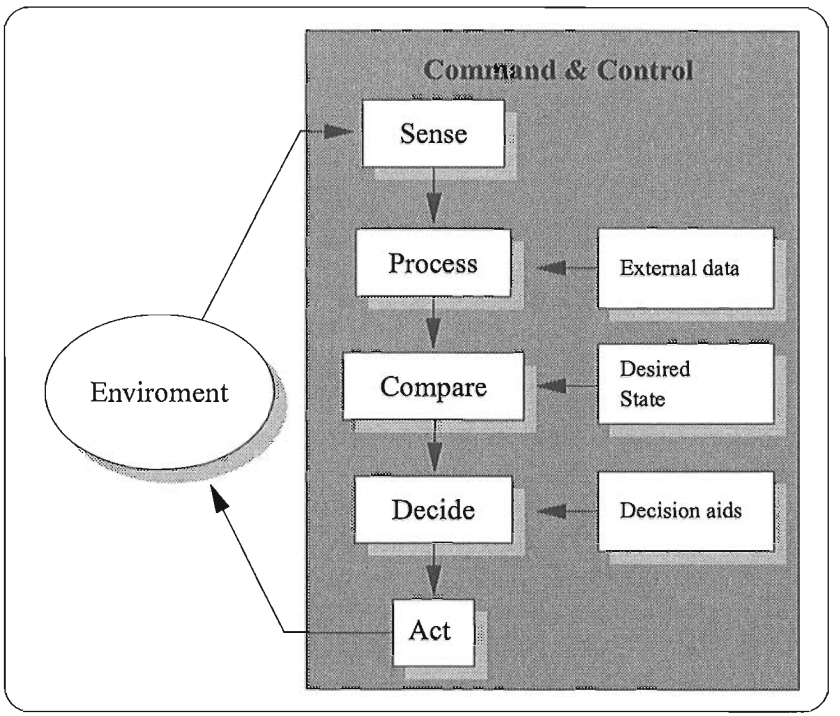

Figure 3. Lawson's C2 Process Model.[72]

In order to place the C31 command architecture within a scheme which entails various levels of command, we end up with the Combat Operations Process Model of Orr (Fig.4), which represents an adaptation of the models of Boyd and Lawson with Higher and Lower levels of command added. Since the passage of the information and intelligence generated by these levels of command is not specifically defined in the model, it may be used to describe C31 processes at any level of command and control, although the impact of the Intelligence Analysis part is different at the tactical level and below from that at the operational and strategic levels. At the latter levels the process begins to function in the manner of Lawson's C31 model, whereupon the functions of the Act phase consist of transfers of information rather than physical actions.[73] As the speed of the decision-making process depends on that of the processes at the

other levels of command, the commanders are obliged to concentrate on acquiring relevant information and transmitting this horizontally in order to accelerate the whole process.

The **task of intelligence** is to acquire the necessary information for proper control of the existing state of affairs so that the commander can make his decisions on a firm basis,[74] where the state of affairs refers to the multidimensional physical and intellectual picture that is required so that the commander can achieve domination over his adversary and safeguard his own troops. The physical aspect concerns the terrain, weather conditions and "fixed structures", while the intellectual aspect covers personnel, armies, the parties to the conflict, nation-states and the human factor. The current view is that a transition is taking place from monitoring of the state of affairs to control over it, i.e. from a reactive to a proactive approach. The state of affairs also includes the area covered by the peace support mission and its immediate surroundings. Control over the state of affairs can be supported by information contributed by the intelligence process that fills out the picture gained thus far and intelligence products that support decision-making.[75]

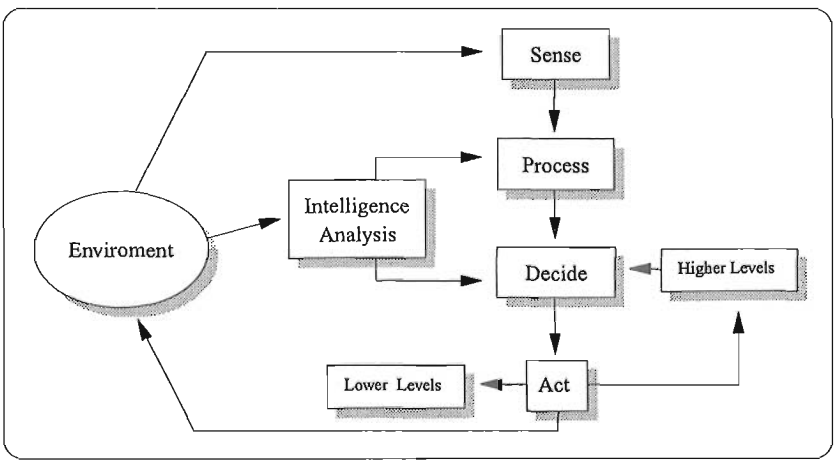

Figure 4. The Conceptual Combat Operations Process Model.[76]

American command and control practices lay emphasis on the need to develop systems, principles and processes intended

to produce essential information for the right people at the right time. The use of only the essential information as a basis for decisions nevertheless forces the commander to tolerate inexactitude, because possession of the essential information does not imply knowing everything. The commander can then do what he can to reduce the inexactitude by making use of further knowledge gleaned from his own experience. This is a natural step, as military tasks are usually strictly limited in scope, there is only a finite time available for making the decisions, and these decisions will inevitably be based on incomplete information. The command system can assist the commander by reducing the uncertainties surrounding the decisions, acquiring the necessary essential information and processing it as quickly as possible, so as to ensure that the commander's decision-making cycle operates more rapidly than that of his opposite number[77]. This is a matter of the situation awareness that the commander can achieve with respect to the current state of his own army and that of his adversary, the latter's intentions and environmental factors of relevance to the situation at that moment. The achievement of this awareness is crucially influenced by the amount of information needed to make the decision, the amount obtainable and the nature of the matter to be decided. The optimum moment for making a decision may be described my means of a "decision-making window"[78], in which the amount of information required for making the decision and the time available are scaled to the matter to be decided. This ensures that sufficient time is reserved for implementing the decision. Mathematical models are often used to assist decision-making at the highest level, as this calls for precise definition of the operational environment and calculated models with respect to the matter to be decided.

As the environment in which an operation is conducted is by nature stochastic[79], the decision-making window is apt to shift as the amount of information and the length of time available vary in a virtually unpredictable manner. The quest for *essential information* turns into a race between two factors: (1) the information needs as expressed by the commander, and (2) the ability of the command system to meet these needs in a constantly changing environment. Further complications are introduced in practical operations by the commander's personal opinions on

what is essential information and what amount of it is required and his dependence on his own national style of command and control. If there is no longer any command system, or if it functions only to a certain extent, the scope of the problems becomes considerably greater. Survival in such situations calls for personnel training in the use of incompletely functioning or even totally improvised systems. A command system will thus be constantly trying to achieve a balance between the information required and the time available for making the decision. The solution to this problem suggested by Hermann is that certain significant variables should be recognized in crisis control: (1) the level of awareness attainable through possession of the essential information, (2) the optimum time for making the decision achievable by management of the use of time, and (3) the threat posed by the crisis itself. By adjusting the balance between awareness, time and threat, a commander can take control of the situation and create the conditions necessary for correctly timed action of the correct kind.[80] The lower the level of decision-making, i.e. the more the decisions can be devolved to lower levels in the command structure, the more quickly action of the correct kind can be taken. This can also mean savings in terms of cumbersome and expensive data transmission and handling arrangements. The idea behind this is not especially new, as it comes close to the task-based *Auftragstaktik* of Moltke, in which the confusions of war and a certain level of uncertainty have to be accepted at all levels of command.

The last command and control problem is the need to minimize the time spent in making decisions and initiating their execution. This time becomes more protracted as the commands travel from one level in the structure to another. One requirement for the **technical part of the command and control system** is that it should be able to transmit information that is essential for planning and command purposes with as short a delay as possible. This means that particular emphasis in the architecture has to be placed on centralization or dispersion of decision-making functions, for instance, or on the standards of technology achieved in weapons systems and the principles governing their use. One important factor in creating the architecture is the commander's information needs.[81] In the case of a peace support mission it should be possible to link all the troops to one command system,

i.e. the system architecture should observe agreed standards. This will help to avoid sudden interoperability problems.

One of the most important properties of a functional command system for field use is an ability to reorganize and compensate for losses suffered by the organization, e.g. losses of command personnel, sensors or communications equipment[82]. In order to ensure its durability, the technical equipment should be constructed of the cheapest and simplest basic elements or components, which will mean that the overall system can be restored to functional order as quickly and easily as possible.[83] The complexity of integrated systems is well illustrated by developments in information technology in America, where three data transmission and communications systems are in use and five data management systems. This means that even the United States has not yet achieved a centralized command and control capability at the tactical level because of insufficient redundancy in the systems. Given time, technology, social progress and integrated C31 systems will inevitably shape our current rigid linear military organizations into flexible networks in which specially trained personnel will be directed by means of integrated command systems.[84] In the ideal case, the whole organization may have access to the information necessary for completing their mission in the form of centrally created and maintained databases. Information fed into the command system will be worked up into the most suitable form for its users, so as to ensure that the taking of decisions or description of situations at different levels of command will not be rendered difficult or impossible by the quantity of information.

We are talking now not about the communications system of a unified command, brigade or army, but of a centralized global command system. The advances that are being made in command systems thus apply to all levels and contribute significantly to the cohesion of organizations. The necessary technology and artificial intelligence has so far not been able to eliminate command errors arising from the flood of information available, i.e. technology has allowed massive growth in the volumes of information but the ability to handle this information has not developed at the same pace. The majority of the erroneous military decisions made during the last century arose because of human errors and not because of inadequate or faulty

technology[85]. It will be possible in the future to acquire specialized systems to help visualize battlefields, providing the user with information consistent with his user profile without the need for any separate processing. This will mean, of course, that the increase in technological performance will lend the information an illusion of timelessness, reliability and accuracy in the eyes of the decision-makers[86].

Reality and the comprehension of the situation produced by command and control systems will not be one and the same thing even in the future, and researchers are quick to warn of the sense of excessive self-confidence that can be inspired by highly developed command systems. It will be necessary to return to questions of the human factor - intuition, experience, professional skill, intelligence, character and vision - in order to reduce the effects of distorted information and mistaken interpretations.[87] In order to develop our organizations, tactics, doctrines and training appropriately, it will be necessary to be aware of the technical strengths and weaknesses of command systems. It is through technology that armed forces everywhere will attempt to compensate for the reductions in manpower and finance - to achieve more with less resources[88].

Intelligence

"The quest for certainty, in other words, will logically end only when there is nothing left to be certain about"

Martin van Creveld, Command in War[89]

Strategic intelligence can be defined as activity on the part of a state or community by which it aims at gathering, analysing, distributing and utilizing information and knowhow to further its own ends relative to other states, political groups, military powers, movements or individuals. A second purpose is to protect the community concerned from corresponding activities undertaken by others. The idea behind clandestine activities is that they are directed against the actions, behaviour and politics of other states or individuals.[90] The words Intelligence or Military Intelligence Information do not usually form part of the UN vocabulary, and intelligence activities as such are commonly

referred to simply as the acquisition of military information,[91] although both the words information and intelligence have been used in connection with the most recent operations. We shall use the term intelligence here to signify *military and political intelligence and the acquisition of information in connection with peace support missions.*

The 19th century military theoretician Carl von Clausewitz defines intelligence as the gathering of all essential information about an enemy and his state as a basis for one's own plans and operations. Its weakness, in Clausewitz' opinion, lay in the fact that the political leadership and intelligence organization could direct the gathering of information and interpret the products of the process according to their own purposes. In his critical assessment of information obtained for use as a basis for decision-making and the methods employed for acquiring it, Clausewitz was anxious to point out just how fragmentary and unreliable the information was on which decisions were actually based. Even so, a commander is expected in a crisis to reach decisions that are as correct as possible, and usually to do so quickly. This means that he needs information processed as accurately as possible by professional officers in order to reduce the effects of friction in warfare.[92]

Clausewitz' statements fundamentally still hold good. Intelligence supported by the future C4I systems will serve to dampen the effects of friction and enable decisions to be based on broader bodies of information, and presentation systems are now available by which leaks of information can be controlled and information laid before the commander at the right moment. The fundamental task of intelligence is to find out what the other side does not want you to know. It is thus a matter of noticing efforts to deceive, searching for things that are secret and acquiring a dominant advantage over the enemy. In order to achieve this, intelligence officers have to be able to understand the values and ways of thinking of the other side and appreciate his otherness.[93] The usefulness of intelligence information is also affected by the expectations and attitudes of the people taking part in the decision-making process, and these will be entirely independent of the results of the intelligence as such.

Intelligence activity can vary in extent from strategic to tactical, the main difference between these two lying in the extent

and scope of the information obtained. The activity should take place within the area of responsibility defined for the level of command or the intelligence body concerned, and this area of responsibility may either coincide with the area covered by the peace support mission or spill over into the surrounding areas or states as well if these are likely to influence the mission. Intelligence serves the needs of different levels of command by means of different organizations, products and methods.[94]

The strategic level of command is supported by **strategic intelligence**, and information acquired by national strategic intelligence will be intended to serve the purposes of constructing a national strategy, political programmes and military plans at both the national and international levels[95]. Of particular interest in this connection are the factors that affect the military performance of individual countries, their weaknesses and the alternative courses of action open to them in different circumstances. Decision-makers at the strategic level should lay down clear guidelines for intelligence, since these are often left fairly broad and vague. One reason for this is the reluctance of politicians to define national or UN interests and the fear of political humiliation. In the absence of adequate guidelines, however, the intelligence staff themselves have to formulate scenarios from which to obtain advance warnings or evaluate the course of events.[96] When assessing strategic intelligence it must be remembered that it is an agent - subject, object and instrument - of the national exercise of power. It is through intelligence that one can achieve and maintain the cognitive initiative over one's adversary that confers freedom of action. It is by acquiring information that political decision-makers receive feedback on the success or failure of their policies[97]. This means that the confidentiality of intelligence information is of crucial importance for the nation's security,[98] and goes part of the way towards explaining the equivocal attitude of the UN towards intelligence organizations and the information provided by them, especially since confidentiality tends to increase the inequality between states.

Strategic intelligence can be divided into four fields according to the objectives and activities concerned, these being in constant interaction with each other and with the policies that determine the guidelines for the intelligence work[99]: (1) collection of

information and (2) its analysis, which together provide the foundations for shaping national security policy, and (3) counter-intelligence and (4) covert action, which are employed in the implementation of this policy. The collection and analysis of information will be discussed later in connection with the intelligence process.

Counter-intelligence consists of recognition of the actions of other states' intelligence services, neutralization of the threats posed by these actions and manipulation of the intelligence services concerned in a manner which benefits one's own state. To this may be added the recognition and neutralization of threats posed by terrorists and other actors not affiliated to states.[100] Operations in this field make use of the same instruments for the acquisition of information as foreign and military intelligence. The operational security and protection of one's own forces is based largely on information gathered by counter-intelligence regarding objects, performance capabilities and actions of interest to the other side. As Merrill Kelly emphasizes, the timely observation and distribution of certain pieces of information by counter-intelligence can be of considerable significance to the tactical command, especially when a particular nationality is subject to a distinct external threat[101].

Covert action, as one aspect of the execution of a politically selected programme, is aimed at influencing the political, military, economic and/or social life of another state and thereby at promoting one's own national interests. Although it can serve at the same time as a means of acquiring intelligence information on that state,[102] it is primarily a user of intelligence information, and its location within the intelligence organization is more an administrative than an operational matter. In the view of Richard Shultz Jr., multinational and national covert action against terrorists and radical nations can enable a state to take preventive action in advance. With the increase in the numbers of low-level conflicts and the probability of these, intelligence services are preparing themselves for covert action as one means of conflict control.[103] *The logical conclusion is that in addition to other intelligence activity, American political decisions are both preceded and followed by covert action in the country concerned.*

The four fields of activity outlined above, the collection and analysis of information, counter-intelligence and covert action,

are in close interaction one with another, so that if a state alters its intelligence policy in some area to a significant degree this will affect all four fields.[104] The redirection of intelligence resources in response of UN requests, for example, will affect the intelligence services of the country concerned in their entirety. Also when a state redirects its intelligence services in accordance with the national interest, it is probable that this will affect elements of all four fields.

Operational intelligence is required as support for control and command functions at the operational level. As information acquired by national operational intelligence services is intended to support the planning and execution of campaigns aimed at achieving strategic goals at the theatre of war level, it is important that intelligence should create suitable conditions for the success of the operation in the field. Objects of interest include factors affecting the logistics of operations, regional conditions and the nature of the terrain. Operational-level intelligence systems have been developed for the purposes of warfare and not of peacekeeping.[105] Headquarters command functions at the tactical level are backed up by **tactical intelligence**, the information acquired by which is intended to support the planning and execution of tactical-level operations. In this case intelligence is primarily being placed at the service of the lower command in the area of operations, and interest is focused on the parties to the conflict as potential threats and on the direct effects of weather and the terrain.[106] **Targeting** applies to all levels of command, and is intended to produce information necessary for the appropriate concentration of the effects of the use of weaponry. The information concerned is often a part of that generated by general intelligence, or else serves to fill out the latter.[107]

Intelligence as it applies to peace support missions may be divided here into four temporal phases within an operation: planning and preparation, concentration in the area of operations, action, and post-conflict monitoring and supervision. Each phase has its own intelligence requirements. The instructions issued by the commander at the planning stage regarding the intelligence information that will be needed concern at least the nature of the area of operations and the conditions prevailing in it and estimates of the threat that exists and of possible developments in the situation[108].

Attitudes towards intelligence vary according to both political practices and the cultural background. Broadly speaking, intelligence for the Western countries is a matter of maintaining supervision over other states in the event of war. This intelligence activity originated from the need to gather comparative data on the culture of other states and of target states and on the factors influencing their policies, and has typically been performed by officials and to some extent in the universities. Intelligence focused on other nations is a generally accepted fact in the United States, for example, but a wide variety of opinions exist on the methods to be used for acquiring the information. The purpose of intelligence organizations in a democracy is to serve the national interest, and they should therefore be free of political ties[109]. One problem of principle is the compatibility between intelligence and democratic values, as the nature of intelligence is regarded as the antithesis of democracy,[110] but the results of intelligence can be used indirectly to promote democratic values. It is for this reason that we are faced with an *ambivalent attitude towards intelligence*, as manifested at the present time in demands for greater openness and responsibility. Demands of this kind always become more vociferous at times when there is little threat to national security.[111]

Bozeman, in her study of cultural backgrounds, defines three fundamental reasons for the strengths and weaknesses perceived in Western intelligence: classical Greek philosophy, Roman jurisprudence and Christianity. She sees the sources of political intelligence in the Greeks' thirst for knowledge, while Roman jurisprudence and the principle of public affairs proved restrictive in the sense that they left no room for the use of some instruments of political action such as concealment, deception and covert action. The final factor is the linking of the Christian concept of morality with politics - love and war.[112]

3.2 THE INTELLIGENCE PROCESS

Intelligence is an uninterrupted process that lends support to the command and control process, its end product being "acquired, compared, combined, analysed, evaluated and

interpreted information". The fundamentals of command and control warfare reflect the neo-Clausewitzian battle of wills, in which rational human beings engaged in making decisions and plans base these on a critical analysis of available information, including intelligence information[113]. The major difference between Clausewitz' concept of intelligence and the present-day concept lies in the contemporary belief in the ability of modern intelligence systems to produce more correct information than incorrect.[114]

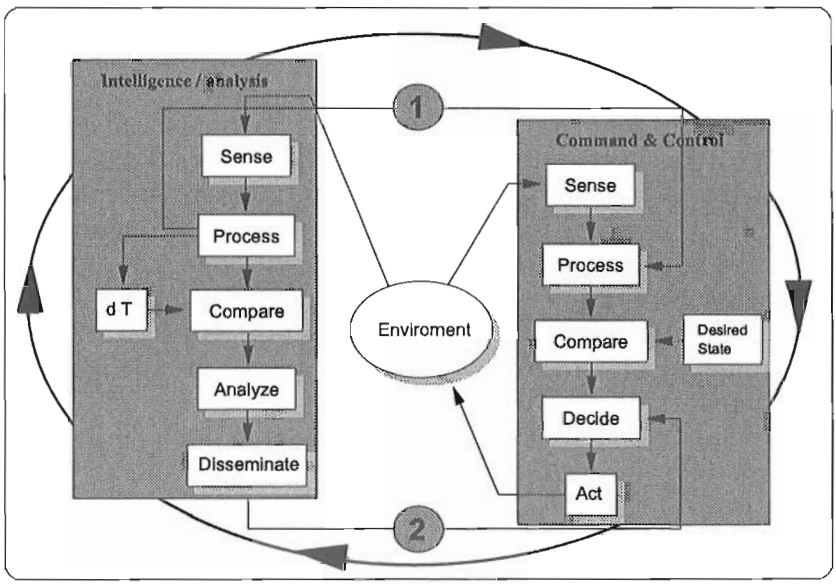

Figure 5. **Adaptation of Lawson's C31 Process Model employed as a frame of reference for the present work.**[115]

According to the theories of Lawson and Orr, **intelligence** *influences the command and control process in two stages* (Figure 5). Firstly, significant raw data acquired by the intelligence services can be included in the creation of a description of the situation at stage 1 - Process, after which the command and control process goes on to compare this description and the alternative courses of action with the predetermined target situation. It is this comparison that forms the basis for deciding on the measures to be taken to achieve the target situation. The second point at

which the results, analyses and evaluations achieved in the intelligence process come to bear on the command and control process is at stage 2 - Decide, when the effects of the action are evaluated on the basis of the altered description of the situation and the products of intelligence operations.[116]

The theories of Lawson and Orr can be interpreted as implying that the intelligence process produces parts of the situation description required for command and control purposes and of the information needed to reach decisions at all stages of the command process, i.e. command and intelligence are regarded as parallel processes throughout, beginning with the planning and preparation of the mission and continuing until its termination. A five-phase model for the intelligence process can be derived from Lawson's theory (Fig. 5), in which the *first ph*ase is regarded as being implemented by **Means** such as sensors and investigators, having the purpose of acquiring significant facts or observations which will be needed in the command and intelligence processes. It is essential in this phase to make a distinction between raw facts, or information, and intelligence[117]. The use made of the Means depends on steering from the Environment in which the command process is taking place (Intelligence/Analysis in Fig. 5).

In the *second phase* of the intelligence process individual observations are combined, confirmed and in some cases interpreted, after which the significant information is fed into the command process to fill out the situation description (1-Process). In the *third phase* of the intelligence process the significant facts are combined into a broader entity and compared with the existing situation and data received from other sensors. The *fourth phase* is that in which the results of the analysis emerge, representing the intelligence products. These provide the command system with feedback on the success of the action taken and a prediction of the future development of the situation with various alternative scenarios. The intelligence products may comprise information on the scope for action on the part of a particular party to the conflict, an analysis of airborne action in the target area or a prediction of future political developments. In the *fifth phase* the intelligence products are disseminated to those who need the information. We shall refer to the information distributed at this point simply as the **products**. The recipients may be other parts

and levels of the intelligence organization, for instance, or national intelligence organizations. In the course of this dissemination the information is also fed to the command and control process to serve as a basis for decision-making (2-Decide). The process comes to an end only when the mission is completed[118].

One of the crucial phases as far as the success of the intelligence process is concerned is the analysis of the facts acquired[119]. This can be distinguished as a separate phase of its own in the case of strategic intelligence, but irrespective of the level, it must inevitably consist for the most part of human reasoning and be grounded in experience, which naturally means that the possibility of human error - misunderstanding of the data, misplaced trust in unreliable data or the classification of certain items as anomalies - increases as the amount of data grows and the time limits become more stringent.

Rosenau is of the opinion that *the principal problem lies in distinguishing "normal" changes from undesirable ones.* It is indeed true of research into world politics as a whole that the detection, recognition and analysis of anomalies can be decisive for the perception of real changes.[120] It is characteristic of intelligence **organizations** that they attempt to acquire a large bulk of information out of fear that an essential fact will otherwise be missed. The result is nevertheless that the flow of information becomes uncontrollable in the search for eventual certainty as a basis for decisions and that the essential information will be obscured by "noise". It is therefore important that everything that is inessential should be filtered out at the analysis stage of the intelligence process. The danger as far as the reliability of the information is concerned is that the process will begin to jump over the Act phase and turn into a four-phase one, frequently as a consequence of failure to take the necessary decisions or of inadequate familiarity with the intelligence process and the performance capabilities of the system.[121] An understanding of intelligence as a five-phase process can help one to appreciate the strengths and weaknesses of intelligence organizations. The analyst must remember all the time that the task of intelligence is to produce information as a basis for the taking of decisions and that it is the politicians' task to ensure that the correct decisions are taken.

It is possible to improve the external steering of the

intelligence process by means of scientifically valid analytical models. As Robert Mandel maintains, more precise definitions of national interests and goals on the part of political decision-makers can be achieved by improving the flow of information between them and the intelligence community, by agreeing on common approaches and by training. There are four factors that are apt to disturb the intelligence process, and thereby also the decision-making process, and which, if they coincide, can add considerably to the difficulties. The *first factor* concerns the professional and personal inadequacies of individual officials, as manifested in the selection of personnel within an organization, overestimation of the accuracy and reliability of data, or overreaction because of flaws in personality. The *second factor* is the complexity of the intelligence process employed, which may be reflected in difficulties in defining criteria for evaluating the information produced, in selecting appropriate means of acquiring information or in assigning priorities to intelligence missions. *Thirdly* we have the internal barriers created by the organization's bureaucracy, and *fourthly* deficiencies in political and strategic direction, which is an external factor. The barriers raised by the organization itself often take the form of compartmentalization, internal competition and a high turnover in personnel and technology. The original purpose of compartmentalization may have been to preserve privacy - to operate on a "need to know" principle - but taken too far it can detract from the efficiency of intelligence work. Internal competition, a rapid turnover in personnel and continuous changes in the organization are all highly detrimental to the continuity of intelligence work. These internal barriers have always proved most serious at times when intelligence has been deployed in covert operations, as these create the greatest need for internal collaboration.[122]

Reductions in the **time available for reaching decisions** present a major challenge for intelligence processes, especially when attempting to explain and evaluate changes that have been observed and their impact on existing power structures and actors[123]. The path from observations via decisions to action cannot be allowed to take a matter of days or even hours, given the nature of modern command and weapons systems. The intelligence process must be able to make its own contribution to the situation description within the time limits set by the decision-

making cycle and support such decisions with its own products. This means that it must be aware of the information needs of the decision-makers and able to concentrate its attention on satisfying these needs within the shortest possible time. The narrowing of the decision-making window places more emphasis on intelligence and the time allocated to preparing operations.

3.3 INTELLIGENCE ORGANIZATIONS

Although co-ordination of the intelligence activities of the major powers is complicated by their networking relations, internal competition and differences in interests,[124] **intelligence organizations at the national level** have an obligation to back up peace support operations by responding to calls for information on the part of their national contingents and placing ready-made intelligence products at their disposal. Depending on national principles in this matter, the support provided can extend to the strategic, operational and tactical levels. That obtained from national strategic intelligence may consist not only of information but also of the provision of a group of liaison officers such as the National Intelligence Support Team (NIST) deployed by the United States. Similarly regional headquarters at the national level can supply intelligence products, command system services or a liaison group such as the Joint Intelligence Support Element (JISE), in addition to which an operation may be supported by means of information acquired by particular branches of the armed forces.[125]

Various barriers to the passage of information can arise in organizations such as the UN, including compartmentalization, originally conceived of as an instrument for data protection, internal divisions and attempts to pursue individual interests. When considering the placement of personnel it is important to remember that the UN is a political organization which attracts people with strong ideological motivation, so that the staff are not necessarily able to distinguish between intelligence information and the other information that they receive, or may even be unfavourably disposed towards intelligence in principle. This can reflect upon on the whole organization and can become

a problem on occasions.[126] The effects of this problem can be alleviated by means of high standards of professionalism, good personal relations and the creation of both official and unofficial internal channels of communication.

The **commander of an operation** should organize his troops and headquarters in such a way that the delay times in the flow of information are suitably short, and the intelligence system and practices should be such that they can be altered in response to changes occurring at different phases in the operation and the requirements set by particular situations. In the best cases the intelligence practices employed in an operation - ways of working and technical systems - will have been in use in peacetime and before the operation began, as in the CJTF scheme, but at all events, intelligence must be one aspect of the planning of the whole operation that takes place under the commander from the time of his appointment.[127]

The quality and usability of intelligence products will be critically dependent on the analysts processing the information, and the training of these people is a long and very exacting process which requires practice in real situations. The need for larger numbers of these people over recent decades has forced the authorities to cut down on their training, however, with the consequence that the intelligence products have not come up to the standards expected in terms of quality, interpretation, linguistic form or content. Analysts trained in the scientific community are apt to concentrate on details in their attempts to solve problems, as their training has not placed enough emphasis on broad entities or perception of how the topic to be studied is related to such an entity.[128] In addition, intelligence officers must be capable of resisting political pressures to produce information that lends support to a particular policy. It is their responsibility, in fact, to resist politicization, which can very well take the form of the use of information for personal ends or to cover up mistakes. Anyone engaged in intelligence work, and most particularly an analyst, must be capable of understanding the way of thinking, set of values and models of behaviour of the target person or organization, and this understanding cannot be gained in any other way than by engagement in actual intelligence work. It is only in this way that he can reliably evaluate the threats that exist in a given situation, outline realistic plans for counteraction

or predict future developments, and this can only be achieved by multidisciplinary study.

Erroneous conclusions arise when the analyst allows his own cultural background to influence the result rather than the culture, ideology, society and logic of the country concerned - giving rise to the *Mirror Image phenomenon*. This phenomenon exists equally well at the strategic, operational and tactical levels and is attributable primarily to a lack of local expertise.[129] A similar kind of error is the failure to understand "the otherness of the enemy", although this is connected more with military than political action. One's opponent employs doctrines, tactics and weapon systems of his own and is trained for a particular kind of warfare. Cohen takes the example of the Vietnam War, at the beginning of which United States intelligence reckoned that the Chinese People's Army would conduct its operations in the same manner as the army of North Korea except that it would be less well armed. This was an error of judgement, however, for they were well organized, well equipped and well trained for guerrilla warfare. The consequence of this mistake was that the Chinese were successful at first, because the UN troops had no idea of the weaknesses in their tactics. *It can take years to learn to understand the otherness of an enemy and develop counteractions suitable for one's own tactics and operational skills.*[130] The third challenge for intelligence officers is the ability to adapt to dynamic changes in situation after a long period of *status quo*. This has proved to be extremely difficult.

3.4 INTELLIGENCE PRODUCTS

An intelligence product arises as an output from the analysis phase. Godson provides the following categorization of the analytical work involved:

- The product may comprise a full description or explanation of a significant international political, military, technological or sociological trend.
- Use may be made of sociological theory for the understanding of the raw data, and the product may be of assistance to political decision-makers in achieving their

goals or a means of proposing alternative methods of attaining these goals.

- One purpose of the product may be to obtain an early warning, e.g. of an offensive, to provide long-term predictions of further developments, to describe or estimate regional trends or to present evaluations based on experience.
- The product may arise from disparate items of information of a topical character concerning some special field of military, political or economic significance to political decision-makers.[131]

It is natural in the light of the above that the academic world and the intelligence community, in accordance with UN principles, should collaborate more intensively and open-mindedly than ever and concentrate their efforts on studying the cultures and societies of the target states. The aim is to achieve broad-based, reliable descriptions of these target states which comprehend all aspects of life, partly in order to prevent purely military information from acquiring a monopoly status in the supporting of decision-making.[132] One of the problems inherent in the acquisition of information is that no criteria exist for classifying or supervising intelligence products in terms of quality, while qualitatively more information is available than it would ever be justifiable to collect. This is partly due to the fact that decision-makers are unable to state sufficiently clear priorities for the information to be acquired – no one is prepared to say that a certain matter is not worth looking into at all. Qualitative criteria have been proposed, however, e.g. the requirements that the information should be up to date, essential, of a sufficient quantity, of acceptable accuracy and obtained by certain methods.[133] Similarly, intelligence manuals lay down qualitative criteria by applying certain attributes to good intelligence.[134]

At the operational and tactical levels, intelligence products are expected in part to supplement the situation description, to help in identifying and defining goals, to support the planning and implementation of missions by providing information, to reveal attempts at deception and surprise, to support its own side's attempts at bluff and to evaluate the results of missions

and the redirection of activities. Commanders' decisions should receive support from regular situation reviews in which the headquarters staff and lower echelons of the command structure report not only on the current situation but also on intelligence information and evaluations that have been received. The lower echelons of the command hierarchy are expected to produce both daily situation reports and predictions of future developments, statistics on the movements of both the enemy forces and their own and summaries of events and confrontations. An intelligence product thus arises as a consequence of the intelligence process, but it should be noted that it does not arise during a single cycle in the process but through an endless sequence of loops. This ensures that information and predictions generated during previous cycles can be constantly reassessed. Intelligence products arise in a routine manner - daily, weekly, monthly and yearly - as well as on an *ad hoc* basis.[135]

Strategic intelligence supports decision-making by means of information on the military and economic strength of states, their internal political situations and possible internal unrest - all information that it is relatively easy to acquire. In addition, it produces information of the aims and plans of state governments and other countries' intentions - information that it is relatively difficult to acquire, and on the consequences of its own side's decisions and of the actions of other states - information that it is still more difficult to acquire. Among the end products of the intelligence work, the assessment of the situation consists of an examination of various matters in relation to each other, e.g. the intentions of states are compared with their undertakings, technical comparisons are made of weapons systems, and so forth. The complexity of the comparison process and the need to monitor the objects of investigation over long periods make it exceedingly difficult to achieve reliable intelligence products.[136] Such products can also differ in the temporal significance and duration of the information they contain. Particularly problematic situations for the generation of intelligence products arise when a new crisis breaks out in an area, for instance, for which no special knowhow exists nor are there any intelligence instruments ready for use there, or else the speed with which the crisis has broken out prevents the seeking of confirmation for the

information or its careful analysis. Problems also arise when the political approach that has been chosen has consistently led to disappointments - as this approach will have been partly based on intelligence products in the first place.

On looking into the products of counter-intelligence one observes a certain connection between this and strategic intelligence, and further comparison of their products with the needs for information that exist at the commencement of a peacekeeping operation reveals another link. The products of counter-intelligence include:

- National counter-intelligence evaluations regarding persons, embassies and military bases at home and abroad and the threats facing allied countries.
- Situation reports on the activities of foreign intelligence services, possibly including models for modes of action and profiles of individual people.
- Proposals for the neutralization and manipulation of other states' intelligence services. These may include arrests, deportations and trials. The aim of manipulation is usually to lead foreign agents on a false trail.
- Information, including details of the adversary's intentions, priorities or weaknesses.[137]

Attention must be paid in the dissemination of intelligence products and information to the needs of the users and the degrees to which the products have to be encrypted. If necessary, the information has to be sanitized before distribution if the users' security ratings are inadequate. The security classification will be based on that applied nationally in the country concerned, while multinational operations may form a classification system of their own or observe the NATO classification, for instance.[138]

Indications and early warning are often mentioned as one of the tasks of intelligence. In practice this means that the instance responsible for the implementation of the intelligence operation has to define the indicators and priorities for observing an early warning, so that when the indicators appear work can begin immediately on preparing the decision-makers for the eventuality of the signs of a crisis emerging. Once these signs come about the problem is how to convince the political decision-makers that

they have, or are about to have, a crisis on their hands. *Decision-makers tend to notice events that conform to their predictions and ignore those that fail to conform*[139]. Thus intelligence not only has to generate information but it also has to make sure that the political decision-makers understand the implications of that information. In the opinion of Robert Gates, this often leads intelligence services to produce for decision-makers items of information which they will not wish to know.[140] The inabilities of decision-makers to make use of intelligence products are revealed well by a quotation from the report of the UN's first peace enforcement mission, in Korea: "It was not the absence of intelligence which led us into trouble, but our unwillingness to draw unpleasant conclusions from it"[141].

3.5 SOURCES OF INTELLIGENCE

Sources of intelligence can be classified into three main groups: open sources, technical sources and human sources. The open sources are public ones to which anyone can gain access, e.g. the media, news agencies, published works, conferences and interviews with people who have been abroad. The technical sources are based on conventional photography or infrared imagery or the interpretation of electromagnetic radiation emitted by the object of interest, while information can be obtained from human sources either overtly or covertly. With the vast increase in the numbers of sources and the amounts of information yielded by them in the course of the last decade, data acquisition organizations have also grown immensely,[142] and at the same time technological advances have meant that strategic intelligence in particular has moved away from the use of human sources to technical methods. These are naturally best suited to the evaluation of technical performance potential, the creation of basic databases and the supervision of the observation of arms limitation treaties. Their advantage lies in their ability to generate a large bulk of information, although this then places an additional burden on the analysis phase, while their weakness lies in the fact that they do not tell us anything about the political aspirations of the states in question

or their operational plans or clandestine research and development work.[143]

Modern intelligence may be divided into seven main categories in terms of the agency responsible for it and the resulting product:

CATEGORY	CONTENT
Human Intelligence (HUMINT)	• HUMINT covers all information gained through human contacts. At the tactical level this implies a wide scale of activities ranging from the interrogation of prisoners of war, the acquisition of documents, patrolling, observations and collaboration with other military and paramilitary forces in the area to contact handling. HUMINT yields the greatest volume of information, but also calls for critical evaluation of the sources. Its targets include sources of information on plans, intentions, decisions, research and development work, doctrines, personalities, training and morale. HUMINT can also involve covert operations, including the use of agents and illegal collecting methods. Special forces, specially trained field HUMINT teams and patrolling troops can be used to collect information.
Signals Intelligence (SIGINT)	• SIGINT is based on the interception, location, analysis and monitoring of radio communications (COMINT) and the interception and analysis or electronic measurement of other radio transmissions such as radar signals (ELINT), in order to obtain information on the transmitter and its users. By combining information obtained in these ways and others it is possible to identify targets with the accuracy needed for precision weapons and predict the enemy's intentions. • Specific varieties of ELINT include Foreign Instrumentation Signals Intelligence (FISINT), Telemetry Intelligence (TELINT), which is based on the observation, collection and analysis of telemetric transmissions, and Radar Intelligence (RADINT), which is based on the analysis of data obtained by means of terrain reconnaissance radar, artillery identification radar, air control radar or fire control radar methods.
Imagery Intelligence (IMINT)	• IMINT is based on the visual examination of photographs and the use of lasers, radar, infra-red imagery, image sensors or synthetic aperture radar (SAR), from which information can be deduced by comparing and combining the results. In this way it is possible to locate and recognize buildings or equipment belonging to the parties to the conflict, concentrations of troops or other activities. The results obtained are highly accurate, easy to store and available for further processing. Some of the systems used enable real-time situation descriptions to be produced, e.g. oblique aerial photography and the latest laser radar devices. • Specific varieties of IMINT include Photo Intelligence (PHOINT), in which information is extracted by interpreting, classifying and evaluating information contained in photographs made available for intelligence purposes.

Measurement and Signature Intelligence (MASINT)	• MASINT is a scientific and technological form of intelligence in which qualitative and quantitative analyses are made of data obtained by technical means on the basis of measurements of various details and features observed, with regard to certain systems, by which they can be recognized.
	Specific varieties of MASINT include:
	• Acoustic Intelligence (ACINT), which relies on the collection and processing of acoustic phenomena.
	• Optical Intelligence (OPINT)
	• Electro-optical Intelligence (ELECTRO-OPINT), which is based on optical monitoring of the electromagnetic spectrum from the ultraviolet region (0.01 µm) as far as the infra-red region (1.000 µm)
	  • Infra-red Intelligence (IRINT)
	  • Laser Intelligence (LASINT), involving laser-assisted technical and georeferenced identification of locations
	• Nuclear Intelligence (NUCINT), which relies on the collection and analysis of radiation from radioactive sources

CATEGORY	CONTENT
	• Unintentional Radiation Intelligence (RIN), involving the observation, collection and analysis of unintentionally generated electromagnetic energy that has no clear directionality as does a nuclear explosion, for instance.
Open Source Intelligence (OSINT)	• Open Source Intelligence is concerned with all data available to the general public which can potentially be of value for intelligence purposes.
Counter-intelligence (CI)	• The aim of counterintelligence is to gather information and to take action to protect one's own organization. Its targets are acts of espionage, sabotage or assassination which other states, intelligence organizations, persons, terrorists or other foreign citizens may plan to carry out.
Technical Intelligence (TI)	• Technical Intelligence is used to monitor technological advances made by the parties to a conflict at either the strategic or tactical level and the performance capabilities and operative usefulness of technological innovations that could have military applications at the time or in the future. It is virtually synonymous with Scientific and Technical Intelligence.

Table 4. Categories of intelligence employed in this work.[144]

The importance of **HUMINT** is emphasized in the case of low-level conflicts, as the small bodies of lightly armed and correctly trained troops typically involved in these are able to evade technical intelligence devices. By mixing with the local population or moving about in terrain where it is difficult to use technical surveillance devices, small groups of guerrilla fighters can avoid both observation and exposure to armed intervention.[145] The targets may not necessarily differ very greatly between war and peace support operations, but there may be significant differences in the capacity to observe and locate them, and consequently it is necessary when developing the capabilities of armed forces to take both types of conflict into account. Determination of the disposition of a target state's forces is based on intelligence at both the strategic and operational levels, and most of the work has to be done by electronic means, which makes it both expensive and slow. The amount of time required is due to the fact that a target state's electromagnetic activity under peacetime conditions will be relative low, so that successful concealment and decoy tactics can mean that recovery of the "missing pieces" can take years. At the same time the sudden occurrence of unrecognizable or otherwise deviant signals can easily lead to over-reaction.

The strength of **SIGINT** lies precisely in the high speed of data acquisition and localization. One of the principal tasks of an electronic intelligence system in peacetime is to gather early

warning observations, and the use of technical devices for intelligence purposes can be expected to increase as manpower is reduced and engagements take place over broader areas. On the other hand, this development may be forestalled by the fact that the funding required by technical systems will increase faster than the results achieved by them would warrant.[146] Targeting places still greater demands on intelligence in terms of both accuracy and speed. In spite of all the talk, current strategic, operational and tactical-level sensor systems do not yield sufficiently accurate data to enable the targeting of an armed response, which must be based on the transfer of highly accurate location and identification data to the weapon system. One solution to the targeting problem has been sought through the use of unmanned airborne vehicles (UAV).

3.6 INTELLIGENCE ARCHITECTURE (THE C4I STRUCTURE)

The term C4I architecture will be used here as an aid to explaining the contributions of the various subsystems making up the technical part of the command and control system to the intelligence architecture as a whole, where architecture denotes a frame of reference or structure describing all the interactions affecting a given set of troops, system or activity[147]. In Frank Snider's view, the architecture of a system usually consists of (1) clearly identified subsystems, (2) those functions of the subsystems that they will be expected to perform, and (3) interface standards for the subsystems.[148] Although he proposes a four-level scale for assessing the quality of a system's architecture, three of these levels will suffice for the present consideration of intelligence:

- *Warfare effectiveness*, which can be assessed according to how well the troops have discharged their mission. Various analyses are possible for this purpose under normal conditions. War effectiveness is synonymous with the ability of the C4I system to meet the information needs of the commander at the operational and tactical levels from an intelligence perspective.

- *Functional effectiveness* (C2) denotes the value added by the command and control function to the warfare effectiveness of the overall system. Functional effectiveness is synonymous with the ability of the C4I system to combine with and maintain the elements that affect warfare effectiveness, such as groups of liaison officers.
- *System performance* (C4) can be evaluated when separate elements have been defined within the functional effectiveness of the command and control system. After this the systems engineer is able to design the subsystems by combining the C4I systems serving the previous levels. System performance is evaluated from a functionality perspective.

The definition of the C4I architecture originally set out from the need to create a command and control system that embraced all branches of the armed services and which forms a common information technology architecture that will solve the problems of interoperability, and the definition of the technical aspect of this was based on the demands of the command and control system and the information required.[149] The aim from the command viewpoint was to create an overall system that would enable situation descriptions to be produced and transmitted with virtually no delay, as in the "C4I for the Warrior" scheme in the United States. As Paylor points out, the problem with the system is that the leaders at the strategic level are inclined to concentrate on micromanagement and what they should do if the information technology breaks down.[150] When discussing the C4I system or architecture in general, people frequently fail to understand that there is no system yet in existence that is ready to use. It is much more a question of combining subsystems for each situation and mission separately.[151] Where intercontinental communications between major powers have traditionally been reliant on satellite and radio connections, the C4I architecture of the future will be able to make use of other transmission possibilities. One new alternative that has emerged with recent advances in technology is optic fibre technology, which could be used to link the operational level, i.e. regional commands and operations, to the C4I system. Asynchronous Transfer Mode (ATM) could be used for transmission purposes,

which would allow for greater capacities and speeds. The tactical level could then be linked to this worldwide system based on the transmission of speech, pager information, telefax and electronic data by means of satellite connections. The development of systems of the kind proposed in the United States has set out from the need to participate with the immediately available data transmission capacity either in a global regional conflict or in an OOTW operation. The immediately available system implies here not only the capacity in one's own possession but also whatever commercial capacity that is immediately purchasable.

One real field of problems concerns the compatibility of subsidiary systems and subsystems, where improvements have been sought by employing the International Standardization Organization (ISO) system as a frame of reference. The actual architecture has followed the Open Systems Interconnection (OSI) model, which standardizes the interfaces between levels and the users' protocols that span these levels. The intelligence architecture integrates and combines subordinate systems such as data acquisition systems and producers and users of data. At its most extensive, this network of nodes and links would unite the commanders of regional forces, the commanders of operations or joint task forces and the national intelligence and command organizations in the home countries by means of a common intelligence database. An important role in this architecture would be played by intelligence centres at different levels, the purpose of which would be to provide common information services for all the troops belonging to the same intelligence network. This could be implemented in the form of an intelligence warehouse of either an Email or Internet type.[152]

4 REQUIREMENTS LAID DOWN FOR INTELLIGENCE

"... but officially, blue helmets 'have never and will never engage in intelligence activities' in Bosnia-Herzegovina.

Commandant Franchet,
UNPROFOR[153]

4.1 UN COMMAND AND INTELLIGENCE REQUIREMENTS

Decisions regarding peace support operations and the relation of intelligence to these

The UN secretariat, the Security Council and the member states are well aware of the importance of command functions and data management for the success of peace support operations.[154] Command practices in the UN naturally reflect the primary importance of political will and the reaching of a solution by diplomatic means if at all possible. *Similarly they are well aware of the friction and reluctance to take risks or accept responsibility which are associated with political decisions.* Attempts have been made to speed up decision-making by means of preparatory diplomacy and grouping of the issues. Connie Peck illustrates the difficulty of taking decisions at this level by explaining that UN Headquarters and the general staff of the operation concerned have a few hours in which to reach a decision which involves thousands of small details. It is understandable, therefore, that the narrowing of the decision-making window will inevitably increase the significance of the time available and of intelligence.[155]

It is precisely the lack of command and intelligence systems that will force the UN in the future, as well, to hand over responsibility for leading demanding operations such as IFOR and SFOR to any member state or regional security organization that is capable of carrying it, given that the individual states have national interests in operating in the target area and have at least

some military structures already in existence there.[156] Major-General Franklin van Kappen is of the opinion that the operations led by the UN in the future will be first level ones of a traditional kind, while more demanding operations with a stronger mandate for the use of force, those of the second level, will be led either by the UN or by a state or regional security organization authorized by the UN. Operations at the third level, those that include sustained combat missions will continue to take place under a UN mandate but not under UN command. Van Kappen is nevertheless anxious to point out that as far as the soldier in the field is concerned such a division is pure theory and is of relevance mostly at the political level and in courts of law.[157]

Recent trends in the types of operation planned have been towards low-level conflicts, but the situation and the resulting tasks of the troops on the ground can alter very quickly. This means that the need for a traditional infantry-based supervision force has diminished and that for a heavily armoured force with adequate firepower and an efficient C3I system has increased.[158] The UN has concentrated to date on debating over the means of implementing the operation, whether it should come under Article VI or Article VII, and it has proved unable to reconcile military inevitability with political purpose, i.e. it has been incapable of defining strategic goals or target situations for its operations. The doctrine incorporated in the Agenda for Peace was written from the diplomatic perspective, as if operations could be divided into types and situations fitted neatly into four predefined categories. The Agenda proved unable to perceive or explain the complexity of states' internal conflicts or to present any pragmatic means of applying the categories.[159] The constant wrangles in the Security Council over the mandates for operations have meant that strategic command has become more a matter strategic ambivalence.

Even if upper level command relations in the UN were clearly defined, there would always be a certain indeterminacy in the command structures of the operations themselves[160]. This is felt to be due in part to the preservation of national command structures during operations. When it is a matter of defining intelligence procedures, the above facts can cause problems, in that contingents can interpret the mandate in different ways, favouring one party or another in the conflicts, or else contingents

cannot tolerate a situation in which their actions are being scrutinized by another state. Attitudes towards humanitarian interventions in particular have proved contentious in this sense, e.g. in northern Iraq, Somalia, Haiti and Ruanda, because they have been a mixture of peacekeeping and peace enforcement and opinions among the participants have differed regarding command relations and interpretation of the content of the mandate.[161]

Quoting the remark by Boutros-Ghali that *"the time of absolute and exclusive sovereignty has passed"*, Richard Smith notes that member states of the UN have begun to accept that it may intervene in their internal affairs in certain situations. The principle is always that any "infringement" of state sovereignty must be authorized by the UN, however.[162] Stanley Hoffman goes further, and demands that any UN-authorized intervention must be justifiable not only in terms of the national interest but also on ethical grounds. It is difficult to define these ethical grounds, however, as moral distinctions do not form a clear basis for a political strategy, let alone a military one. A separate difficulty, both theoretically and politically, is that of distinguishing an intervention from a peace support mission.[163] As Berdal points out, it will be essential in the future to separate peace support from peace enforcement, as it is primarily a matter of approving variation at the level of consent and of taking this into account. Through this procedure the troops can be prepared for action at the tactical level and have the right to use force to fulfil their mandate. The decision to use this force, without the operation becoming a peace enforcement mission, requires a thorough assessment of the situation.[164] The degree of consent may differ, of course, between the strategic and tactical levels, but it is still the case that the success of a peacekeeping mission under all circumstances will be dependent on consent at the strategic level, whereas provided the action taken remains within the provisions of the mandate, fluctuations in the degree of consent may be accepted at the tactical level even in the case of traditional peacekeeping missions.

It has been customary over the last decade to use air power to support ground troops, to protect air transport and to impose limits on mobility, e.g. in the form of no-fly zones. The operations concerned have been in the nature of interventions and have

proceeded according to existing doctrine and models. Adaptations are made mainly as far as the regulations regarding the use of force are concerned. *The use of air power presupposes the establishment and maintenance of dominance over the air space* in order to be able to use its main mechanism, firepower, in accordance with the aim of the operation. Any use of force presupposes intelligence, which should produce results at the same level of accuracy as applies to the weapon systems employed. Precision weapons call for precision intelligence, or targeting. At the same time the establishment of a no-fly zone requires control over the air space, for which support must be received from electronic warfare devices and surveillance systems.[165]

In the case of strategic decisions the Security Council lays down the political goals for the Secretary-General in the form of a resolution that specifies the tasks for the mission and the limits within which it will operate. This resolution arises in the Security Council as a result of unofficial consultations between the member states' delegations aimed at creating a set of commonly agreed principles before the issue is brought before the council officially.[166] The Secretary-General is responsible for execution of the Security Council mandate **at the strategic level**, being assisted in his decisions in this respect (2-Decide) by the Department of Political Affairs (DPA), Department of Peace-keeping Operations (DPKO), Department of Humanitarian Affairs (DHA) and Department of Public Information (DPI). The Department of Political Affairs carries out the necessary political inquiries and analyses and has the main responsibility for advance diplomacy and the concluding of a peace agreement. The DPKO is responsible for UN military strategy, i.e. the planning, preparation, implementation (command) and monitoring of missions (1-Process and 2-Decide). The Secretary-General will then form a group known as the *"Friends of the Secretary-General for..."* to support each peacekeeping operation with information and diplomatic activity, i.e. to generate ideas, make comments and influence the parties to the conflict by diplomatic means. The UN member states share information with the secretariat in accordance with their national practices and interests, observing Article 51 of the UN Charter in the best cases.[167]

Command of the mission in the target area itself is delegated by the Secretary-General to a commander, known either as the

Force Commander, the Special Representative of the Secretary-General or the Chief Military Observer. The military part of the mission is usually entrusted to a Force Commander. These persons are appointed by the Secretary-General and are directly responsible to him. In this way he ensures that the mission carries out the tasks laid down in its mandate.[168] Conclusions reached by researchers and opinions expressed by former commanders of such missions emphasize that the commander should receive adequate information on local conditions and the intelligence needs of his troops. It is also an advantage for the officers of the staff to have a uniform background, good morale and similar working methods. This will help the staff to create optimal conditions for the commander to make correctly timed decisions (1-Process and 2-Decide). The political representatives working alongside the commander of a mission are also of considerable significance in this. It is their duty to analyse political, sociological and psychological factors related to the behaviour of the target countries, for it is by combining political and military information in the framework of the UN command process that military actions can be made to serve political goals.[169] No source provides an unambiguous account of the command process or the way in which intelligence is linked with this, but it can be assumed that the command process conforms to the models put forwards in the theoretical chapter above (Figs. 3 and 4) and that the grounds for the necessary decisions are derived partly from intelligence sources, even though this is technically contrary to the UN's official command procedure.[170]

There is no separate technical section in the UN command system, and the technical systems currently available to support decisions at the operational level are poorly adapted to crises at a lower level than actual war. A tactical-level HF, VHF or satellite-transmitted radio system is set up in the target area for voice communications, and the command system relies mainly on commercial data transfer and management systems. Apart from face-to-face meetings, the main instrument used for mission command functions is the telephone and telefax, mainly using national post office, telegraph and other communications facilities. Encrypting devices are used on telefax communications between the command staff and UN headquarters. The computer terminals are largely commercial applications. In areas where the

infrastructure has been virtually destroyed or is very primitive, use is made of satellite telephones and associated terminals, but the use of satellites is in general restricted by considerations of cost.[171]

The intelligence process and its principles

Officially, the UN does not practise intelligence in the same way as nation-states do, *but rather its secretariat*, the Secretary-General's staff, *gathers information as a basis for the decisions that have to be made*. This is referred to as the acquisition of (military) information.[172] Open discussion of the importance of intelligence and the need for it has increased over the last five years or so, but it has largely centred around the difficulty of reconciling national and international interests. There are also outstanding unresolved questions surrounding the rights over intelligence information - which is strictly speaking national property - and the sharing of this with others.[173] The question of organizing intelligence within the UN will have to be solved sooner or later, however, as UN troops will not be able to manage new-generation missions without situation descriptions that are obtainable with the minimum of delay and integrated intelligence systems to support decision-making.[174] The major powers have no direct need to develop UN intelligence practices, because their troops receive the intelligence they need from national systems, In fact these nations may be said to gain political power by offering the UN intelligence support, as they are able in this way to control the information on which the organization bases its decisions in accordance with their national interests. It is the small nations that can derive the greatest advantage from developing UN intelligence services, as this would enable them to be more closely involved in the decisions that take place.[175] As far as the role of the regional security organizations is concerned, their intelligence practices can be expected to benefit from peace support missions and develop accordingly.

The **national intelligence services** of member states produce information as a basis for decisions taken by their delegations and representatives, and in the end the permanent members of the Security Council are usually better informed on the current

state of affairs through their own intelligence services than they would be through information received from the Secretary-General or the DPKO. The information generated by the UN itself tends to be used for comparison purposes or as a basis for discussion, because it is available to everybody. This information reaches the Security Council via the Secretary-General, who directs its acquisition through the medium of his immediate subordinates.[176] The UN Headquarters receives most of its strategic intelligence from the national systems of member states, and part from those carrying out the peacekeeping operations. Such information is nevertheless dependent on the performance capabilities of the national intelligence services and even more so on the willingness of the countries concerned to share their information. Likewise the information obtainable directly from UN operations is dependent on the troops made available for these operations, the extent to which they are equipped for intelligence work and the prevailing political situation. The main purpose of intelligence at the tactical level is to gather information relevant to the safety of the troops and their ability to perform the tasks demanded of them. UN documentation almost without exception attributes intelligence and command problems to command relations, which is evidently a reference to politicization of the information travelling within the organization and its use as an instrument for the exercise of power. The documents mostly suggest that the problems concern the reliability and confirmation of information and observations that have been communicated. At the UN Headquarters level efforts are made to reduce the politicization problem by gathering information from several independent sources and using as analysts people whose home countries have no political interests to defend in the target area. Some politicization nevertheless takes place in connection with selection of the information to be distributed.[177]

According to Eriksson, *the current UN intelligence process entails the acquisition of information on a case-by-case basis, where each instance is followed by an analysis of whether activity or tension in the area concerned has grown or diminished.* The information required for ensuring the safety of the troops engaged in a particular mission, for example, has at the present time to be acquired from national sources. The cautious attitude of the UN towards intelligence does nothing to reduce the need for

intelligence for decision-making purposes, nor does it relax the quality requirements in any way. As both Heidenrich and Palin emphasize, procedures will have to be found which take account of UN principles but ensure that decisions are based on adequate information. The level of consent is one aspect that affects the gathering of intelligence in the field, i.e. mainly at the operational and tactical levels. This information cannot be gathered by spying or covert action, as the neutrality of the UN is reflected directly in the fact that it uses the information that it has acquired for fulfilling its mandate and not for interfering in the affairs of the target state.[178] Success in this requires practice on the part of the general staff on the basis of well-functioning instructions. Cohesion within the general staff directing a particular mission can be improved by adopting the lead-nation principle, under which the main body of the staff is derived from one country.[179]

Organization of intelligence and its products

As far as information is concerned, the Security Council relies for the direction of peace support missions on (1) the UN Secretary-General and secretariat, and (2) the governments of member states and their obligations under Article 51 of the UN Charter to inform the Security Council via the Secretary-General of their actions and of the current situation. Even so, the obtaining of information is one of the greatest problems involved in arousing the interest of decision-makers so that they will react in time to both security threats and humanitarian problems (1-Process, 2-Decide). The lack of strategic guidance and the existence of mixed mandates make it more difficult to interpret the intelligence obtained and make the correct deductions in order to be able to react quickly to infringements or new situations. The problems are compounded further in second or third-level operations, because a considerable proportion of the UN member states are against peace enforcement.[180] The UN Military Staff Committee is mentioned in the charter as a body charged with ensuring that the Secretary-General is supplied with the necessary information on which to base his decisions and with formulating military strategies[181]. There is now a need to reorganize this committee and its command activities so that it can furnish those responsible for the planning

and preparation of missions with information channels leading directly to national sources. This option has remained unused, however, because the United States, Great Britain and France have virtually rejected the idea of consulting the committee.[182] Although the committee is mentioned in United States Presidential Decision Directives 13 and 25, its role and significance have remained more or less unchanged. Closer inspection of these directives will not in any case lead to any credible proposal for solving the UN's operational command problems.[183]

The Department of Peace-keeping Operations (DPKO) at UN Headquarters has a Situation Centre (SITCEN) for the purpose of updating situation reports round the clock (1-Process),[184] and the Information & Research Cell (I&RC) attached to this carries out an intelligence process practically in accordance with Orr's model. It is maintained in UN documents that no intelligence process exists anywhere below headquarters level, in that all the other levels merely implement the first phase, the gathering of information. Thus, *from the UN Headquarters perspective, the missions primarily produce information simply for creating situation reports* (1-Process). Headquarters nevertheless obliges the general staff in command of an operation to draw up summaries and evaluations at certain intervals and to issue reports together with recommendations for action (2-Decide).

The intelligence process is not based on handling of an extensive UN body of information but on the staff's opportunities for obtaining the necessary information from national sources. The intelligence staff and decision-makers are all aware of these acquisition defects, and this in turn detracts from the usability of the information in UN command relations, partly on account of staff attitudes. The Situation Centre is the only actual intelligence organization at UN Headquarters and its situation reports are used both for monitoring missions in progress and for surveying potential crisis areas in order to obtain early warnings. Similarly the I&RC is the only body specifically intended to carry out intelligence work, and a UN information acquisition organization spreads out around the headquarters anew for each mission that is undertaken, under the responsibility of the military command and in accordance with the mandate, the preliminary operational plan and the troops assigned for the purpose.[185] The UN believes that it will obtain the necessary information by placing in the

I&RC staff who have connections with national intelligence agencies. The cell has contacts at least with United States databases and those of certain other NATO countries via the JDISS system (2-Decide), and Connors maintains that at least Great Britain, Pakistan, Morocco and Nigeria share intelligence data with the I&RC. The western powers are particularly well represented both on the staff of the Situation Centre and in leading positions in the DPKO.[186] The majority of the intelligence officers placed in these bodies are majors or lieutenant-colonels with intelligence experience, usually meeting the qualifications required of an analyst. The most serious problem is the excessively rapid turnover in staff. The tasks are normally carried out on a personal basis. There were five officers and one non-commissioned officer working in the office in autumn 1997.

The duty officers in the Situation Centre produce daily and weekly situation reports, whereas the I&RC does not issue regular intelligence products at all, concentrating instead on situation and case-specific analyses of missions in progress and potential crisis points. The analyses of operations in progress chiefly consist of assessments of the fulfilment of the mandate or of violations of agreements between the parties involved in the crisis, and the principal occupation of the I&RC is the analysis of potential points of crisis, i.e. the production of early warnings. All its products come in two versions, an official version and an unofficial one, the latter being presented to the Secretary-General and the head of the DPKO personally by the I&RC chief. The products are distributed according to an estimate of who might need the information, but the usual recipients include the heads of the DPA, DPI and DPKO and other actors subordinate to the UN, such as UNHCR. The products are classified as either UN Confidential or UN Eyes Only. No quality classification is laid down for them, but instead each officer employs his own national classification. Missions are supported by distributing information on OSINT sources, public-level analyses and intelligence products in the case of the highest-level officials in accordance with national security classifications.[187]

In some cases it proves impossible to differentiate intelligence as strategic, operational or tactical. An individual item of information may be relevant to all these aspects, e.g. a breach of a cease-fire agreement, the death of a UN soldier or a statement issued by the

government of a major power. Intelligence products and information should nevertheless be classified and their significance evaluated prior to distribution.[188] Research has shown that this intelligence is used as background not only for military decisions but also for political ones, and also as an aid to civilian organizations carrying out humanitarian activities. Eriksson confirms this view in noting that a special representative or other negotiator will have difficulties in achieving results at the negotiating table unless he has a clear picture of the activities of the parties to the crisis, their intentions and their ways of working. The availability of objective, broad-based information could be improved by extending co-operation between the academic world and the intelligence community, as scientific research could yield information on the cultures and societies of target states that was more free of bias and vested interests. This would lend an air of greater reliability and impartiality to the descriptions of potential crisis points, and they might indeed be more reliable and impartial. At the same time the intelligence officers would have a good opportunity to gain a better orientation towards their field of operation.[189]

Intelligence methods and architectures

The sources used for intelligence purposes consist first and foremost of open sources (OSINT), technical reports and publications and mission reports and notices. In addition, the I&RC receives unofficial copies of analyses produced by other UN departments. National sources nevertheless play a highly significant role both quantitatively and qualitatively. The UN is not advised in any way on how this national intelligence has been acquired, and it may be passed on either officially or unofficially, in internal meetings at UN Headquarters.[190]

HUMINT is the most reliable and most important means by which information can be obtained on the intentions of the parties to a crisis in the context of a peacekeeping operation[191]. When UN military observers are employed for intelligence purposes it is essential to recognize their special status as unarmed "military diplomats". Observers can yield valuable information on local conditions and customs, because they live among the local people. Another trustworthy and valuable source of information in Eriksson's

view consists of non-governmental organizations, although it is important when using such information to remember the nature of the informants' actual duties and their level of education.[192]

Surveillance in connection with peace support missions is carried out by technical means, using satellites, aircraft, terrestrial systems and various radar systems (RADINT). Researchers reckon that the UN will never possess an intelligence system of this kind for itself but will continue to be reliant on national systems. Through the coordinated use of integrated systems even a small peacekeeping force can maintain surveillance over a vast area. Smith recalls the French proposal that the UN should purchase an intelligence satellite of its own, which the other member states regarded as a waste of resources. SITCEN in fact buys images produced by the French SPOT satellite, which have a resolution of 0.15-25 metres, and Russia has now offered its satellites for use on a commercial basis, promising a resolution of 2 metres. France, Italy and Spain, meanwhile, have indicated that they are considering making data from their Helios satellite available to the UN.[193] Good use can be made of airborne SAR radar for the supervision of embargoes and no-fly or restricted access zones, and traditional air photography is also useful. Unmanned airborne vehicles enable the surveillance apparatus to be over the site for longer and with less risk of accident or detection. The acoustic and seismic sensors used in terrestrial devices can produce data on their specialized targets within the limits of their detection ranges. Radar, of course, has the advantage that it can still provide surveillance data under bad weather or visibility conditions.[194]

In addition to traditional military intelligence methods, officers have to mingle with local inhabitants and maintain social relations in order to create trust and obtain information on local conditions. Use can also be made of contacts for this purpose. When the intelligence practices associated with a mission involve a wide range of methods, any limits on mobility imposed by the parties to the conflict will tend to decline in significance as barriers to the obtaining of information, but if intelligence is based predominantly on open sources such as the media or on national systems, the mission will find itself dependent on its sources of information and it will become difficult to assess the reliability of the findings. In the case of traditional operations, Eriksson favours the use of passive methods that remain undetectable to the parties

in the conflict, as this will help obviate unpleasant accusations and explanations. Similarly he is in favour of obtaining and processing this information in the contingent's home country. Only when there is a serious threat to the safety of the peacekeeping force or to the completion of the mission will he condone the use of all available means to gain information.[195] The UN sources and interviews do not allow any impression or evaluation to be formed of the intelligence or command architecture. It is largely a matter of taking advantage of commercial systems at the strategic level and of the national systems or subsystems of certain countries at the operational and tactical levels.[196]

4.2 REQUIREMENTS IMPOSED BY NATIONAL DOCTRINES AND DIRECTIVES

Participation in peace support missions and linking of intelligence to command and control

The UN is expected to retain its prominent international role as a peacekeeping agency, but it is significant that *participation in such missions has become a means by which many countries can defend and promote their national interests.* This has prompted Patricia Chilton to claim that any country or alliance that is not actively involved in peace support operations will lack prestige in the world order of the post-Cold War period[197]. It is this, perhaps, that explains Sweden's active role in operations in the former Yugoslavia, whereas Somalia has attracted less interest. Sweden also has a long tradition of participation in operations purely for reasons of solidarity.[198] According to Stephen Stedman, Nordic involvement is based not only on experience but also on a theory of the escalation of conflicts which presupposes that one should respond to the use of force with force. The shows of force provided by the major powers are not necessarily incompatible with this theory, as their purpose is to prevent the use of force by others.[199]

A state is taking a strategic decision when it agrees to participate in a UN mission, and the decision must be in line

with national interests.[200] Any participation also requires the fulfilment of certain political preconditions, however, as laid down in Presidential Decision Directives 13 and 25 in the United States and defined separately in most other countries. These preconditions may include demands regarding command over the troops and the end state to be aimed at under the mandate[201]. It is common for the head of state, as supreme commander of its armed forces, to retain nominal command over the troops regardless of what organization they have been subordinated to, but the "stringency" of this command relation varies from one country to another. Directives such as PDD 25 allow developmental demands to be made on security organizations or diplomatic notification to be made of the limits which the state concerned is not prepared to exceed. The leadership of the United States, for instance, is of the opinion that the UN will never reach the necessary command and intelligence capacity to enable it to direct an enforcement operation[202], even though it believes that it is capable of supporting operations by coordinating the reconstruction and humanitarian aid programmes of civilian organizations. The strict provisions of PDD 25 reflect US experiences of multinational operations and ones that involve demonstrations of force.[203]

The concepts and types of operation mentioned in the doctrines and ordinances correspond for the most part to those presented in the theoretical chapter above. Participation in peace support missions has become a very important part of the security and defence policy agenda for many states and of the activities of their armed forces, as revealed by the up-to-date nature of the directives governing the armed forces.[204]

The **United States** favours a show of force and the use of air power first, before committing its troops to a ground operation, and justifies participation primarily in terms of defending national interests. The national strategy dictates that participation in missions for humanitarian reasons can only be considered when the level of risk involved is low. The strategy also emphasizes the ability to achieve a dominant military presence immediately circumstances become even remotely dubious, and the possibility of a conflict escalating to the point where the mission becomes one of peace enforcement.[205] Participation in such operations is viewed as one of the main duties of the US armed forces in the

future, and the intelligence community that was developed in the course of the Cold War is to be adapted to the new situation so as to support operations such as those in Haiti and Bosnia. The United States is expected to implement the principle of extended control of battle space as applied to traditional warfare in the context of these missions and to complete the decision-making cycle faster than its adversaries[206].

Against a background not only of peacekeeping operations but also of the conflicts in Northern Ireland and former colonies, the approach adopted by **Great Britain** is understandably more cautious and traditional. From around 1995 onwards it has implemented its policies in accordance with the doctrine of "wider peacekeeping".[207] By participating in operations, Great Britain is acting to promote world peace and stability, in accordance with its own defence policy. It will be interesting in the future to see whether British policy develops in the direction of that pursued in the United States, i.e. towards restricting participation to missions that are in the national interest.[208] When deciding on commitment to a mission, the British normally take account of public opinion as reflected and shaped by the media, and they also favour the use of existing military structures in the missions themselves, being disinclined to place their troops permanently under UN command in accordance with the Standby Force concept. Military force is looked on as a proactive instrument aimed at de-escalation or escalation of the situation. The British emphasize the correct timing of military interventions and the use of relevant intelligence in support of every operation. The principal theme of their doctrine is the appreciation of variations in the level of consent, a factor which distinguishes peacekeeping from enforcement - as the use of force can result in one becoming a party to the conflict.[209]

France has followed similar policies to Britain, although with an additional Gaullist legacy in the form of a Europe-centred approach and an insistence on decisions being taken nationally. France has moved closer to NATO in recent years, however, and has accepted the leading role of this organization in future crisis management operations.[210] Patricia Chilton looks on peace support operations as the most dynamic area of French defence and security policy. The country has gained its experience in UN operations conducted in recent times and earlier colonial encounters. The *Rapport Trucy* defines military and political peace

support operations and enumerates the dangers entailed in military operations carried out in the name of peace support. The concept of consent is regarded as a flexible one in the same manner as in Great Britain, and is taken as implying an ability to react on one's own initiative at the tactical level, using force if necessary. In the French view, the confusion of enforcement with other peace support activities will lead to impotence, insecurity and humiliation, as was the case in Yugoslavia. The spirit of the doctrine is "aggressively active", however, emphasizing a readiness to use force in order to fulfil a mandate.[211]

The **NATO** concept of CJTF can be applied to peace support operations where these are in the interests of the alliance in general and concern areas close to the land or sea borders of its territories. Its interests may range further afield, of course, if the conflict poses a threat to security and stability in Europe. The numbers of countries participating in operations will increase by virtue of the Partnership for Peace programme, which should enable many countries to contribute effective contingents to international operations. As Marcuse points out, the ability to undertake peace enforcement operations that is incorporated in the CJTF concept will increase the alliance's capacity for forestalling and containing crises.[212]

The wishes of the military strategists for clear mandates are grounded in the fact that it is the mandate that forms the moral foundation for an operation, defines the legally justified methods that can be employed, lays down instructions and specifies the end state that should be reached[213]. This will enable clear guidelines to be drawn up at the various levels of command and their fulfilment to be verified (2-Decide).

In order to appreciate the complexity of command relations in an operation, it is necessary to look into the command, control and intelligence practices of the participating countries. The national concepts must be placed within the correct frame of reference and temporal framework in order to avoid erroneous conclusions. Having first gained a familiarity with national command relations and chains of responsibility, together with the demands and opportunities introduced by the alliances that the same states have entered into, it is possible to deduce that the command process does indeed follow, with some modifications, the models proposed by Lawson and Orr.[214]

As the doctrines maintain that the command of any operation should take account of the interests, doctrines and education, equipment, cultural distinctions, linguistic skills and mutual trust of the participating countries, these factors will inevitably affect the architecture of the command structure. In addition, particular emphasis naturally has to be placed on UN principles such as neutrality and consent, and on general command principles such as unanimity and purposeful leadership.[215] The Swedes, following the Nordic tradition, also stress avoidance of the use of force.

When formulating his decisions, the **commander of a peace support operation** has to digest a vast influx of information in a short time as the tempo of events is stepped up, i.e. his decision-making window[216] narrows all the time. The political nature of peace support makes the operations multidimensional and obscures the boundaries between strategic, operational and tactical command functions, so that a combat event on the technical level can easily acquire strategic proportions. In spite of this, *the fundamentals of command and control functions do not alter appreciably between peacetime conditions, crisis management and outright war.* It is more a matter of differences in the weight attached to the various factors.[217] National directives do not make separate mention of a technical aspect of the command system applicable to UN operations that might deviate from the theory or from UN requirements, but rather the contingents' contributions to the technical aspect are implemented in accordance with their national command practices and the principles and responsibilities dictated by the UN.

The national doctrines of the major powers mention operations involving demonstrations of force in addition to peace support operations. These are in the nature of joint operations that require compatibility of functions between land, sea and air forces in order to be successful, together with the use of specialized troops and space systems. In an operational sense, crisis management can begin with a show of force, which will serve as a preparation for forceful entry. The United States directives underline the possibility of esçalation and the need to allow for this, e.g. in that humanitarian assistance can develop first into peacekeeping and then into peace enforcement. They also recognize that it is very much easier to differentiate between these levels of conflict in written statements than it is in a practical combat situation[218].

High priority is given to force protection measures, especially at the deployment stage in an operation, and it is the duty of intelligence and counter-intelligence to support the operation commanders at the deployment stage with information on any terrorist or criminal groups active in the target area, paying particular attention to threats that may be directed at troops of specific nationalities. The US directives also stress the importance of counter-intelligence arrangements.[219]

Foundations of intelligence

The national directives usually include intelligence as one aspect of the command process in peace support operations, and the same principles apply to it in this context as in war. The commander's own knowledge of intelligence systems becomes still more important in the case of multinational operations.[220] Intelligence activities directed at other states are normally regarded as acceptable, although there are differences of opinion over methods of acquiring information and the difficulties of reconciling intelligence with democratic values are recognized. Demands for greater openness and responsibility characteristically become more forceful at times of least threat to national security, but it should also be remembered that excessive openness can increase the opportunities for using intelligence information for personal ends, which leads to politicization of the intelligence service. Any effort at making confidential information public is also likely to reveal the sources of that information, at least in the course of time, which would restrict the chances of using those same sources in the future.[221]

Intelligence practices in connection with UN operations are usually laid down in accordance with directives and doctrines applying to joint operations, because the two are basically similar. The greatest differences arise from national practices and traditions, which have to be taken into consideration when applying the doctrines. This implies resolving national differences, coordinating the distribution of intelligence, processing information obtained from national sources, the creation of a multinational intelligence centre and the arranging of common procedures for the exchange of intelligence.[222] The joint use of

intelligence acquisition mechanisms incorporated in NATO's CJTF plans marks a major change in NATO practices, as this organization has not previously been in the habit of sharing intelligence with non-NATO countries. Its intelligence work is based on the use of information produced by national systems, a considerable proportion being from the United States. France has attempted to make up for this by means of European co-operation, by developing the intelligence capacity of individual operations and increasing the resources devoted to intelligence, but in spite of all the efforts, the CJTF general staff organizations need national systems and they need the American command and intelligence system.[223] One strength of the major powers' intelligence community is the ability to detect and locate small-sized targets and transmit the information quickly from one level of command to another for the necessary decisions to be made. The disadvantage of this performance capability is the danger of excessive control and the suppression of micro-level command initiatives. The internal problems of the intelligence community mentioned in the theoretical chapter of this work - mutual competition, differing interests and legislation - affect the intelligence support received by individual operations. The national links that exist in both the chain of command and data management allow member states to intervene in affairs at the operational and tactical levels in order to serve national interests. Intelligence in connection with peace support operations represents a combination of intelligence capabilities and needs at the strategic and operational levels with civilian organizations.

Strategic intelligence is required to provide support for both political and military decision-making by keeping those responsible up to date on the operational situation relative to the predefined end state. If this branch is inefficient, efforts are likely to be made to minimize the uncertainty attached to the decisions by appealing to intuition and personal experience. Counter-intelligence in this field can be expected to increase in importance in the future[224].

Operational and tactical intelligence provide the commander with decision-making support in matters related to the use of force, furnishing him with strategic, operational and tactical-level predictions of the consequences of the use of force and interpretations of how this will serve the purpose of fulfilling

the mandate. The decisions themselves may be made at either the operational or the tactical level. The operational intelligence system has to be adapted in each case to conform with the frame of reference dictated by the operating environment, and this will call for a physical expansion in facilities for the gathering, processing and reporting of information. Established ways of working have to be adapted to the speed of working within the operation, at the same time as preparations have to be made for facing the intelligence problems brought about by the multinational nature of such operations, in as far as these cannot be solved by technical means. At the tactical level it is possible to make use of information acquired by HUMINT methods more rapidly and with a lower level of risk, because the commanders have clearly defined tasks to fulfil and are guided by the ideas generated at the higher levels of command. The fundamentals of intelligence for an operation should be formulated and practised before deployment actually takes place, and it is at this stage that it should be possible to delegate information acquisition responsibilities among the national and international actors involved.[225]

The point of departure in the organization of American intelligence services is always a wartime system, which can then be adapted in each case separately to correspond to the needs of the operation. No country's military doctrines address the question of the relation between intelligence and decision-making, or that of the politicization of intelligence, but this is a problem that largely concerns strategic intelligence. At the operational and tactical levels the functions of intelligence can be defined as follows:

- Early warning, which implies risk management and minimization of the possibility of being taken by surprise.
- Preparation and command of intelligence activities, which form the basis for intelligence planning and organization.
- Force protection, including security and counter-intelligence.
- Monitoring of the situation, based on the use of all sources of information to construct assessments.
- Formulation and maintenance of a coordinated intelligence architecture.
- Targeting, enabling the identification of objects for physical destruction or psychological impact and critical targets with respect to each object.

- Evaluation of the effects of the use of firepower.
- Participation in geographical surveys and analyses of the terrain.[226]

Targeting and evaluation of the use of firepower have not traditionally belonged to the sphere of peacekeeping, not are they mentioned in older directives. Targeting involves the description of objects or systems considered for strikes, weaknesses observed in them and evaluations of how critical they are to the other side. It is the responsibility of intelligence to analyse each object, select and name objects to be targeted and make recommendations on the weapon system to be used in each case. Finally intelligence is also responsible for evaluating the success of the strike. Targeting takes place at all levels of operation, in accordance with the requirements and aims defined for each.

In the case of **demonstrations of force**, intelligence is based on the joint strategic and operational intelligence capabilities of all branches of the armed forces. This is largely due to the fact that tactical forces can be assigned to very distant operations for which they have no up-to-date situation reports or other intelligence that they have obtained for themselves. The peacekeeping tasks undertaken by the British Navy, for instance, require broad-based intelligence or data management so as to be capable of constabulary and maritime power projection, and consequently it is the task of the navy's strategic intelligence to produce information on the maritime situation (1-Process). The importance of this task is greatest at the beginning of an operation, when the decision to initiate it is to be made, as this has to be based on a profound long-term analysis (2-Decide). Operational intelligence receives its principles from a higher level and concentrates on military factors and surveying of the area covered by the operation. The military information that it generates is then linked to the political, economic and psychological contexts in order to obtain a reliable analysis. Tactical intelligence is mostly a matter of maintaining the maritime situation report.[227] In the case of airborne operations, information can be obtained for supervising a truce or cease-fire, and information which is applicable to either the strategic, operational or tactical level can be acquired through the use of aircraft. This information may serve the purpose of improving the overall efficiency of the

operation, minimizing surprises and risks or creating a foundation for the use of air power.

The intelligence process

The intelligence process, its organization and the principles for its implementation are in practice more or less as described in the theoretical chapter. The point of departure for American intelligence is that it should observe the same principles and ways of working in UN operations as in warfare. The main deviation from the theory of Lawson and Orr is the inclusion of intelligence planning in the process as a separate phase before Sense. *One of the main problems as far as success of the intelligence process is concerned is the obtaining and retention of the time needed for comparing information.* The significance of comparative information and the obtaining of this are emphasized in particular in connection with early warnings. External influences can be reduced when the process is directed towards forecasting intelligence based on careful preparation of the actions to be taken, e.g. by updating the databases on parties to the conflict and date available on the area covered by the operation. This means in practice the implementation of intelligence tasks in accordance with the doctrine put forward earlier in this work.[228] Snider believes that this cannot be achieved by means of the traditional intelligence process, as the characteristics identified in the process are linked with too general a set of background material. The difficulty in the case of peace support missions lies in the broad-based nature of information acquisition, for which no military intelligence system has been constructed or trained. National processes can and should be used in peace support missions, provided that the accuracy requirements are taken into account and the results are placed in their correct context in the history of events. This presupposes continuity on the part of the intelligence process, combined with long-term planning and systematic storage of information for later use.[229]

The United States and NATO begin their intelligence processes at the stage of planning of the operation, with a phase known as Intelligence Preparation of the Battlefield (IPB), although this process as applied to UN operations differs in perspective

and level of detail from that employed in cases of war. The process consists of analysis of the area to be covered by the operation, its demography, the expected impacts of the measures to be taken and possible dangers. After this, five-phase predictions are drawn up of the development of the situation, which are followed through in the manner of war games. It is on the basis of this process and the plan for the operation as a whole that plans are laid down for synchronization and the acquisition of intelligence.[230] The necessary information may be available from the UN, from the countries contributing troops to the operation, from the media or from humanitarian aid organizations.

Corresponding information is compiled in the Nordic intelligence process, after which it is assessed for reliability and accuracy and an analysis with conclusions is drawn up before the final analysis.[231] The five-phase NATO intelligence process is observed at all stages in the operation. One product of this planning is a synchronization table, on the basis of which the various levels in the chain of command are assigned their overall intelligence responsibilities and duties with respect to different branches of activity. The intelligence acquisition plan defines for each stage (1) the Commander's Critical Intelligence Requirements (CCIR), (2) objects of early warning, (3) special intelligence needs, (4) methods and sources to be used and proposals for additional needs, (5) times and places for reporting, and (6) other facts to be noted. The plan reconciles the information needs with the particular features of the objects to be investigated and the methods to be used for acquiring the information, with requests for support from national intelligence systems arising as a by-product. The plan and table are filled out as required once the operation has begun and the commander has developed his plans further. In the course of the processing of information the raw data are worked up into a form in which they will be applicable for the purposes of analysis and intelligence production. At the tactical level this forms a part of the control of information acquisition, as the producer of the information is frequently responsible for working it up as well, but at higher levels it is usually a matter of combining the new information with ready-made intelligence products. At the end of the analysis the information produced by intelligence is combined with existing products so as to correspond to the needs of the user. For more details on products, see the section devoted to this

aspect. The last phase involves distribution of the information to those who need it, which is the responsibility of each level in the command structure separately. The American organization for this employs both push and pull modes of distribution, which is faster than the constant issuing of requests and proposals for support.[232]

It is important to recall the principles governing UN activities when considering intelligence, i.e. consent, neutrality and openness. Consent, at least, must prevail at both the strategic and the operational level[233], while every effort should be made to achieve and maintain it at the tactical level by behaving in an impartial manner. The parties to the conflict may easily look on intelligence as a hostile act even though the gathering of information is one of the main functions of peacekeeping forces, and it must therefore be made quite clear to them that the information obtained in this way will be used only for actions that lie within the operation's mandate. In some cases suspicions can be allayed by sharing the information with he parties to the conflict[234]. The intelligence process must always remain within the limitations laid down by the states that have contributed troops to the operation or by the Security Council, which has issued the mandate, but even so it must provide all the information necessary for directing the operation and fulfilling the tasks assigned to it. There is always someone who will accuse the peacekeeping forces of bias or spying, but in spite of this it is important that intelligence activities should not undermine the authority of the UN or the success of the operation.[235]

The organization of intelligence

The states participating in peace support missions usually arrange their intelligence organizations to serve the purposes of both the mission itself and national political decision-making. The most powerful intelligence system at the present time is that of the United States, and it can indeed be claimed that the standard of a country's intelligence organization reflects fairly well the level of development of its national armed forces. As far as the formulation of intelligence practices is concerned, the British guidelines, for instance, urge commanders to create a military intelligence organization that is integrated at all levels, in addition

to which the organization should maintain co-operation with the UN, the media and civilian security elements.[236]

The person in charge of creating a **strategic-level** intelligence organization and intelligence architecture for NATO-led missions is the commander responsible for military strategy, e.g. SACEUR, according to guidelines received from NATO and the national command headquarters.[237] The responsibilities that the national intelligence systems have for supporting each other are defined in the national directives and statutes. The American directives, for example, decree that all information from national systems intended for the use of a particular mission should be directed in a centralized manner to the JDISS workstations of the National Intelligence Support Team (NIST) responsible for military strategy. The composition and performance capacity of this team should be tailored according to the commander's information needs.[238] An intelligence centre can be set up outside the peace support mission itself, or else an existing national intelligence centre can be assigned to the mission (Fig.6). This body can be referred to as a Joint Intelligence Centre (JIC), for instance. The remote terminal for such a centre within the mission will then comprise a Joint Intelligence Support Element (JISE), which will again be tailored to the needs of the headquarters that it is intended to support. This element should be capable of processing information from the joint and all source systems and of taking account of the culture and ways of thinking of the country concerned in the analyses that it produces.[239]

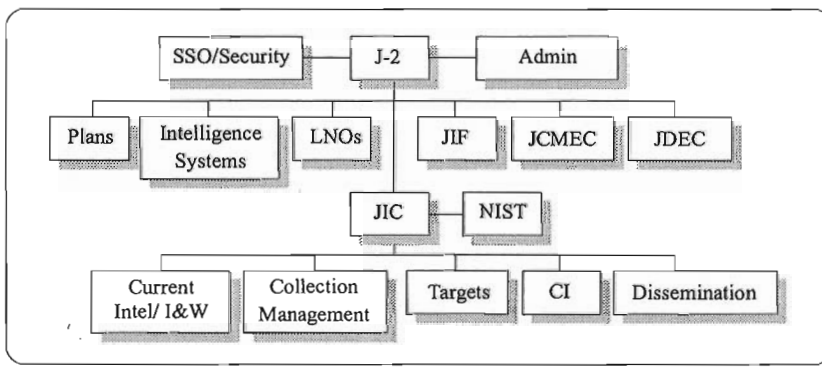

Figure 6. Example of the organization of a Joint Intelligence Centre for supporting a mission.[240]

It is the responsibility of the commander of a **Operation** to set up a broad supervision and intelligence system that extends from the operational level to the combat technology level and in effect covers every person under his command. An intelligence support team should also be attached to this system in order to synchronize the command of intelligence operations between the levels and arrange collaboration and the exchange of information with civilian organizations. It is reasonable to arrange joint intelligence centres at both the operational and tactical level within a mission, these being subordinate to a Head of Intelligence, who defines the intelligence practices to be observed by all those engaged in the mission.[241] If it is impossible because of the nature of the mission or the country in which it is operating to link intelligence directly to the headquarters as one of its functions, the American directives maintain that it should be infiltrated into the other offices in the headquarters. A full-complement headquarters as allowed for in the CJTF model should be capable of running a multinational intelligence system covering the various branches of the armed forces, and the composition of such a headquarters can be altered as the situation demands, assigning officers to it to represent the participating contingents.

The question of command responsibilities in the case of operations of long duration has remained open so far, as a CJTF headquarters is intended for temporary assignments.[242] The nucleus of the headquarters should be functioning before the operation commences, working within the parent headquarters chiefly on the planning and preparation of various operations. Additional staff trained for this specific purpose can be taken on from the parent headquarters or from the nationalities participating in the operation. The intelligence department of the joint headquarters (CJ-2) is responsible for coordinating the intelligence of the separate branches of the armed services, and the intelligence process is carried out in this department, so that the information can be analysed in its correct context and at the right time. Similarly it is possible by this means to coordinate the work of all the intelligence systems in the most appropriate manner. In the CJTF model the national officer groups, NIST and NIC, are located in the joint headquarters.[243]

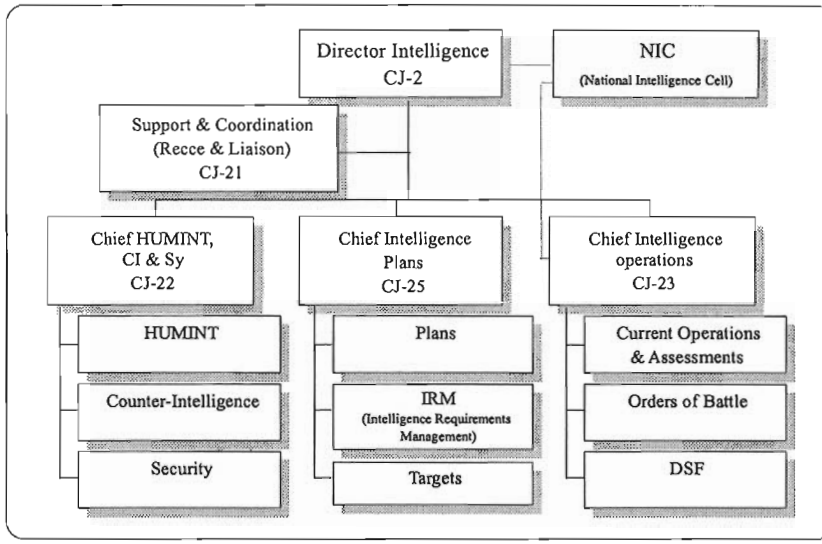

Figure 7. **Composition and structure of the intelligence department (CJ-2) of a CJTF headquarters.**[244]

Certain countries participating in peace support operations have regularly included intelligence personnel in their contingents, either because this is laid down in their doctrines or belongs to their military training or else because they have a need to gather information on peace support operations. The most significant reason in the opinion of Eriksson is that these states do not regard UN intelligence as adequate to guarantee the safety of their troops.[245] As one of the preconditions for successful intelligence operations mentioned in the doctrines is proper training for the personnel involved, the requirement being that the command and intelligence processes should be planned and the staff trained before commitment to the operation.[246]

A person selected as an intelligence officer should have a proper understanding of "the otherness of the enemy", which can be achieved only in the course of time, through active intelligence work, and he should also have a sound scientific background, in order to produce reliable analyses, and the ability to comprehend an overall situation, which in some cases may mean the evaluation of several target groups simultaneously in

relation to the goals of the operation or the safety of the troops. Boyd also raises the need to report on the contexts of observations, in order to avoid erroneous interpretations. Experts of different kinds are required for intelligence duties, depending on the level of command: experts in the culture and language of the area, analysts, interrogators and security personnel. They should possess not only the knowhow required for the intelligence process but also a knowledge of local affairs, linguistic skills and fieldwork experience. Personality difficulties and deficiencies in professional skills can come to the fore in the most surprising of circumstances, causing a person or group to cling on to old values in situations where adaptability and dynamism are called for. It is likewise important that they should internalize the subordination of military decisions to the political arm at all levels.[247] They should also be able to read and write reports in such a way that both civilians and military personnel can use the same intelligence products in their decision-making. In view of the above, it is clear that the professional and human relations requirements for intelligence personnel will gain in importance in situations where the decision-makers are motivated by a strong political ideology. Artur Hulnick concludes his thoroughgoing treatment of this subject by noting how negative attitudes multiply and propagate through an organization, and that this can only be rectified by training and joint action, the mutual trust generated by which is a fundamental prerequisite for successful decision-making. Intelligence workers and decision-makers have to be aware that they differ from each other as groups in the ways in which they handle information.[248]

Intelligence products

The commander should be supported in the decisions that he has to take by means of an up-to-date picture of the situation and by supplying the necessary intelligence products (1-Process and 2-Decide). Intelligence needs are more extensive and more diverse in peace support operations than in ordinary combat operations, since it is not a question of a single enemy but of parties to a conflict. The commander therefore requires updated background information on the political situation in the area,

including historical and cultural influences, at all stages in the operation, together with portraits of leaders and persons of influence in the conflict (2-Decide). Also, he needs information for comparative purposes (1-Process) on local troops, ethnic groups, parties with an interest in the conflict, and particularly the deployment, attitudes and performance capabilities of potentially hostile elements. The intelligence system should make observations on all events and changes in the situation in the area and its security environment that could threaten the stability of the situation, perhaps within a very short time.[249]

Intelligence requirements are usually based on an evaluation of the existing threat, which serves as the grounds on which the commander defines his information needs (CCIR). Under difficult conditions the commander should be able to state clear, unambiguous, prioritized information needs that will ensure successful collection and analysis of information, and this should be timed so that an intelligence protocol for the operation can be formed and the troops are able to practice its implementation before deployment. If the protocol is formed only after deployment, intelligence will be operating in the wake of planning and will not be able to make its full contribution to the command process.[250] In an ideal situation the results of intelligence work will be available for use in the peace support command process at the same time at both the strategic and tactical levels, thus ensuring that the UN Security Council and the tactical commander receive notice of any change in the situation simultaneously, so that it will serve as an early warning. This is possible only if intelligence is able to make its own contribution to the situation report (1-Process).

Tactical intelligence should produce information on the implementation of the task in hand, including observations of troop withdrawals or breaches of treaties, and these should be appended to existing background information, data on the aims of the parties to the conflict and assessments of their performance capacities. This will generate analyses of events and predictions of future developments which take account of the overall situation and are of maximum use for decision-making purposes. In order to guarantee the quality of the end products, the process should contain a classification system and analytical facility. In fact, the production of information for use in decision-making is one of the

most important tasks of peacekeeping forces.[251] As part of their national contribution, the commanders of the United States regional forces support operations with analyses and databases and by coordinating the work and results of organizations already gathering intelligence in the area concerned (2-Decide), as described above.

The multinational dimension is taken into account by delivering this information in ready-filtered form so that it can be distributed to all participants (2-Decide).[252] IMINT images received as national support are transmitted to terminals in digital form, and hard copies can be made of these for immediate use. They can also be stored on tape or in databases for later use and further manipulation. SIGINT results are processed in this branch's own handling centres and the end products are distributed to users via intelligence departments or offices at the various levels of command. MASINT interpretation facilities are available, even in the American intelligence system, only at centres specialized in this.[253] In addition to background facts on the operational environment, such the infrastructure, the terrain or the weather, the tactical-level commander of a peace support mission will probably want answers to the following questions at all stages in the operation (1-Process, 2-Decide):

- The conflict. What are the points of departure of the conflict at the local level and how can these be influenced? How extensive is its impact?
- The parties to the conflict. What skills do the parties to the conflict possess, what are their future intentions and what is the state of their morale and discipline? What are the characters of their leaders? What is the structure of their command systems and how well do they work? How are their troops divided into combat units and what are their levels of preparedness and resilience?
- Changes in the situation. How probable is an escalation of violence? Why is this likely to happen, when and where?
- Demography. What is the ethnic distribution of the population and what attitudes prevail in the local people? What part are they likely to play in the coming operations, and how can they best be induced to help in the process of resolving the conflict?
- Infrastructure. What are the data transmission and telecommunications networks in the area like? What is the

state of the arms industry there? What is the structure and capacity of energy supplies? How will the terrain affect military operations and supplies? What is the state of the environment?

In addition to answers to the above questions, it is necessary to produce counter-intelligence analyses of the parties to the conflict, the impact of terrorism and crime in the area and factors affecting the safety of the troops, and also to construct intelligence scenarios from the viewpoint of the parties to the conflict and predictions of the future course of events. Operational-level predictions normally apply to the next 48-96 hours, but longer-term analyses can be drawn up as required. Meanwhile targeting intelligence calls for estimates of the weaknesses of the parties involved, the centre of gravity of their deployment, location of strategic targets and their identification marks, and technical intelligence requires investigations into the combat potential of the various parties. *One of the most significant intelligence products at the upper command levels, e.g. SACEUR, is an evaluation of the impact of the operation in the form of a comparison of the results achieved with the end state defined in the mandate.* Also connected with this is an evaluation of the effectiveness of the use of arms, a document which ends up with the political decision-makers.[254]

A further intelligence product is the **indications and early warning**, i.e. an observation or identification of an impending crisis and a report on this. The generation of early warnings is dependent on the ability of strategic intelligence to perceive signs recognized as indicative of a crisis. It should be possible to include early warnings in preliminary analyses. The NATO directives stress the breadth of the area of responsibility of the intelligence services and the need for control over the entire situation in connection with the observation of changes. The indicators that serve as early warnings vary from one level of command to another, and may be individual details such as movement on the part of a person or target at the operational or tactical level, whereas at higher levels they are more likely to be based on analyses provided by the intelligence system as a whole, such as a notification of preparations for mobilization or significance alterations in the political, economic or social situation in the country concerned.[255]

In the opinion of Williams the command system requires good initial information at the beginning of an operation. *Experience suggests that the first six weeks are decisive for the success of an operation.* This initial information includes details of the area concerned, the deployment of the troops engaged in the conflict, conditions in the area and its infrastructure and the ethnic composition and attitudes of the local population (2-Decide). These facts will be of help in estimating the threat to the safety of the peacekeeping troops, for instance.[256] In order to ensure the supply of initial information, Smith proposes that regional intelligence centres should be set up. The problem is that the member states themselves are reluctant to do this, as there is no guarantee that the resulting information will be used for the correct purposes. The sources emphasize the need for broad-based information which can be filled out in time according to the user's needs.[257] Thus when Admiral Blair put forward his views on the future of United States intelligence backing for peace support operations in the Defense Intelligence Journal, he laid down the requirements, or information needs, separately for the different stages in an operation. At the planning and preparation stages intelligence is expected to produce predictions of developments in the situation for use in UN and operational command decision-making (2-Decide). These predictions should concentrate on possible policies and aims of the states and groups involved in the conflict and the capacities of the armed forces stationed in the crisis area and are intended to help in the deployment of troops within the operation. Once initiated, the intelligence process will involve updating of databases, atlases and any operational plans regarding the crisis area. It will also lead to the creation at the planning stage of an intelligence system to support the operation proper, which will contain both national and tactical elements. The structure of this system and the choice of elements should be based on the information needs expressed by the commander.[258]

Planning and preparation	Deployment in the target area	Action	Monitoring and supervision
• weapon systems • threat assessments • support for operational planning • intelligence system design	• threats associated with deployment • deployment of intelligence units	• intelligence information to support the commander • formation and distribution of a tactical situation description • support for alliance intelligence • battle damage assessment (BDA)	• Supervision of agreements

Table 5. **Requirements placed on intelligence services in the various stages of an operation.**[259]

Intelligence information should be distributed to all troops participating in an operation regardless of nationality. The US practice is to include this distribution procedure in the information acquisition and synchronization plan, and in any case distribution and security measures must be decided upon in advance and with due attention paid to national restrictions. Distribution problems become more acute when one is dealing with non-governmental aid organizations (NGOs), for instance. In view of the situational nature of the information, the Americans have deemed it appropriate to set up an office for UN operations that attends to the censoring of information before distribution, while another approach, involving intelligence support teams, is devoted largely to ensuring the passage of the necessary military intelligence within the command process and the appropriateness of its distribution.[260]

Both Smith and Williams state that the intelligence aspect of an operation should produce situational and intelligence reviews for the use of the upper levels in the command structure and that these reviews should indicate the intentions of the parties to the conflict, changes in the situation and the influence of these factors on the ability of the peacekeeping forces to complete their mission (2-Decide). Political and military analyses at the operational level should be performed jointly, and intelligence at this level should be capable of furnishing the decision-makers (2-Decide) with

proposals for policies by which the alternative scenarios can be managed. As Smith puts it, *control over information of this kind makes the UN a party to the politics of the crisis area whether it likes it or not.*[261] The results of the intelligence work are normally distributed in written form, as documents, telefaxes, letters or courier messages, especially in cases where the data transmission systems of the various nationalities cannot technically be rendered compatible within the intelligence architecture. The electronic distribution of products is becoming more widespread, however, as it is faster and enables further processing of the data. New possibilities introduced by advances in technology are video conferencing and search-based services of the Internet type intended for users of computer terminals.[262]

All the authors emphasize the substantial problems attached to the last phase in the intelligence process, distribution, the most serious of these being the handing over of national intelligence products to other states, or even to the parties in a conflict. One concrete example of this mentioned by John Mackinlay is the sharing of strategic intelligence between the United States and non-allied nations. An attempt has been made to resolve this problem in PDD 13 and at a practical level in the planning of operations and in exercises - but with poor results.[263] Multinational operating environments inevitably entail intelligence leaks, either intentional or accidental, and this affects the interest of the producers of intelligence and the parties to the conflict alike in participating in such activities or even permitting them. Eriksson maintains that the problem can be reduced by adapting intelligence products to individual recipients, but the danger is that the decision-makers will receive different impressions of the situation, and thereby different grounds on which to reach their conclusions (1-Process, 2-Decide) and that the information will become politicized. As Raevsky notes, all information that bears essentially upon the taking of decisions must be transmitted to those responsible regardless of nationality.[264]

It is inevitable, of course, that *the parties to a conflict will attempt to work towards their own ends*, and this may take the form of feeding disinformation to the operation's intelligence system. Allowance must be made for such practices by means of both counter-intelligence and technical monitoring, and it naturally

places additional demands on systems for ascertaining the quality and reliability of intelligence information. Supervision and efficiency assessment must be extended to the whole of the intelligence process, with the ultimate aim of improving its ability to support decision-making.

Intelligence methods

Open sources (OSINT) which can provide extremely useful information to fill out that obtained as the result of intelligence analyses include Lloyd's Register of Shipping, Jane's books and magazines and the publications of the Stockholm International Peace Research Institute (SIPRI) and the International Institute for Strategic Studies (IISS). The practically instant ability of the media to provide information about the outbreak of a local conflict or about events in a crisis area anywhere in the world should be exploited to the full for the acquisition of information. This also implies that the media can prove to be sources of early warnings.[265] Observation or adoption of the following factors would improve the performance of the UN and its operations:

- The collection and processing of data from general sources - the CNN, press agencies, research institutes and the press itself, also local media.
- Combination and processing of information from other UN organizations, such as WHO, UNESCO etc.
- Limited rights of access to national intelligence offices - affecting member states.
- Ability to receive information from satellites and process it - purchase of information or its receipt as a donation,
- Operation command intelligence support from the Secretary-General's office 24 hours a day.
- Encoded communication connections for member states producing information and for the command functions in operations[266].

The advantage with open sources is the abundance of information available, and the greatest drawback the need for processing and critically evaluating all the material. Although computers can be used to organize the mass of information, the

decisive factor for the final outcome depends on the professional skills of the analyst. Another problem is concerned with variations in the availability of OSINT material, e.g. interruptions in Internet services or blocking of the desired address. The Internet is undoubtedly the most cost-effective means of acquiring up-to-date open source information, and as Dander points out, there is also software available for OSINT analysis purposes, e.g. the Project Pathfinder and Sentinel programs in the United States.[267]

In the case of traditional peacekeeping missions the primary sources **at the tactical level** are the battalions themselves, local citizens, psychological operations groups, UN civilian sections and non-governmental organizations (NGOs). The last-mentioned are regarded as extremely useful sources for the purposes of UN operations. A considerable amount of information can be gathered by following the local news media and those of nearby areas.[268] The commanders of missions have to prepare themselves for sudden crises by having rapidly deployable military intelligence staff at the ready, and this is possible only in an integrated intelligence system where all the available intelligence technology and equipment can be mobilized. The US directives place emphasis on IMINT and SIGINT intelligence employing aircraft and space vehicles, but peacekeeping intelligence operations should also be ready to make use of manned and unmanned electronic, optical and acoustic surveillance equipment, justification for the use of which can be found in the "spirit" if not the wording of the mandate. Nordic directives, on the other hand, point out the human ability to make more accurate observations than any technical devices[269].

The intelligence methods recognized by NATO are HUMINT, IMINT, SIGINT, OSINT AND CI. It is noted that IMINT allows a general impression of the area of the operation to be formed together with an assessment of the capacity of the forces operating there, and it also permits control to be maintained over the methods used. HUMINT is normally the main source and the most reliable means of obtaining information for the use of peace support missions, and of confirming information derived from other sources. In a peace support context the advantages of SIGINT come to the fore best in the

issuing of early warnings, because little use is normally made of the electromagnetic spectrum in missions. OSINT is the outstanding intelligence method at the planning stage and when forming the initial databases, and it has also proved useful for early warning purposes with advances in telecommunications. The security of the troops themselves can be improvement by the use of CI methods, i.e. counter-intelligence, but the capacity of this approach to yield intelligence information as such has not so far been exploited to the full. As noted above, HUMINT is the chief tactical intelligence approach adopted in traditional peacekeeping,[270] but in the opinion of Martin Urquhart *its traditional division according to levels of command should be abandoned and all HUMINT for a particular mission should be coordinated jointly and centrally*[271]. Activities corresponding to HUMINT are referred to in the Nordic Countries as surveillance. Field observation and reporting are among the basic elements of peace support, and are used for detecting and indicating changes in the prevailing situation (1-Process). The observations concerned may be breaches of agreements or evidence of such that provide the basis for decisions leading to sanctions (2-Decide). The Nordic directives give expression to the traditional spirit of peacekeeping with their mention of a combination of patrols and the use of sensors[272].

Patrolling remains one of the principal military tasks in peace support missions, as it allows the commander to gain an intelligence advantage over the parties to the dispute at the tactical level. Patrols can also be used for confirming or supplementing information obtained from field observations or technical systems, and it is well suited as an intelligence method where supervision is to be maintained over wide areas. The firepower of armoured intelligence vehicles, their mobility and their protective and communications equipment make them particularly suitable for military confrontations, for mobile field observations, for protecting transport columns, as a reserve and for probing routes. Helicopter patrols can be used for surveillance and the gathering of information over wide areas with the minimum of delay, while aircraft and satellite systems can be complemented with unmanned airborne vehicles equipped with various remote sensing devices. Military police can be assigned protection, supervision and conventional policing tasks.[273]

Eriksson also mentions that *the United States, Great Britain and France all use special forces for intelligence and humanitarian work in peace support missions.* These forces can be deployed without arousing attention even to points situated far away from the command centre, and their possession of foolproof communications facilities means that they can undertake liaison and intelligence tasks and send back situation reports. They can also provide real-time data on the situation and weather conditions as an aid to regular battalions being moved to the area (1-Process). These forces are also suitable for offensives of a limited kind, tactical intelligence, illumination of targets for precision weapons, anti-terrorist activities and light infantry functions.[274] Hunter notes that the observation points set up by the special forces and battalions of the British army, including the covert ones, are particularly valuable for the acquisition of information. The directives also recommend special forces for attending to civilian matters, for co-ordination work and for public information duties. They are similarly available for gathering together, exercising and organizing local scattered armed groups or security forces belong to the host country.[275]

Troops specialized in **electronic warfare** (SIGINT and EW) are capable of providing an operation commander with short-delay electronic descriptions of the situation and of issuing early warnings (1-Process). Naval vessels are equipped with a wide range of intelligence devices and systems, and these have the advantage of being immediately available for focusing on the target area around the clock once the vessel has arrived at its station. This means that general intelligence work can commence as soon as an embargo on shipping or trade has been declared, with more precise intelligence tasks being defined as the operation proceeds.[276]

Counter-intelligence (CI) employs in part the same methods as military intelligence in order to obtain information. The safety of one's own troops is dependent on information acquired by counter-intelligence regarding the performance capacity and activity of the other side's intelligence and the objects of its interest. The role of counter-intelligence is expected to increase in the case of local conflicts, as also will its role as a producer of information. Although covert action is regarded as a tool for the

promotion of democracy and the advancement of peace in the United States, *the Europeans look on it as contrary to the nature of peace support missions.*[277]

The doctrine of wider peacekeeping introduced in 1994 stresses the importance of consent. Peacekeepers should act in such a way that they cannot be accused of illegal or covert action of any kind. The US directives state that the parties to a dispute may regard intelligence in general as a hostile act and lose confidence in the whole peace support operation as a consequence. It may be said that on the whole the major powers accept partial consent at the tactical level, but neutrality must be preserved under all conditions except in the case of peace enforcement missions. The Nordic doctrine holds that the acquisition of military intelligence should be as overt and discreet as possible and should take place with the consent of the parties to the conflict,[278] whereas the British document insists that all personnel regardless of rank are obliged to contribute to the gathering of information. Peacekeepers should be taught and trained where to look for information and how to report it. The training of the troops on arrival at the area of operation should include setting up observation posts, defence exercises, fortification, daily routines, the keeping of diaries, the writing of reports according to a standard model and the use and servicing of observation and surveillance equipment. They should be instructed in the identification of the fixed-winged aircraft, helicopters and land vehicles in use in the area, and their basic training should have included the recognition of a wide range of weapons of different types.[279]

Intelligence architecture

The commander should determine the intelligence architecture to be adopted in such a way that both early warnings and prompt, accurate, clearly presented intelligence information can be distributed to all the troops. This is essential for their own security in the first place. The intelligence architecture of a traditional operation is based on communications equipment owned or leased by the UN, and the commissioning of this equipment is allowed for separately in the Status of Forces

Agreement for the mission. The civilian wing of the UN will be responsible for arranging the lines of communication between the operational headquarters and the UN headquarters, while those between the operational headquarters and the troops will be built and maintained either by the signal division of the operational command or by the contingents themselves. The contingents will almost always be responsible for their lines of communication with their home country. The Nordic directives do not say anything specific about the intelligence architecture, but assume that intelligence will use the command system in the same way as any other user of the computer terminals. The handbook at the combat technology level nevertheless encourages the integration of surveillance systems in order to achieve improvements in coverage and reliability.[280]

The NATO directives state that *the information technology systems used in a peace support mission are a combination of national military systems and the civilian systems of the host country.* They also warn about placing excessive reliance on the local telecommunications network. The data protection directives point to the need to be ready to use encrypting to maintain security, but at the same time note the importance of impartiality and "transparency". The directives are fairly comprehensive all told, when both the UN political leadership and the needs of joint operations are taken into account. The core of the communications system for ground troops will usually be formed by the data transmission system of one country, to which the lower levels of the command structure are linked by means of interfaces that conform to NATO standards.

The intelligence architecture should be designed and constructed in good time, and both this and the data protection system should take into account the multinational nature of the operation and the participation of non-NATO countries. Intelligence support teams are an essential part of the headquarters of any operation. The principal task of the designers of the architecture will be to achieve compatibility between the various data processing and transmission systems.[281] The information travelling via the architecture must be defined and it should be possible to trace its passage in each case, as the ability to identify the source of each item of information means that it can be assigned to the correct context

and its confirmation can be proved to be from a different source. Simplicity is an advantage in that it facilitates development of the architecture, and particularly the linking of new non-NATO contingents and civilian organizations to it. It is maintained in the SIPRI yearbook that Australia, Canada, Great Britain and the United States at least have been working actively to develop the performance capacity of UN missions in the fields of information technology and data transmission., with the accent on interoperability.[282]

US intelligence at the national level observes the "split-based operations" principle, which means that the troops deployed in a mission received support from their own country or their own garrison. This support is mediated through the ability of the C4I system to establish worldwide data transmission connections. Systems will undoubtedly be developed further in the future to the point of becoming browser-based information services, referred to in the intelligence community as Joint Intelligence Virtual Architectures (JIVA). Existing systems of this kind correspond in level of performance to the C4I for the Warrior. Development work is still in its early stages, however, and the system is not expected to be operational for many years yet.[283]

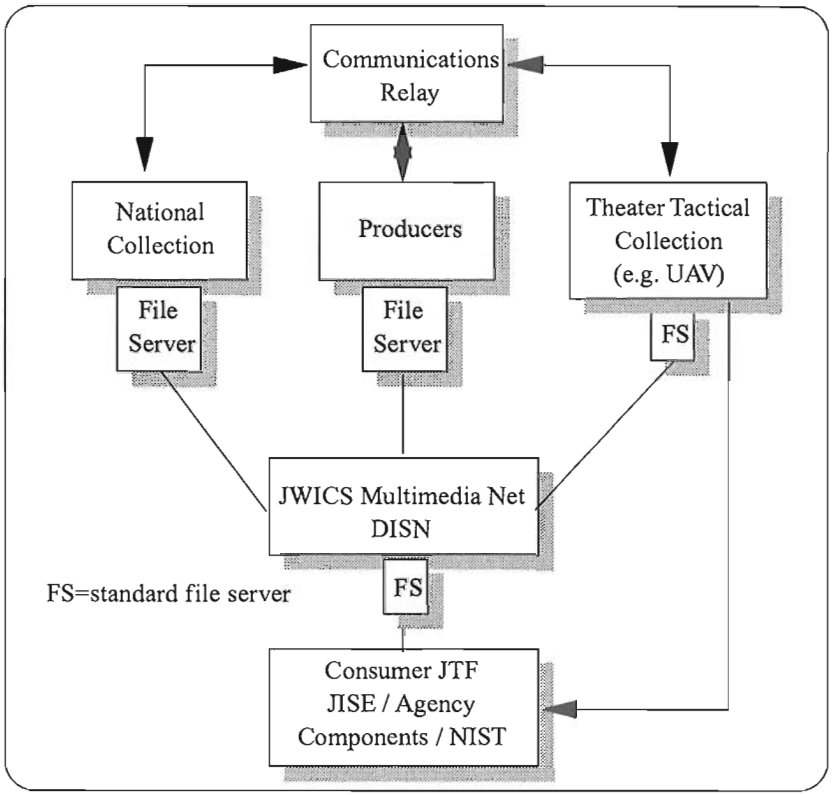

Figure 8. An example of the structure of an intelligence architecture. The diagram shows how national intelligence systems, the operation's own intelligence products and the operation's tactical intelligence system are linked together by means of a communications network and how they are joined to the JWICS system. The lowermost information user in the diagram receives his intelligence both via the JWICS database and directly from the tactical system, e.g. in the form of an image from an unmanned airborne vehicle.[284]

The practically ideal intelligence architecture presented in the theoretical chapter above is based on the American C4I for the Warrior doctrine. The architecture links both the national intelligence systems and those participating in the mission and the corresponding users of their terminals together, the success of this being dependent on careful planning that takes account of the prioritized demands for the passage of information over each stage in the connections. The scheme for the architecture is then

passed on to those responsible for lines of communication as a basis for further planning and implementation. As explained by Barry, data transmission within NATO relies on the fixed NATO Integrated Communications System (NICS), so that any CJTF data transmission architecture has to be developed on *ad hoc* principles out of the national systems of the United States and other countries. He reckons that this dependence will continue at least for the foreseeable future.[285] The main items of equipment in the CJTF headquarters intelligence architecture are the telephone and telefax machine, with or without an encrypting device, and workstations attached to the CRONOS/LOCE and SHED COINS data management systems.

A CJTF headquarters functioning at sea would need the corresponding naval workstations. The workstations are linked together by means of LAN and WAN transmission networks, employing satellite systems, the local telephone network and radio systems for transmitting the signals. These enable links to be made to TARE and IVSN/national systems and support security-classified video conferencing and telephone calls. Special transmission systems are used for the images produced by unmanned airborne vehicles.[286] British naval doctrines favour the creation of a rapid, efficient intelligence architecture in order to connect all the sensors, information technology and data systems, databases and other intelligence systems in the area. The use of transmission systems calls for high levels of professional skill on the part of the personnel, but these strategic and operational systems have many advantages, including a centralized command for all naval operations anywhere on the world's oceans.[287]

5 EXPERIENCES WITH THE IMPLEMENTATION OF INTELLIGENCE

"We had preliminary intelligence data on the types of threats we would most likely encounter and were very well prepared. A typical load out of the Prowlers would consist of three ALQ-99 pods, a single wing-mounted fuel tank and a single wing-mounted HARM."

Captain Baxter, USMC Tactical Electronic Warfare Squadron 4, Operation Deny Flight[288]

5.1 EXPERIENCES WITH EXISTING PEACE SUPPORT OPERATIONS

The lack of national interest on the part of the major powers became evident in the case of the problems in Yugoslavia and Somalia and the attempts to solve them. The Security Council was slow in intervening and had no military power at hand to pursue its strategic goals. The interests of the major powers coincided with the international interest only at the point when United States influence began to suffer. It is reasonable to claim that it was only when Washington, London and Paris had reached a consensus that UNPROFOR received a strategic directive in which the mandate, political pressure and military power were in the correct proportions. This did not occur until the late summer of 1995, reaching its culmination in the initiation of Operation Deliberate Force.[289]

The commencement of an operation of the Lead Nation type is usually connected with protection of the national interests of one or more permanent members of the Security Council, for in Lawrence Freedman's view attention to such interests can easily involve operations carried out in the name of peace support by the major powers, for which legitimation in the eyes of the international community is sought from the UN or some other organization.[290] Efforts are made to ensure the correct decisions in the Security Council by lobbying the other members prior to taking the matter to the council, and the member that makes the initial proposal then takes responsibility for leading the operation,

accepts the physical risks and pays the costs. Those who abstain from voting remain on the sidelines to see whether the operation is a success. The United States withdrew from Somalia, for instance, because its troops encountered greater risks than the administration and the nation were prepared to accept. On the other hand, a successful operation such as that in Haiti may be said to have survived the external and internal political and military pressures and to have been of more or less the planned duration.[291]

The operations in Yugoslavia are divided into a number of missions and based on a number of Security Council resolutions, so that the troops are acting on the strength of several mixed or multidimensional mandates. A mission comparable to the CJTF set-up was tried for the first time in the IFOR and SFOR operations, and the results were encouraging, in that the command headquarters were able to control both the NATO and non-NATO troops effectively. When it comes to developing the CJTF concept further, use will undoubtedly be made of experiences gained not only from the ground operations but also from the Deny Flight air operation commanded by AFSOUTH and the Sharp Guard naval operation.[292] Operation Deny Flight was undertaken under UN Resolution 816/12.4.1993, and its aim was to supervise the air space and force the parties in the conflict to observe the mandate, which prohibits fixed-wing and rotary-winged aircraft from entering the No-Fly Zone over Bosnia-Herzegovina. The operation was also detailed to defend UN bases, under UNPROFOR command, and by request, with legitimation accorded under resolutions 836 and 958 (chapter VII). On UN orders and under its co-ordination, NATO carried out air strikes on certain targets that threatened the UN protected zones. In addition, supporting flights were carried out in connection with control procedures, intelligence and maintenance of the operation.[293] The NATO air force implemented the command process connected with its operations according to virtually the same cycle as in the Second World War, the Gulf War, and the Bosnia operations, based on an intelligence report issued twice every 24 hours and an air tasking order issued at six o'clock every morning. This meant that in the worst case air operations would be performed on the strength of information that was 36-48 hours old, due largely to financial savings in the

data transmission functions of the C31 system.[294]

Command of the Somalia operations was complicated to a significant degree by differences in the interpretation of the UN mandate between the various states and experts involved. The operation began as a humanitarian mission, UNOSOM I, in which the United States participated from August 1992. At the second stage, the UNITAF operation, a limited use of force was added to the mandate, while the third stage, UNOSOM II, was a peace enforcement operation which involved combat episodes. It was in this latter operation that the differences in national interests and political agendas began to be seen, together with the complexity introduced by the use of a multinational force. The military commander had to adapt his strategic approach in order to ensure that it would continue to be possible to control the operation. The complexity and multinationality of the command relations led to significant difficulties in the exchange of intelligence, one reason being the US desire to retain a strict national command over both its troops and its intelligence.[295]

Operation Up-Hold Democracy, focused on the island state of Haiti, began on 18.4.1994, although preparations were put under way in September 1991, when Jean Bertrand Aristide was elected president. It had become clear to the United States by summer 1994 that it would be impossible to achieve a political solution, and thus USACOM received the command to *prepare for either forceful or peaceful intervention*. A decision to intervene with force was taken on 18.9.1994, but it was rescinded only a few hours before the operation was due to start and redefined as a peaceful intervention.[296]

The Bush and Clinton administrations in the United States have increased the amount of intelligence support given to the UN, but certain sources suggest that the upper limit is now being reached in terms of both the amount of information that can be communicated and the financial resources that can be devoted to this. The Republicans, who have been calling for restrictions in this support, have been particularly dissatisfied with the UN in the matter of ensuring the security of intelligence information, and have proposed a bill to place substantial limits on intelligence co-operation.[297]

Experience clearly indicates that the UN is incapable of running the more demanding types of operation, i.e. second or third-level

operations. The disarming of parties to a conflict without full consent has proved to be tantamount to a combat situation, and the impotence of the UN in such matters may be seen to be due partly to defects in its own structure and the inconsistencies between its own principles and the nature of the interventions required, and partly to the unwillingness of the member states to arrange and pay for the firepower required for enforcement operations.[298] All the conflicts concerned are fundamentally struggles for power, irrespective of whether the operations are initiated in order to provide humanitarian aid or to limit the scope of an armed confrontation. As Lawrence Freedman points out, experience shows that the parties to the intervention inevitably become parties to the conflict, with their own distinct interests.[299]

5.2 INCORPORATION OF INTELLIGENCE IN COMMAND AND CONTROL

The UNPROFOR command system has been criticised not only for its poor decision-making process and command structure but also for its poor co-operation with the UN and NATO. Collaboration between political and military command elements at the operational level has been accused of a lack of co-ordination. One point that was raised in a seminar held by former UNPROFOR commanders in Oslo was the way in which certain participating countries insisted on commanding their own troops on national lines, in addition to which *the overall UNPROFOR command process was deemed disorganized and unable to make use of the information supplied to it by the intelligence process.* It is evident from the Lewis report that demanding peace support operations cannot be run without a clear military command structure, as revealed most obviously in missions that have a mixed mandate. According to Roberts, it was this that eventually led to the situation in UNPROFOR in summer 1995 in which the UN Secretary-General, with US backing, withdrew his special envoy Akashi from the command process for deciding on the use of force. [300] The outcome was that the UNPROFOR commander called on the RRF to plan its actions so as to support the UN forces and as a separate RRF operation. The situation had

developed by July 1995 to the point that the commander ordered full integration of the planning and implementation of command processes for the RRF, UN and NATO (air force) military operations. At the same time the intelligence processes of the organization were focused on supporting this planning initiative (1-Process, 2-Decide). A strategic outline for an integrated plan for air and ground operations was available by 29.7.1995, and the actual product of the whole command and intelligence process, the air and ground operation plan, was completed in the last week of August, on the eve of Sarajevo Market Place II. The plan was put into effect from 2.00 hours on 30.8.1995 and the operation finally terminated on 20th September. No infantry confrontations took place at all during the operation, and the Bosnian Serbs did not once fire back. Colonel Nicholls concludes from this that the UN did not become a party to the conflict even though it used force against one of the parties.[301]

When LANDCENT was acting as the command headquarters for IFOR a distinction was made in its command process between overall planning of the operation and the command function proper. The planning section, CJ-5, was responsible for planning future action, ensuring capability between political and military action and the planning of alternative measures such as evacuations, while the Joint Operations Centre was responsible for commanding and directing the implementation of the existing plan under the supervision of the operational section, CJ-3. The responsibilities of intelligence in this overall plan consisted of danger assessments, map services, the danger assessment, intelligence architecture, counter-intelligence and troop safety aspects of intelligence planning, HUMINT and the command and co-ordination of intelligence.[302]

Experiences in Somalia suggest that the overall planning of the operation should take account of political, humanitarian and military considerations and the interaction between these. Planning should be based on essential, reliable and exhaustively analysed information, and should be backed up with intelligence services that are available to all the participating countries and headquarters. Intelligence practices also need to be defined in the course of general planning.[303] Lieutenant-General Hugh Shelton, commander of the Haiti operation, led the preparations for this from Fort Bragg and moved to his flagship only two days before the landing.

This meant that he was able to benefit from the services of the intelligence centre of the XBVIII Airborne Corps (CMISE) throughout the preparations. The use of video-conferencing facilities made it possible to conduct routine conversations between commanders and ensure co-operation between headquarters staffs. The commander also used this form of "telecommunications" for negotiating with the President and senior members of the Ministry of Defense. Video-conferencing was continued throughout the operation, as it had proved during the preparation stage to be a reliable and natural means of exchanging information and views. It meant that the commander was able to be advised on the situation in accordance with the accepted doctrine both when on the move and when at his headquarters.[304]

In practice it is almost inevitably the case that the levels of decision-making in peace support operations become indistinct, with lieutenants and captains having to take rapid decisions of considerable importance so as achieve the desired concrete results at the strategic level. One cannot prepare for such situations in advance, nor can one practise for them. It is therefore important that all levels of command should be in possession of an overall picture of the political and military situation and of the culture of the area concerned.[305]

5.3 THE INTELLIGENCE PROCESS AND ITS FUNDAMENTALS

One of the most significant findings of the UNIDIR questionnaire was that *the majority of peacekeeping operations have not had any operational-level intelligence procedure specified for them.* Although the battalions have received information and exchanged information among themselves, no systematic intelligence practices have been defined for them. The command and intelligence processes have both remained unclarified. The same survey also reported that the mediators in the Yugoslavian dispute appointed by the international community did not receive intelligence information from the regional security organizations, although they did receive information from their own national intelligence sources. Channels of the latter kind were also

available to some of the UN commanders who served in the former Yugoslavia. The questionnaire claims that UN Headquarters did not have the necessary channels open to it. It is similarly evident from Lord Owen's memoirs that there was an aspect of national interest involved in the conflict management operation, although it was not clear what the ultimate aims were.[306] UN intelligence practices are determined in each case by the mandate, which may require supervision over the use of heavy arms, and this in turn may mean monitoring the movements of combat troops and weapons systems on both sides as well as the verification of demobilization. If the operation is incapable of doing this, it will lose its credibility in the eyes of the parties to the conflict and the international community in general, so that intelligence practices may well be the key to a convincing presence as a whole.[307]

Another of the main purposes of intelligence in peace support operations is to ensure the security of the troops, which implies the use of counter-intelligence methods. Similarly, the operability of the intelligence system as such must be ensured in order to be able to locate and monitor weapons and weapon systems maintained by the parties to the conflicts as part of the drive to prevent their movement. This presupposes a broad scope of action for the intelligence services with respect to both the acquisition and distribution of information. Experiences in Somalia confirmed the already evident need for deciding upon an official UN intelligence protocol.

The UN must be prepared to renew its own procedures and to make use of all available information when directing demanding operations. The elaboration of an intelligence protocol begins with defining the process and organizing the intelligence system. No common intelligence protocol was drawn up for the Somalia operation, whereas in practice it would have been important to define how use could be made of the various types of intelligence and means of acquiring information. One dismal example of this is the fact-finding mission that was sent there, which was linked to the UN only for the duration of its field investigations and failed completely to generate the information needed for the Security Council to reach its decision (2-Decide). Some states such as Australia and Indonesia define in their national doctrines the intelligence tasks relevant to low-level

conflicts (OOTW), and in this way they are able to decide on their own participation in the management of such conflicts. They are able to direct their own intelligence towards identifying possible conflicts in good time (1-Process) and to preparing a body of intelligence data (2-Decide) for the eventuality of commencing an operation.[308]

Experiences confirm the claim put forward earlier that the classification of intelligence into strategic, operational and tactical is unreasonable in connection with peace support operations or demonstrations of force. Another observation is that the greatest failures materialize at the operational level. In Somalia, for example, the operational intelligence architecture was constructed around commercial satellite connections, which meant that the JTF did not have any ready capacity of its own but needed to purchase it. Similarly the operational level has often found itself having to act in a new environment, built up areas such as Mogadishu, Sarajevo and Port au Prince, engaging in urban intelligence in places where conventional intelligence is not accustomed to functioning.[309] The political leadership of the United States called off the arms embargo on the Bosnia muslims of its own accord on 11th November 1994, and at the same time it stopped distributing intelligence information on the blockade to troops taking part in the peacekeeping operation, including those of NATO members. This placed Admiral Leighton-Smith in a situation in which he had to pretend not to know anything about these matters when discussing the arms embargo with General Janvier of UNPF and General Smith of UNPROFOR. At the same time the US intelligence machinery was producing information on the embargo (1-Process, 2-Decide) which Janvier and Smith were not receiving via their own channels.[310] By way of contrast, both Smith and Caldwell raise the case of Lieutenant-General Sanderson, Australian commander of the UNTAC operation, who received intelligence from both national and American sources, mainly because of his Australian nationality. The opposite extreme was represented by General Nambiar, the first commander of UNPROFOR, who was refused NATO intelligence support because he was Indian.[311]

The manner in which IFOR shares its information among participants shows that some progress is taking place. The IFOR Russian staff located in SHAPE, for instance, received all the

intelligence information relevant to the operation. A second demonstration of a change in the right direction is the Joint Analysis Center (JAC), through which NATO and its allies received support in connection with peace support operations. The practical implementation was in this case the work of a 12-person co-ordination group containing staff from 6 NATO countries. Apart from these operations, the JAC also produced information to back up naval operations in the Baltic.[312] Intelligence practices in the SHAPE headquarters began to alter as far as both staff and information technology were concerned at the time of Operation Deny Flight, as information technology made it possible to search for intelligence information according to the user's needs. Practices developed after that to the extent that the intelligence systems in Bosnia maintained data acquisition around the clock under NATO control. Now *the clear-cut IFOR command system has allowed a broad-based intelligence protocol to be established*. Under the existing protocol the small states have had to accept their position and the fact that the major powers control intelligence in peace support operations.[313]

The Haiti operation was the first real test of joint intelligence for the United States Atlantic Command (USACOM), in that the command headquarters received support from the Joint Intelligence Center (JIC), in the form of the Atlantic Intelligence Command (AIC). The operation was implemented in practice by JTF-180 and JTF-190, which were similar in their intelligence architectures, ways of acting (TTP) and directives and had compatible data transmission and distribution equipment and devices. Their common intelligence protocol was based on the USACOM publication "Atlantic Tactics, Techniques and Procedures" (ATTP), which laid down the principles for intelligence work, the idea behind it and the headquarters' intelligence organization and activities. The third edition of this publication was in use by the time the Haiti operation began. Comparable intelligence directives for joint operations exist on the strategic and tactical levels. The intelligence practices followed in the Haiti operation had been created and rehearsed in annual JTF-level exercises and the finishing touches had been put to the compatibility between the JDISS and the army's Warrior system.[314]

At the planning and preparation stages of peace support operations, and also at the deployment stage, the headquarters

staff have to accept and handle considerable amounts of detailed, unclassified and uncoordinated information (1-Process), as the intelligence process for the operation as such is not yet functioning. In the case of the initiation of UNPROFOR, this lack of an intelligence process was due to the absence of any statement of intelligence requirements and practices, and also to national differences of opinion within the headquarters staff as to the intended nature of the intelligence and command processes. It was felt at the beginning that there was insufficient time to gather background information and train command and intelligence organizations. In the UNTAC operation, for instance, the UN staff had not gone into the recent history of the region, its culture or the conflict as such, and as a result the goodwill of the local people was soon lost. *There should have been time to gather background information, as the initiation of an operation usually takes several months.*[315]

The body appointed by the US European Command (USEUCOM) to plan the operation in Yugoslavia (YPJC) adapted the intelligence process so that the service provided would correspond to the information needs of the regional commanders, which meant that to some extent it functioned in reverse, e.g. the information was not classified according to the degree of secrecy required but "declassified" according to the extent to which it could be made public. This made it easier to take account of the national backgrounds of the recipients and to distribute information in an open system.[316] The intelligence process at the operation level must be adapted to local conditions, so that in Bosnia, for instance, the sighting of four tanks did not necessarily mean "just a platoon on the march", for under local conditions there could be a considerable force involved, perhaps a "mechanized brigade" moving from Pale. In other words, each observation had to be interpreted in accordance with existing knowledge of the deployment of the local troops for combat purposes and the levels of armament of the parties concerned. The intelligence process received support at the operational and tactical levels from recognition keys compiled by the national organizations, knowledge of the tactical instructions drawn up for the Yugoslavian army in its time, and a knowledge of local conditions. The material required began to accumulate only when the operation had actually begun. The initial information was

used for the recognition of critical indicators such as equipment, points in the terrain and directions of movement, and it was possible on the strength of these indicators to support decision-making (2-Decide) by creating bodies of information that would enable troops, intentions, rotations and changes to be detected and recognized.[317]

The intelligence process observed in the IFOR operation was in accordance with the theory but adopted a counter-intelligence viewpoint. One problem was adaptation of the HUMINT and CI products into a suitable form for the user. *Evaluation of the reliability of the process lasted six months, after which it was possible to say that the limits within which the intelligence products lay were properly known.* Considerable attention was paid to the planning and preparation stages in the IFOR operation, which gave a good impression of the strengths and weaknesses of the system. It is important at the stage of planning the intelligence architecture to have a clear idea of the information systems and data transmission systems available to those responsible for intelligence and those using the computer terminals, as this will enable the system to be made as clear and straightforward as possible.[318] When it came to transferring responsibility for the command of the IFOR operation, however, the staff that was taking over planned its future activities on the basis of intelligence products received from outside. Support from national systems and NATO intelligence services was invaluable for LANDCENT, and for this reason the creation of an intelligence architecture was regarded as one of the first tasks, so that a general view could be obtained of all the instances providing information and what connections existed with these. In order to ensure the receipt of information, the participating countries were asked to send groups of liaison officers to join CJ-2. The actual intelligence protocol for the operation was laid down in the IFOR permanent instructions. Having assumed responsibility for intelligence, LANDCENT used both manual and automated methods for directing its activities. The Collection Cell was responsible in practice for controlling and implementing the intelligence process and for its integration into the higher-level intelligence system. Intelligence for the whole operation was synchronized according to a plan drawn up and maintained by the Collection Cell.[319]

The intelligence process for the 10th Mountain Division in Somalia was an application of the IPB and METT-T processes laid down in the ordinances, the databases in particular having to be adapted for the purpose. A synchronization table was produced for the operation's intelligence activity, which was then used as a basis for constructing a table of events. This in turn enabled control and planning of the intelligence activities proper. An attempt was made to apply every stage in the intelligence process, and the result was at times found to be good. The processes could not be made to function in the desired manner at the lower levels of command, however, because the processes at the combat technique and tactical levels did not contain any knowledge of the demography or political spectrum of the target area. In addition, the intelligence process was adjusted to support 48 and 72-hour decision-making cycles, and as the command cycle became faster the intelligence process still received enough material but it began to skip over some stages, so that the end products deteriorated in quality. The US Central Command (USCENTCOM) began to define the commander's information needs in the course of UNOSOM II, and in effect took control over intelligence. This meant that the operation's intelligence process lost its tactical-level control, i.e. JTF intelligence control. Attempts were made to solve distribution problems by means of liaison officers, as in UNPROFOR, the aim being to achieve a process that was almost in accordance with Lawson's model, although this situation was never reached entirely.[320]

An IPB intelligence process was applied to evaluation of the media impact and the planning of its exploitation in the case of the Haiti operation. This process provided the commander with an evaluation of the objects of media interest and their needs and impact and gave intelligence justification for producing the necessary background material. At the same time it produced a list of things and targets that should be concealed from the media, on the grounds of the confidentiality of operations and the safety of the troops – Command and Control Warfare.[321] The JTF-190 intelligence process in the Haiti operation began with an analysis of the capacity of the intelligence system to fulfil its task of exploring the strengths and weaknesses of the system. The conditions in Haiti were such that instead of an order of battle

the troops needed an evaluation of the current situation, an evaluation of its probable development and a geological estimate. One essential factor for the success of the process was co-operation inside the intelligence centre that would be concentrated around the all-source analysis group as this combined the data obtained from the various sources. The duty officer held internal co-ordination meetings in the centre at which evaluations were made of both the current situation and the intelligence products, future activities were planned and it was confirmed that the process was generating products that were in accordance with the declared information needs.[322]

One of the basic duties of intelligence within IFOR was to take part in the targeting process. The organization responsible for this process was the Joint Targeting Co-ordination Board, which combined the work of headquarters departments CJ-2, CJ-3 and CJ-5 and was inspected once a month. The objects targeted varied from geographical areas and structures to institutions, which were classified into those to be destroyed and those to be taken over. LANDCENT could also name as a target a function or object that was to be protected from one of the parties to the conflict or from a particular action. In Haiti all levels of command took part in the targeting process, in accordance with the doctrine, and attempts were made to check the location of each target by HUMINT and CI methods. The process was developed to comprise both technical sensors and human observations of the most important sites.[323]

5.4 THE ORGANIZATION OF INTELLIGENCE

Experience suggests that determining the organization of intelligence services is a highly problematical matter, as officially no such organization exists and information is communicated in accordance with the command structure. This problematical nature of intelligence is well illustrated by the arrangements that accompanied the operations in Somalia. In UNOSOM II, for instance, the UN had JDISS terminals operating in five towns in addition to Mogadishu and could, according to Smith, have received intelligence support from the United States, but was

unwilling to accept this because UN Headquarters did not trust the information provided by US military intelligence. This scepticism had arisen partly on account of the unsuccessful US attempt at abducting General Aideed on 3rd October 1993, in which intelligence had been unable to support the commander of the raid by creating and maintaining an accurate description of the situation (1-Process) or by formulating an updated evaluation of the existing threat (2-Decide). The initial situation was complicated still further by the reluctance of the United States to share intelligence with the UN previously, during UNOSOM I. According to the report by Connors, UN Headquarters was able to support the commanders of the operations in the decisions that they had to make (2-Decide) by means of the JDISS system, acquiring information from the US National Military Command Center and National Military Joint Information Center.[324]

As the area of intelligence responsibility of the US European Command (USEUCOM) covers not only Europe but also parts of Africa and the Middle East, the USEUCOM Yugoslavian Joint Planning Cell (YJPC), as part of the Operations Planning Division, was engaged in analysing the situation in the former Yugoslavia and evaluating the possibilities for the United States to react to events there. This use of the YJPC represented the first experiment in combining crisis management planning with JTF operations, its purpose being to plan and direct intelligence simultaneously at the strategic, operational and tactical levels. After 1993 the planning cell set up more or less permanent offices in Sarajevo and Kiseljak in Bosnia and in Split and Zagreb in Croatia to provide a service for the US, NATO and UN forces. In some cases the YJPC would send a liaison officer into the field to assist the UNPROFOR troops, e.g. in interpreting U-2 images (IMINT, 2-Decide), or to assist UN officials and UNPROFOR officers in negotiations with the US command authorities.[325] One of the USEUCOM intelligence centres, the Joint Analysis Centre (JAC) at RAF Molesworth (Fig. 9), provides support for both US and NATO troops in the SACEUR responsibility area and has in practice been distributing its products to US and allied troops in the context of the Yugoslavian peace support operations. More recently its support has also been extended to forces supervising the No-Fly Zone in Iraq, the operations in Albania and Zaire and

the UNTAES and SFOR missions. The Operations Division is responsible for situational intelligence and the distribution of information, e.g. early warnings and updates of the maritime situation, while the Analysis Division is responsible for analysed products, the Command and Control Warfare Division for targeting and task organization and the IMINT Division for IMINT analyses. The Multinational Intelligence Co-ordination Center (MICC) accepts requests for support and directs intelligence accordingly, while the LOCE Division is responsible for data transmission to the various parts of the intelligence architecture and for providing the groups of liaison officers with the necessary information technology.[326]

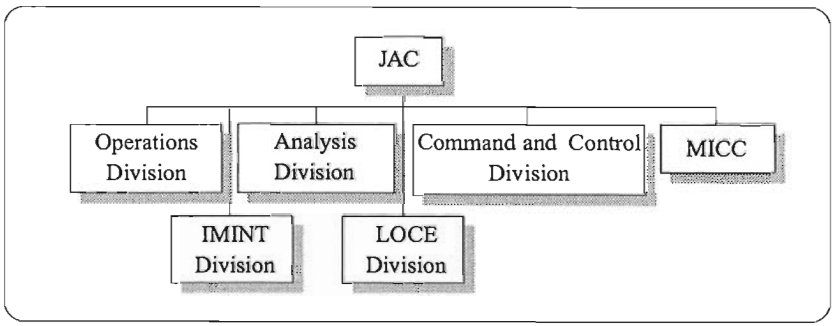

Figure 9. **Composition of the USEUCOM Joint Analysis Center**[327]

As a form of national support, the United States included the Task Force CI Coordinating Authority as a CI and HUMINT element in the Provide Promise operation, and a six-person counter-intelligence group from this element was seconded to the headquarters of this operation in Zagreb. A group of similar composition was also used in the Support Hope operation in Ruanda in June 1994, when the detachment consisted of 36 persons. In the IFOR mission, counter-intelligence officers were used for maintaining contacts with local police and military authorities in matters of counter-intelligence and for exchanging information when participating in situation assessments at the various IFOR headquarters. The active involvement of these liaison officers and CI/HUMINT groups ensured that intelligence would be linked with command functions.[328] When the Rapid Reaction Force (RRF)

arrived in the former Yugoslavia in June 1995, there were two planning groups engaged in preparing its deployment and activities, one in Zagreb, Croatia, and the other in Kiseljak, Bosnia. The RRF was reliant initially on the UNPROFOR troops and command structure already established in the area for their command and services functions, and in the same way its intelligence was dependent on the UN system. The RRF operational command was located in headquarters maintained by the British Royal Marines in Kiseljak, and a NATO-based intelligence centre for the Bosnia area, run mostly by the Americans, was located in the same place, so that it naturally also produced information required by the RRF (1-Process,2-Decide).[329]

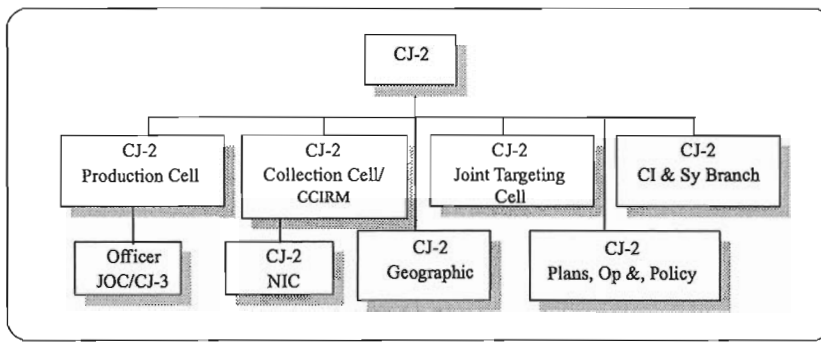

Figure 10. **Composition of LANDCENT CJ-2.**[330]

The commander at IFOR command headquarters was assisted in the synchronisation of air and ground operations by a Battlefield Co-ordination Element (BCE), and it was the responsibility of intelligence to keep the various elements up to date with the actions and plans of the parties to the conflict, communicate battle damage assessments (BDAs) to the commander of the ground element and supervise the passage and availability of intelligence information to the air commander. The final task was to assist in updating targeting data.[331] The organization of the intelligence section of LANDCENT at IFOR command headquarters is described in Figure 10. The head of intelligence was in command of the section and was responsible to the IFOR commander for the organization of intelligence services. The actual products were the work of the Production

Cell, one officer from which was located in the Joint Operations Centre (JOC) to ensure appropriate joint direction of intelligence and the operation itself. The Collection Cell maintained the intelligence architecture, monitored intelligence requirements and synchronized the use of resources, while the Targeting Cell took part in the targeting process and constructed battle damage assessments (BDAs). The Plans, Ops & Policy Cell participated in the planning of future operational activities under the leadership of the planning section (CJ-5), and the CI & Sy Branch maintained the security situation and organization for the operation and produced information for the use of other intelligence bodies. Geographic Support was responsible for cartographic services for the operation and for specialized analyses connected with these. SIGINT was subordinated to the operational section (CJ-3) as a part of command and control warfare planning and management. Co-ordination of electronic warfare was assigned to a separate Electronic Combat Signals Cell, which was located physically within the intelligence section but was subordinate to the operational section. Personnel duties were designated in such a manner that each individual was responsible for the implementation of one part of the intelligence process, for some specialized branch of intelligence and for contacts with his own country's SIGINT systems. The British officer, for instance, was responsible for contacts with command bodies subordinate to IFOR, for the analysis of ground operations intelligence and for maintaining the ground forces' electronic operational chain of command.[332]

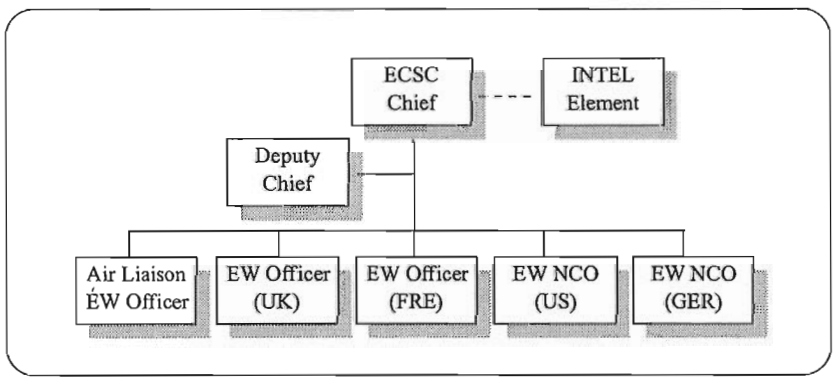

Figure 11. **Composition of the IFOR Electronic Combat Signals Cell.**[333]

The United States made abundant use of CI and HUMINT resources in order to ensure the security of its troops in the operations carried out in the 1990's, deploying no less than 110 persons in this capacity in Bosnia, for example. The need for this arose out of experiences with previous operations, so that efforts were made in Bosnia to apply all the regulations and methods laid down in the relevant directives. *The CI and HUMINT functions of the multinational division led by the United States were implemented as an integrated whole,* with four-person CI/HUMINT groups providing support for the battalions and the division. The resources were even increased for a time in connection with the elections in autumn 1996, and liaison officer support was extended to the Polish-Nordic brigade. Separate standing procedures were laid down for this operation,[334] in which the intelligence section at the divisional headquarters coordinated all the division's CI and HUMINT functions. This procedure was an adaptation of the centralized command of HUMINT activities practised by the United States[335], the Joint Doctrine and the TTP directives, although it could not be applied in its entirety, as the division possessed only ground and air components. The practical consequence of this was the provision of small J2X elements in the US National Intelligence Command as part of the ARRC headquarters in Sarajevo and within the intelligence section of the G2X multinational division (Fig. 12). One significant feature of this arrangement was that there was no intelligence force subordinate to the G2X division, but rather it coordinated all divisional, IFOR and national HUMINT activity in its area of responsibility and maintained contact with the ARRC.[336]

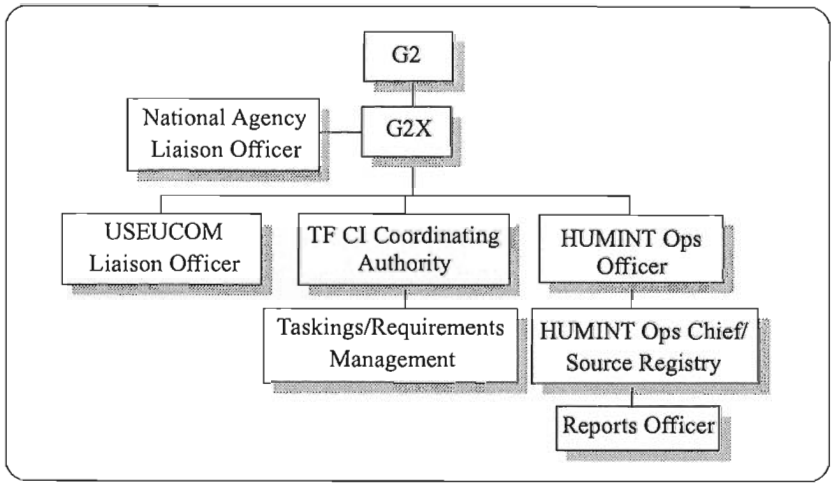

Figure 12. **Counterintelligence and HUMINT in the G2X organization Task Force Eagle.**[337]

It was the USCENTCOM intelligence department that established the intelligence protocol for UNOSOM II in Somalia, with strategic support provided in the form of a national intelligence support team (NIST). Operational support was produced by the USCENTCOM intelligence centre, which was in this case responsible for formulation of the military strategy, while the intelligence section of the JTF headquarters for the operation functioned at the tactical level, synchronizing and combining the higher-level information and that obtained from the operation itself to provide a situation description for the use of the commander. A fourth level was formed by the troops engaged in implementing the intelligence activities. Intelligence within the operation was organized on the basis of evaluations of the situation (METT-T), the size of staff permitted under the mandate, the logistic capacity and the infrastructure available in Somalia. The outcome was a mixture of staff and materials that proved inadequate for the task at hand. The reasons for this lay with the METT-T process, the planning principles available, the priorities laid down for USCENTCOM intelligence and the poor preparation of the Somalian operation.[338]

Atlantic Intelligence Command (AIC) began its preparations for the Haiti operation by sending 15% of its staff to the joint intelligence centres (JICs) requiring support to undertake instruction and training duties. This meant that the lower levels in the command structure could be introduced to the intelligence updating arrangements, the acquisition of data, targeting, analysis of the operational chain of command, computerized data processing and telecommunications. These people were then able to act as liaison officers at the relevant headquarters, bases and embassies during the operation. Each JTF was reinforced with a national intelligence support team (NIST), which contained personnel from the DIA, CIA and NSA, and these teams were supplemented with groups of liaison officers from the local command, with a view to both furnishing additional skills and providing additional information. The teams were equipped with user interfaces of the kinds laid down in the protocol.[339]

The hard core and leadership of the Haiti operation was formed by the XVIII Airborne Corps, JTF-180, and the framework of its intelligence system was provided by the 525th Intelligence Brigade. The principal intelligence task was to accumulate enough situational data to ensure the safety of the operation's own troops[340], and from this point of view the starting point for the preparations was the worst possible, an intervention by force. The brigade's Analytic and Control Element (ACE) set up a joint intelligence centre (JIC) for the area covered by the operation on USS Mt. Whitney, while the part of the operation remaining on the mainland, at Fort Bragg, was the Corps Military Intelligence Support Element (CMISE), intended to provide backing for the 513th Intelligence Brigade in accordance with the split-based design. The idea behind this was to ensure continuity of intelligence at all stages in the operation, and particularly at times of troop movements. The CMISE intelligence centre began preparing its back-up operations in October 1993, and activities were intensified from January 1994 onwards, reaching a peak in March 1994, with exercises in preparation for the JTF-180 operation. All this time the intelligence centre was producing additional background data for planning purposes and taking part in the training of the troops. The essential aspects of the preparations as far as intelligence was concerned were the creation of databases, the compiling of information from national sources

and practical preliminaries for implementation of the split-based design.

The intelligence centre sent intelligence support elements (ISEs) to all the forces entering the operation as they moved to their stations, and preparations for the elements to be deployed along with JTF-180 reached their climax with the assessment of the situation in Haiti produced by the back-up intelligence centre on 10.9.1994, after which preparations began to be made for commencing the operation within ten days. Once this situational assessment had been made, the personnel began working round the clock to extend the centre's acquisition of data to other intelligence systems in order to be able to produce broad assessments for the commander's use. For this purpose teams of officers were seconded to it from all the branches of the armed services and other intelligence organizations. This meant that the intelligence centre was able to provide support for the operation until such time as the ACE centre on USS Mt. Whitney was ready to assume command. A four-person team of CMISE liaison officers was then located in the JTF-180 operational centre to ensure communication between it, the intelligence department and the CMISE. The liaison officers' duties and the places where they were stationed varied as the operation proceeded, but all the groups had ASAS Warrior terminals with them with the necessary databases, chains of command and IMINT products installed. It was through these groups that the intelligence centres gained access to national-level information and services such as the armies' daily intelligence surveys. The SIGINT liaison officer served on USS Mt. Whitney throughout the operation, distributing the information that had been acquired and analysed to the operational command and the JTF through electronic channels. When JTF-190 assumed responsibility for intelligence after the landing on Haiti, the back-up intelligence centre continued in its support function and also served as an alternative intelligence centre in a more general sense.[341] The intelligence work required in the operation itself was carried out by the 110th Intelligence Battalion, which was equipped for counter-intelligence, long-range intelligence patrols and the formation of liaison teams, while teams A and B of the 3rd Special Force Group was available for more demanding operations, including counter-intelligence, for which the teams were spread over 27 locations. Actual troop

intelligence support was arranged by the 519th/525th Intelligence Brigade, and additional information was gathered by the 16th Military Police Brigade, these troops being engaged mainly in counter-intelligence and the interrogation of Haitians placed under arrest.[342]

The main tasks of the joint intelligence centre (JIC) set up within JTF-190, itself formed by the 10th Mountain Division, were the issuing of indications and warnings, reporting, construction of threat analyses, planning of directions for the acquisition of information, analysis of information generated by the all-source system and targeting, and the centre had a comprehensive, efficient intelligence architecture for the execution of these duties. Darren Sawyer mentions as the success factors behind the Haiti operation the training and instruction provided, the experience that the intelligence centre possessed, the wide range of expertise contained within the intelligence architecture and the skill shown by the commanders. The intelligence forces that were available were evidently well suited to the task.[343] It should be remembered that every act of setting up an intelligence centre is a unique event.

The joint intelligence centre for JTF-190 was located in an industrial building in Port-au-Prince, and the premises were arranged so that every room had facilities for pinning the necessary maps, photographs and diagrams on the wall. The terminals and communications devices were installed with LAN connections as well as AC/DC electricity supplies, but as deliveries of some of the material were delayed, priority had to be given initially to the distribution of JDISS terminals. The support groups (JSE and NIST) brought the equipment that they needed with them. Experiences gained in the course of the operation suggest that more training should be provided in the use of the JDISS system, the arrangements for dealing with requests for intelligence support should be explained in detail to all those concerned and the groups of liaison officers and other ancillary staff should be located in the intelligence centre from the preparation stage onwards.[344] The means for gathering intelligence, i.e. the individual groups, were controlled from the tactical operations centre (TOC) of the 519th MI Battalion, employing radio, telephone and Gold Wing systems. The command drew up summaries of the process twice every 24

hours and communicated these to the JTF-190 intelligence centre. Following withdrawal of the US intervention forces at the beginning of April 1995, the UN-led UNMIH operation received intelligence support from the Military Intelligence Support Team located at its headquarters.[345]

The US troops setting out for Bosnia, Somalia and other UN missions received training in intelligence and security in addition to conventional peacekeeping duties, the intelligence aspect comprising the construction of unconventional intelligence plans, individualized intelligence duties, recognition, troop intelligence and the dissemination of information. Likewise, it was laid down that the regular duties of a battalion included the construction of intelligence plans for each stage in the operation and implementation of these plans in accordance with UN principles. In view of experiences in Macedonia, it was also stated that intelligence practices in operations carried out under stable conditions should be adaptations of classical combat reconnaissance, e.g. omitting clandestine elements.[346]

The DANORP report maintains that the work of the UNPROFOR and UNPREDEP headquarters could have been facilitated if UN doctrines and tactical instructions had been available that applied to all countries. The headquarters of the Bosnia-Herzegovina Command, on the other hand, was set up with due attention paid to these problems, and the framework for it was derived from the NATO Northern Army Group, so that it had experience of working together, of the decision-making process and of the use of a common language. It was felt important that the headquarters staff should be similar in background, working morale and accepted headquarters procedures, and that particular emphasis should be placed on the training of intelligence officers, as *the training of a skilled intelligence officer for a particular aspect of the work can take years.* One of the major problems in multinational operations is linguistic skills. One example of this is the chain of reporting adopted by UNPROFOR, in which information travelled from Sarajevo to Zagreb and from there to New York, *each report being rewritten three times in the course of this process* in wording chosen by writers of vastly differing language ability, leading to a substantial deterioration in the reliability, comprehensibility and usefulness of the intelligence information provided.[347]

As Lt.-Gen. Rose puts it, a correct picture of the situation (1-Process) and an awareness of the limitations affecting one's own actions (2-Decide) can help to prevent false expectations arising in higher command circles and provide solid information on which to base strategic decisions at UN Headquarters and at the national level (2-Decide). This is particularly true of media reports regarding sensational events in the area of operations, a process in which the general public emerges, through the agency of the media, as a major factor influencing strategic decisions. Sarajevo Market Place I and II, for instance, taking place on 14.2.1994 and 28.8.1995 respectively, were isolated events that gained strategic importance on account of their treatment in the media. In each case the UN reaction was elicited primarily by a media outburst rather than by a thoroughgoing investigation.[348]

In the case of the Haiti operation the JTF-190 commander defined his intelligence needs, which were then adapted to the methods available, by a process that led to the construction of a synchronization table for intelligence activities. The commander of the UNITAF operation in Somalia set as his intelligence needs (1) to be able to locate heavy armaments maintained in the area by parties to the conflict, (2) to be able to predict the probable actions of local political and military persons, (3) to be able to identify internal and external threats to the troops engaged in the operation, and (4) to be able to locate minefields. The requirements were also defined at the technical level in order to ensure receipt of the necessary information. Co-ordination was the responsibility of the JTF intelligence branch. On the other hand, when the operation became UNOSOM II, its commander, General Bir from Turkey, was unable to direct its intelligence activities as the system was mainly American.[349]

At one time the situations centre of the DPKO at UN Headquarters used to issue weekly summaries of strategic decisions regarding operations in progress, but the production and large-scale distribution of these had to be discontinued because certain permanent members of the Security Council were attempting to politicize them, by removing information or using it for their own purposes, with the intention of influencing the decisions that were taken. Instead, the duty staff of the situations

centres took to issuing a brief daily report of one or two pages on the previous day's events for individual operations such as UNPF.[350] As far as the support provided during operations is concerned, Ratner notes that the UN Secretariat did not distribute detailed information on the progress of UNTAC but relied instead on the content of the Secretary-General's periodic report, a practice that he believed failed to meet the needs of either the Security Council or the command process within the operation itself. Smith goes as far as to mention the nature of operational-level intelligence as one reason why the UN failed to achieve a dialogue between the warring parties in the UNTAC framework.[351]

The operational support provided by USEUCOM included information on the background to the conflict, the history of the region and progress in intelligence practices. Its Yugoslavian Joint Planning Cell (YJPC), for instance, recorded data on movements of heavy armaments in the Bosnia region, their volumes and the command relations in a separate database, the same model as was adopted for monitoring the flow of refugees in Ruanda. The cell also generated analyses of Yugoslavian history, culture and politics as a basis for strategic decision-making (2-Decide) and time-bound alternative scenarios for the development of the operation or the practical situation for decision-making at the operational level (2-Decide), incorporating analyses of combat strengths and deployments and the build-up of forces as a function of time. At the tactical level, the cell supported decision-making (2-Decide) by analysing the terrain and evaluating the performance capacity of given weapons systems under the conditions prevailing in Yugoslavia. In spite of the acclimatization that had already taken place, the planning cell realized that it had interpreted the gathering of groups of people in school yards in connection with the capture of Srebrenica as being "in the nature of a demonstration" when these had in fact been troops belonging to the Serb army in Bosnia. The lesson to be learned was that *strategic-level information and events in low-level conflicts can depart entirely from the scales to which one is accustomed*. The strategic-level change at Srebrenica was brought about by the introduction of ten or so tanks. One notable drawback, however, was felt to be the fact that there was no one in the field (HUMINT) to corroborate the information obtained by technical means, and as a result the YJPC was unable to

construct an entirely reliable picture of the situation (1-Process).[352]

USEUCOM's JAC intelligence centre was engaged round the clock in producing situationally and spatially bound advanced warning data for the troops in its area which could be communicated to SFOR, for instance, by radio. The centre also responded to requests for support from the Joint Special Operations Task Force in Sarajevo and exchanged information with its own team of liaison officers. One further significant task was to supply data for the construction of US and NATO marine defence situation reports. Its Analytical Division also produced daily analyses of current events which were distributed to users in the same manner as advanced warnings, while its Command and Control Warfare Division was responsible for targeting and the formation of the operational chain of command in Europe and produced analyses of the weapons systems in use in its area of operation. The JAC intelligence centre was able to receive and process IMINT data from U-2 aircraft and from national systems. The Multinational Intelligence Co-ordination Centre (MICC) co-ordinated intelligence support for the IFOR operation from the beginning, responding to some 500 requests in the course of a year. The co-ordinating body was responsible for distributing intelligence obtained from national sources among the NATO countries, and this took place rapidly, as the officers concerned had direct contacts with their own defence ministries. The system was of considerable significance when western civilians had to be evacuated in response to the Albanian crisis, for instance.[353]

USEUCOM experiences confirm the vital importance of being able to inform decision-makers of the objectives and intentions of the parties to a conflict (2-Decide). There have been some peacekeeping missions in which this was not possible, so that the intelligence service was forced to placate its clients with large quantities of information irrespective of quality. USEUCOM has also felt at times that it is competing with the media in terms of the speed of communication, to the extent that *news reaches the people in their living rooms before it reaches the commander a few kilometres away from the scene of the event.* It is essential to be able to point intelligence sensors in directions dictated by the troops' information needs, and the definition of precise priorities in this respect is of particular importance because the national systems are obliged to serve two masters, their own governments and the

UN. The YJPC, for instance, was in a situation of having its priorities determined for it where support for command processes was concerned, as the United States already had about a dozen operations in progress in the area of the former Yugoslavia before IFOR began.[354]

- Force protection: air defence systems threatening US troops in Macedonia and Zagreb and NATO airborne operations.
- Ground truth: to ascertain what the parties to the conflict are really doing.
- Air operation support: target selection and battle damage assessment (BDA).
- Support for the planning of NATO ground forces: planning of the withdrawal of UNPROFOR.
- Support for operations by UN peacekeeping forces.

Products of the intelligence services were used to support the UN troops escorting UNPROFOR convoys of humanitarian aid by providing situation assessments (1-Process) and threat evaluations (2-Decide), the aim being to keep them informed of the routes available to them and of potential crisis points. Demands for situation assessments then increased with the arrival of the RRF, and intelligence was now required to provide estimates of the threat to it (force protection) and the information required for planning and executing its tasks (1-Process, 2-Decide). Some of this information was obtained from NGOs. It is said that UNPROFOR finally lost control over the combat situation (1-Process) in Lt.-Gen. Rose's time because of the restrictions placed on the intelligence systems to be used and distribution of the information generated by them (2-Decide). During the hostage crisis of May 1995, for example, it was extremely difficult to gain an adequate impression of what was going on. This was due to the small numbers of intelligence personnel in the field and the lack of people who could be rapidly released from one assignment and seconded to another.[355]

The national intelligence organizations within IFOR suffered from the problem that not all the existing information on the operation was made available to them, the same problem that afflicted the Mogadishu and Fort Drum organizations within UNITAF. In the case of IFOR, short-term situation assessments could be formulated on the basis of information acquired and co-

operation between intelligence services, but there was little point in distributing these in graphical or textual form because a proper understanding of the results would have called for personal experience in the field. Individual events and products, together with conclusions and digital illustrations, could be communicated to users within four hours of the occurrence at the fastest, so that in the case of the Usora Bridge explosion in August 1996, for instance, details of the event were at the commanders' disposal before they had reached the CNN. One factor that increased the amount of work involved in intelligence reports was the need to communicate everything in two forms, one in accordance with the command structure of the operation itself and the other in accordance with the national structure.[356]

When LANDCENT was acting as the command headquarters of IFOR, its intelligence department received and evaluated intelligence products both from within the operation itself and from outside and distributed its forecasts on both an immediate time-scale (0-24h) and for the future (24-96h). These were intended to provide an evaluation of the current situation and to present estimates of possible developments, and were distributed to COMIFOR, the headquarters, the commanders of the ground and air forces and SHAPE. In view of experiences during Operation Deny Flight, a facility was developed at NATO's SHAPE headquarters by which "clients" could access the intelligence products they needed from an electronic notice board[357]. The source material for these evaluations was obtained from NATO Headquarters, the operation's own headquarters, the command headquarters of the different branches, national sources, IFOR troops and open sources, and particular emphasis in their construction was laid on the importance of joint action, so that intelligence could be directed in a manner that conformed with operational needs, intelligence would be able to participate in the wargaming aspect of planning and intelligence would be able to influence future trends in the commanders' information requirements.

The evaluations produced by intelligence were distributed as parts of the Intelligence Summaries and Assessment Reports products in accordance with the day's schedule. Battle damage assessments were drawn up by the Joint Targeting Cell as part of the targeting process, while the CI-INTSUM and CI-INTREP

reports issued by counter-intelligence contained matrices of information on threats facing the operation's own troops and the needs for protection, the current protection situation for the troops and counter-intelligence, and forecasts and instructions for the troops. These reports were distributed to the command headquarters of the various branches, the Allied Military Intelligence Battalion and SHAPE. One example of products that were regarded as being of particularly high quality was the set of medium and long-term forecasts drawn up in connection with the elections in autumn 1996. Similarly, promising experiences were gained with the combining of information in IFOR and SFOR, e.g. the combining of all HUMINT information on the operation in the C2X intelligence centre in Sarajevo. *The uniting of national forces for the combination of intelligence data has proved to be an exceptionally efficient solution.*[358]

The problems largely concerned distribution of the information, as no standard distribution list was ever drawn up, and it was this that led to accusations from national intelligence organizations that not all the data processed within the operation were being divulged to them. The barriers to efficient distribution included the sheer bulk of information generated, the numerous levels of command that existed both vertically and horizontally, and naturally the speed of reporting, which made it impossible to implement distribution in the "everything to everybody" manner laid down in the initial doctrines. At the same time, the non-NATO countries suffered from the problem that they were denied access to the CRONOS system, and when the majority of the data in the possession of the SFOR headquarters was transferred to a LAN/WAN network these countries had neither the necessary terminals nor the authorization to use such material. This problem had been realized at the DSACEUR level in October 1996, but it still had not been solved by April 1997.[359] In the case of the violation of the protective zone at Srebrenica on 5.-11.7.1995, for instance, it would have been possible to have a warning of the threat in the form of a revised situation assessment, as both American and French intelligence was aware of the Serbs' intention to attack the town, but Raevsky maintains that these countries refused to release the information because France and Britain were accusing the United States of favouring the Muslim government. General Janvier was informed in his capacity "as a

French officer" but not as commander of the UNPF. Smith indicates as one explanation for this procedure the fact that members of the peacekeeping forces of certain UNPROFOR countries had leaked information to the party that the country in question favoured.[360]

UNITAF intelligence reported that the available databases were incomplete with respect to both maps and the georeferencing system, and the basic data for producing threat scenarios were also deficient. No one properly understood the local politics or the importance of the clans when the Somalian operation began, and the supporting intelligence sources were inclined to view the situation "through western eyes" and failed to comprehend that for the Somalis the dispute over Aideed was one between rival clans, for they did not see the problem as personified in one individual. The presentation of intelligence findings followed an adaptation of the protocol for LIC operations, and the tactical signs failed to correspond to the established practice. The result was that intelligence was able to issue early warnings only on a very limited regional basis and could not aspire to broad-based generalizable predictions or evaluations. Again the fears of UN member states and organizations regarding leaked information were by no means unfounded, to the extent that Smith claims that the armed confrontation in Somalia in October 1993 arose on account of a UN communications failure, i.e. an information leak. Incidents of this kind do not encourage national intelligence organizations to divulge sensitive information, for fear of their sources being revealed, the information between used by recipients to their own ends and the creation of "problems of hygiene" in areas close to the source nation's own borders.[361] Widespread dissemination of information during the UNOSOM II operation was prevented by US legislation, which meant that the officers of the intelligence support element (ISE) at USCENTCOM acting within Operation Continue Hope were unable to provide support for the UNOSOM II commander and his American deputy. Attempts were made to resolve this question in a variety of ways, but the difficulties were compounded by the manner in which the intelligence architecture had been formed and the vast geographical area to be covered. US legislation prevented the ISE from being placed under the command of the American general who was vice-commander of

UNOSOM II on account of the fact that he was subordinate to the UN.[362]

Distribution of strategic and operational-level intelligence products on Haiti was constructed around the JWICS and JDISS, which meant that the force's intelligence wing was in direct connection with the National Military Joint Intelligence Centre and the intelligence branches of the various armed services. The intelligence architecture made it possible to transmit data, IMINT images, graphics and video images at the tactical level as well, and the JDISS provided IMINT analysis facilities and provided the tactical command levels with direct access to strategic-level national databases, the distribution of products and the office automation software system. The information requirements of the operation determined the contact requirements according to which the communications network was developed. The back-up intelligence centre for Haiti (CMISE) was to a great extent concerned with all-source analysis for monitoring of the overall situation, and was directed by a group of its own that drew up an independent matrix for distribution of its products. This took account of the categories, levels and users of information and was developed into a stepwise data acquisition synchronization table for operational planning purposes. This ensured that the users' information needs were met when designing intelligence activities.

The analytical work was concentrated in the ACE, which produced a Daily Intelligence Summary (DISU) and fortnightly digests. Two situation reviews per day were arranged at the back-up intelligence centre during preparations for the operation, in addition to which it issued information for users at 12-hour intervals and ensured that its bulletins had reached their destination by supervising the distribution process. Information was distributed to the lower levels of command in accordance with the intelligence architecture. Once the operation had begun, intelligence reviews were sent out at two-hour intervals, and the airborne troops taking part in the landing were provided with a last-minute situation update for the target area, including the movements of key figures, immediately before entering their aircraft. Once responsibility had been taken over by the intelligence centre on board USS Mt. Whitney, the back-up centre at Fort Bragg began producing long-term evaluations that went

into the history of Haiti, recent events there and the effects of the operation, with the objective of constructing a strategic forecast. The invasion force (JTF-190) received subsequent support in the form of various matrices and diagrams, which concentrated on counter-intelligence.

Ten days after the commencement of the operation the JTF-190 Intelligence Battalion was able to produce a list of Haitians likely to pose a threat to the troops and a diagram of their whereabouts. Direction of the acquisition of this data was based on adaptation of the products to the known intelligence needs, and to these ends co-ordination meetings were arranged at the intelligence command point that were attended by liaison officers or representatives from all the troops involved in the intelligence system and contacts from other supporting organizations. These meetings discussed the situation as it was at that moment, the current phase of intelligence operations and their plans and the stated information requirements, and were acknowledged to have increased synergy within the intelligence system and allowed more efficient use to be made of resources.[363]

5.6 INTELLIGENCE METHODS

Perhaps the most frequently used of the **open sources** of information has been the television, particularly the CNN channel, which was watched regularly by intelligence officers at the situations centre in UN Headquarters, those on USS Mt. Whitney and those of the LANDCENT intelligence centre. One purpose of this close monitoring was to check on possible erroneous information contained in its reports, especially regarding losses among UN forces. The principal source in terms of the volume of information acquired, however, has been the press, which primarily offers a suitable means of monitoring the political and economic situation in a country over longer periods of time. Also, by combining details from newspaper articles it is possible to extract vital information on changes in personnel among the military leadership of a country, in its parliament or at the battlefront. Reports in local newspapers can provide information on new weapons acquired by the parties to a conflict,

appointments, organizations and operations. It is essential, of course, to bear in mind that military details contained in the media will often be inexact, even to the point of constituting disinformation.[364]

A separate set of sources consists of the news agencies, so that practically all the intelligence units functioning in the former Yugoslavia received the bulletins issued by the news agencies either directly or through offices of their own. The political analysis team at UNPF Headquarters, for instance, compiled daily press summaries covering current events together with trends deducible from long-term monitoring or forecasts of future development in the situation, usually the political situation. These summaries were distributed both by the UN staff and offices and by the Zagreb embassies of the participating member nations, and extracts from them were published as media analyses in the operation's own UN magazine, as was done by Mark Thompson in his UNPROFOR News columns,[365] and similarly in Haiti. Another comparable product was the "Night Owl" report of information carried by the local press, radio and television drawn up daily for the commander of the IFOR US division. This also contained facts that were believed to be of interest to commanders at the tactical level and was distributed on the open communications network.[366]

Theses and dissertations submitted in the course of officer training should also be exploited when compiling basic data. Some such dissertations produced in the United States contained accounts of military strengths, performance capacities and weaknesses that could have been of use for intelligence purposes in Yugoslavia, Somalia or other regions, and proper use of these could have done much to extend both general knowledge of the areas concerned and also the capabilities of the staff for operating there. They could also have helped in constructing surveys of the interests of the major powers in certain regions, e.g. the British interest in the Bosnian war or US policies in the Balkans as a whole. Collaboration between civilian and military intelligence organizations took place at the sectoral and operational headquarters levels within the UNPF, with the involvement of political officers, analysis and assessment units and heads of civil affairs on the civilian side and military observers, headquarters intelligence offices and policy and planning offices

on the military side. Such collaboration was highly unofficial in the Sarajevo sector, for example, and consisted mainly of conversations on daily events and alternative scenarios for future developments, while UNPF Headquarters served as an official analytical working group that met once a week to discuss developments in the situation in Yugoslavia and the co-ordination of coming activities. This collaboration was always based on the principle of confidential consultations between professionals.

Much can be done to further a peacekeeping operation through well-timed, accurate publicity, and intelligence information can be used to provide support for the public information and information operation plans that form part of UN missions by similarly employing properly verified information to avoid erroneous conclusions and place events in their correct contexts (2-Decide)[367]. The advance of the Information Society has meant that intelligence organizations and their practices have become more open, so that, as Lt.-Col. Moore points out, financial restrictions and demands have begun to be placed on intelligence, with the consequence that it will soon have to attract its own clients and serve its own community more conspicuously than at present. It is clear that the granting of resources in the future will depend on the impact that present-day intelligence achieves.[368] It is sometimes possible, of course, for intelligence to make use of the products of other organizations, e.g. the International Court of Justice in The Hague, which gathers information from refugees from the former Yugoslavia and from NGOs that have acquired it by their own efforts. Utilization of information acquired by the court or placed before it is not without problems, however, and the procedure can lead at the local level to the cancellation of agreements or even to threats of violence, as it can undermine confidence in aid organizations or even prevent them from operating successfully. Thus information gathered from this source should largely serve a confirmatory function and the command process should in no way be dependent on it.[369]

At the **strategic level**, the intelligence office at UNPF Headquarters was in daily contact with both UN Headquarters and also the 5th Air Force and USEUCOM, in addition to which its officers received information on the political situation through their own embassies, while at the operational level it maintained

military contact with the liaison officers of the parties to the conflict and the UN military observers. The intelligence officers working for the observers took part in the morning briefings at the office and also received an unofficial updating at afternoon coffee, and collaboration in the sectoral headquarters followed a similar pattern. At the tactical level, collaboration was a question of the concrete combining of information and skills. The practice in the Sarajevo sector, for example, was to combine EW-assets, Cymbeline-countermortar radar, battalion and military observer intelligence and situational data and reviews obtained from neighbours and from the UNPF with information from the political sphere and news agencies to produce a daily situation assessment and an official communiqué for the day.

When the RRF arrived in the region, its representatives, the MNB intelligence officer and the artillery commander also took part in the intelligence process. Very close, frank collaboration was maintained between the intelligence forces in the sector.

HUMINT amongst the local population produced reliable information for the creation of situation assessments both in Somalia and in the former Yugoslavia (1-Process), with experience leading to the conclusion that more reliable information was forthcoming from women and children, and from observing their movements, than from people who supplied information in exchange for payment. The success of this HUMINT activity paved the way for the unhampered movement of troops and for co-operation with NGOs. Many intelligence officers criticized the accent placed on technical intelligence and the equipment required for this at the expense of HUMINT in spite of the experience that intelligence derived through patrolling was of greater service to the command and control process at the tactical level in peace support operations than was intelligence derived through technical means. The effectiveness of HUMINT is grounded in language skills, of course, which caused difficulties in Somalia, as each patrol had to have one person capable of speaking the language.[370] American experiences in Somalia, Haiti and Bosnia indicate that counter-intelligence groups and interrogators are good at acquiring HUMINT information, as alongside their own specific functions, they can provide both military and civilian organizations with value information. The accent placed on counter-intelligence in the US armed forces is

understandable in the light of the suicide raid in Beirut, which still colours both their attitudes and their activities, and the approach adopted by the British is likewise influenced by experiences in Northern Ireland.[371]

The traditional HUMINT techniques employed in peace support operations have been visual observation and patrolling by normal troops, but parties to conflicts have been increasingly apt to interfere with these functions by restricting the movement of patrols and observers, firing on personnel and jamming radio communications. In Sarajevo, for example, the warring factions intentionally directed the UN troops to the poorest observation posts and forbade them to built posts at the best sites, which detracted from the efficiency of intelligence, because it proved impossible in Yugoslavia, any more than in Somalia, to rely on technical aids for monitoring the use of mobile weapons systems such as 2S1 tank-mounted howitzers or combat tanks.[372] UN military observers serve as the "commander's eyes and ears " at the field observation level, being persons with a certain level of military skill and experience who can be moved about rapidly over the whole area of operations. As Captain Madsen remarked in an interview, "Working as a UNMO is like a cat and mouse game. They try to hide things and we try to find them." It is essential for the observers to maintain credibility with the parties to the conflict by acting openly and honestly,[373] although the creation of the Total Exclusion Zone in Sarajevo and the search for heavy weapons led to their being treated as spies and "tank-hunters". Their principal task is to supervise the implementation of agreements and facilitate solution of the conflict at the local level. They must not be expected to gather data for targeting purposes, nor should their neutrality be called into question.[374]

Of the British **special forces**, at least the Special Air Service (SAS) employed HUMINT methods in Bosnia. The SAS served as Joint Commission Observers (JCO), an organization set up by Lt.-Gen. Rose at the beginning of his period as commander in 1993 that was directly subordinate to the UNPROFOR commander and whose chief acted as the commander's special advisor. The JCO groups were located in the sectoral and UNPROFOR headquarters, and their duties ranged from patrolling to intelligence and messenger functions. Their participation in patrols gave them a knowledge of local conditions, the area

covered by the operation and the local population and military, and their mobility as such was an expression of the UNPROFOR commander's demand for complete freedom of movement. Their intelligence work consisted mainly of confirming information received from other sources, but they were also engaged in acquiring real-time data on developments in the Srebrenica and Zepa protective zones for the UNPROFOR commander at the time of the Serb offensives (1-Process). The JCO groups also had preparatory and observational duties in support of the NATO air raids, and when the situation worsened towards the end of August 1995, the group in Sarajevo was reinforced and air raid support and gunfire observation posts were set up.[375] The information supplied by the special forces was detailed and in part ready analysed, and their intelligence products were regarded by UNPROFOR headquarters as extremely reliable. The JCO groups reported both to the UN headquarters responsible for the area concerned and to the command position, where the position's chief of command and intelligence officers together with the UNPROFOR intelligence officer drew up the necessary analyses and reports as a basis for the UNPROFOR commander's decisions (2-Decide).[376]

Experiences in Somalia were parallel to those in Yugoslavia. Here US special forces moved about relatively openly and associated with the population in order to acquire information on local conditions, and as they were not especially numerous, they were not perceived as a threat by the people.[377] In the case of the Haiti operation, a reinforced Joint Special Operations Task Force (JSOTF) was formed, known as JTF 188, with a strength of 2200 men from all branches of the armed services, which was responsible to the USACOM commander and was designed to have the duties of looking after the evacuation of civilians, supporting the prevention of movements by sea, direct action, unconventional warfare and special intelligence.[378] When the operation was "softened" as of 19.9.1994, the majority of the JSOTF was recalled. In addition to the above duties, these troops were utilized mainly for intelligence and supervision purposes during the deployment phase. It had been learned from the operations in Somalia and Panama that these troops should not be used for "witch-hunting" in the target area, and in practice their duties were modified once the landing was complete to

comprise mainly humanitarian aid and resolution of the hostage situation. Also, it was these special forces that were employed on surveillance and intelligence missions in 27 towns in the area during the first week of the intervention, while the main troops remained in Port-au-Prince and Cap Haitien. At this point it was realized that the United States did not have enough trained HUMINT personnel.[379] The planning of the operation was in a way a test of the future Adaptive Joint Force Packaging principle, which involved locating specially formed units in the vicinity of potential crisis points. The main aspect requiring further attention as a result of these experiences was collaboration and the division of labour between the special operations forces, those responsible for civilian affairs and the PSYOP groups.[380]

SIGINT has yielded intelligence information for use at all levels of command in peace support operations. As far as the planning and preparation stages are concerned, the commencement of operations is usually hampered by a shortage of linguistically qualified EW operators, and the problems become still greater if the operation to be supported becomes prolonged. Problems of this kind were encountered equally frequently in Somalia, the former Yugoslavia and Cambodia. Follow-up operations can be conducted with a smaller staff either from the home country or from their base. Ground-based EW units were employed in both UNPROFOR and IFOR, where the personnel were chiefly British or Canadian. Tactical EW failed to achieve the expected results in the former Yugoslavia, however, mostly on account of the efficient emission control and rigorous communications discipline (COMSEC/OPSEC) implemented by the parties to the conflict and the poor command of Serbo-Croat on the part of the EW operators.[381] In Somalia the initial intelligence analysis failed for some reason to appreciate the dependence of the clans on long-range radio communication, and thus no specific SIGINT capability was included in the initial army and marine complements. For Haiti, on the other hand, intelligence support of this kind was planned and implemented entirely by the SIGINT branch of the CMISE, which meant the recruitment of staff with an adequate knowledge of Haitian and French and their training to form a well-integrated group. Attention was also paid to the technical organization and adaptation of the necessary equipment and to the data transmission aspects of the system. A full Joint

SIGINT Process was implemented for the duration of the operation, the end-products of which were both daily situation reports and interim reports sent by the duty officer to the commander at the end of his shift. After the landing the officers of the SIGINT support group moved to Port-au-Prince to assist JTF-190. No mention is made of the systems employed in the SIGINT work during this operation.[382]

The targeting list distributed to those responsible for the NATO and UN command and intelligence processes (2-Decide) at the planning and preparatory stages of Operation Deliberate Force comprised air defences, command and control systems, supply lines, traffic junctions and other key sites as described by IMINT techniques, although preparations for the operation also involved verification of these data and practice runs (1-Process). The pilots' approaches to the sites were facilitated by video filming of the routes (topography and landmarks) on reconnaissance flights. Rules of engagement were laid down for the airborne electronic warfare elements EF-111A Raven and EA-6B Prowler, and electronic orders of battle (EOB) regarding troops in the target areas were acquired and worked up in good time before incapacitation of the air defences (SIGINT). Each air raid was based on accurate localization and recognition data for the aggressor, and those responsible for deciding on the raid were in possession of real-time information on the chances of impact on the target (1-Process, 2-Decide).[383]

Both French and American unmanned aerial vehicles (UAV) were used for intelligence purposes (IMINT, SIGINT) in Bosnia, these being in effect national systems that were used with the UN's "tacit consent". The Tier II Predator unmanned airborne vehicle system was taken into use in the Albanian sector in June 1995, and over 70 runs had been made by October of that year, amounting to some 600 hours of flying time. In August 1995 the Predator was used to produce a virtually real-time video image of a target for battle damage assessment purposes which was distributed both to the 5th ATAF command centre for the operation and to the United States from the Predator system's ground station via the Joint Worldwide Intelligence Communication System (JWICS). Unmanned aircraft were used to monitor movements of Bosnian Serbs in the Brcko Corridor, the withdrawal of heavy weapons from the 12-km total exclusion

zone (TEZ) around Sarajevo and movements of the Bosnian Serbs' air defence missile equipment. At least two UAV's were lost, one owing to a technical fault and one shot down by the Bosnian Serbs. It is also claimed that unmanned craft were used for airborne intelligence purposes in Somalia,[384] but as noted by Stuteville, these aircraft were left behind in the United States at the beginning of the UNITAF mission in view of the limited strategic airlift capacity and the opinion of the helicopter pilots that it would be dangerous to use them in the operation's airspace - the latter reason proving the decisive one. At the time of UNOSOM II it was evidently a matter of the use of national resources, which was based on a gentlemen's agreement between the US generals.[385]

The first experiences of the use of **imagery intelligence (IMINT)** for peacekeeping purposes were obtained with the French SPOT satellite as support for the peace mission in the Golan Heights. Following the declaration by President Bush in September 1992, the United States also made its imagery facilities, including both satellite and aircraft-mounted cameras, radar devices and electronic sensors, available to UN peacekeeping operations. Interpretation of IMINT products calls for specialized skills in processing and "reading" digital images, and experience shows that surveillance of this kind can be effectively evaded by camouflage or the use of underground facilities and distorted by dense vegetation cover or steep landforms. The United States provided IMINT support for UNPF intelligence in such matters as the search for mass graves around Srebrenica and the monitoring of the movements of the Serbian FROG-7 artillery missiles, but the performance of the J-STARS system in Bosnia was hampered by the terrain, the topography and the climate. The system was most successful in identifying the movements of fairly large numbers of men and motorized troops, especially when it was known beforehand what geographical area had to be surveyed, e.g. in the supervision of an agreed disengagement of troops or the verification of a ceasefire. In the Haiti operation the IMINT analyses produced by the CMISE at the planning stage yielded data on built-up areas and potential sites for parachute or helicopter landings. The results were distributed to the Task Force and the troops subordinate to it, and it was possible to extend the services to the company command level.

Analyses of images of selected sites were produced throughout the operation, and a total of almost 8000 images were printed for use by the troops. The AIC supplied the intelligence centre on board USS Mt. Whitney with IMINT images for targeting purposes.[386]

Flight trajectory radars (RADINT) were deployed by Lt.-Gen. Rose to supervise the 20-km Total Exclusion Zone (TEZ) created around the city of Sarajevo as a consequence of Sarajevo Market Place I, the first five trailer Cymbeline Mk1 devices arriving in February 1994, to be replaced by the Mk2 version in September of the same year. The countermortar radar troop of the Royal Horse Artillery set up a command post and three radar sites within the city, each normally comprising two Cymbeline Mk2 radars. The troop also acquired a HALO sound detection system in January 1995, but this proved unreliable, its capacity being restricted by malfunction of the microphone stations and transmission connections and by the steep topography of the area. Since EW was hampered by similar considerations, *these two technical intelligence systems, RADINT and SIGINT, were deployed "in parallel"*. The stations were placed with reference to the activity of the parties to the conflict, the firing distance from the centre of Sarajevo and the possibilities for protecting UN functions in the area. The best locations were unavailable, however, as the combatants were apt to prevent any UN activity there, or even deny access altogether, e.g. by opening fire.[387] One problem in the use of radars that emerged particularly at times of heavy fire at close range was to distinguish the impact point from the firing point, and the combatants learned to take advantage of such weaknesses, as also of limitations in radar coverage. Confirmation of the radar findings was sought from the battalions' observation posts, the military observers or EW. Individual weapons and small artillery units could usually be identified extremely well and reliably.

A countermortar radar from the Dutch marines was also obtained as part of the multinational brigade (MNB/RRF), and this was deployed in the preparations for Operation Deliberate Force and as firepower in the operation itself, in addition to which a MSTAR ground surveillance radar was used for fire control and area surveillance at the MNB observation positions in Sarajevo. The Jordanian battalion had a troop in the northeast

UNPROFOR sector which was equipped with US-built anti-artillery radars. Its task was to search for and locate heavy weapons firing on the town of Tuzla, a UN protection zone. The troop was deployed about three kilometres from the frontline, so that its radar had a range of about 24 km. The chief problem affecting the performance of this device was the low level of competence of the personnel manning it.[388]

The purpose of technical intelligence (TI) is to ascertain the technical specifications and capabilities of the combatants' weapon systems. Smith points out the difficulties involved in distinguishing the weapons used by the combatants by crater analysis, a problem that was compounded in Yugoslavia by the fact that both parties to the conflict were using weapons systems inherited from the Yugoslavian People's Army. In Cambodia, on the other hand, the weapons systems that were in use dated back to the Second World War. In spite of these difficulties, an intelligence collection system should possess adequate expertise to enable identification of the aggressor in each instance e.g. Weapons Intelligence Section.[389]

NATO-led **air operations intelligence** comprised sections devoted to large-scale mapping, threat identification and location, and battle damage assessment. Activities were initiated by NATO's E-3 aircraft, flying in Hungarian airspace in October 1992 with the full consent of that country's government,[390] but once NATO was able to use its AWACS aircraft for airspace surveillance and reporting of breaches of the No-Fly Zone, patrolling in connection with the maritime embargo was entrusted to WEU/NATO aircraft. Interest focused at the beginning of the operation on the integrated air defence system deployed by the Bosnian Serbs, which was based on anti-aircraft missile systems dating from Soviet times and personnel and material air defence support received from Serbia. Intelligence with regard to targets such as nodes in the communications system and radar stations was provided by means of aircraft-mounted strategic and tactical-level IMINT and SIGINT sensors, and it was this information that formed the basis for creating the NATO air corridors in Bosnia. The intelligence grounding for Operation Deliberate Force, which began in August 1995, provided the basis for the use of precision weapons against the Serbs' SA-6 missile stations and other significant target, and further intelligence support was

received from the Pentagon's Defense Airborne Reconnaissance Office, which produced the hyper-accurate data on the desired targets required for the use of precision weapons.

The UN employed American U-2 aircraft for strategic intelligence purposes both in Iraq (Operation Provide Comfort) and in Yugoslavia (UNPROFOR). The US has in effect been providing the airborne strategic intelligence component for UN operations since 1975,[391] and altogether some 20 000 low or medium-altitude tactical-level reconnaissance flights with both IMINT and SIGINT equipment have taken place in that time. Direction-finding accuracies as good as 0.5-1% are achievable with the SIGINT/ELINT equipment normally carried by aircraft, whereas the results obtained with SAR radar devices in Bosnian terrain were very much poorer than had been expected, on account of the pronounced relief and sharp topography, which interfered with the passage of the radar beams, and the lush, dense vegetation, which provided effective camouflage for military installations. American EA-6B Elso aircraft were used experimentally in a stand-off capacity for independent search-and-destroy missions, employing a pair of aircraft to search for surveillance and fire direction radar stations and induce the Bosnian Serb air defences to use them. This meant using their ELINT systems to detect and locate the object and firing radiation-homing missiles at it. The principle originates from the US Command and Control Warfare Doctrine C2W.[392] The Rapid Reaction Force (RRF) used Gazelle reconnaissance helicopters, of which the AMB had 9, and a Lynx LH9 equipped with an automatic gun and anti-tank missiles for operational intelligence and planning. Prior to the arrival of these, the French ALAT division's helicopters were also used for surveillance duties.

The focus of **counter-intelligence** was on the commencement of the IFOR operation, and the CI personnel were assigned to it at the initial stage. The work was hampered, however, by the security regulations applied to these troops by the American division, e.g. the restrictions on their movements. This meant that they were unable to move freely in the area which they were intended to cover, and although the regulations were circumvented by various temporary arrangements, contacts with the local population were made substantially more difficult. Only the Nordic Brigade and the groups subordinate to this division

were able to move more freely. The most important piece of equipment was found to be the digital camera, which enabled pictures even to be relayed to the national intelligence community within four hours of the event. It was similarly the case in Somalia and Haiti that the majority of the intelligence was produced by counter-intelligence groups and interrogators, as indeed had been the intention. All the feedback and sources for learning from past experiences emphasized the significance of appropriate training both for intelligence personnel as such and for ordinary soldiers on patrol who are required to make patrol and incident reports.[393]

In most operations the actual parties to the conflict have been hostile towards intelligence activities on the part of the peacekeeping forces. This has been manifested most obviously in *efforts to deceive the peacekeeping force or to exploit its presence or actions for the protagonists' own purposes*. The use of special forces in the area of operations has been apt to arouse suspicions and to place the peacekeeping force in a difficult situation. The use of such troops for target indication purposes at Gorazde in 1994 engendered such a level of suspicion that the JCO were shot at.[394] The operations in Somalia and the former Yugoslavia have demonstrated that **at the tactical level, peacekeeping forces have to operate with only partial or occasional consent from the parties to the conflict and must therefore be prepared to suffer losses**. This means that, where internal conflicts within states are concerned, the peacekeepers should pay appropriate attention to force protection, tactical mobility, good and reliable communications and adequate intelligence support. This need not necessarily be inconsistent with efforts at mutual understanding between the strategic and operational levels and the parties to the conflict, but it is essential to preserve the principle of impartiality at all levels, and most of all at the tactical level. Berdal adds that the British doctrine has demonstrated the coincidence of theory with practical experience in this respect, and experiences are confirmed by the observation of Cedric Thornberry that "without the principle of impartiality UN peacekeeping operations would be acts of self-destruction". General Rose put the British doctrine into action in Bosnia under the heading of "robust peacekeeping", the point of departure in which was to preserve impartiality while at the same time being capable of reacting with a show of force, and if necessary its use,

at the tactical level in order to discharge one's mission and protect one's troops. Such reactions should constitute immediate acts of self-defence, e.g. an air strike against a position that has fired on the peacekeeping force. The principle of freedom of movement was likewise implemented by using military support to deliver humanitarian aid without seeking permission from the parties engaged in the conflict.[395]

5.7 INTELLIGENCE ARCHITECTURE

The US doctrine of a centralized data management architecture was tried out in a peace support operation for the first time in Somalia. The original need for a centralized architecture, first perceived in the Gulf War, arose out of the split-based organizational concept, in which a considerable proportion of the intelligence support is produced in the background. When the Somalian operation began, USEUCOM was using an experimental version of the Theatre Rapid Response Intelligence Package (TRRIP) data system, largely consisting of a user interface that had been tested at the American military hospital of UNPROFOR in Zagreb in order to develop a communications architecture with which intelligence terminals could be brought to the tactical level. The next stage was to extend the system to Operation Able Sentry in Macedonia. The second version of TRRIP, adopted for use in Operation Provide Comfort in April 1994, had a digital camera and scanner added, and by this time there were terminals installed in Naples, Skopje, Macedonia and Zagreb, some of which were still using the system in December 1997. Six TRRIP terminals were used in Operation Support Hope in Ruanda, and the system was also functioning during Operation Uphold Democracy in Haiti.[396] These terminals and the services they provided were indirectly available to the UN, as they remained United States property.

The C4I architecture used in IFOR was created in the space of three months and was designed to take account of the broad scope of the data acquisition task, the military and civilian organizations involved and the complexity of the environment in which the operation was taking place. One special feature

associated with counter-intelligence and HUMINT was the facility for processing and transmitting digital pictures taken by hand. The directives for the operation applied to both reporting and the supervision of commercial off-the-shelf (COTS) material, as the TRRIP system was based on commercially available products and used the MSE telecommunications network, INMARSAT, the Trojan SPIRIT systems and the regional network as its transmission channels, since by linking these together it was possible to include the battalion level in the architecture as a fully accredited subscriber. Implementation of the architecture was hampered by the shortage of space and the location of the command posts in places that were not readily accessible from a communications point of view. The Secret Internet Protocol Network (SIPRNET) used for communication between command posts proved extremely useful, while the best contribution to the analytical capacity of the system was achieved through the JDISS system, which enabled the use of sensitive compartmented information (SCI). The corresponding means for handling open information was the public version of the same system, the Non-classified Internet Protocol Router Network (NIPRNET).[397]

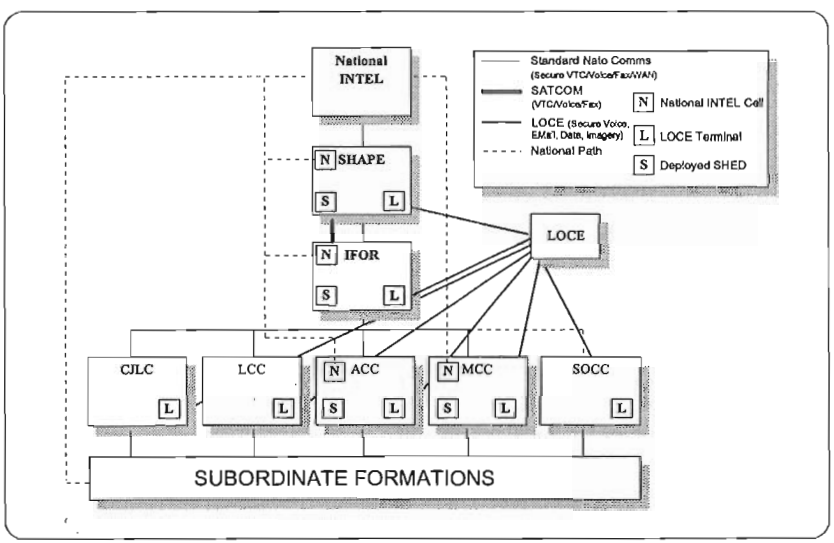

Figure 13. **The IFOR intelligence architecture in autumn 1996.**[398]

The support provided for the NATO troops engaged in IFOR by the USAEUCOM intelligence centre was based on the LOCE system, NATO's only common system for encrypted speech and data transmission. This also has gateways to national equivalents such as the Allied Battlefield Information Collection and Exploitation Initiative (BICES), SHAPE's CRONOS network and the SACLANT Maritime Command and Control Information System (MCCIS). The intelligence centre (JAC) used the LOCE system to implement its connections with both national intelligence and the headquarters of the operations, and for IFOR it was the primary channel for communicating with US national intelligence systems such as the DIA's Blackbird database. When LANDCENT was preparing to take responsibility for directing the IFOR operation, the work of forming an intelligence architecture was begun in good time, and the resulting architecture enabled transmission and terminal device systems to be defined for connecting the various levels in the command hierarchy. Here the use of LOCE terminals by means of the CRONOS system occupied the key position as far as the operation's intelligence activities were concerned. The Electronic Combat Signals Cell (ECSC) used Sun Sparc 20 EW software and the NATO Emitters' database program in order to command electronic warfare and intelligence.[399]

In the case of the Somalian operation the UNOSOM II architecture proved unsuccessful because it was too heavy and complex relative to the situation and the resources available. This architecture was based on the JDISS system, by which intelligence products were to be distributed to both the UN and US troops, and had a dual-level architecture in which Level I comprised products that could be shown to UN or Allied troops but not left in their possession, so that the information travelled only via channels controlled by the United States, while Level II implied that the products had been censored to a form in which they could be made public, so that there were no restrictions on their transmission within the architecture. Contacts between the intelligence support element (ISE) in Mogadishu and Fort Drum - in accordance with the split-based concept - were implemented using the Trojan SPIRIT system, which comprised vehicles of its own, a satellite data transmission system and power sources and was intended to convey speech, data and processed IMINT

information. The system was supported by STU-III, in which speech and data could be transmitted in encrypted form. JDISS services could be provided by installing its software in the Trojan SPIRIT system, but actual telecommunications called for the renting of commercial satellite connections. The channels used for transmitting tactical intelligence were tactical-level satellite systems, i.e. INMARSAT and a lap-top computer, and the MSE telecommunications network.[400]

USACOM's strategic-level intelligence architecture during the Haiti operation was based on the JWICS and JDISS systems, in both of which the GCCS system provided the transmission channels. For the strategic level, this architecture enabled practically instant monitoring of the tactical situation, development of the capabilities of the troops from all the branches of the armed forces and the concentration of these on monitoring work. The systems were managed by the navy at the initial stages of the operation, but when command of the operation was transferred onto the land, responsibility for its implementation switched to the ground forces. Due attention was paid to experiences in the Somalian operation when formulating the architecture, which was based to a great extent on HUMINT needs. Of the services offered by the system, perhaps the most attention was aroused by video teleconferencing (VTC) and the facility by which the lower command echelons could recover the information they needed from the higher echelon databases. Data transmission within the operation took place in the form of speech, data and video images, extending from the President to the tactical commanders. The greatest problem for USACOM was the insufficient supply of technical personnel, as had been realized in the exercises that preceded the operation.[401]

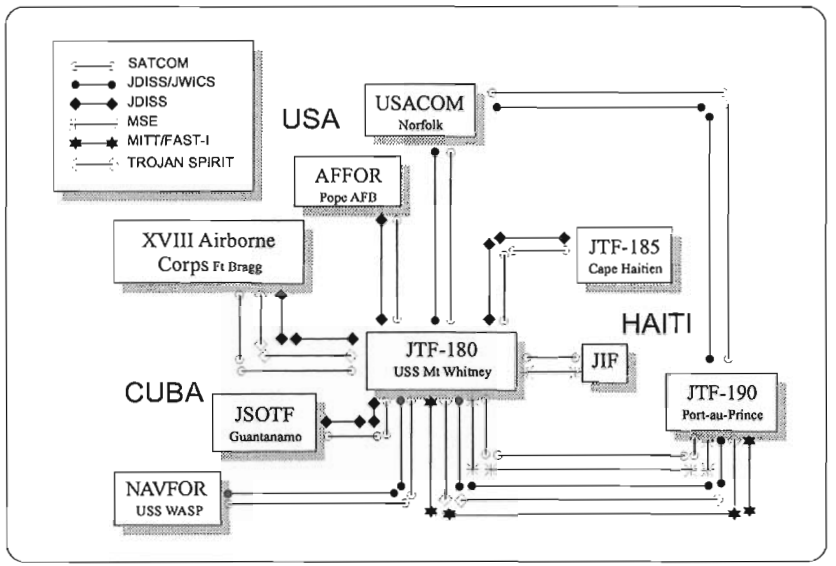

Figure 14. **The intelligence architecture of Operation Uphold Democracy, viewed from the perspective of the XVIII Airborne Corp, or JTF-180.**[402]

The CMISE intelligence support element within JTF-180 in the Haiti operation was supplied with materials that granted access to USACOM databases and those of other national intelligence systems via a JDISS terminal. The distribution of intelligence took place by means of transmission and terminal devices belonging to the architecture depicted in Figure 18. The ASAS Warrior terminal and Defence Secure Network 3 transmission system were used to distributed SIGINT information, and the JWICS transmission system, through which the video teleconferencing took place, for instance, was used for strategic command purposes. The intelligence support element stationed with JTF-190 at Port-au-Prince used the Trojan SPIRIT system for its data transmission, the practicality of this system being reflected in the fact that the support element had its communications channels ready and had commenced data transmission within an hour of arrival at its position. Planning and execution of the JTF-190 intelligence architecture within the Haiti operation required both the communications element (J6)

and the users to practice formation and use of the system in advance. The main systems as far as the intelligence centre was concerned were (1) the JWICS system, which had a utilization rate of 10-20% and was used by the national forces operating in the region (AIC) and the JTF intelligence co-ordinators for synchronizing intelligence activities, and (2) the JDISS system, with a utilization rate of 80-90%, by which those responsible for the analyses were able to contact databank services at the national level (SCI services), send and received Emails and process IMINT products and cartographic material. Data transmission within these systems called for high baud rate satellite connections. JDISS connections within the operation were implemented with the General Service Communications (GENSER) field communications system.[403]

6 CONCLUSIONS

6.1 ON THE RESEARCH ITSELF

Theory and topics of the research

When formulating a theory of command, control and intelligence it proved possible to combine knowledge from several spheres into an entity that enabled the material acquired here to be handled analytically and logically. The C³I theory of Lawson and Orr, which was the main theoretical approach applied here, allowed intelligence to be coupled with command and control functions, the interface between the two processes being taken to comprise the stages of formation of a situation assessment and decision-making at the end of the command process. The sources used here confirm that this is the case in practice. The essential thing is to understand that these processes fuse together in everyday life and that interaction takes place in which the determining factors are needs, the situation and time, and not merely theory. *It may be claimed in the light of this work that the theories as such have not been realized at any level of command or within any of the processes,* although many operations led by the United States and some NATO-led ones have come close to arrangements that conform to the theory.

One of the results obtained here was the observation that the C³I theory does not allow for a feedback system after the operation. Although individual countries and the UN have their own "lessons learned" processes, it is felt from experience that the method has not been able to remove the problems affecting interaction between intelligence and command. An analysis performed after the operation can ensure that the command and intelligence processes are developed in the light of the experiences gained. In the American military tradition, feedback has been used to develop the link between intelligence and command, and its inclusion in the theory and practice would undoubtedly be of benefit to future crisis management operations.

A "research matrix" was drawn up on the basis of *the topics to be considered and the theories of command and intelligence* to facilitate the work by dividing the questions to be answered into precisely specified subquestions. This made it possible within the work proper to analyse and compare the subject matter corresponding to one subquestion at a time: (1) the association between intelligence and command, (2) the fundamentals of intelligence, (3) the process, (4) organizations, (5) products, (6) methods, and (7) architectures. Answers to the subquestion were thus found by comparing the theory lying behind the research, the requirements placed upon intelligence and the experiences obtained from operations with respect to one of these topics at a time. Godson's division of intelligence into three parts, organization, products and methods, as used at the beginning of the work, was filled out at points where deficiencies or overlapping could be observed. Once the topics to be studied and the questions to be answered had been successfully defined, the finding of answers to the questions and the formulation of conclusions based on these proved relatively straightforward. The drawback, however, is that reporting according to this format entails repetition at many points, which detracts from readability.

Reliability and generalizability of the research

It may be claimed on the basis of this work that *intelligence within peace support missions has changed as operating environments have changed*. It is not such a straightforward matter, however, to discern whether intelligence practices observe primarily the impartiality principle laid down by the UN or military expediency. *More emphasis tends to be placed on the latter as operations become more demanding and the risks attached to them grow*, i.e. as one approaches peace enforcement. The major powers do not perceive any contradiction in terms between military expediency and impartiality in the organization of intelligence, provided that the actions of the peace support troops do not render them parties to the conflict or place them in one camp rather than the other. Since the sensitivity of intelligence activities is acknowledged, care is exercised in selecting the intelligence forces

and their equipment and methods and incorporating these into the operation. Experiences during the 1990's denote a clear tendency for an increase in the quantitative need for intelligence and in its peace support role with the growing importance of data management and the ever more demanding nature of the operations. This has also been accompanied by a change in attitude as reflected in the statements of UN staff, politicians and military commanders alike. The sources used here are primarily Anglo-American ones, and thus reflect those countries' political, economic and military attitudes and aspirations. The bias is rectified somewhat by the use of a few Nordic studies of intelligence and command relations.

All the UN member states have indicated that they will observe UN principles in connection with peace support operations, even though these principles may in part be at variance with national doctrines and experiences, at least partly because *national doctrines conform better to the nature of present-day conflicts than the UN doctrines do*. The member states feel that clandestine operations are contrary to UN principles and are apt to undermine the warring parties' confidence in the UN and its operations, but in spite of this it may be claimed on the basis of the sources used here that the United States and France, at least, undertook covert operations in connection with peace support in Somalia and Bosnia. Just how extensive these operations were and what their objectives were cannot be deduced in any rational or straightforward manner, nor is it possible to say what other countries may have been involved.

The main question posed in this work can be answered in a relatively reliable manner, even though the principal UN sources used in the argumentation are in the nature of talks or interviews. *Intelligence is undeniably of significance for the direction of operations and for supervising the achievement of their goals and the observation of agreements*. It could be claimed that without intelligence the reports produced for the UN on peace support missions would not be based on any systematically analysed data. This observation can in fact be generalized further.

The first subquestion can also be answered quite well. Experiences suggest that the interaction between operational command and intelligence is approaching that which is assumed to exist in theory. It can also be maintained that the closeness of

this interaction is related to how demanding the operation is. This finding is again generalizable.

The second subquestion can likewise be answered well. Intelligence is almost without exception organized better, more clearly and with a higher capacity in operations not led by the UN, and the results are also reliable in these cases. These observations are generalizable with the following reservations. (1) The information available on the organization of intelligence and its products in the context of a particular operation is frequently based on only one or two sources, so that the results are little more than indicative of a trend and partially generalizable. (2) Evaluation of the principles of action, duties and equipment of the intelligence troops is based on the combining of scattering pieces of information and technical details, and their actual performance capacity has been arrived at entirely by deduction. The differences between the peacekeeping doctrines of Great Britain, France and the United States are stated reliably as far as intelligence is concerned, however, and the lines of development perceivable in the peace support roles of these countries' armed forces are argued reliably. Thus the trends and requirements are clear in these respects. Similarly UN policy and the needs for development are argued in a reliable manner, although not necessarily in the official manner.

Assessment of the source material

The scientific journals (RUSI, INSS and UNIDIR) provide a good basis for research of this kind, in that their reports are comprehensive in terms of sources and consistent in their findings. On the other hand, the US Army Command and General Staff College reports are of variable quality. Those submitted as Master's theses are good, but the interim reports often rely on very limited source data and their usefulness is thus restricted to a narrow, specialized field. The quality requirements insisted on here were a comprehensive range of sources, proper references and verifiability. The most useful sources of this kind were the reports of Smith, Snider, Stuteville and Raevsky. In employing press sources particular attention was paid to their verification, in which respect the numerical data given in them proved

particularly unreliable, partly due to differences in the methods used for calculating flight statistics, for example. Otherwise such articles were useful sources of technical data on the communication and weapons systems used in particular operations. The scientific material can be criticized largely for the manner in which the choice of sources reflects the affiliation of the author or the purposes for which the investigation was carried out. It was conspicuously rare for an author to note that his sources contradicted each other on some point or that they went against his own views. Apart from the official UN sources, the source material was usually fairly comprehensive. The principal problem with UN sources are that they remain silent on the question of intelligence activities and their connection with command functions and that written intelligence documents tend to be classified as confidential or secret, which hampers their availability and their use in a work intended for publication. Efforts were made to obviate these problems by using speeches by UN officials and interviews with such people as primary sources.

6.2 THE INTERACTION BETWEEN INTELLIGENCE AND COMMAND

It can be claimed on the basis of this research that the present manner of taking decisions on and within peace support operations has not proved capable of responding to the demands posed by the narrowing of the decision-making window on account of changes in the operating environment. *As the operations become more demanding and entail greater risks, interaction between command and intelligence functions has increased and has approached a level dictated by military expediency.*

Political decisions have been complicated by an unwillingness to take risks or to set clear-cut aims, while military decisions are hampered by unfamiliarity with the independent creation of strategic and political plans of action and a reluctance to venture into that sphere. These problems have become exacerbated at the operational level, in the commanding of operations. *It may also be maintained on the strength of the present*

findings that there is no appreciable difference between warfare and peace support in the interaction between command and intelligence functions. One factor which does affect this interaction, especially in a peace support context, is the multinational nature of the operation and the consequences of this, such as national differences in command and intelligence practices. Successful interaction within an operation depends on the creation of consistent command practices, either through training or by forming the core of the operational headquarters from representatives of one nation or organization who are used to working together. The results suggest that the UN should retain its role as the umbrella organization for peace support action, but that it is not believed to be capable of mounting more demanding operations than this.

Experiences indicate that it is precisely from the UN Security Council that a mandate is sought to intervene in the internal affairs of sovereign states, and that decisions regarding such applications and the monitoring of their implementation are matters that require intelligence activities. The interaction between command and intelligence functions is seen here to proceed in the manner shown in Figure 15, which is an adaptation of Orr's model for the command structure of an operation. This application of the model allows explanations to be given for the manner in which the actors engaged in intelligence and command activities on behalf of UN Headquarters are located with respect to each other and the directions in which information travels, but it does not reveal the largely unofficial and ineffective nature of this interaction at the UN Headquarters level, or the fact that it has been impossible to rely implicitly on its functionality.

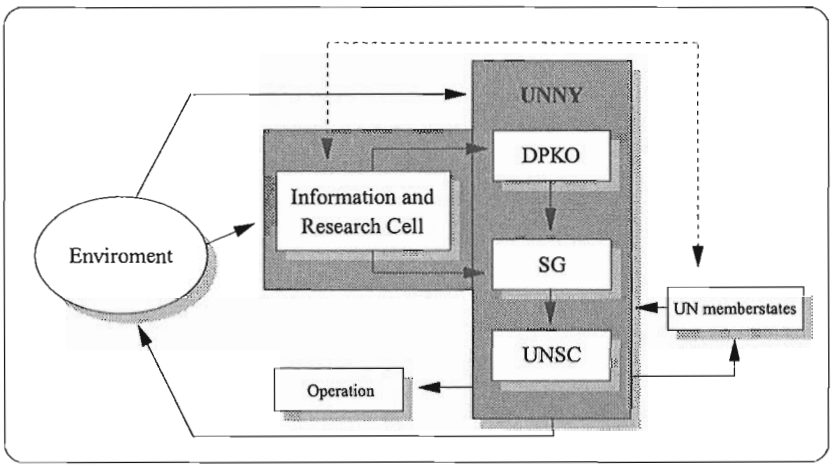

Figure 15. **An application of Orr's operational command model to the location of actors participating in the interactions between command and intelligence functions with respect to each other when the decisions are taken at UN Headquarters. National intelligence support received from UN member states is depicted with a broken line.**

Participation in peace support missions has developed during the 1990's into a means whereby member states can pursue and defend their national interests, so that the operations themselves have come to reflect the political traditions of these states and their security and defence policy agendas. Peace support missions have become a very important task for the armed forces concerned, as is reflected both in the updating of the relevant directives and in the concentration of military co-operation on questions of crisis management. It is evident from this research that following an intervention or peace support mission a participating major power has frequently become involved in the conflict itself, with its own distinct interests and agenda. The degree to which a country has participated actively in affairs has often varied greatly, as exemplified by the passive role adopted by the United States after disengaging from the arms boycott of Bosnia-Herzegovina, which was transformed into an active role upon the signing of the Dayton agreement.

National decisions regarding participation in operations have been governed not only by national interests but also by conditions

laid down in advance by their political leadership. The tightness of these conditions has reflected the nation's experiences of multinational operations and wars and its traditions of leading international coalitions, and national strategic intelligence has been required to assess the fulfilment of such conditions and further developments in the situation. *Interaction between command and intelligence functions at the strategic level has taken place in accordance with national legislation and principles and existing administrative structures.* To generalize somewhat, it can be claimed that interaction has been organized better within individual states than in the UN. Orr's model is unable to explain the unofficial national methods of exerting influence on the interaction between command and intelligence functions or the volume of information transmitted in connection with this.

It is clear from this work that political decision-makers have been unwilling to delegate decisions regarding the use of force to the military commanders in charge of operations, even though in situations where no progress has been achieved by diplomatic means and the peacekeeping forces have been subject to increasing attacks, the emphasis has inevitably shifted towards the military commanders. The UN "dual-key" command system, for instance, has proved highly inefficient, even dangerous on occasions, where extremely demanding peace support operations are concerned, whereas it has been easier to maintain control over the problems in "lead nation" operations in which one state has assumed control and the military command is in the hands of personnel of a single nationality.

It should be possible through experience to recognize from the situation descriptions the moment when the military commander should be allowed to decide on the use of force, and intelligence should be capable of producing short-term situation assessments and of providing decision-makers with reliable information on which to act in such an eventuality. It is the intensity of the conflict that determines whether decision-making should be weighted towards the political or the military leadership, but as the intensity increases decisions have to be made more quickly at all levels of command. Also, as the command process gains in intensity, intelligence becomes subjected to rigorous demands in terms of delivery times.

The basis for subordinating military activity to political direction should be laid down at the stage of choosing the Special Representative of the Secretary General (SRSG) and the Force Commander (FC), and these choices should be made in such a way as to avoid personality clashes in the course of the operation. *Experience suggests that it is especially important for the force commander to receive support both from national intelligence and in terms of UN political and military information.* The command structure of IFOR, for example, was supported by both national intelligence services and the joint NATO service. Military expediency in the interaction between command and intelligence functions is emphasized in accordance with the military traditions of the lead nation, especially in demanding operations. In Haiti, for example, the operation observed United States practices and procedures. In less demanding operations, on the other hand, the need for conformity has so far been less pronounced. UN documents have been drawn up for individual operations to define the interaction between command functions and military information, but national directives have taken precedence over these in some cases, both in practical situations and in personnel attitudes.

As a consequence of the Partnership for Peace programme and the notion of CJTF, we are in the process of gaining a coalition pool of forces formed and trained in peacetime and ready for action at short notice that can be tailored to meet the needs of individual situations. Experiences with IFOR lead one to believe that the command and intelligence functions of a multinational force representing different branches of the armed services can well be combined and organized within the CJTF model, the obvious strength of which is that the foundations of both command and intelligence functions and their interaction have been laid down and practised beforehand, from which it follows that the intelligence architecture will also have been planned and rehearsed in advance. It will now be possible to develop this model further in a pragmatic sense as a result of experiences in the former Yugoslavia.

Demanding peace support operations have been moving all the time towards assuming the nature of a show of force, and of its use if necessary, and this has laid further emphasis on the closeness and importance of the interaction between command functions and intelligence. The closeness of this interaction can be appreciated

through the nature of the activity, the extent of the preparations made for it and the costly nature of the equipment required for it. *Appropriate use of airborne and naval weapons systems for peace support purposes has called for careful planning, which in turn has been reliant on high-precision minimum-delay intelligence.* The use of naval and air power has almost without exception been justified in terms of national doctrines and regulations that meet the requirements of military expediency, but the technical elements of the command and intelligence architectures employed in UN operations have not been capable in all respects of providing the rapid exchange of data, encrypting of sensitive information or adoption of alternative means of communication that the situation might require. It is precisely for these reasons that it has been necessary to adopt the framework of the data transmission system from one major power and link all the troops to this. The design and implementation of the data transmission architecture has been at the core of interaction between command and intelligence functions in recent UN operations.

6.3 INTELLIGENCE ARRANGEMENTS IN PEACE SUPPORT OPERATIONS

The fundamentals and process of intelligence

It became clear from this research that *military intelligence is accepted as a part of peace support and its control,* as is manifested in both the national doctrines and experiences gained from the operations themselves. One boundary condition for this acceptance at the moment is the observation of impartiality, as laid down in the UN principles of action, consent and avoidance of the use of force. The most significance change relative to the UN principles is the relaxing of the notion of consent, which no longer carries the importance that it used to. Intelligence arrangements in the case of more demanding operations have tended rather to observe the principle of military expediency, and it is significant that the major powers have not felt this expediency in the organization of intelligence to be in any way at variance with the impartiality of the UN, although the smaller

nations have been more cautious in this respect. For the member states, preservation of the principle of impartiality has meant that the intelligence acquired should be used for fulfilling the mandate and not in order to interfere in the affairs of the country concerned or to serve one's own national interests. In practice impartiality has been preserved in intelligence activities through a policy of openness or by prohibiting intelligence activities for fear of accusations of spying. On the other hand, the lack of intelligence activities to back up discharge of the mandate has been felt to undermine the credibility of the operation and the UN as a whole. A need has been recognized in the UN for carrying out intelligence work and supporting the decisions that have to be made with intelligence data, and the present unofficial position of intelligence has encouraged efforts to continue making use of unofficial connections in order to meet the information needs of the upper leadership within the UN and the commanders of its operations. The basing of decisions on unofficial information has led to some questioning of the reliability of the UN organization and has engendered a power struggle over the control of data sources by politicizing information, a form of "information warfare".

It is often difficult to categorize intelligence as strategic, operational or tactical, and the same item of information can sometimes be of significance at all three levels. The events of the Sarajevo Market Place were individual incidents at the tactical level, but their consequences were strategic matters as far as the conflict as a whole was concerned. Again, it may be observed on the basis of this work that *evaluation of the significance of individual items of information and the distribution of these calls for advanced professional skills in order to make the essential information available at the moment when a decision has to be made.* It is also looked on as calling for short-delay transmission of information in both directions throughout the intelligence organization.

It is reasonable to claim that a new code of intelligence practice has to be created for each operation, and that *intelligence practices within operations have either been steered in the direction of national models or else they have automatically assumed such a form.* When steering the development of such practices, it has been possible to reconcile national differences and integrate all the forces to work towards a single goal, whereas if the intelligence

practices have emerged of their own accord the member states have been represented within them, even though under some other name or without permission. The major powers' national intelligence systems, constructed under the exigencies of war, have been modified to conform with the commanders' information needs and with the demands and scales imposed by the situation and the presence of a multinational force. There is nothing wrong with this adaptation as such, as it makes it possible to tailor both the troops and the principles, processes and modes of action involved in the command and intelligence functions to the nature of the operation. The most important single thing that has to be rendered compatible throughout an operation's intelligence practices and the intelligence process has been shown to be the distribution of the resulting information. It is nevertheless clear from this paper that *the distribution and accessibility of information has been influenced by national considerations*. Attempts have been made to solve these distribution problems by means of bilateral agreements, for instance, one concrete example of which would be the sharing of intelligence between NATO and Russia within the SFOR operation.

Also, targeting and damage assessment have emerged as important new aspects of intelligence in connection with peace support operations. At one time this was largely a matter of analysing the impact of ammunition fired by the parties to the conflict, but now targeting has become a natural part of intelligence and the command process, as it is impossible to envisage any air strike, cruise missile attack or concentration of artillery fire without accurate target data and an analysis of the foreseeable damage. The Haiti operation followed US regulations in this respect, whereupon targeting became an integral part of the intelligence activities, as is common in demanding operations.

Where the intelligence process in those operations not commanded by the UN itself has broadly followed by the model prescribed by the theory, the process implemented by the UN has been more restricted. The observations compiled here suggest that intelligence processes developed for war conditions have not yielded the expected results. *Under present-day operating conditions, which are complex and involve mutual interaction, the traditional linear cause-and-effect situation assessment process does not function as such in a peace support context.* The terrain and

physical conditions always have the same effects, of course, but their significance for an army at war is quite different from what it is for a paramilitary group gathering its food out of the fields and villages. It has not been possible to base evaluations of the performance capacity of the parties to a conflict on the numbers of tanks they possess, the specifications of these tanks and the training received by the personnel, for the parties concerned have sometime used their weapons in ways that are contrary to all military reason.

The US intelligence process, for instance, is constantly being developed on the basis of experiences gained, and it is evident that an effort has to be made to depart from the traditional process that delimits variables such as the terrain, the enemy and one's own troops and concentrates on certain of these variables. Things and factors that are relevant to peace support should not be excluded simply because they are not accepted elements of military expediency, and it is not simply a matter of drawing up new checklists but of training new analysts and leaders. Responses that have seemed appropriate in the circumstances have included non-linear thinking, examination of local behavioural models or modes of action, and broadening of the range of factors, both quantitative and qualitative, that have to be taken into account. The quality and reliability of the information is of particular importance in peace support operations, whereas the significance of quantity or volume has declined. The first task of the intelligence process in an operation has been defined as being to determine the critical weapons systems, troops and individuals which can be monitored in order to trace increases or decreases in activity, after which the production of situation assessments and analyses to support decision-making can be arranged in such a manner as to meet the commander's requirements. When operating at the heart of the conflict, it has to be remembered, of course, that military intelligence is competing with the media to produce an impression of the situation, and this situation can be turned to one's advantage only through an efficient publicity campaign, as was done in the Haiti operation.

Von Clausewitz' cynical attitude towards intelligence activities would seem justified in the light of recent peace support operations, too. One of the problems to have emerged in connection with the intelligence process is the difficulty of finding

comparative data and of gaining the time in which to make comparisons. The present research indicates that even an intelligence organization that has developed its practices into a well rehearsed routine cannot continuously produce the necessary amounts of information within the time schedule required. Even so, the factors and information needs that influence the commander's directing of the operation have altered only to a marginal degree; the greatest change has been brought about by technological developments - involving the amount of information available and the speed with which it can be transmitted. If we imagine that the relative speed of data transmission were the same now as in von Clausewitz' day, we could very well ask how the time required for making comparisons has altered as the systems have developed. Even the most skilled and knowledgeable of analysts could not assess the reliability of an item of information without taking a certain length of time over it, according to the amount of work involved. One obvious danger that was alluded to above was that of jumping over certain stages in the intelligence process, leading to a decline in the quality and reliability of the products.

Organization of intelligence work

Intelligence activities in UN-led operations are implemented in a very lightweight manner with respect to their organization, products and methods. The states that have supported strategic intelligence at UN Headquarters and supplied the Information and Research Cell (I&RC) with intelligence and the necessary intelligence officers have for the most part been located in the West. The I&RC has mainly acquired its information from national sources belonging to member states, the headquarters situations centre and public sources. Its principal duty, of course, is to acquire information for issuing early warnings of possible flashpoints, but it also distributes ready-made products applying to individual incidents and weekly summaries directly for the use of the Secretary General and the under-secretaries. Also, apart from communicating early warnings to the Security Council via the Secretary General, it also supplies other UN organizations with intelligence data unofficially. Although the activities of the

I&RC have developed greatly over the last decade, there is still room for improvement, which should take place in accordance with the political views of member states and their willingness to observe Article 51 of the UN Charter and to share their strategic intelligence with the UN. So far only a very limited willingness to participate in this manner has been forthcoming. The present research allows us to claim that the major powers have arranged their national intelligence services to support peace support operations, and that this trend became more obvious towards the end of the last decade, but efforts have been made to arrange this support in accordance with existing command relations and structures. Certain UN member states have defined intelligence with respect to potential areas of conflict in their surroundings as part of the duties of their armed forces, and have in this way assured themselves of possessing the necessary background information on which to decide whether to participate in a peacekeeping operation, and indeed whether such an operation should be initiated. *It has been shown here that initial information of this kind occupies a decisive position as far as the success of an operation is concerned.* The failure of the Somalian operation, for instance, began from the point at which the intelligence centre responsible for the area classified it as being low on the scale of inherent interest. This meant that the intelligence centre began its own work there only after the operation was under way, rather than supplying information to assist in its planning. It would nevertheless be reasonable to claim that national strategic intelligence services have succeeded in backing up peace support operations far more effectively than has UN strategic intelligence.

A further finding here was that *increasing use is being made of a network of national intelligence centres of UN member states to provide backing for intelligence work and command functions in peace support operations.* The majority of this support has come from intelligence centres in the United States and other NATO countries, and experience indicates that these have produced not only the basic information required for the operations but also minimum-delay situational data for situation assessment purposes and variable information in support of decision-making. The short-delay facility owes its origins to connections with national information and data transmission systems and the liaison officers sent out in support of operations. The basic material

supplied in this way has included background information on the history of the area, its culture, the geopolitical situation and maximally detailed data on armed forces maintained in the area. The variable information has typically included interpretations of IMINT images and analyses of data produced by sensor systems such as SIGINT. One of the most important variable items in both UN-led operations and those led by others has concerned the definition of indicators leading to early warnings.

Meanwhile, the national intelligence centres have participated in the targeting process. Some of the data, however, have been produced in response to requests for information, the extent, amount and accuracy of the data provided being determined according to the interests and laws of the country supplying the data. Before the information is handed over it is in any case modified in accordance with the intelligence practices of the country concerned. Following an early warning issued by strategic intelligence, additional information is required on such matters as the interpretation of the mandate and the deployment of the troops engaged in the peace support mission. Increasing amounts of support in the form of strategic intelligence are needed at the planning and preparation stages of an operation, and the research suggests that the dependence of the UN on national systems has begun to decline only upon deployment of the troops, partly because the UN has not had sufficient intelligence capacity on which to base the planning of the operation and its command functions at the early stage. On the other hand, experiences with "lead-nation" operations suggest that at least the United States and NATO are capable of providing intelligence support for command functions at the planning and preparation stages.

Intelligence at the deployment stage of an operation has tended to concentrate on the security of the peace support troops (OPSEC, force protection), particularly in connection with movements of troops from countries that have been under terrorist threats, e.g. Great Britain. This security has been created largely by national intelligence methods, although with the support of UN Security and possibly the security services of the host country. *Force protection is in accordance with the doctrines of the leading nations and they have not been prepared to compromise on this.* In the course of the operation itself, operational intelligence has enabled the commander to maintain control of the situation and be active

in taking the necessary decisions, and both the comments of commanders and the doctrines themselves look on mastery of the theories and doctrines of warfare as laying the foundation for an understanding of the significance of intelligence and control over the combat situation. Intelligence is required to associate detailed items of information with the whole and locate them correctly in the situational assessment. Decisions can then be supported by the necessary situation descriptions and evaluations of the force's own scope for action. The data are adapted into the appropriate form and communicated to the commander and the political administrator (SRSG). *Operational-level intelligence has usually succeeded fairly well in discharging the duties expected of it.*

Construction and maintenance of the intelligence systems is usually planned and implemented by the intelligence centre of the operational command, although when there is a change of command, as in IFOR, the key headquarters personnel have overlapped for some time, with the remainder of the headquarters acting jointly in the area from which the operation has set out. In demanding operations, groups of liaison officers seconded from national or regional intelligence centres (NIST, JISE or NIC) have been attached to the intelligence department at the command headquarters, while multinational operations have ensured the co-ordination of functions by setting up separate offices for individual functions, e.g. electronic warfare. Perhaps the most comprehensive description of the arrangement of intelligence services has been obtained for the Haiti operation, a report which clearly indicates that *the operation's intelligence arrangements were made in accordance with the usual command relations and in the manner established for the regional force.* Intelligence activities for the operation were the result of years of practice, and the system was functioning at full capacity when preparations were still being made for the operation itself. Intelligence support for the "warrior" in this operation worked with extremely short delay times and amply fulfilled the information needs.

The results indicate that *the most challenging stage in an operation is when the conflict escalates and the original mandate evolves into a mixed mandate.* This means that the operation may come to include the commanding of troops engaged in an air operation or an air and ground operation or the arranging of joint action with such troops. This leads to a progression from general

intelligence to targeting intelligence intended to support the planning and preparation of air and ground operations within the framework of the mandate. As operations have expanded, this planning and preparation stage has come to last several weeks.

Sometimes operations have entailed more than one mandate, i.e. in practice more than one type of operation, and the present findings suggest that second-level operations do not necessarily come under chapter VI or VII, nor can they always be classified according to the Watson Institute, Wider Peacekeeping or UN typologies, but rather each operation must be interpreted from its own starting-point. Intelligence that is implemented openly and without violence is not dependent on the chapter under which the operation belongs. It can also be maintained that the possibility for immediate retaliation with force has always been part of the nature of air operations, and that this use of force must be based on targeting intelligence and general intelligence. Post-conflict intelligence has always included operational-level elements, but the majority of the surveillance has taken place from aircraft, using electronic equipment that have been under strategic level command and control.

The information requirements of a tactical level commander are normally specified on the basis of the strategic and operational requirements. When issuing commands regarding information requirements, attention has to be paid to the limitations imposed by the UN principles and the mandate, in order to retain the troops' scope for action. The primary task of intelligence at the planning and deployment stages in an operation is to implement the intelligence practices laid down for it, create the intelligence system and begin gathering information.

It became clear in this work that the most essential difference between operational and tactical intelligence arises from the fact that the latter has been expected to identify in the field any initiation of activities that are contrary to agreements or in other ways pose a threat to the operation and to be able to name the guilty party. It must be possible to provide the tactical commander with an incident report at short notice and to make an assessment of possible future developments in the situation on this basis. It is at the tactical level that the information gained at higher levels becomes more concrete and gains in precision. The commander

needs to know the ethnic composition of the population in the area, the leaders of the groups and the cultural differences that exist between the groups. He must know the starting-points for the conflict at the local level and whether he is able to influence these, and how the nearby areas, or UN activities in general, can affect fluctuations in the situation.

Training in intelligence work has been an absolutely essential factor in the success of this activity, and the present findings leave no doubt that the only people who can be chosen as intelligence officers are those who have practical experience of the work and of the geographical area concerned. They must be thoroughly familiar with headquarters routines, possess a high working morale, be capable of co-operating with others and have a good understanding of the differences between the parties to the conflict. Intelligence officers working at the tactical level should also have a good knowledge of the languages of the area. Officers are expected to be able to adapt to the framework of a peacekeeping operation and to be able to appreciate the significance of particular items of information at the different levels of command. The findings suggest that more attention in the choice of intelligence personnel should be paid to the possession of a common cultural background and similar ways of operating. The more demanding an operation becomes, the more significant the role of a well-trained and immediately available intelligence leadership becomes. The intelligence departments of the operational headquarters should be set up and trained before the deployment of troops in the area. Experiences suggest that the time available for this ranges from a few weeks to a matter of months. The training of peacekeeping battalions has been altered in recent times to place more emphasis on intelligence and security alongside traditional peace support, and the standard tasks have included drawing up and maintaining a situationally adapted intelligence plan. *Experiences have also suggested that it is necessary to create an intelligence system even in operations where the situation is stable.*

Intelligence methods and architectures

The information necessary for carrying out intelligence tasks in operations led by the UN can be roughly divided into that

obtainable from UN military sources and civilian sources, from the parties to the conflict and from open sources (OSINT), including statistical and analysed data quoted in the media, academic sources and registers. This latter open source information has been used principally to describe the backgrounds and points of departure for operations. Some of the open sources have been under national control, but it has been possible to purchase their services. In the case of other operations not led directly by the UN the role of national intelligence sources and security organizations functioning in the area has been very much greater.

Essential information on local conditions, the political situation and persons active in the area has been obtained from news agencies and the press, and other initial data and experiences of operations have been available in dissertations submitted to military academies and the journals published by these institutions. The resources of the scientific community have also been utilized for providing initial information and in the construction of long-term analyses. The main problem experienced with the use of public sources of information has been their immense volume, so that a large amount of time has had to be spent on extracting the data. NGO's have also proved to be reliable sources of information, especially if one bears in mind the actual purpose of their activity and remembers to support them in return with information from one's own intelligence section. Collaboration with other parallel or subordinate intelligence organizations is usually arranged both on the basis of existing command relations and by forming separate co-ordination bodies and holding joint meetings. *UN operations have involved a greater element of unofficial collaboration than operations led by others.* In the latter instances joint activities are normally organized by creating a joint intelligence centre (JIC), seconding groups of liaison officers to subordinate headquarters and forming multinational intelligence forces. Strategic-level intelligence in connection with peace support operations has been carried out by HUMINT, IMINT SIGINT, OSINT, CI and TI methods, recourse being had at the beginning of the operation to all the methods that are already functioning in the area. Activities are then intensified as the demands of the operation grow, especially if this is in the interests of the states

who own the systems. *Experiences suggest that the use of HUMINT and CI methods for strategic intelligence purposes tends to increase steadily within demanding operations,* these two types of intelligence activity being ones that readily complement each other. IMINT methods have been used to support the planning of operations, the surveillance of treaty infringements and command functions during the operation proper. *As more information technology is employed in intelligence architectures, it has become possible to transmit IMINT results to all levels of command with the minimum of delay.* Images generated by IMINT were used in the Haiti operation to support both the tactical commander in selecting landing places for the helicopters and the intelligence centres in targeting.

	STRATEGIC	OPERATIONAL	TACTICAL	MEANS
HUMINT	• Special forces	• Military observers • Special forces	• Battalions • Military observers • Special forces	• Surveillance, patrolling, inspections
SIGINT	• Aircraft • Ground stations (HF)	• Aircraft • Unmanned aerial vehicles • Ground stations	• Ground stations (mobile)	• Intercept, measurements, direction finding
RADINT	• nil	• nil	• Ground stations (mobile)	• Surveillance, direction finding
IMINT	• Satellites • Aircraft	• Aircraft • Unmanned aerial vehicles	• Nil	• Photographing of sites, large area surveillance
OSINT	• Intelligence units • Intelligence centres	• Intelligence units • Intelligence centres	• Intelligence sections	• Media, internet
CI	• Counterintelligence troops	• Counterintelligence troops	• Counterintelligence troops	• Patrolling, inspections, interrogations
TI	• Research institutes • National organizations	• National organizations	• nil	• Research of military technology

Table 6. **Distribution of intelligence categories among the levels of command.**

The majority of the categories of intelligence were employed at the operational level, activities being commenced in the form of CI prior to the actual deployment phase, while other categories

were taken up as deployment began and continued until the follow-up phase. As operations have become more demanding, the numbers of intelligence systems used and their performance capacities have been increased. The operational-level intelligence systems for the Haiti, IFOR and SFOR operations were designed with the requirements of an armed intervention in mind, whereas in other operations the systems were developed as required by the situation and the mandate. *The present observations suggest that development of the intelligence systems has usually been left too late, at the cost of human lives and endangering the success of the mission.*

HUMINT in broad terms, including field HUMINT teams, has continued to be the principal means of gathering intelligence for peace support operations, especially at the tactical level, although there is now a tendency to set aside the traditional division into strategic, operational and tactical levels in the organization of these activities. *Experiments have been made with centralized management of HUMINT resources, and this has proved successful and effective in Haiti and in the IFOR/SFOR operations.* In this context CI troops have also been included as a part of HUMINT. No great methodological advances have been made in the actual means of acquiring information, but the availability of new technical devices has speeded up the transmission of incident reports, e.g. in that photos taken with a digital camera can be distributed to all those requiring them at all levels of command within a few hours of the event by means of the C4I architecture.

Military observers have been used in their traditional role at the operational and tactical levels, but unlike special troops, they are not used for targeting purposes. The role of military observers as the "eyes and ears" of the commander can be said at least to have worked well in traditional operations, and some success has been had in second-level operations as well, but as they are unarmed, their use in demanding operations and for missions of a combat reconnaissance kind has proved too risky.

Special forces have been used at all levels of command, but mostly at the operational and tactical levels. The more demanding an operation is estimated to be, the closer to the traditional use of special forces their role has come. The use of special forces in isolated, sparsely populated areas yielded good results in Somalia,

Haiti and Bosnia, the main problem being the small numbers of such troops available relative to the numbers of missions and their extent. A second problem lies in the simultaneous use of such forces for the delivery of humanitarian aid and for the identification of targets, covert action and the detaining of war criminals, leading to a duality of function which has been apt to turn the attitudes of the local people against the special troops and cast doubts on the impartiality of the whole operation.

Efforts have been made to use SIGINT and EW to acquire early warnings of crisis flashpoints and to take prompt action at both the operational and tactical level. The results achieved with such action have varied greatly according to the level of technology in the host country. The methods employed for SIGINT and EW purposes have included the use of aircraft, unmanned airborne vehicles and ground stations, and information has been acquired by listening in on radio communications, measuring and identifying signals and locating the sources of radio broadcasts. This has proved to be the fastest intelligence technique of all, but the accuracy of its results has varied greatly. Only ground stations have been used at the tactical level, but these have not matched aircraft-mounted systems in terms of performance. A new technique at the strategic and operational levels is the use of unmanned airborne vehicles, for either SIGINT or IMINT according to the loads that they can carry. This intelligence device has proved extremely useful on account of the difficulty of detection, its cost efficiency and its high intelligence capacity. Unmanned airborne vehicle systems have been used to transmit surveillance pictures to both sides of the Atlantic simultaneously.

Tactical-level regional intelligence networks have been formed on the strength of the observation points belonging to the battalions responsible for the area and the patrolling and supervision work undertaken by them (HUMINT). Networks of this kind are useful for forming detailed pictures of the situation for transmission to the operational level more or less as they are. The patrolling normally takes place by vehicle, on foot or from helicopters. This form of intelligence work has drifted towards combat reconnaissance as the operations have become more demanding, and in this connection preparations have been made for using air fire observers for target indication duties. Information

obtained from the battalions' intelligence teams has been corroborated by technical methods.

The other "novel" aspect of peace support operations in addition to the use of unmanned airborne vehicles has been *the increased use of counter-intelligence (CI) methods as the major powers have begun to assume active roles in operations*, partly in response to the incidence of terrorism and crime. Counter-intelligence in effect takes the same forms as HUMINT, so that it is natural that these two categories of activity should have moved closer together. The main emphasis in counter-intelligence has been on the deployment phase of an operation, but if the peace support troops have come under any particular threat in the course of the operation - implying changes in the level of consent - counter-intelligence has been stepped up once again. The role of these groups in the acquisition of information has been accentuated at times when restrictions have been placed on the movements of the battalion's own troops. Use has been made at the tactical level of surveillance and flight trajectory radar systems (RADINT) located at ground stations in order to monitor local agreements such as arms embargoes, and they have proved capable of determining the deployment of firing positions by both parties to the conflict, the principles of their artillery activity and the main target areas. *By combining radar findings with visual observations and crater analyses it has proved possible to identify the aggressor in individual incidents.*

It is seen here that *intelligence in connection with air operations has become a function of its own that makes use of all available intelligence systems, both national ones and those belonging to the peace support operation.* The justifications for such operations are produced by technical and strategic (IMINT and SIGINT) intelligence methods, the resulting information being filled out with that brought back by each flight that is undertaken. Tactical air photography is used to produce additional information on targets, and electronic warfare weapons systems and command and control warfare methods are employed to incapacitate the air defences. The assumption regarding intelligence in connection with air operations is that "every means available" will be used to ensure that the mission is successful. Naval operations are now coming into the same category in this respect.

It became evident in the course of this research that the

principal factor lying behind efficient, extensive intelligence is the ability of the peace support mission to organize a comprehensive, smoothly functioning advanced technological architecture that is able to integrate intelligence into all levels of command so that the division into strategic or tactical intelligence is irrelevant as far as the user is concerned. Counter-examples like Somalia or UNPROFOR demonstrate that in the absence of a comprehensive architecture, or given an architecture that fails to function successfully as far as the operation is concerned, intelligence is unable to meet the information requirements laid down for command purposes. The principles for creating the C4I architecture were borrowed from the United States' armed forces, as is natural since the United States is the only UN member that has a global communications system that is in operational use, has been validated and covers all branches of the armed services. This system has been utilized to the utmost extent in demanding operations such as Haiti and IFOR, but it should be remembered that even ready-made systems have had to be adapted and developed in order to overcome technical interfaces, and that the making of these changes has taken time, so that formation of the architecture should be programmed for the beginning of the planning phase of an operation. In the case of the Haiti operation the intelligence architecture had been tested and rehearsed for several years before it was ready for use.

When an operation is being led by the UN and the United States simply provides certain services, problems customarily arise, the reasons for which have usually concerned the security of data, technical compatibility difficulties or differences in the principles governing use. The architecture of the Somalian operation, for instance, was relatively simple, but data security and differences of opinion regarding the principles for its use led to insurmountable problems. Major difficulties are to be expected in the future, too, regarding the formation of an intelligence architecture in operations led by the UN, if only because the UN has no ready-to-use basic network to which the troops engaged in the operation and UN Headquarters can both be linked. The majority of the core communications network will continue to be purchased from commercial sources in the future as well, although some may well come from telecommunications operators in the countries that are parties to the conflict. The information systems

used in UN-led missions have provided little more than office services and have not permitted the transmission of data over a separate, secure network.

6.4 FINAL EVALUATION

All nations have learned to take public opinion as shaped by the information media into account when deciding upon whether to participate in operations, an aspect that has gained greatest prominence in the United States and Great Britain. The major difference between the United States, France and Great Britain in their command and intelligence arrangements and the interaction between these lies in the fact that where the United States has centralized decision-making and data management and even made a conscious attempt at micro-level control, Great Britain and France have attempted to delegate leadership to those who are best able to do the job. Meanwhile, *all three have characteristically striven towards a military expediency that conforms to their own national traditions*. At the same time, national military traditions have been enriched as a consequence of the experiences gained in peace support operations, as manifested by updatings of both technical combat directives and military doctrines.

Without going into the background to the Haiti operation or the reasons for it, it may be said that preparations and the operation itself were implemented primarily on the basis of military expediency. The present research has shown that intelligence in connection with the operation took place in accordance with the protocol that applied to the Atlantic Joint Task Force at the time (AJTTP), and the fact that lessons had been learned from the Somalian operation regarding the preparatory stages is a demonstration of the US forces' ability to make rapid changes in their ways of working. The British doctrine of "wider peacekeeping" proved to be well suited to the situation in the former Yugoslavia when applied by the British commanders in the form of "robust peacekeeping", which observed UN principles but accepted a reduction in consent at the tactical level if completion of the task so required. *Thus the use of force and threats in that direction may be said to have gained acceptance as a part of peace*

support provided that the reaction comes at once and is correctly targeted.

An appreciation of the culture of the parties to the conflict and an ability to predict their actions accordingly proved to be of considerable value in Operation Deliberate Force. When the UN troops used their firepower against one of the parties, the Bosnia Serbs did not fire back but rather respected this demonstration of force after the weakness that the UN had shown up to that time. This is a good example of the need for a good knowledge of the local culture, even though one cannot generalize from such a reaction. The parties to the conflict set out to hamper UN intelligence for understandable reasons, as they hoped in this way to restrict or prevent intelligence activities in areas that were critical for them. The causes partly lie in the UN's own failures, in that there was a substantial danger that information would be leaked to the opposite side. The UN has nevertheless achieved good results in situations where intelligence has been shared equally with both parties or encrypting has been used successfully to prevent any leaks. It is necessary to earn the confidence of both sides in order to carry out intelligence activities in a peace support operation safely and by open methods in the framework of the UN mandate. *One should not run the risk of prejudicing the integrity of the whole operation or the trust shown in it for the sake of a single intelligence mission.*

Great Britain may be said to have remained faithful to its own peacekeeping doctrine in the former Yugoslavia, in that in accordance with their directives, all the troops produced intelligence and the commanders took responsibility for the smooth functioning of the intelligence organization. Perhaps the greatest difference between the British and US peacekeeping doctrines lies in the fact that the Americans regard an operation as having become a case of peace enforcement as soon as force has been used, even in self-defence. The US approach to peace support operations has proved slower to adapt to local conditions and to the type of operation involved than that of the British. Research into intelligence activities carried out at the US Army Command and General Staff College nevertheless provides some indications that intelligence arrangements may sometimes be adapted to the doctrine of another state or organization, e.g. in the case of Command and Control Warfare (C2W). In this respect

it may be said that *greater diversity is being introduced into control over the military aspects of crisis management*. This observation is supported by experiences with UN operations, in that willingness to bring the armed forces into action has increased rapidly as the conflict has gained in intensity. Indeed, this tendency is to be seen from the very beginning in the case of air operations.

Finally, however, it should be emphasized once again that the findings of the present research are at variance with the official UN view of intelligence and its implementation. *In practice, virtually all the refinements that belong to modern intelligence systems have been used in operations since 1990*. The UN command system has admitted that there is a need for the gathering of intelligence and the commanders of the operations have insisted on receiving information of this kind to support their decisions and command functions.

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ABBREVIATIONS

AIC	Atlantic Intelligence Command
ASAS-Warrior	All-Source Force, Analysis System Warrior
ATAF	Allied Tactical Air Force
BCE	Battlefield Co-ordination Element
BDA	Battle Damage Assessment
CAOC	Combined Air Operations Centre, 5. ATAF
CCIR	Commanders Critical Intelligence Requirements
CI	Counter-Intelligence
CIA	Central Intelligence Agency
CINC	Commander-in-chief
CJTF	Combined Joint Task Force
CJ-2	Operational level intelligence section in CJTF
CJ-3	Operational level operations section in CJTF
CMISE	Corps Military Intelligence Support Element
CMO	Chief Military Observer
CNN	Cable Network News
COMINT	Communications Intelligence
COTS	Commercial-Off-The-Shelf

CRONOS	Crisis Response Operations in NATO Operating Systems
C2W	Command and Control Warfare
C3CM	Command, Control, Communications and Countermeasures
C2	Command and Control
C3	Command, Control and Communications
C3I	Command, Control, Communications and Intelligence
C4I	Command, Control, Communications, Computers and Intelligence
DANROP	Danish-Norwegian Research Project on UN Peacekeeping.
DHA	Department of Humanitarian Affairs
DIA	Defense Intelligence Agency
DPA	Department of Political Affairs
DPI	Department of Public Information
DPKO	Department of Peace-keeping Operations
DSU	Direct Support Unit, U.S. Marines
ECSC	Electronic Combat Signals Cell
ELINT	Electronic Intelligence
EOB	Electronic Order of Battle
EW	Electronic Warfare (part of C2W)

FC	Force Commander
FLIR	Forward Looking Infrared Radar
FOA	Swedish National Defence Research Establishment
GCCS	Global Command and Control System
G-2	Brigade level Intelligence
G-2x	Organization inside the G2 responsible for HUMINT
HUMINT	Human Intelligence
IFOR	Implementation Force
IISS	International Institute for Strategic Studies.
IMINT	Imagenary Intelligence
INMARSAT	International Marine Satellite
INSS	Institute for National Strategic Studies, National Defense University, USA.
IPB	Intelligence Preparation of the Battlefield
IRM	Intelligence Requirements Management
IVNS	Initial Voice Switched Network
I&RC	Information & Research Cell in UNNY DPKO
I&W	Indication and Warning
JAC	Joint Analysis Center, USEUCOM

JCMEC	Joint Captured Material Exploitation Center
JCO	Joint Commission Officers
JDEC	Joint Document Exploitation Center
JDISS	Joint Deployable Intelligence Support System
JIC	Joint Intelligence Centre
JIF	Joint Interrogation Facility
JISE	Joint Intelligence Support Element
JIVA	Joint Intelligence Virtual Architecture
JMICS	Joint Mobile Intelligence Communication Systems
JOC	Joint Operations Center
JTIDS	Joint Tactical Information Distribution System
JTF	Joint Task Force
JWICS	Joint Worldwide Intelligence Communication Systems
LAN	Local Area Network
LANDCENT	Allied Land Forces Central Europe
LIC	Low Intensity Conflict
LNO	Liaison Officer
LOCE	Linked Operational Intelligence Centers Europe

MASINT	Measurement Intelligence
METT-T	Mission, Environment, Troops, Threat and Time
MICC	Multinational Intelligence Co-ordination Center
MNB (op)	Multinational Brigade
MND-N	Multinational Division North, IFOR
MSC	Military Staff Committee (UN)
MSE	Mobile Subscriber System
NACCIS	Maritime CCIS (Command Control and Information System) Core System
NATO	North Atlantic Treaty Organization
NGO	Non-Governmental Organization
NIC	National Intelligence Cell, Nato term for NIST
NICS	Nato Integrated Communications Systems
NIPRNET	Non-classified Internet Protocol Router Network
NIST	National Intelligence Support Team
NMCC	National Military Command Center
NMJIC	National Military Joint Information Center
NSA	National Security Agency
OOTW	Other Operations Than War (FM 100-5)

OPSEC	Operational Security, (part of C2W)
OSINT	Open Source Intelligence
OSIS	Open Source Intelligence System
PDD	Presidential Decision Directive (USA)
RADINT	Radar Intelligence
RRF	Rapid Reaction Force
RUSI	Royal University of Defence Studies
SACEUR	Supreme Allied Commander Europe
SAR	Synthetic Aperture Radar
SCI	Sensitive Compartmented Information
SFOR	Stabilization Force, IFOR
SHAPE	Supreme Headquarters Allied Powers Europe
SHED	Special Handling & Education Detachment
SIGINT	Signals Intelligence
SIPRI	Stockholm International Peace Research Institute.
SIPRNET	Secret Internet Protocol Router Network
SITCEN	Situation Centre
SLAR	Side-looking airborne radar
SRSG	Special Representative of the Secretary General

Sy	Security, part of CI
TARE	Telegraph Automatic Routing Equipment
TEZ	Total Exclusion Zone, Sarajevo
TCICA	Theater Counter-Intelligence Co-ordination Authority
TI	Technical Intelligence
Trojan SPIRIT	Trojan Special Purpose Intelligence Remote Integrated
TRRIP	Theater Rapid Response Intelligence Package
TTP	Tactics, Techniques and Procedures
UAV	Unmanned Aerial Vehicle
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIDIR	United Nations Institute for Disarmament Research
UNOSOM I	First United Nations Operation in Somalia
UNOSOM II	Second United Nations Operation in Somalia
UNPF	United Nations Peace Force
UNPREDEP	United Nations Preventive Deployment
UNPROFOR	United Nations Protection Force

UNTAC	United Nations Transitional Authority in Cambodia
USACOM	United States Atlantic Command
USCENTCOM	US Central Command
USEUCOM	US European Command
WAN	Wide Area Network
WEU	Western European Union
WHO	World Health Organization
YJPC	Yugoslavian Joint Planning Cell, EUCOM

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