

SECURITY ISSUES in the Planning and Management of Transboundary Conservation Areas

David Peddle, Leo Braack, Thomas Petermann and Trevor Sandwith

2004

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IUCN Transboundary Protected Area Task Force**

InWEnt – Internationale Weiterbildung und Entwicklung (*Capacity Building International, Germany*) is an organisation for international human resource development, advanced training and dialogue. InWEnt was established through a merger of the *Carl Duisberg Gesellschaft* (CDG) e.V. and the *German Foundation for International Development* (DSE) and can draw on decades of experience in international cooperation. Its practice-oriented programmes are directed at experts, managers and decision-makers from business and industry, politics, government agencies, international organisations and civil society from all over the world. Its Development Policy Forum organises high-ranking, informal policy dialogue on current issues of development policy.

IUCN – The World Conservation Union - Task Force for Transboundary Protected Areas. The World Conservation Union (IUCN) through its World Commission on Protected Areas (WCPA) established a Transboundary Protected Areas Task Force to contribute towards a global programme on transboundary conservation. The TBPA Task Force consists of a group of volunteer specialists from many parts of the world, most of whom are involved in transboundary conservation programmes. The Task Force initially developed a set of guidelines for managers and other professionals, entitled “Transboundary Protected Areas for Peace and Co-operation” including some preliminary definitions and a draft code for the management of TPBAs in times of peace and armed conflict. Informed by a series of regional initiatives around the world, the Task Force has promoted the concept of a Global TPBA network which will co-ordinate and support the efforts of TBPA managers into the future. By linking TBPA sites, managers and resource materials through an internet site called TBPA.NET, the global network will assist transboundary initiatives to share lessons learned, to disseminate information and will provide a primary information resource to managers and researchers.

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**A Guideline Manual produced by InWEnt, collaborating
with IUCN TBPA Task Force**

This document should be cited as:

Peddle, D., Braack, L.E.O., Petermann, T., and Sandwith, T. 2004. *Security Issues in the planning and management of Transboundary Protected Areas*. Internationale Weiterbildung und Entwicklung (InWEnt), Germany.

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Acknowledgements

This manual has benefited considerably from the discussions and inputs during 2002 and 2003 of delegates who participated in a series of five Transboundary Protected Area workshops in Africa, and a major international TBPA workshop in Thailand during February 2003. The contents of the manual have largely been shaped to address the needs and challenges as expressed by these delegates, and hopefully will contribute towards developing an improved understanding of the various security issues and processes involved in transboundary conservation initiatives. The authors express their gratitude to all these participants who shared their own experiences, concerns and ideas, thereby enriching the discussions for all involved.

Particular thanks are due to Roland Stein and Marloes van Amerom who read and made valuable comments on a draft version of the manual. Roland Stein also contributed two Boxes which add additional perspectives to specific sections.

Abbreviations and Acronyms

ASEAN	- Association of SouthEast Asian Nations
CITES	- Convention on International Trade in Endangered Species of Wild Fauna and Flora
CEO	- Chief Executive Officer
CIC	- Chief in Charge
CIO	- Chief Intelligence Officer
CoA	- Course of Action
CSO	- Chief Security Officer
DSE	- Deutsche Stiftung fur Entwicklung (<i>German Foundation for International Development</i>)
EAC	- East African Community
EMPRES	- Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases
Interpol	- International Criminal Police Organisation
InWEnt	- Internationale Weiterbildung und Entwicklung gemeinnützige Gesellschaft (<i>Capacity Building International</i>), a merger of DSE and Carl Duisberg Gesellschaft e.V.
IT	- Information Technology
IUCN	- the World Conservation Union
JMB	- Joint Management Board (<i>with representatives from each Partner Country to collectively implement and supervise the terms of the Treaty establishing the TBCA</i>)
MIKE	- Monitoring the Illegal Killing of Elephants (<i>is a CITES mechanism</i>)
MoU	- Memorandum of Understanding
NEPAD	- New Partnership for Africa's Development
NGO	- Non-Governmental Organisation
PA	- Protected Area
PPF	- Peace Parks Foundation
RETOSA	- Regional Tourism Organisation of Southern Africa
SADC	- Southern African Development Community
SDI	- Spatial Development Initiative
SF	- Security Forces
SWG	- Security Working Group
TBCA	- Transboundary Conservation Area
TBPA	- Transboundary Protected Area
TFCA	- Transfrontier Conservation Area
TFC&DA	- Transfrontier Conservation and Development Area
UNHCR	- United Nations High Commission for Refugees
WCPA	- World Commission on Protected Areas

1. Introduction and Definitions

1.1 INTRODUCTION

The term Security has a broad sweep, and relates to “*a condition of being protected from or not exposed to danger, being safe*” (Oxford English Dictionary). In the context of wildlife conservation areas, dangers or threats to a sustainable continued existence may take on many forms, and include not only direct physical threats in the form of poaching, refugee invasions, escaped fires, invasive exotic plants and pollution from neighbouring areas, but also other equally or even more serious long-term threats such as financial security, government and public support for the idea of conservation and commitment to conserve certain areas, disease containment not only against alien pathogens entering ecosystems (e.g. bovine tuberculosis) but also endemic wildlife diseases escaping into domestic stock (e.g. Foot & Mouth Disease), and many others risks either acting on or by a conservation area (Braack *in press*).

While all of the above risk elements are valid subjects for discussion under the theme of ‘Security’, this Manual will limit itself to the more traditional subset of threats relating to direct human actions upon conservation areas, such as illegal entry and the often negative motivations such as poaching, smuggling, theft etc. In particular, as far as is possible to avoid getting embroiled in more local matters, the focus will also be specifically on the ramifications and consequences brought about by *transboundary linkage* of conservation areas. By transboundary linkage we mean formal efforts aimed at jointly and harmoniously managing across political and other unnatural borders the natural resources and the opportunities they represent within previously independently-managed geographic entities. Perhaps the best examples are the various linkages between protected areas adjoining each other but falling in different countries, such as the Waterton-Glacier International Peace Park (USA, Canada), Great Limpopo Transfrontier Park (Mozambique, South Africa, Zimbabwe), Lanjak-Entimau Betung Kerihun Transboundary Conservation Area (Malaysia, Indonesia), and many others throughout the world.

Why do we engage in such transboundary linkages and thereby encumber ourselves with a whole new suite of security threats and other complications? For the very valid reason that the greatest threat facing global biodiversity has been and continues to be habitat fragmentation. Rapidly expanding human populations and demand for resources during especially the mid- to late-20th century caused a global trend of setting aside relatively small and often inappropriately bounded conservation ‘islands’ no longer able to sustain the ecological processes and mechanisms necessary to maintain species and communities, thereby ensuring an escalating and compounding pattern of species loss now assuming alarming proportions on a global scale. Recognizing the consequences of habitat fragmentation, conservationists are now attempting to create corridors and linkages to improve the resilience of these disrupted ecosystems, and Transboundary Conservation Areas (TBCAs) are but one manifestation of these efforts, also known in slightly different guises as Transboundary Protected Areas (TBPAs), Transfrontier Conservation Areas (TFCAs), Transfrontier Parks and also Peace Parks. Box 1.1 describes what each of these terms has come to mean in different parts of the world, while Box 1.2 gives the IUCN definitions of the various kinds of Protected Areas.

BOX 1.1 TERMINOLOGY ASSOCIATED WITH TRANSBOUNDARY INITIATIVES

Transboundary Natural Resource Management Area (TBNRM Area)

An area in which cooperation to manage natural resources occurs across boundaries (Griffin *et al* 1999). Note that this concept does not necessarily involve any formal protected areas.

Transfrontier Conservation Area (TFCA)

An area or component of a large ecological region that straddles the boundaries of two or more countries, encompassing one or more protected areas, as well as multiple resource use areas (as defined in the SADC Protocol on Wildlife Conservation and Law Enforcement, 1999). This is a term used particularly in southern and eastern Africa, with more or less the same meaning as TBCA (see below)

Transboundary Conservation Area (TBCA)

Essentially the equivalent of a TFCA, except that the boundaries referred to need not necessarily refer to international borders but may be provincial or other intra-national limits of jurisdiction.

Transboundary Protected Area (TBPA)

An area of land and/or sea that straddles one or more boundaries between states, sub-national units such as provinces and regions, autonomous areas and/or areas beyond the limits of national sovereignty or jurisdiction, whose constituent parts are especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means (Sandwith *et al* 2001).

Transfrontier Park (TFP)

Essentially the equivalent of a TBPA, implying that all or most of the areas comprising the jointly-managed Transfrontier Park are high-status formal protected areas, usually of National Park status, with perhaps one or more smaller areas serving as linking corridors.

Parks for Peace

Parks for Peace are transboundary protected areas that are formally dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and to the promotion of peace and co-operation (Sandwith *et al* 2001).

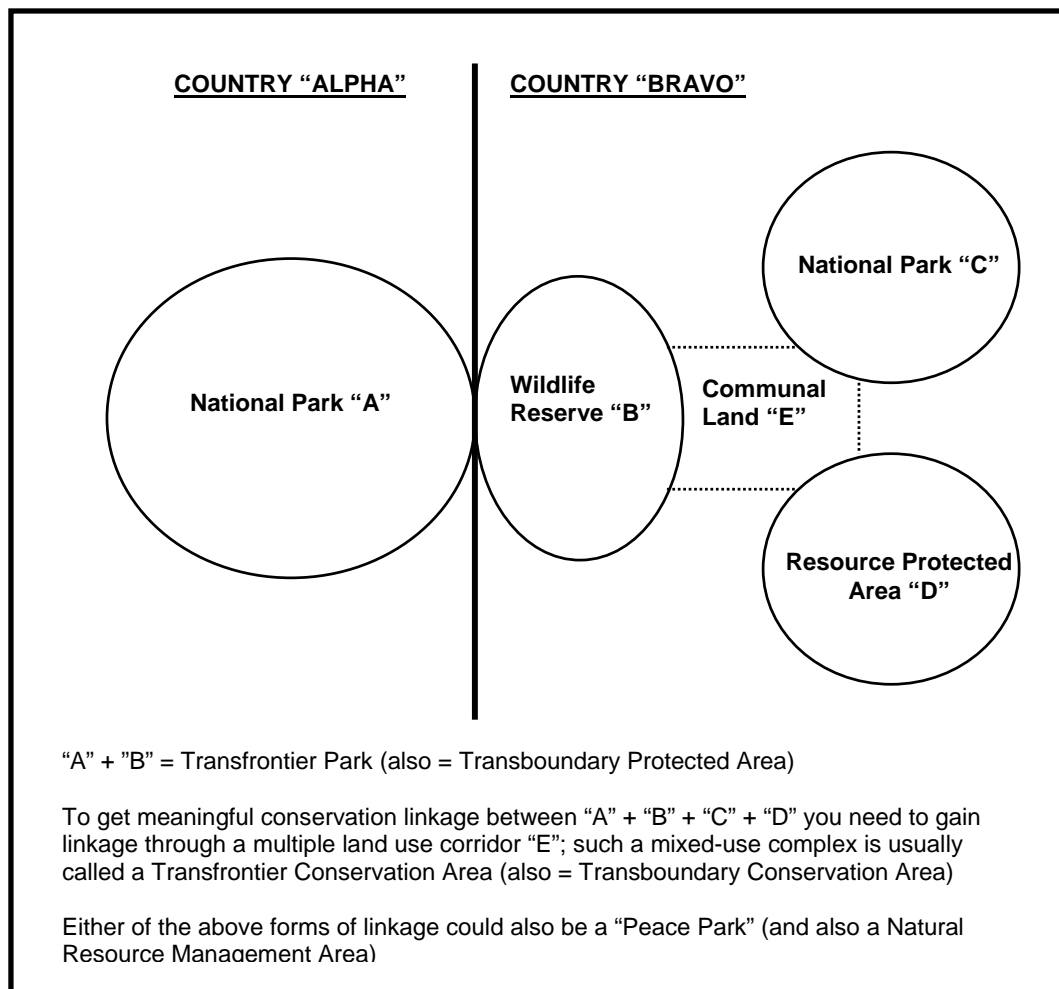
1.2 DEFINITIONS

To avoid some of the uncertainty associated with the different application of terms in different parts of the world, we have adopted for purposes of this Manual the term TBCA, and we will use the term in the context of referring to *geographically defined areas that are contiguous or close to each other and of which some are separated by one or more international political boundaries, but all are or will be jointly managed for improved natural resource conservation and other benefits in terms of a formal Agreement or Treaty between the partner nations.*

A recent IUCN publication (Sandwith *et al* 2001) reveals that by 2001 the number of potential transboundary protected area complexes had risen to 169, involving no less than 666 separate but closely adjunct protected areas. Efforts are now being pursued on virtually every continent on the planet to engage in these transboundary linkages, to achieve collaborative management of adjoining conservation areas according to harmonized management plans.

Another recent study (Hall-Martin and Modise 2002), commissioned by the Regional Tourism Organisation and Development Bank of Southern Africa, identified a minimum of 21 existing or potential TFCAs within southern and eastern Africa, representing a total area in excess of 400,000km². Three of these (Kgalagadi, Great Limpopo, and Ai Ais Richtersveld TFCAs) have already been formally established, and another five are in various stages of planning or implementation. Similar initiatives have also been successfully concluded or are in progress elsewhere, notably in southeast Asia and central America.

FIGURE 1.1 DIAGRAMMATIC REPRESENTATION OF DIFFERENT KINDS OF TRANSBOUNDARY LINKAGES



The motivations for establishing these TBCAs usually have as common denominator objectives aimed at expanding land surface under compatible and effective conservation management so as to improve ecosystem resilience, but in many cases other motivations are at least equally important from a political perspective, such as socio-economic development achieved through ecotourism in marginal and impoverished regions, and sometimes also to promote peace and cooperation between neighbouring states. This latter advantage of TBCAs is often one of the most underestimated of the benefits of engaging in such transboundary linkages, because the formal and regular interaction between officials from differing nations engaged in TBCA initiatives promotes collaboration, an understanding of each others problems, tolerance, all of which are passed up to politicians and down to communities and so in the longer term contributes to stability and peace and regional social upliftment.

However, despite the excellent opportunities that these TFCAs or TBCAs represent for promoting biodiversity conservation, tourism and also socio-economic development, there is still a shortfall of co-ordinated facilitation and guidance on the processes and mechanisms associated with the planning and establishment of such TBCAs. Although the first formally declared transboundary linkage is generally accepted as the Waterton-Glacier International Peace Park between the USA and Canada, with collaborative management agreements established between the two in 1932 (de Villiers 1999), only a slow trickle followed this initial example until the 1990s when an international spate of

TBCA development commenced. Even now much of the lessons are being re-learnt in different geographic regions as a result of inadequate contact and exchange between different continents. Some guidelines do exist, such as an excellent series on Transboundary Parks by IUCN (e.g. Sandwith et al 2001, van der Linde et al 2001), and Transboundary Natural Resource Management (TBNRM) by the Biodiversity Support Programme (Griffin et al 1999, etc), and while these Guides have found some encouraging regional acceptance and application, it has not been widespread and general. At least in southern and eastern Africa, a clear need has been expressed during a series of InWent workshops by TBCA practitioners for a variety of Guide Manuals focussed on specific themes, and also for improved regional guidance and coordination (Petermann et al 2002). This manual on Security is a direct consequence of this expressed need.

BOX 1.2 IUCN PROTECTED AREA MANAGEMENT CATEGORIES (IUCN 1994)

Category 1: Strict Nature Reserve/Wilderness Area; A Protected Area managed mainly for science or wilderness protection

Category 2: National Park; A Protected Area managed mainly for ecosystem protection and recreation

Category 3: Natural Monument; A Protected Area managed mainly for conservation of specific natural features

Category 4: Habitat/Species Management Area; A Protected Area managed mainly for conservation through management intervention

Category 5: Protected Landscape/Seascape; A Protected Area managed mainly for landscape/seascape conservation and recreation

Category 6: Managed Resource Protected Area; A Protected Area managed mainly for the sustainable use of natural ecosystems.

2. Key Security Issues in Transboundary Conservation

2.1 INTRODUCTION

To understand what Security issues become relevant when engaging in TBCA initiatives, it may help to consider what happens as a consequence of achieving the objectives of TBCAs.

But what are these TBCA objectives? Usually, and very broadly, they are to restore disrupted ecosystem processes or promote biodiversity resilience in such systems, and often also to increase tourism potential and promote peace...this is the usual mix that many TBCAs aim for. Achieving these objectives most frequently requires (amongst many other things) a 'softening' of the historical restrictions associated with international boundaries, and can only be effectively done by:

- ❑ removing all or most of the fences or barriers preventing the free movement of wildlife across international borders
- ❑ creating easier access for tourists to the various constituent areas making up the TBCA, ideally removing the need for border posts within the TBCA, and thereby allowing relatively unimpeded movement of people across international boundaries
- ❑ achieving optimal levels of collaboration across international boundaries between officialdom and stakeholders involved in the joint management of the TBCA.

Although none of the countries participating in the TBCA relinquish any sovereignty, and a TBCA does not by any means signify or become 'no-mans land', there are clear and dramatic changes brought about by enabling a more free movement of people and wildlife between the different countries, and mechanisms need to be put in place to retain control while still pursuing the objectives of the TBCA.

BOX 2.1: TBCAS DO NOT EQUAL "NO MANS LAND"

Because it is often a source of immediate concern to Security departments when they are first approached about being involved in a TBCA initiative, it is important to make it clear that each of the countries engaging in a TBCA will retain full sovereignty and all rights to the land and management thereof over any portion that a particular country has in a TBCA. All that is being aimed for is achieving greater compatibility and 'harmonisation' in the management of adjoining or linked conservation areas, enhanced freedom of movement by wildlife and ideally also people. This process of greater collaboration, preferably joint management, and enhanced access by wildlife and people, will require management and control mechanisms, hence the need to involve Security and all other stakeholders.

The situation described above and the ramifications thereof are depicted in Figure 2.1.

FIGURE 2.1a: TRADITIONAL SITUATION PREVAILING AT MANY INTERNATIONAL BOUNDARIES

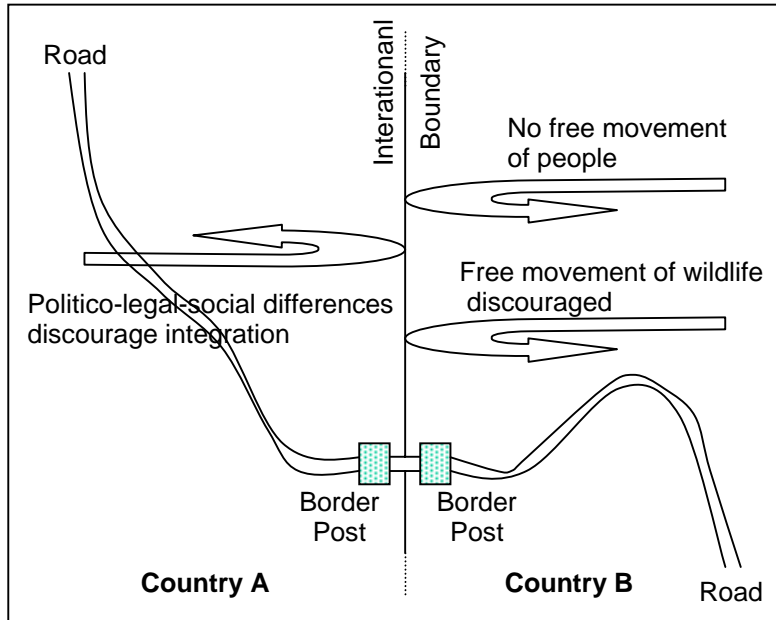
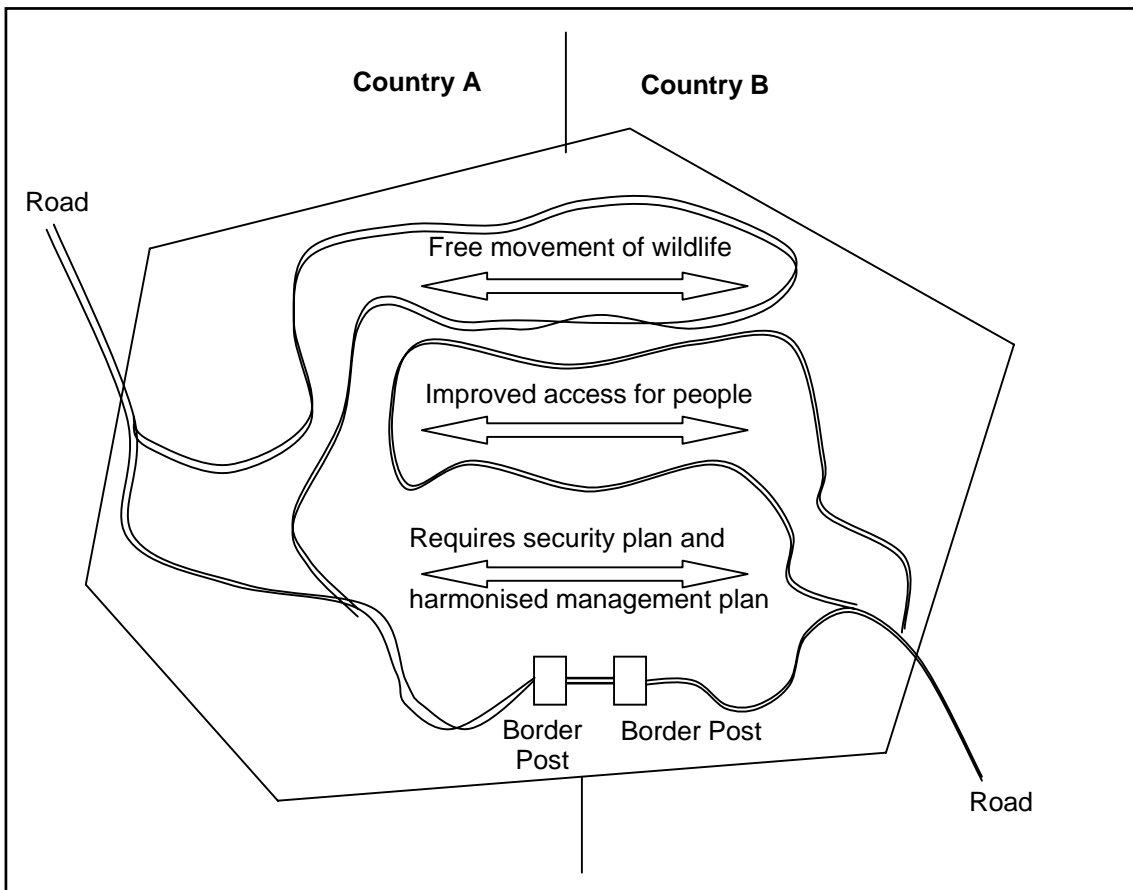


FIGURE 2.1b: ONE POSSIBILITY ARISING FROM TBCA LINKAGE



2.2 WHAT ARE THE SECURITY ISSUES THAT BECOME RELEVANT DURING PLANNING FOR TBCAS?

Experience has shown that there has often been an unintended oversight by the initiators and conceptualisers of TBCA initiatives in bringing on board Security stakeholders in the early stages of planning. This may lead to a delay in the implementation of any Actions Plans or the project management schedule, as these important stakeholders need to first be familiarized with the concept and all its ramifications. It is these ramifications that are of particular importance, as conservation staff are sometimes not aware of certain consequences such as the activities of drugs and arms smuggling cartels in the region and opportunities such cartels may find in the potentially relaxed conditions of an inappropriately planned TBCA. For national security reasons these stakeholders, which include politically powerful state departments such as Defence, Police, Intelligence, etc, have the capacity to delay and even stall a TBCA process, and it is in the direct interest of the conservation or planning agencies to involve the security stakeholders (as indeed all other stakeholders!) from early in the planning stages.

2.2.1 Removal of fences

Fences exist either to limit or direct the movement of people and/or wildlife, and if such fences are removed it impacts directly on the motivations for the initial construction of such a fence. In the context of TBCAs, fences usually considered for removal are those along the international boundary, specifically because in many cases the fences represent unnatural barriers which disrupt the historic access and flow of wildlife across the ecosystem. The original purpose for most of these boundary fences have usually been to:

- ❑ demarcate the international border between two countries
- ❑ restrict the uncontrolled movement of people from one country to another, and
- ❑ restrict the movement of wildlife in compliance with veterinary regulations regarding the spread of wildlife diseases such as bovine tuberculosis, Foot & Mouth Disease, East Coast Fever, Brucellosis, and many others, from wildlife to domestic stock.

2.2.1.1 *Removal of International Boundary Fence*

Where boundary fences do exist, it is very often the case that fence-maintenance, fire-breaks or patrol roads are present to provide access to and usually also parallel such an international fence for its entire distance, and that such roads occur on both sides of the fence. In the case of extensive parks adjoining each other along an international boundary, as is often the case in Africa, one could have a hundred or more kilometres where two roads are separated only by the fence and parallel each other for the entire distance. Removal of this fence creates a nightmare for security staff who immediately have visions of unlimited opportunity for criminals to use the patrol roads to move between the two countries at any point between these two adjoining roads, and the potential enormous costs to secure this route against smuggling or other illegal activities. Such fences may not have been impenetrable barriers even when they did exist, but if anyone cut the fence for access into the adjoining country, it would alert security personnel of illegal activities and pinpoint an area where security staff could focus their attention. Other than by doing very regular foot patrols for tracks, removal of the fence would make it very difficult to detect or have warning of illegal activities in the border area. For this reason careful planning needs to precede the removal of such international border fences, so that access points to such roads can either be controlled or monitored, or one or both of the roads along the fence can be closed and rehabilitated. It sometimes happens that a compromise has to be reached, as in the case of the Great Limpopo Transfrontier Park, where certain sections of fencing will remain in places where intelligence services and security staff have identified strategic or chronic problem areas, while other extensive sections of fencing can be removed in keeping with the objectives of the TBCA.

Another security consideration associated with such international or other border-fences is that they clearly signify a 'limit' or boundary, in this case a change in country and jurisdiction. A person intent on illegal activity and moving from country "A" into country "B" could easily plead ignorance of having moved from the one country into another (where the law may be more strict or have more serious consequence) because there was no fence or other indication of a jurisdictional change, thus complicating legal proceedings. For this reason security personnel sometimes insist that even though a fence may be removed, a clearly visible line of fence-posts should remain in place to denote the boundary, especially if the roads are to be closed and rehabilitated. Such a line demarcating the boundary is also important in the operations of security and other personnel of the different countries, as they need to know where sovereign responsibilities commence and end.

Stakeholders affected by removal of an international boundary fence include the Defence Force, Police, Intelligence (most countries have one or more Intelligence Departments), the Veterinary and Plant Disease authorities, as well as the departments for Immigration, Customs & Excise, and also Foreign Affairs.

2.2.1.2 *Roads/Bridges/Air-strips and access control*

For security departments – which have as mandate the task to minimize criminal activity or threats within or to a particular border area – a key issue is always to have as much control over movement of people and to have as much information as possible about what these people are doing and where they are. Of course, this is not possible in an absolute way, but it does to some extent represent the ideal in order to accomplish their task. If you know exactly how many people have entered through a defined entrance gate into a Park, and you know how many people have checked into and taken up their camp or hotel accommodation, then if there are discrepancies in numbers it suggests either accidental 'loss' possibly by way of vehicle breakdown on some isolated road and the people need to be found, or deliberate 'loss' by way of illegal activities (e.g. poaching, or smuggling vehicles across border patrol road) or even suicide along some deserted patrol road, as has happened on occasions. Such absolute control is difficult to achieve without compromising the attractions and pleasurable experience drawing visitors to the TBCA, but security personnel will usually strive for some measure of control, and often will aim for at least the following measures being in place:

- a limited number of designated entrance/exit gates into or out of a TBCA, through which all traffic can be channelled and where control can be maintained. Here people pay entrance fees if required and their entry into the area is recorded (even if not by name then as a unit or number of people), visitors convey a sense of their purpose (a sedan vehicle loaded with holiday gear will attract no attention but a camouflage-coloured off-road vehicle mounted with arrays of spotlights and refrigerated trailer would certainly arouse suspicion and elicit a search), fire-arms are declared and sealed, while vehicles leaving the TBCA are given cursory examination for wildlife products and their exit recorded (again perhaps not as specified identities but at least as numbers). Some control can be maintained in this manner, and if applied properly will suffice as a basis to keep in check at least flagrant criminality, poaching and corruption.
- a communication system, ideally supported by a computerized data network. This has a multitude of advantages, examples being either if suspicions arise about stolen vehicles, so that security or other officials can rapidly telephone or radio an appropriate police base with access to centralized information, or suspicions about the activities of a 'visitor' who has 'lost' critical entry or accommodation documents, in which case rapid communication is required with the other point of entry or camp/hotel to verify information. Ideally, all Entrance/Exit Gates into/out of a TBCA should be linked as a computer network, in which case it becomes possible, with relative ease, to enter a vehicle registration and other details upon entry into the TBCA, and can be deleted upon departure, thereby greatly increasing the capacity to identify and track anomalies. Clearly, there will be a need for the different countries

and Parties to the TBCA to reach agreement on standardisation of equipment, frequencies and procedures.

Access control within a TBCA and the need therefore can perhaps be better illustrated and explained by examining Figure 2.2 below:

Figure 2.2a more or less depicts the typical and historic situation where tourists move between two adjoining countries. All traffic and people are channelled by road and fence to a formal border control post of one country where persons have to present themselves, comply with passport, visa, health, veterinary, agricultural, customs and excise requirements, and then proceed via a narrow and short corridor of land to a similar facility of the country being entered. Along the way there are a number of security checkpoints, some where people may be physically searched and some of which people are not even aware of but they are subject to video or other surveillance. This is standard practice and legal requirement by most countries which will not waive such procedures even for admirable initiatives such as TBCAs.

BOX 2.2: WHY 'PERIPHERAL BORDER POSTS' WERE NOT ACCEPTABLE IN THE CASE OF THE GREAT LIMPOPO TRANSFRONTIER PARK

While Mozambique and Zimbabwe were willing to implement peripheral border posts, concerns by security departments in South Africa prevented this option. This arose because the 19,000km² Kruger National Park in South Africa has a road network of over 2,000km, much of it as infrequently-used patrol roads or fire-breaks which in many places reach to the western boundary thus offering uncontrolled access into the remainder of South Africa via farm roads connecting with the main road network again. South African security officials claim that with such an extensive road network within the Kruger Park there are just too many opportunities for criminals to bypass the official entrance/exit gates. In theory therefore, vehicles or arms or drugs could enter from one of the Partner Countries where South African authorities have no control, and then illegally enter South Africa via such clandestine entry points along the western boundary. This necessitated the establishment of two *internal* border posts (Pafuri & Giriondo) situated along the historic border between the countries, inside the TBCA.

FIGURE 2.2A: ACHIEVING FREE MOVEMENT OF ANIMALS BY REMOVING INTERNAL BARRIER FENCES. ALSO CREATING OPPORTUNITIES FOR PEOPLE TO ACCESS TBCA COMPONENT AREAS OF BOTH COUNTRIES, BUT ONLY VIA ONE POINT AT AN INTERNAL BORDER POST.

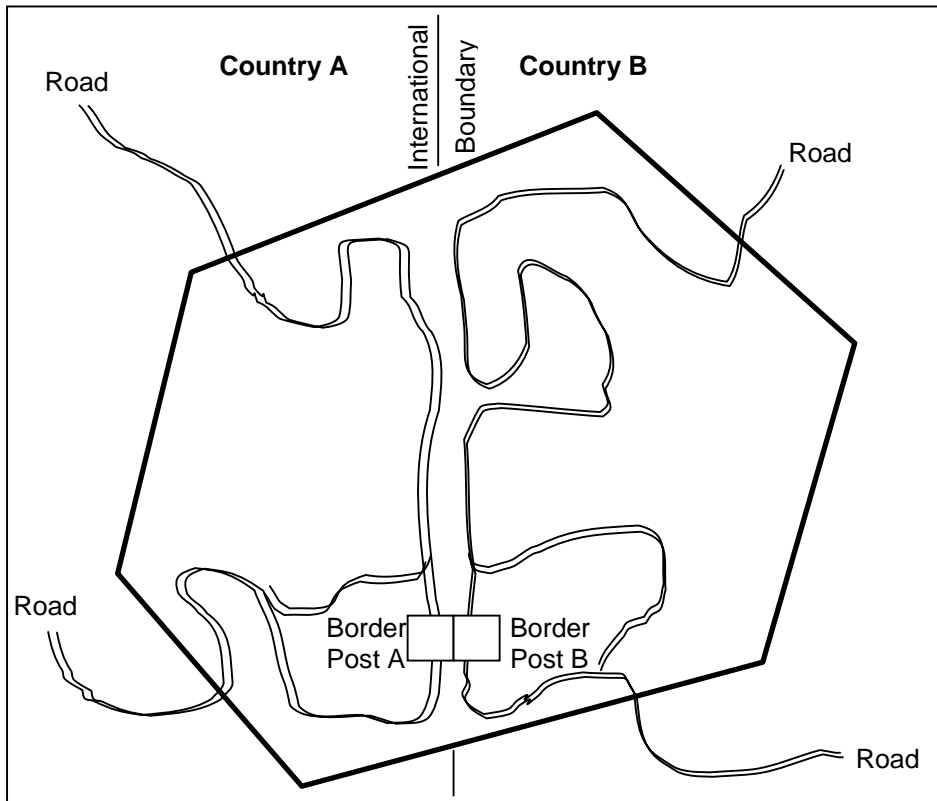
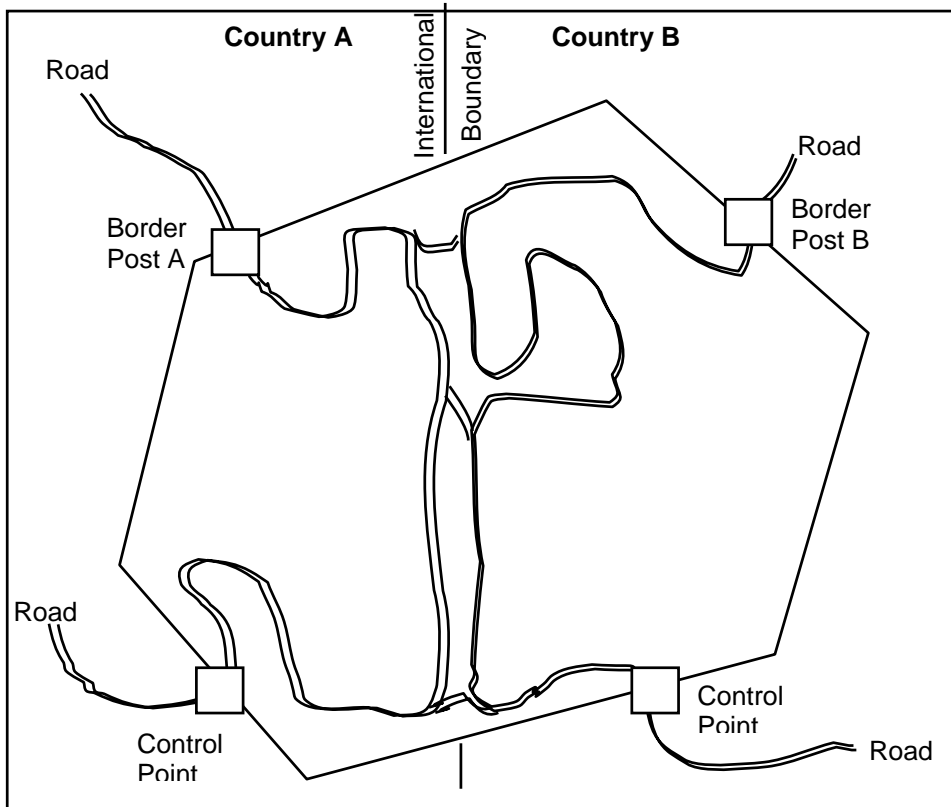


FIGURE 2.2B: LINKAGE VIA PERIPHERAL BORDER POSTS: MAXIMIZES OPPORTUNITY FOR PEOPLE TO TRAVEL FREELY ANYWHERE WITHIN THE TBCA AND DERIVE MAXIMUM BENEFIT FROM THE EXPERIENCE



There is a willingness amongst some countries, provided the security situation allows it and all other requirements can be accommodated *on both sides of the border*, to stretch the 'corridor' between two border posts, thereby allowing the TBCA in effect to become the 'corridor'. This will usually only be feasible or allowed where the TBCA is completely bounded in a manner whereby vehicles cannot move from one country to another except through formal border posts, and this means that the entire TBCA needs to be bounded by a combination of fences, rivers and mountains restricting such uncontrolled movement. A process needs to be initiated and facilitated to investigate the feasibility of such an option and reach agreement between all stakeholders.

A situation of having peripheral border posts has considerable tourist advantages as it potentially reduces the border inconveniences for a large percentage of visitors who only want to access the TBCA and not necessarily use it as a thoroughfare into the next country. Again, by mutual arrangement between the Partner Countries participating in the TBCA, a visitor can be allowed entry into the TBCA from either country, travel anywhere within the entire TBCA (even those parts of the adjoining country) without going through the formal border procedures, as long as such a tourist exits back into the country of initial entry without having left the confines of the TBCA. This way the tourist has the full benefit of the entire TBCA without the procedural problems normally associated with border crossings. However, if the tourist wishes to enter the TBCA from one country and after a stay exit into the next country, such a visitor has to go through the full border procedures upon entry into the TBCA and again upon exit. This is easy to control as a visitor will not be allowed exit into another country if border procedures were not complied with at the point of entry.

Roads and airstrips exist not only for the benefit of tourists, but also for management purposes, including implementing adequate security measures for effective safeguarding of the TBCA against not only criminals but also fire, poachers, and to patrol for the presence and combat of alien disease or invasive plants. So roads and bridges and airstrips are essential management tools, but the use of and access to this infrastructure has to be controlled to avoid abuse for inappropriate purposes. This can be achieved either by simple 'No Entry' signs discouraging or warning people from entry (enforced by fines if ignored), to the placement of locked gates or barriers, or where necessary even placement of a permanent guard.

2.2.2 Tourist Safety

Ensuring the safety of tourists and that such visitors have a relatively trouble-free experience is part of the mandate of at least a subset of the security community. Not only is this incumbent upon any socially responsible organisation, but it is also in its best interest so that such visitors will either return or at least convey a positive image of their visit to that TBCA. It impacts on the long-term financial or political viability of the TBCA.

TBCAs are by their very nature located at the borders of countries and this often coincides precisely with areas where conflict may have occurred historically between two or more countries. There are examples of current TBCAs where military forces in earlier times liberally placed land-mines in roads or strategic areas to prevent or slow enemy movement, and no records were kept so that many of these land-mines remain in place. Naturally, this represents a serious threat to tourism and such areas have to be identified and demarcated either for mine removal or complete avoidance.

Some border areas are chronically subject to incursions, clashes, smuggling or other criminal activities and such areas need to be identified and measures put in place to safeguard the interests of tourists. Tourists inadvertently stumbling upon a group of cross-border drug-smugglers are potentially at serious risk, but Intelligence or other Security departments are

frequently well aware of these nodes or focal points of criminal activity, and therefore able to point out such risk areas to Park managers.

2.2.3 Community Expectations

For historic strategic and other reasons the Colonial or reigning powers at the time in many cases drew political boundaries which not only cut straight across homogeneous ecosystems, but also through ethnic groupings, often separating members of the same community and in some cases even members of the same family. Unless such communities are involved as legitimate stakeholders from early in the planning process and efficient information transfer takes place, the possibility exists that unrealistic expectations may be raised when such communities learn of plans for a TBCA and the associated 'softening' of boundaries. They could expect easier access to wildlife resources, easier movement through conservation areas to community members in the adjoining country, or easier movement for trade and commercial purposes. If such movement or access is made less restrictive some form of control will surely be required, while if the expectations are unrealistic then these expectations need to be managed otherwise it will transform into resentment and become a security problem, potentially leading to strained relations, increased poaching, and reduced collaboration in issues of mutual concern.

For these and other reasons, Communities (whether neighbouring or living within the proposed TBCA) need to be regarded as legitimate stakeholders in any planning for a TBCA.

2.2.4 Community Concerns

Many proposed TBCAs have subsistence communities living within the boundaries of the area where free movement of wildlife is proposed. While this may not necessarily be cause for concern in some parts of the world, in Africa it brings with it the risk of lions, elephants, rhino and buffalo, to name a few. Elephants can devastate a field of maize or other crops in one night of marauding activity, which could constitute a severe life-modifying event in the lives of a family which does not have a cash-based lifestyle, but survives on resources at hand. Similarly, the depredations of one lion killing community cattle can represent a major loss for the affected people. All of this will severely influence the perceptions of community members regarding conservation ideals and also relations between such community members and management staff. The lives and livelihood of such communities therefore need to be safeguarded when wildlife corridors are established or potentially dangerous animals are re-introduced into areas inhabited by humans. This may mean either fencing in such communities, fencing out wildlife from crop-growing areas, or other mechanisms to address the threat.

Uninformed communities may also become concerned at rumours about the area they are living in being incorporated within a proposed conservation area, with suspicions of forced relocation to unsuitable or undesirable areas.

To negate or address these and other concerns, communities need to be engaged early in the public participation and planning process associated with any TBCA proposal. This has to be an open and honest process of information exchange and consultation to retain trust and goodwill, or else the consequences of their resentment may be felt for a very long time and the damage require considerable effort to resolve. Subsistence communities may often be comprised of uneducated people, but they are nevertheless intelligent and understand when their rights are being infringed. With a little assistance they can effectively represent their interests and make meaningful and important input during planning phases, for the benefit of all parties concerned.

2.2.5 Legal Matters

Several aspects become relevant under this heading, all of which touch on international relations between the different country-components comprising the TBCA.

2.2.5.1 The need for compatible legislation or at least agreements and commitments to streamline activities across national boundaries within the TBCA

A series of examples to illustrate the potential impact of incompatible legislation in neighbouring countries should serve to highlight the need for TBCA planners or managers to be aware of the ramifications of such legislation and the need to develop mechanisms to accommodate such differences:

- Where boundary fences separating two adjoining conservation areas are removed, poachers may take advantage of different penalties imposed in different countries. For example, the illegal killing of rhinoceros may carry a severe fine in country “A”, but a far more lenient fine in country “B”. It would therefore be in the interest of a poacher to coax a rhino across the border and then shoot it in the country of less severe penalty, just in case an arrest is made. This applies equally to other rare, endangered or other wildlife having high value. The difference in penalties between different countries may arise for historical reasons, such as rhino not being present in one country for a very long time due to local extinction and therefore not considered during the subsequent formulation of laws/regulations; however, with the boundary fence now lifted and deliberate efforts to reintroduce such rhino, the laws need to be reviewed to accommodate the consequences of engaging in a TBCA.
- Differences in security actions directed towards poachers: while the following may be an extreme example, it nevertheless illustrates the point. In at least one African country the historic massacre of rhino and other wildlife was such that it was made legal to ‘shoot on sight’ any poacher within a protected area, in an effort to stop or discourage such poaching. While not rigorously implemented any more, the law still allows such practice, and if this country (country “A”) engages in a TBCA with an adjoining country (country “B”) where capital punishment is illegal, it gives rise to major complications when a poacher which is a citizen from country “B” unwittingly enters (because the borderline is no longer evident) and is shot dead for poaching in country “A”. While not as extreme in their differences, there may be legal irregularities between partner countries engaging in a TBCA which give rise to unintended consequences in a TBCA situation, and therefore need to be identified and addressed.

2.2.5.2 Compliance with regional and international Conventions and other legal commitments

As a hypothetical example, country “A” may be a signatory to CITES and therefore subject to the commitments relating to management and sale of ivory or other relevant wildlife products, while country “B” may not necessarily be a CITES signatory or may be less diligent in enforcing the stipulations to the Convention. If these two countries are engaged in a TBCA where elephants or other relevant wildlife may now freely cross between the two countries, any advantages which country “A” may have negotiated in trade of wildlife products as an outcome of years of diligent adherence to CITES stipulations may be discontinued because of the less stringent practices in country “B”, simply because country “A” now has less control over wildlife moving into country “B”. Such unintended consequences of engaging in TBCAs need to be recognized, understood and either accepted or remedial mechanisms or actions instituted. There are a number of other international commitments which bind some countries to specific Conventions or Treaties but not necessarily a neighbouring TBCA partner countries, and these differences in commitment need to be accommodated.

Continuing with the above line of reasoning, it is important in African elephant range states that the CITES mechanisms relating to ivory poaching and trade be coordinated and implemented in a streamlined manner by the partner countries engaging in a TBCA, such as the procedures and documentation relating to Monitoring the Illegal Killing of Elephant (MIKE).

BOX 2.3: REGIONAL AGREEMENTS FACILITATE TBCA PROCESSES

Many international Conventions, Treaties and other legal instruments exist which pave the way and facilitate cross-boundary collaboration. People must just be made aware of them and apply them. As examples, the SADC (Southern African Development Community) *Protocol on Wildlife Conservation and Law Enforcement*, signed in Maputo in 1999, in Article 3 (para 2 c,c) stipulates that “*States Parties shall cooperate with other Member States to manage shared wildlife resources as well as any transfrontier effects of activities within their jurisdiction or control.*” The Protocol goes on within its 23 Articles to make ample provision in many areas to enable or even pressure participating countries to comply with commitments which support the objectives of TBCAs, including harmonising of legislation and co-operation in transboundary law enforcement. The *Treaty for the Establishment of the East African Community* (1992) in Article 124 lists a series of commitments for member countries to address Regional Peace and Security, including (para 3) “*The Partner States shall evolve and establish regional disaster management mechanisms which shall harmonize training operations, technical co-operation and support in this area...*” and also (para 5) “*The Partner States agree to enhance co-operation in the handling of cross-border crime, provision of mutual assistance in criminal matters including the arrest and repatriation of fugitive offenders and the exchange of information on national mechanisms for combating criminal activities...*” with many other stipulations for transboundary collaboration.

2.2.5.3 The need for agreements, mechanisms and structures to apply, and comply with, terms of the TBCA Agreement, Treaty etc

While the terms agreed on in an MoU or other formal commitment between partner countries in a TBCA may encourage optimal collaboration, issues of national sovereignty sometimes create complications. Consider the case where rangers or police pursue a poacher who flees towards the border area. Once that poacher crosses the now no longer physical boundary, the rangers and police do not have the jurisdiction or authority to continue pursuit and certainly will not have powers of arrest in the adjoining country. This may result in security personnel having to physically stop at the political boundary-line and watch the poacher make an escape, while at best attempting to make radio or other contact with security counterparts in the adjoining country which need then to be mobilised and arrive far too late for meaningful action against the poacher. Such situations need to be pre-emptively identified and procedures or mechanisms developed to address such contingencies. In this specific example, one option may be for the partner countries to agree that in such situations security personnel from country “A” are authorised to pursue and apprehend the poacher, then await arrival of security personnel of country “B” who make the formal arrest.

Another related complication may arise due to lack of extradition agreements. This may become contentious if a poacher has killed someone in country “A” where the death penalty may be imposed, but the poacher escaped into and was arrested in country “B” where the death penalty constitutionally may not be imposed. Such

discrepancies need to be discussed and pathways for potential conflict resolution agreed on beforehand.

All the examples above indicate the need for a team of legal experts, comprising appropriate representatives from each of the countries participating in the TBCA, to form a committee to review and to develop solutions to potentially conflicting legislation. This may involve requesting one or more countries to revise outdated or incompatible legislation, which could take considerable time and effort, or simply to devise mechanisms to address specific situations.

2.2.6 Alien wildlife and diseases

Worldwide there are now restrictions on the unimpeded transfer of wildlife or wildlife products, because of the many lessons learnt regarding the high cost associated with a wide range of introduced foreign organisms. Diseases such as African Horse Sickness, Foot and Mouth Disease and several others can have disastrous effects on entire industries with a loss of many millions of dollars. Much more insidious are the gradual but ultimately equally disastrous effects of introducing plants and animals into a country where natural control mechanisms do not exist to control such newly introduced species; numerous examples can be cited of the aggressive spread of plants such as *Pistia*, *Lantana*, *Opuntia* cactus, *Chromolaena*, etc, all of which have major impact either through overwhelming displacement of indigenous flora or gross habitat modification. Animals which have had major impacts when introduced into new areas include the cane toad and European hare in Australia. Very strict regulations exist to control the spread of such species across international boundaries, and entire divisions of staff exist in many countries specifically dedicated to the management of alien wildlife and wildlife products.

BOX 2.4 : EMERGENCY PREVENTION SYSTEM FOR TRANSBOUNDARY ANIMAL AND PLANT PESTS AND DISEASES (EMPRES)

Agricultural and veterinary pests and diseases often migrate or spread across borders and cause major losses and emergencies. In 1994 the Food and Agricultural Organisation (FAO) established an Emergency Prevention System (EMPRES) to reduce the risk of such crises or emergencies developing. The FAO now has an excellent website (<http://www.fao.org/EMPRES>) which provides a wide range of highly useful information, such as animal disease information systems, disease recognition modules, disease mapping, disease alerts, Good Emergency Management Practices, various resources and tools including software downloads.

Dropping of fences, or less restricted movement of people across components of a TBCA which straddle international boundaries will therefore create legitimate concern amongst veterinary and agricultural authorities who wish to protect domestic crops and stock from potential introduction of alien diseases and pests. Clearly it would therefore be essential for these authorities to meet with TBCA planners and management staff to address these concerns and incorporate the needs of these stakeholders into the planning and management process.

2.2.7 Communications

By the nature of their work, security agencies and personnel regularly deal with emergencies and crises. The need for effective communications infrastructure, equipment and procedures becomes critical at such times, and may mean the difference between saving or losing lives.

Key points such as Entrance/Exit Gates, Rest-camps or other accommodation clusters, airfields, ranger stations, outposts, security bases, etc should be able to communicate with each other by telephone and/or radio, using radio-frequencies and numbers/call-signs that are known to each other or available on a readily accessible list, and equipment that is reliable and in a good state of maintenance. People should know who to contact in

emergency situations and what procedures to follow, and such procedures should be documented and available for quick reference if required. When an aeroplane crashes this is not the time to discover that the radio batteries are flat, that the radio transceiver tower was pushed over a week ago by an elephant, that a key person is not carrying their mobile phone or radio on them, or worse that no-one seems to know who to contact or what to do. Equally important, in terms of a TBCA, this needs to be co-ordinated across international boundaries, so that all key persons, units and points are in contact through compatible equipment and are able to understand each other in a mutually understood language and following standardized procedure. It does not help if a wall of flood-water is rapidly approaching the boundary line and nearby villages if colleagues in the adjoining country have state-of-the-art communications equipment but of an incompatible specification, or if the radio operator in the one country speaks only English and the other only Portuguese.

It helps if the component areas comprising the TBCA use compatible computer equipment and programmes, and that databases etc are developed in a manner that allows easy data transfer between personnel from different agencies or geographic areas. This becomes very relevant in Geographic Information Systems and the practical advantages of using common systems and compatible equipment for mapping and data exchange. Rangers and others security staff may find considerable advantage in having compatible databases whereby information about wildlife movement, human movement etc can be exchanged and occasionally updated.

Another aspect of communication relates to institutional frameworks...lines of interaction and information dissemination between security agencies within a country, between countries, between security personell and other non-security management agencies within and outside the TBCA, but these aspects are more fully addressed later in this manual.

2.2.8 Training

Operations and the management thereof will only proceed smoothly if sufficient capacity exists, and that means that sufficient posts exist to deal with the range of responsibilities in the TBCA, and all persons in those posts have proper Job Descriptions and are fully qualified and trained to meet the expectations associated with such posts.

Security personnel should not only be effectively trained (and equipped) to deal with their specific security tasks, but also receive ongoing training to remain current within an environment where technology and societal needs and attitudes are in a constant state of change.

Security personnel working within a TBCA should also be trained to recognize and operate within the special circumstance they find themselves in. Not only do they need to deal with the safeguarding and interests of people, but the security of the wildlife – both animals and plants – is equally a major priority. Soldiers posted along the border area – and this does sometimes happen within a TBCA for reasons of military training or even at permanent base stations - come from a very different background with a different mindset and sometimes yield to the temptation of engaging in a little poaching themselves. Induction courses or training is required to strengthen awareness amongst security staff of the value and benefits of wildlife and the need for conservation of these natural resource assets. Furthermore, a sensitivity needs to be created amongst security personnel regarding the nature and needs of tourism. Tourists are on holiday and want to relax, not be confronted with weapons-bearing uniformed persons aggressively demanding identification documents, or columns of camouflage-clothed soldiers implying some kind of military emergency. Security staff need to maintain a low profile, at least to the extent possible within the demands of their responsibilities. Conversely, in areas known for high theft or criminality, tourists gain confidence when there is a conspicuous and strong presence of security personnel, but all this needs to be done within the context of the particular conditions and situation prevailing

within a specific TBCA. This balance of needs, and how to conduct themselves within specific situations, requires security personnel to undergo some extent of training or course attendance.

BOX 2.5: PROMOTING UPPER RHINE VALLEY REGIONAL TRANSBOUNDARY COOPERATION BETWEEN GERMANY AND FRANCE

The Upper Rhine Valley is a core area of experimentation in the field of bilateral cooperation between German and French police and judicial systems. One of the main promoters and facilitators of this increasing cooperation is the EURO-Institute at Kehl, Germany.

The EURO-Institute is a joint German-French centre for transboundary cooperation. Included among its major activities are, by way of example, bilingual training-seminars which aim at resolving the foreign language problems and obstacles to be found in institutionalized, joint cross-border training for police-officers and judicial staff.

Functioning as a kind of a 'neutral facilitator', the Institute creates opportunities for meetings between German and French judges, prosecutors and policemen and gives them a platform to exchange experiences, problem-solutions, different views, culture-specific perceptions and tools of implementation.

The Institute also assists in compiling basic information on legislative and administrative systems in the region, law-regulations and the legal frameworks for transboundary cooperation. The discussion of case studies helps the practitioners to elaborate appropriate solutions for day-to-day practical implementations.

Due to the commitment of the EURO-Institute the creation of a series of cross-border training-courses on the topic of 'criminal law and criminal proceedings' has turned out to be a real success-story.

Box contributed by Roland Stein, Coordinator, UNESCO Transboundary Biosphere Reserve "Pfälzerwald – Vosges du Nord"

2.2.9 Management of Emergencies and Disasters

Despite best-practise management and having the best available infrastructure and equipment, accidents and unforeseen events do occur, and by their nature they usually represent some form of an emergency or crisis. In the event that a mishap does occur, it is essential that contingency plans and measures be in place to cope with such a situation. Who is tasked to deal with a particular situation? If a building is on fire, who takes the lead and delegates responsibilities and takes charge of the situation? If a tourist has a heart attack in a distant camp well within the TBCA, where is the nearest helicopter or ambulance and who has to do what? If a bridge collapses with tourists on it, a power-line falls across a road, a vehicle with passengers is hi-jacked, a volcano erupts, an aeroplane crashes, who is in charge and who does what?

While the ideal situation would be to have a permanent Emergency Control Centre (ECC) where any crisis can be reported to and which has the capacity to deal with most emergencies and can serve as an information and advice centre, few institutions have the resources to implement such a permanent ECC. A second option might be to designate a small number of appropriately skilled or qualified people to serve as an Emergency Management Team, and that these team members should be contactable at all times (by

mobile phone or radio), they should know where to report to during a crisis or emergency (a previously decided on central facility, fully equipped with telephones, radio, contact lists and other essential equipment), and that each person will have clearly defined tasks and responsibilities, and is well versed in dealing with such tasks. It should also be required that such a team do periodic mock emergency exercises of differing nature to sharpen responses and skills. Lives can be saved by effective and rapid response. In the case of TBCAs, there is a need to ensure that standardised and compatible equipment and procedures are agreed on beforehand if partner countries need to jointly deal with emergencies or handle an emergency on behalf of a neighbouring country. If there are language differences between partner countries, as is the case in many TBCAs, at least one member of the emergency team should be fluent in the language of the other country. Each country should have such an emergency team or at least emergency procedures in place to co-ordinate and advise during times of crisis.

2.2.10 Roles and Responsibilities

Given the location of a TBCA at the borders of adjoining countries, it is natural that a range of security agencies has a role and responsibilities within such a TBCA. This includes the defence force (army, air force, and perhaps even navy and other branches), police, intelligence, rangers, veterinary and agriculture authorities, immigration, customs and excise, and of course the relevant conservation units such as rangers, anti-poaching units, and own security staff. There is considerable potential for friction, misunderstandings, power-struggles and assumptions within such a complex mix of overlapping responsibilities. It becomes critically important that a fully-representative committee or other body be constituted and that such a body hold regular meetings to co-ordinate activities, ensure appropriate information sharing and to identify problems or issues which need to be resolved. There should be a very clear understanding between all security elements who has responsibility for what so that each agency, unit or component knows exactly what its role and functions and responsibilities are, and that each of the other agencies, units or components has a full understanding of how the different role-players complement each other or fit together. Not the least reason for ensuring that such an understanding is reached is to avoid the situation of some issues not being dealt with because *"I thought that was your responsibility!"* The intelligence community has a key role in such a situation because one of their primary functions is precisely to take a broader strategic view to identify gaps or shortfalls in the overall security coverage or network.

2.2.11 Security Force Operations and Security Bases

History has shown that invariably National Security takes precedence over biodiversity conservation, so that in times of conflict or tension military bases may be established even within high status conservation areas, including national parks. Where there is substantial smuggling taking place in certain border areas, either the military or police – or both – may need to establish temporary/semi-permanent base facilities, and will need access and patrol opportunities within the TBCA. These are realistic national needs which cannot be wished away and cannot be resisted by conservation agencies...it needs to be accepted and the process managed. There is a great need under these conditions for the different stakeholder agencies and departments to delegate high-level representatives to meet and agree on activities and the parameters within which these activities can or should take place, as well as the various processes and how these processes will be managed. A forum with representatives from the different security, conservation and other stakeholders should be constituted (see *"Roles and Responsibilities"* above...these issues may possibly be dealt with in the same structures as advocated in that section) and meet regularly to review and deal with any tensions or issues arising from security-related activities and needs. While such military or police activity may be taking place within each of the countries, in which case stakeholder representatives from both countries should create opportunity to meet jointly to discuss transboundary issues or matters of common concern, it may be that such military/police/security activity is only taking place within one country. In such a case, in the

spirit of joint management and collaboration which gave rise to the TBCA in the first place, it is incumbent on that country to inform the other partner countries in the TBCA *before* such activities are commenced and to ensure good information flow to the extent that the activities of the security agencies allow without compromising the objectives.

There are multiple levels of issues which arise from the presence and activities of security stakeholders, and which need to be discussed between these security elements and the TBCA management structure. At the most basic level it involves discussion and agreement on location of base sites, electricity and other supplies, access routes, sewage and other waste disposal, authority of Rangers over security personnel or at least an understanding of modes of interaction, lines of interaction and reporting. Also critical is discussion and agreement on use of firearms, limitation of noise and other disturbance to both wildlife and tourists, and co-operation with conservation staff.

There is opportunity for mutually beneficial joint operations not only between different security agencies within one country, but also between the security elements of adjoining countries. At least in southern Africa, there is formal agreement in place (the Southern Africa Regional Police Chiefs Organisation – SARPCO) which makes it possible for police from one country to conduct activities in an adjoining country as long as they are accompanied by appropriate representatives of the host country. Such opportunities for joint opportunities to optimise security operations within a TBCA should be explored and pursued.

2.2.12 War and conflict situations

Most of our planet's biodiversity resides in the tropical regions, and the greatest potential for TBCAs and greatest associated benefits also exist in these regions. Tragically, although by no means restricted to them, it is also in these tropical regions that the preceding decades have seen some of the worst conflicts, human displacements and even mass genocide, as well as associated pressures and impacts on wildlife and the environment in general. Africa has been especially burdened with the consequences of such civil strife and armed rebellion, and the consequences thereof are often devastating, not only as direct impacts on innocent civilians, but also to already threatened wildlife assets.

War and conflict brings with it a range of consequences, of which the most obvious include:

- ❑ A potential breakdown in the ease with which officials from adjoining countries can interact and continue collaborative management within a TBCA
- ❑ An influx of military, rebel and other armed forces into the border areas including protected areas forming part of a TBCA, with negative consequences
- ❑ Human displacement resulting from armed fighting, often resulting in an influx of refugees either moving through but sometimes also settling within a protected area or TBCA
- ❑ Wildlife resources within a TBCA being used on a large scale to supplement military rations and provide resource material for military operations, or for food and shelter for refugees.
- ❑ Critical or valuable conservation infrastructure and equipment established over many years being appropriated for military or other use, sometimes vandalised or looted.
- ❑ Donors and other supporters sometimes suspend contributions or assistance during such a crisis period which is precisely when the need for resources is greatest

Political tension, conflict and wars very rarely are influenced by wildlife conservation considerations. Theatres of war and the impacts of war such as refugee spill-over are unlikely to give heed to the needs of conservation. These are stark realities. When nations engage in genocide, when they aim missiles at urban centres, and when affected civilians need to safeguard and feed their children, then wildlife, like much of the normal sanity and rules that prevail during times of peace, are relegated to positions of low priority. During these times the challenge to conservation officials will be to limit the level of impact, to

prioritise how to devote limited funds and other resources to achieve the best returns for conserving rare species or especially valuable habitat, to engage in compromises so as to ensure the best return. If refugees are flooding in, no amount of waving the rule book will stem the tide...it then becomes necessary to be flexible, acknowledge that some resources will have to be sacrificed in the short term, and this process has to be managed by allocating space for refugees to settle where the least impact will be incurred, and to proactively provide meat and wood using resources that are the least harmful to the system. These actions are extremely difficult to plan, implement and manage during a crisis, and it therefore becomes critical that in regions where the potential for such conflict does exist, TBCA officials should proactively develop plans and mechanisms to anticipate and deal with possible eventualities. These plans, actions, and mechanisms essentially fall into three broad categories:

1. Anticipatory, pre-emptive actions during times of peace and cooperation to have a strategy, plans and measures in place if and when serious conflict situations may arise
2. Actions and measures to mitigate impacts during times of war or other conflict
3. Measures aimed at recovery, rehabilitation and a return to optimal operations after the cessation of hostile activities.

There is actually a significant amount of guidance available to assist protected area managers to develop plans and measures as recommended above. A number of specific case studies on armed conflict are available for perusal and consultation on the BSP (Biodiversity Support Programme) website www.BSPonline.org, which provides access to many documents and reports on armed conflict and the consequences thereof, and also many highly useful references providing guidance on disaster management, conflict response, and related issues. Much of this information is captured in the BSP publication by Shambaugh *et al* 2001, titled "*The Trampled Grass: Mitigating the Impacts of Armed Conflict on the Environment*". This subject is also explored and discussed in the IUCN publication by Sandwith *et al* 2001, "*Transboundary Protected Areas for Peace and Co-operation*", which contains a *Draft Code for Transboundary Protected Areas in times of Peace and Armed Conflict*, as well as measures to promote and enhance compliance. This Code is intended as a basis for understanding and agreement between neighbouring nations on measures which should be mutually observed in order to reduce the impact of armed or other conflict on biodiversity or natural resources of common benefit. Despite the unpredictable nature and often rapidly changing situations associated with high conflict, the authors have nevertheless generated an excellent generic foundation from which conservation agencies and TBCA practitioners can gain guidance and draw material from for application and use in their own specific situations. With permission, this Draft Code has been attached to this document for easy reference and use. We hereby recommend that:

1. senior representatives of the key departments, agencies or stakeholders involved in a TBCA familiarize themselves with the contents of the Draft Code,
2. that such key representatives should meet while still in conditions of goodwill and collaborative management in order to identify issues of common or specific concern that would become relevant if a conflict situation were to arise
3. that such key representatives constitute a committee or body mandated to develop a set of pre-emptive recommendations that will serve as mutually-acceptable guidelines for actions by the various TBCA parties to reduce conflict within the TBCA and minimise the negative consequences of the conflict on biodiversity and related stakeholders ("*Guidelines for Ameliorating the Consequences of Serious Conflict*")

4. that contingency measures be developed by this same body to accommodate and address situations where a breakdown in adherence to the Code or Guidelines occurs...this would include the relocation of representatives of key threatened species such as rhino, orang utan, tigers etc to areas of greater safety
5. that active steps be taken to create a deeper understanding of the value of TBCAs, the biodiversity they contain, and the benefits they offer, amongst TBCA security personnel and security departments, agencies or role-players which may become involved during times of conflict, especially at political and strategic level
6. that agreements be negotiated pre-emptively with donors or neutral agents that resources will be made available at short notice to address specific crisis situations of particular threat during situations of conflict
7. that copies of the mutually-acceptable *Guidelines for Ameliorating the Consequences of Serious Conflict* be distributed to all departments and stakeholders affected by the TBCA and others likely to be involved during times of serious conflict
8. that a neutral but effective third party (IUCN?) be pre-emptively approached to monitor the implementation and adherence to the *Guidelines* during the crisis period, in order to facilitate such adherence or at least learn from shortfalls which can then serve as lessons for subsequent situations.
9. that a core body of key persons, comprising either in part or in total the body referred to in Points 3 & 4 above, be responsible for ensuring information exchange between key TBCA stakeholders (if need be through a neutral third party) during times of heightened conflict, in order to optimise the likelihood of effective adherence to the Guidelines and to contribute to a holistic approach being maintained in the interests of the TBCA. This body of persons should, in terms of their mandate and before a conflict situation arises, familiarize themselves with the various international commitments, undertakings and guidelines (such as the UNHCR Guidelines on Prevention of Environmental Impacts Related to Refugees Operations, etc), and maintain a current database of contact details for national and international humanitarian and other aid institutions which could assist in managing or reducing the impact of conflict situations, and importantly who could also bring to international awareness the plight that the TBCA finds itself in, providing such action remains neutral and does not contribute to aggravating the conflict.
10. Senior officials from state conservation agencies, and also from NGOs, should lobby and engage political leaders to achieve incorporation of a standardized set of "*Commitments to Ameliorate the Consequences of Serious Conflict*" within regional agreements, such as within SADC, EAC, ASEAN, etc. Incorporation of such commitments in regional agreements brings with it a greater degree of legitimacy, pressure to comply, creates a good platform for advocacy and peer review, and somewhat reduces the likelihood of flagrant disregard of the commitments (or the *Guidelines for Ameliorating the Consequences of Serious Conflict* on which the Commitments may be based). This may bring higher level resolution and relief than the *Guidelines for Ameliorating the Consequences of Serious Conflict* can achieve, and may result in commitments from regional partners to assist with placement and food provisioning of refugees, short-term crisis financing or other resource provisioning, and lobbying international bodies for assistance, thereby reducing the impact on critical conservation land and resources.

BOX 2.6: REGIONAL AGREEMENTS CAN BRING PRESSURE ON WAYWARD PARTIES

As an example of a Regional Agreement which can contribute towards moderating the actions of participating States, the SADC (Southern African Development Community) *Protocol on Wildlife Conservation and Law Enforcement*, in Article 12 (para 1) stipulates that “Sanctions may be imposed against any State Party which:

- a) *persistently fails, without good reason, to fulfil obligations assumed under this Protocol; or*
- b) *implements policies which undermine the objectives and principles of this Protocol.”*

2.3 USING CONFLICT TO THE ADVANTAGE OF TRANSBOUNDARY CONSERVATION AND/OR ESTABLISHMENT OF PEACE

There are several examples in the world where international conflict situations have been either resolved or moderated through the implementation of transboundary ‘Peace Parks’, or where longstanding conflict along political borders has led to such areas being *de-facto* conservation zones. Valuable lessons can be learnt from these situations for possible application elsewhere.

2.3.1 Establishment of TBPAs for conflict resolution

Possibly the best example of this principle is the Cordillera del Condor (Condor Mountain Range) region between Peru and Ecuador. An undemarcated portion of the Amazonian jungle border territory where the two countries meet was under dispute, both sides claiming sovereignty, leading to military build-up and war in the 78km area. With no settlement in sight, both countries agreed that proclaiming Adjacent Zones of Ecological Protection would lead to amicable resolution, which was then signed into effect through a Presidential Act in 1988. This solution to alleviate conflict has since led to hugely expanded ‘Reserve Zones’ around the initial core areas, the basis for a 2,42 million hectare TBCA now being developed. The area is now amicably managed according to mutually agreed ‘Principles of Good Governance’, and has clear objectives which focus on peace, biodiversity conservation, and sustainable development of the communities resident therein (Ponce & Alcalde 2003).

Contested border areas exist elsewhere in the world, and substantial discussion has been directed towards applying the concept of a Peace Park to resolve the often violent border conflict in the Kashmir region between India and Pakistan (Tallone 2003). One possibility is to create a ‘Siachen-Saltoro Peace Park’, which potentially could allow the armies of both countries to withdraw under conditions of honour and dignity without compromising their political positions on the disputed Kashmir region, thereby reducing further degradation of these magnificent mountain landscapes and saving many lives. This is also a core distribution area for the endangered snow leopard and therefore has very clear biodiversity benefits in addition to the political and humanitarian issues.

2.3.2 Border conflicts promoting biodiversity conservation

Border conflicts often result in deterioration in the management of affected conservation areas especially when heavy military activity is involved, sometimes leading to dramatic cross-border movement of refugees and associated habitat destruction due to the demands for food, fuel and shelter in order to survive. In certain circumstances, however, border conflict has the unexpected and unintended

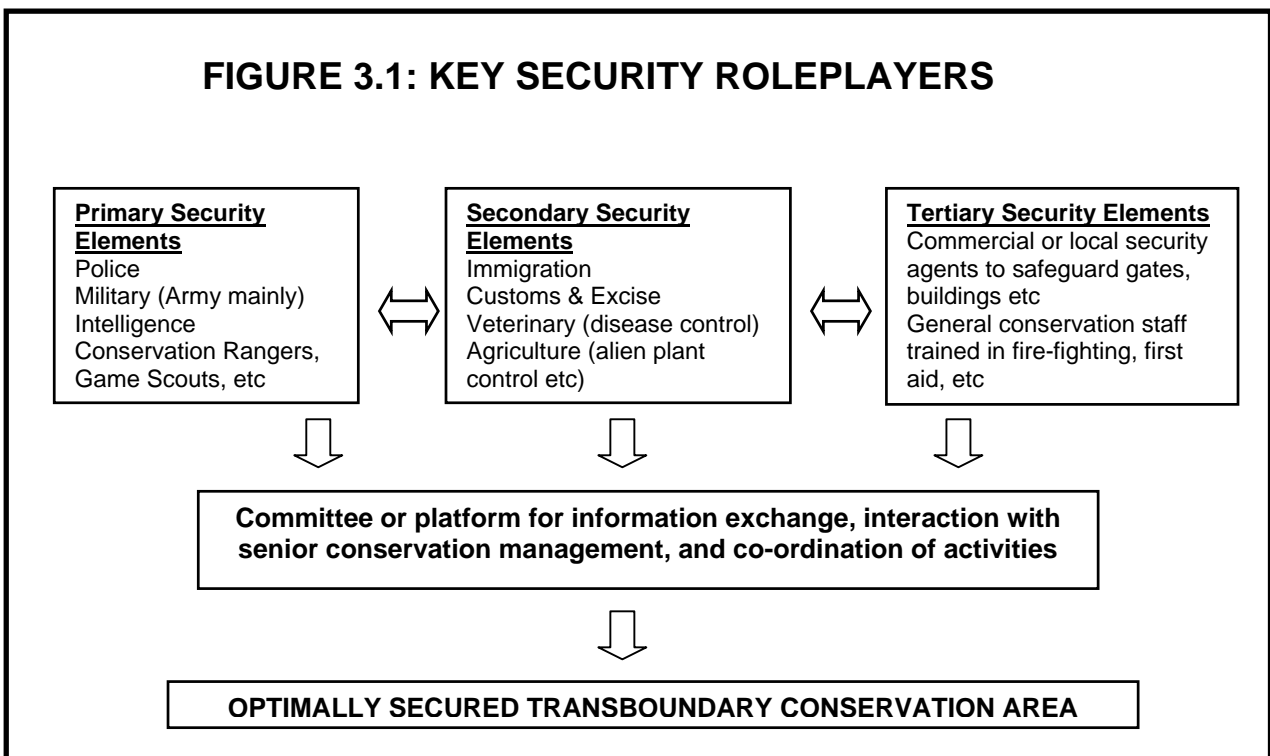
consequence of actually improving biodiversity conservation. The Demilitarised Zone (DMZ) between North and South Korea is such an example. Created in 1953 as a 250km long and 3,8km wide buffer zone with land mines and barbed wire to discourage human use, the DMZ has over half a century become a sanctuary for a wide range of wildlife long since displaced elsewhere by human population expansion and gross habitat transformation. Several rare species, including Amur leopards, have found safe haven here in what was never intended as a wildlife preserve. International agencies are now promoting the idea of establishing the DMZ as a Transboundary Peace Park when political relations between the two regions are normalised, with considerable benefits not only for wildlife, but also tourism and scientific study (The DMZ Forum 2003).

3. Security Roleplayers and Frameworks for Interaction

3.1 KEY DEPARTMENTS, AGENCIES AND OTHER ROLEPLAYERS AFFECTING SECURITY WITHIN A TBCA

In a sense of course *anyone* entering or working in a particular TBCA is a ‘Security Roleplayer’, as some of these people will have access to sensitive information which they can sell to the detriment of the ‘security’ of the TBCA, many employees are in a position to sabotage critical activities, and anyone can be a cause of arson or poaching, murder etc. We therefore need to narrow our scope of discussion, and for purposes of this section the focus will be on those roleplayers which are the primary agents employed or responsible for promoting aspects of security within a TBCA, or area affecting the TBCA.

As mentioned in Section 1, even within these agencies which clearly have a security function, there are differences in scale of responsibility and level of impact. In this section we examine each of these roleplayers to develop a clearer understanding of their roles and functions, as well as the institutional mechanisms which contribute towards optimal collaboration and interaction. Figure 3.1 attempts to provide an overview of the various Security roleplayers, but their categorisation as Primary or Secondary or Tertiary Security Elements should not be taken as absolute...it is meant to convey a sense of which elements may be critical to the immediate survival of a TBCA during times of crisis, through diminishing scales of impact, all from the perspective of TBCA managers, which may differ dramatically from the perspective of officialdom concerned with the health of the domestic stock of the country, etc.



As a consequence of their different roles and functions, the various security elements will not have the same distribution within a TBCA, freedom of movement, and will have different mandates. So, for example, the police will probably have a need for and a right to move freely anywhere within the TBCA, defence force elements will probably confine their activities to the border area, while immigration, customs and excise officials will be highly localised to specific transit points, although with some degree of latitude related to the need for investigations concerning infringements of regulations within their mandate. Also, the need for specific security elements will vary in different TBCAs and according to the conditions prevailing within a particular TBCA; not all TBCAs will have a need for defence force elements or immigration or customs officials, while most will probably to lesser or greater degree be subject to police visits or permanent presence, and probably all TBCAs will have Ranger units or anti-poaching staff permanently deployed within most areas making up the TBCA.

3.1.1 Police

The role of police is fairly standard throughout the world, and is focussed largely on activities relating to prevention of crime and investigation of crimes that have been committed, either within the TBCA or in a manner that affects the TBCA. The police potentially require access to all areas of the TBCA and demand great freedom of movement, which is usually difficult to refuse or limit. While police typically conduct their own independent operations, it is also a frequent practise for other security elements to conduct joint operations with police, depending on the nature of the exercise, relations of trust, and many other local factors. Police activities are a vital component of security actions in any country and they have a major role to play even in TBCAs. This becomes particularly important in TBCAs that, by their very nature of straddling an international boundary and being a sparsely-inhabited area, are sometimes used as conduits for smuggling drugs, weapons and other contraband. The police have a definite need for effective information exchange with all other security elements within a TBCA, and also cross-boundary exchange of information and intelligence. Because police have wide-ranging responsibilities, freedom of movement and also hold a powerful position within most countries, the potential for friction between police and other security elements is often high, which makes it imperative that good communication channels are maintained between security roleplayers and that role definition is clearly established and accepted by all security elements.

3.1.2 Intelligence

There is less uniformity of structure and responsibilities in Intelligence units of different countries, but most countries have such agencies or units and they fulfil an important role. They may either be part of the defence force, police, secret service or often a completely independent and separate national department. They usually do not have an overt presence or activities, tend to work in the background but often are powerful in terms of influence. Their primary mandate is to glean information, test the veracity of information relevant to national interests, and to use resulting intelligence in a manner which promotes the strategic interests of the country in a variety of spheres. Clearly, few security stakeholders have a greater need for liaising and cross-agency information access as does the intelligence community. It is the need for developing cross-cutting intelligence and information exchange that makes it so important to develop committees, forums or platforms where representatives of all security and other relevant stakeholders can share information, contribute to the 'bigger picture' and co-ordinate activities. It has also happened that intelligence officials from different agencies within one country, or equivalent officials from adjoining countries, use the same information sources which can play off the different agencies against each other to the detriment of the security community and benefit of the source(s), hence a further need for co-ordination and cross-agency liaison. This becomes critical in some unexpected ways, such as an anti-poaching unit that has a network of informers within neighbouring communities or has undercover agents living in such communities. These agents need to retain anonymity and trust or place their lives at risk, and periodically need to participate in the activities of

poachers to maintain their cover. If another security agency becomes involved it could lead to these people becoming compromised or destruction of an informer network established over a long time. This emphasises the need for close collaboration and information exchange between security elements.

3.1.3 Military

The military forces have a mandate to maintain 'territorial integrity' of a country, which means they have to secure the borders and prevent infiltration, invasion or attack. The country border is a prime area of activity of the military, and in times of tension or in high risk areas of infiltration, national security interests will always supercede those of wildlife conservation. Even during times of peace and stability the military may insist, and will usually have their way, on some form of presence or access to border areas, even if it compromises the wilderness qualities of a TBCA. Where military activity is required or demanded, such military presence should be preceded by a process of negotiation so as to reach agreement regarding numbers of military personnel, number and type of military vehicles and infrastructure, access routes, areas of activity, types of activity, and lines of communication and processes of interaction. Clearly these will be broad arrangements as the nature of their work is such that unexpected eventualities do occur and are unpredictable in scale. But the point is that a commitment should be forthcoming from the military to respect the conservation land use of the area and the need for sensitivity in their use of the area, obviously to the extent possible within the demands of their responsibility.

Such military activity may not be restricted to army ground patrols, but may require helicopter or even full-scale parachute troop deployment in relatively inaccessible border areas. In times of conflict the military may insist on construction of bituminised airstrips close to strategic border areas...such actions should only be engaged in after all options have been fully investigated, and then placement should be such that the impact is minimised, both in terms of impact on biodiversity but also 'visual pollution/disturbance' on tourists.

Naval activities in marine TBCAs may also be required, but usually have less impact on the biodiversity and tourism within the marine TBCA than in a terrestrial situation. Naval presence can assist in discouraging illegal fish trawling, reef destruction, smuggling and other activities.

The Ministry of Defence in most countries represents a powerful political department which few other departments can match in terms of 'clout' and influence. Approaches and demands by the military therefore need to be dealt with circumspectly but much compromise and collaboration can be achieved so that the functions of all parties remain unimpaired. Outright confrontation in meetings should be avoided; far better results can be achieved by informal discussions between the relevant ministers, between conservation Chief Executive Officers and defence Commanding Officers, and between Park Managers and local commanders. Both sides – conservation security staff and defence personnel - can benefit considerably through collaboration and joint exercises. Game Rangers know the local geography, conditions and people very well, and can assist the military in optimising their activities. Similarly, the patrols and presence of military groups can serve as deterrent for poachers and other illegal activities, and by proper planning such military presence can contribute to TBCA advantage.

The onus will lie with conservation staff to engage with the military and generate goodwill and collaboration. This is usually best achieved through creating platforms or opportunities to meet and share information, ensuring regular contact between TBCA management and military commanders, and a low-key strategy of creating awareness amongst the military of the biodiversity and social benefits of TBCAs.

3.1.4 Conservation Rangers and Game Scouts

The term 'Game Ranger' has become misused in recent years and in many private wildlife reserves it is now applied even to tourist guides. In its historic and proper application however, this term denoted field staff who had a basic training in wildlife conservation but were also skilled in security aspects, were posted in a manner which enabled strategic coverage of the TBCA or conservation area, and they held wide-ranging duties which essentially made each Ranger the principal authority or 'manager' within a particular region. They have responsibility for crime prevention and general security, monitoring and reporting of wildlife and environmental conditions, implementation of many wildlife management procedures (such as water provision and rotation burning and disease control), maintenance of basic infrastructure, dealing with rogue animals, animals escaped into neighbouring communal areas, liaising and maintaining good relations with neighbouring communities, disaster management, and co-ordinating non-tourism activities within that region. This is a broad generalisation but is a close approximation of what a 'Game Ranger' entails at least within the African context.

In order to achieve his or her responsibilities, each Ranger has a number of Game Scouts to assist in giving effect to the responsibilities within that region. In terms of security responsibilities, these embrace the full range of policing (Game Rangers usually have full powers of arrest etc) for crime prevention such as theft, smuggling, illegal movement of people and goods, also anti-poaching, disaster management such as fighting fires and dealing with the effects of such fires, floods etc. To achieve this, the area for which the Ranger is responsible has to be effectively covered on a regular basis, whether by light aircraft, motor-vehicle, motor-bike, bicycle or on foot. The purpose would be to detect signs of illegal activity, as evidenced by cut fences to allow entry, footprints and tracks, slaughtered animals, leftovers such as empty tins, cigarette and other packages etc. The responsibility would then go further to track and apprehend such criminals, and finally hand them over to the police for longer-term custody and prosecution.

Clearly, to comply with these responsibilities, Rangers routinely need to engage and communicate with a wide range of roleplayers, including other security elements such as police etc, and also neighbouring community representatives. They need to establish a network of information sources, which often also includes informers which operate in clandestine manner.

When an accident or incident is reported, whether a tourist is mauled by an elephant or an aircraft has crashed etc, the local Ranger is most often the first person contacted to take overall responsibility until specialized authority or assistance arrives, if required. The Ranger then has to take control and delegate tasks as demanded by the specific situation. This also means that Game Rangers should at all times be within reach either by telephone or radio, and that such communication equipment should be in a good state of maintenance.

For optimum security of a TBCA, perhaps one of the most fundamental requirements is for good communications and good relations to be established between the Rangers on either side of the boundaries. These are the people who will need to contact each other to follow poachers and criminals which work across the international boundary, to follow wounded or rogue animals, to combat fires, and deal with crisis situations. It should not be left until a crisis situation arises before such key personnel try to establish lines of communication and working models. They need to meet regularly and establish good working relations and information exchange.

3.1.5 Veterinary authorities

The State veterinary authorities which have national responsibility for controlling animal diseases resort in different Ministries or departments in different countries, often within the Ministry of Agriculture. While the major responsibility of these authorities is to prevent certain

diseases (e.g. Foot & Mouth Disease, Bovine Tuberculosis, African Horse Sickness, Bluetongue virus, etc) from entering or leaving the country, and for certain diseases of wildlife to move from wildlife protected areas into domestic stock, they also have a role to play in preventing diseases of domestic animals from entering wildlife. The consequences of, for example, Foot & Mouth Disease (FMD) virus moving from their endemic wildlife hosts (buffalo mainly, but also other cloven-hooved animals) and entering cattle can be disastrous to the economy of a country which relies in large measure on export of beef, as exports of meat will immediately be banned. Similarly, if there is any suspicion that racing horses or any other host animals are infected with the virus causing African Horse Sickness, all countries will immediately ban the import of such horses even if required for a few days to participate in one racing event...this causes major disruption in the normal international traffic of such animals.

State Veterinary authorities usually maintain a low profile but have considerable powers of enforcement, and obviously have an important mandate. Where international boundary fences are planned for removal, such veterinary authorities become important stakeholders to ensure the security of the countries domestic animals and wildlife, and they will clearly need to be involved in the planning and implementation phases of a TBCA.

Many countries, especially in Africa, maintain checkpoints at the borders of or near wildlife areas where all vehicles are stopped and subjected to inspection for the presence of meat or wildlife products, and these products are confiscated and people liable to legal action if in flagrant disregard of legally posted signs regarding the transport of potentially infective material. These are all security aspects which require discussion and agreement during the planning phases of a TBCA.

3.1.6 Agricultural authorities (Alien Plants & Plant Disease Control)

In a manner similar to the veterinary authorities, other departments have the mandate and national responsibility to prevent entry of exotic plants or plant diseases which pose a threat to indigenous biodiversity. Such alien plants or diseases are no minor threat...it is widely acknowledged that invasive alien plants are the second biggest threat to our planets biodiversity, only a short distance behind the habitat destruction caused by humans. In addition to routine checks at all international airports, agricultural authorities have the responsibility to at least be aware of and be involved in the discussions regarding changes taking place at the borders of a country such as during the planning phases of a TBCA.

3.1.7 Immigration authorities

The national department of Home Affairs or Internal Affairs has the responsibility to ensure that all movement of people across the countries borders takes place in an orderly and controlled manner. Illegal and uncontrolled influx of people not only predisposes borders to criminal activities, but if done on a large scale it impacts on the socio-economic conditions of the citizens of that country, as it is usually impoverished jobless people which enter illegally and deprive local citizens of jobs as they are willing to work for very low remuneration. Immigration authorities are responsible for passport and visa control and will have to be involved from the earliest stages if tourists and other movement of people are envisaged in a planned TBCA.

3.1.8 Customs & Excise

The Customs officials generally ensure that prohibitions and restrictions on certain products are applied, and also apply measures aimed at protecting local industry through taxes on specified imported products. The Excise function is largely related to taxation of locally manufactured non-essential or luxury goods such as cigarettes, alcohol etc. The prevention of smuggling of goods is also a major responsibility of this department.

3.2 INSTITUTIONAL MECHANISMS TO PROMOTE STAKEHOLDER INTERACTION

3.2.1 Who are TBCA stakeholders?

TBCAs are affected by a wide range of stakeholders and represent an equally wide variety of interests, from communities who seek employment and other opportunities, conservationists who have biodiversity as their primary motivation and goal, tourism staff and tourists who seek access to the resources within the TBCA, business people looking for market outlets, various national departments concerned with safeguarding national security and other interests, and many others. Each is a stakeholder and each has priorities which they want to pursue and these may not always be in the interests of another stakeholder. Nevertheless, each may be a legitimate stakeholder with a right to be heard and appropriately responded to. It therefore becomes essential that opportunities and platforms are created where all these different stakeholders can meet to exchange views, express needs, discuss possibilities, and arrive at practical decisions as to what is possible within the general purpose and objectives of the TBCA and how this will be done. These platforms and meetings will take place at a variety of scales, some relatively low-level as part of a general consultative process and some high-level with only a few people present to make decisions. However, in fair participatory decision-making that leads to outcomes acceptable to the broadest segment of stakeholders, all stakeholders should have been part of a consultative process and all their inputs should have received fair consideration and consensus opinion taken through to the eventual decision-makers. The security community, albeit a very important component and representing powerful national departments and roleplayers, nevertheless has to fit within these wider needs and form part of the framework of information exchange and decision-making if all interests are to be reasonably accommodated with least resentment and long-term friction.

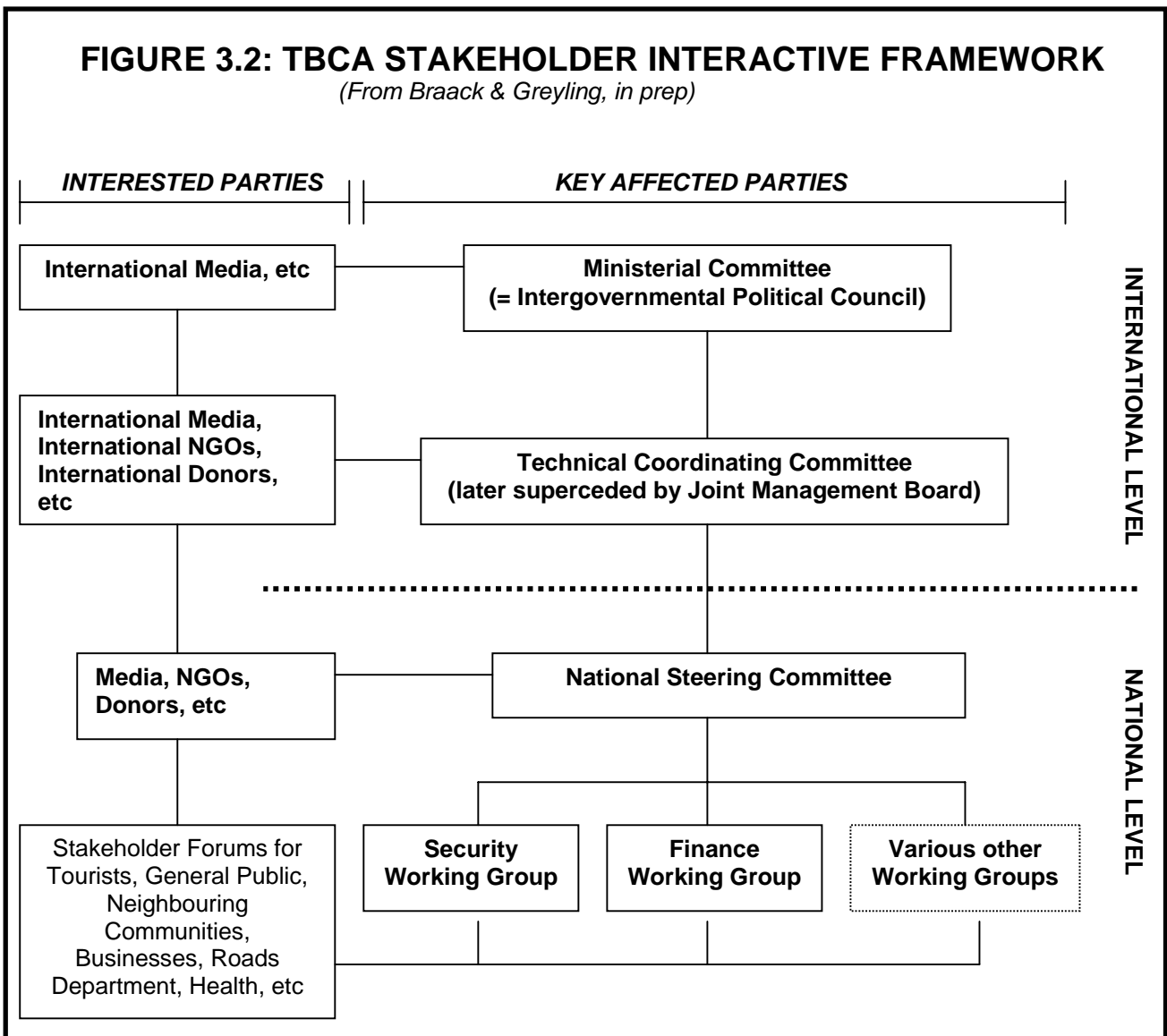
3.2.2 Frameworks and levels of interaction

To develop an understanding of the process of TBCA formation and how the various institutional structures relate to each other, it may be useful to follow the development of a hypothetical TBCA. In most cases, it will be conservation officials in adjoining protected areas who start talking to each other about the benefits of joint management or harmonized management of their contiguous areas, and the need for engaging in an official process to achieve formal contractual linkage across international boundaries in the form of a TBCA. These officials, often assisted by one or more NGOs, may even jointly develop a 'Concept Plan' of what is proposed and the advantages thereof, but soon they will realize that they need to involve various national departments. This is because few agencies are authorised to formally negotiate across international boundaries...it usually has to be a mandated national department such as Foreign Affairs, or another department negotiating at international level with the approval of Foreign Affairs.

These conservation officials with their Concept Plan will in many cases then approach their own line departments, usually the Ministry (or National Department) of Environmental Affairs or equivalent. If these national departments are convinced of the benefits and are persuaded to embark on a process of formal transboundary linkage, the particular Minister will probably approach his/her equivalent in the adjoining country to meet and discuss the proposal, accompanied by appropriate advisors. If these discussions are successful, and if the respective ministers have received support from their Cabinet colleagues in their respective countries, then it will almost certainly result in the ministers recommending the establishment of an institutional framework whereby the process of planning, establishing and developing the TBCA can proceed. The institutional framework will usually be some form or variation of the following:

- ❑ A Ministerial Committee, comprising the Ministers for Environment and any others in the two or more countries participating in the TBCA, which will meet occasionally to provide broad political guidance and direction, as well as to receive and discuss reports on progress,
- ❑ A Technical Committee, with senior representatives from both countries, from the state conservation agencies and any other departments, NGOs etc deemed necessary by the Ministers. This Technical Committee will report to the Ministerial Committee and will be responsible for giving operational effect to the broad instructions of the Ministerial Committee.
- ❑ Various Working Groups , Committees etc of specialists which will address specific themes such as Tourism, Security, Financing, etc. These Working Groups will receive guidance and supervision from the Technical Committee.

The Institutional Framework as outlined above can be depicted as in Figure 3.2 below:



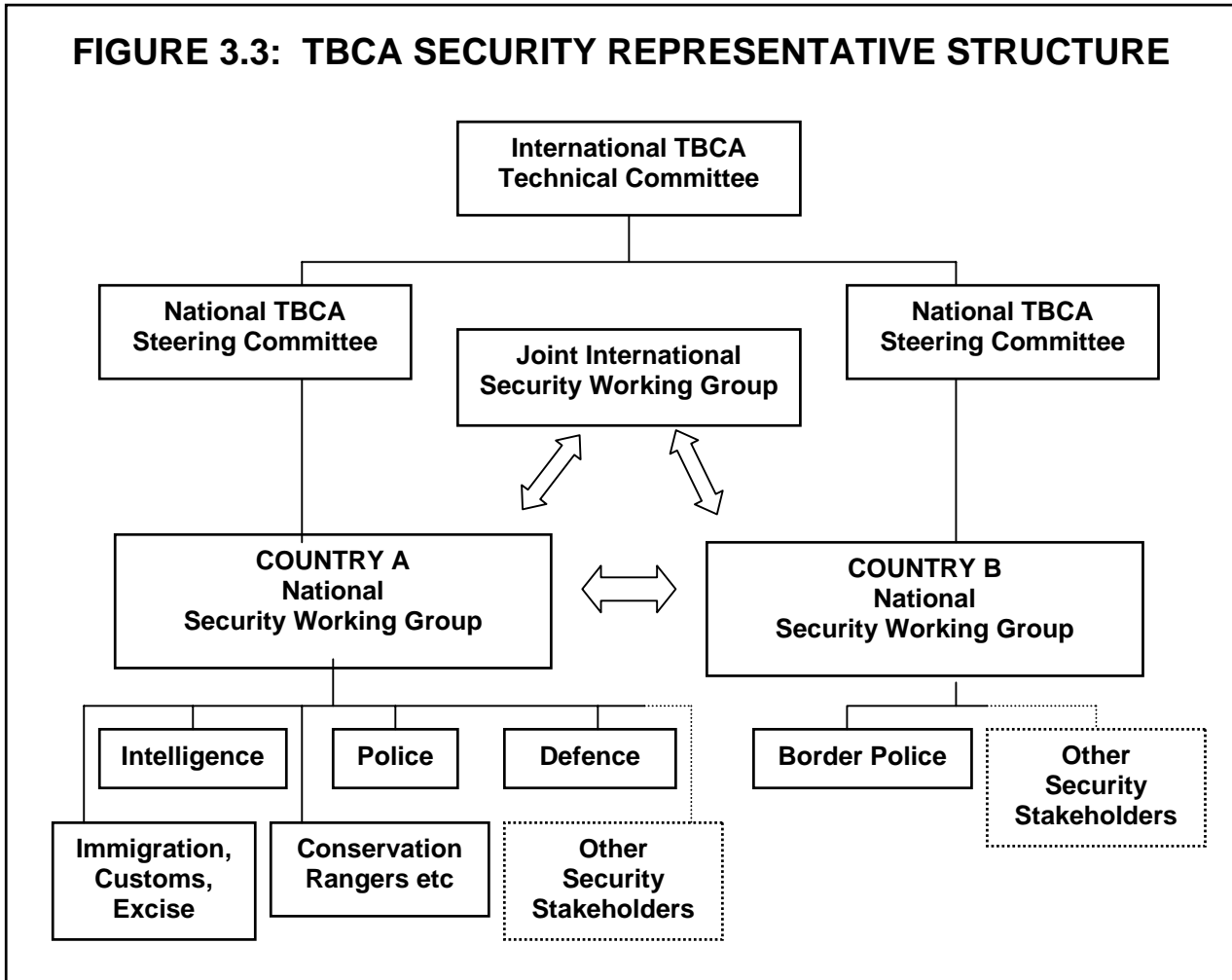
Conservationists have frequently only realized at a relatively late stage the need to engage with security stakeholders, and this may lead to unnecessary delays and irritation during the TBCA planning and implementation process. Stakeholders such as Police, Defence, Intelligence, Immigration, Customs and Excise, as well as the veterinary and agricultural authorities should be notified of the TBCA proposals at an early stage of planning, preferably even during the phase of developing a Concept Plan, and these stakeholders should be invited to nominate representatives who can be kept informed and be engaged during the planning and implementation phases.

Being involved in a TBCA initiative will usually also be a fairly novel experience for many security stakeholder departments, and it is therefore important that such departments or agencies recognize that such TBCAs are no longer an emerging international phenomenon, but rapidly becoming an established trend which holds considerable benefit for participating countries and enjoys substantial political support. Such security roleplayers should therefore not be reluctant partners in an initiative which otherwise may be seen as an added burden to their already overloaded responsibilities. It is important therefore that security roleplayers attend stakeholder meetings and effectively engage with the process from an early stage.

3.2.2.1 *Security Working Group/Committee*

It should be the responsibility of the Security Working Group (SWG) or Committee to identify all the elements affecting Security in the proposed TBCA, and to address all these issues so as to achieve – in a manner integrated with the inputs and products of other Working Groups as indicated in Figure 3.2 - proper implementation and functioning of the TBCA. To that end then, once the SWG has been constituted by the Technical Committee, the members of the SWG should elect a Chairman and commence activities.

For a particular TBCA, there will probably be an internal SWG within each of the participating countries, with representation from all the key stakeholder security departments or elements within each country. Meeting at intervals, each country SWG will discuss the impact the TBCA will have on that particular country and the issues which need to be resolved or addressed. It will also be necessary for these national SWGs to meet their counterparts from the other countries periodically to discuss and work towards resolving security issues of common concern. So, for example, they will need to discuss the implications of removing the border fence, 'hot pursuit' of criminals across boundaries, conflicting legislation, mechanisms for communication, and many other issues. Then, at intervals, the Chairpersons of these country SWGs, or nominated representatives, will meet with their National TBCA Steering Committee to provide feedback on progress within the SWGs. These arrangements are depicted in Figure 3.3. In many instances the Chairpersons of the SWGs automatically are also members of the National TBCA Steering Committee which jointly with their international counterparts make up the International Technical Committee. It is important to realize that the members of these SWGs and also Technical Committee usually participate in the activities of these bodies as part of a wider portfolio of normal activities...it is not as if Ministries or departments will permanently allocate staff for the sole purpose of dealing with the TBCA, except possibly for one dedicated International Co-ordinator to drive the overall process.

FIGURE 3.3: TBCA SECURITY REPRESENTATIVE STRUCTURE

3.2.2.2 Security representation at TBCA management level

While the interests of the Security community during the planning phases of the TBCA are catered for by the SWGs and the Technical Committee, these bodies may dissolve after the TBCA planning phase, at which stage the Technical Committee is often replaced by a TBCA Joint Management Board (JMB) or a variation thereof. Before the SWGs are dissolved, there should be discussion on whether the security interests of a particular TBCA are such that the security community must be represented on the JMB. The JMB usually comprises senior officials of the component areas making up the TBCA, and their function is to implement and supervise the terms of the TBCA establishment Treaty signed between the Partner Countries, and collectively this body either jointly manages or at least ensures harmonized management of the TBCA.

BOX 3.1 SECURITY REPRESENTATION AT TBCA INTERNATIONAL LEVEL

The level and nature of security representation in TBCA governing bodies will depend on the nature of the security issues prevailing in that region. While it will surely be necessary for each country to have a Security Working Group (SWG) to review the effects of a planned TBCA on national interests, and that these SWGs from participating countries will need to meet in order to resolve issues of mutual concern, it may also be necessary for security representation on the eventual Joint Management Board (or equivalent structure) that will supervise the overall operations of the TBCA, especially in regions of high criminal activity such as cross-border arms or drug smuggling. In the case of the Great Limpopo Transfrontier Park, security concerns of one country necessitated the inclusion of several legal Articles in the Establishment Treaty signed by the three Heads of State, and very specific composition of the Joint Management Board also stipulated in this Treaty, as follows (see also Appendix in this Manual):

ARTICLE 11

The Joint Management Board

(1) The JMB shall consist of the following representatives -

- (a) Two from each of the National Implementing Agencies of the Parties; (The main state conservation agency is usually the The National Implementing Agency – Editor)*
- (b) one from the national institutions responsible for borderline control of the Parties;*
- (c) one appointed as deemed fit by each of the Parties.*

The inclusion of a member from the “...*national institutions responsible for borderline control...*” meant that the security stakeholders could nominate a representative for permanent inclusion on the JMB, and contributed towards full collaboration from the security community in TBCA management.

4. Addressing Security Issues in Treaties and other International Agreements

4.1 INTRODUCTION

A decision or proposal to implement a TBCA between two or more adjoining countries brings with it a suite of security considerations because international borders are under discussion and, in particular, a 'softening' of these international borders or easier flow of people and wildlife is being proposed. Political support for such a TBCA initiative within the partner countries brings with it expectations of progress and delivery of outputs towards implementation of the TBCA, so while the departments responsible for security issues may have legitimate concerns they will nevertheless usually be under some pressure to collaborate. This is where the problems start arising. Concept plans for TBCAs are usually initiated and shaped by conservationists, who do not always necessarily have a full awareness of the security ramifications brought about by their proposals, and therefore do not involve the security stakeholders sufficiently early in the planning process. If the Ministers or other political leaders responsible for environmental and conservation matters within the countries taking part in the TBCA have achieved broad agreement, they then have to gain the support of their Cabinet colleagues in the respective countries, and this is sometimes the first time that the Ministers of Defence, Police etc learn about such a TBCA initiative, and the need for their departments to become involved. These ministers responsible for national security are invariably powerful figures, and have the potential to override or delay any TBCA plans, so if they receive feedback from within their own departments that inadequate consultations and processes have been followed between the conservation and security departments without due consideration to security issues, unnecessary frictions and delays could result. For a variety of reasons, all related to optimising the processes and eventual products emerging from stakeholder consultations and all contributing to successful implementation and management of a TBCA, it is simply good practice to involve the various security departments from as early as possible in the TBCA planning process.

Collaborative planning between the conservationists, security and other TBCA stakeholders from an early stage allows for early identification of security ramifications brought about by the implementation of a TBCA, and allows time for proper discussions and development of mutually acceptable solutions or mechanisms to manage security issues. Perhaps most importantly, it allows the proper formulation of Articles and Clauses for inclusion in Memoranda of Understanding, Treaties or other internationally binding commitments between the partner countries, so that all parties have a clear understanding of the security issues and how these will be dealt with.

Because situations vary in different countries and regions, the security issues and how they will be resolved will also vary, but some of the more important issues which are likely to be of a generic nature are highlighted below. These and other issues will have to be discussed by security representatives from all of the partner countries, and consensus reached on how to deal with these matters *before* the TBCA is implemented.

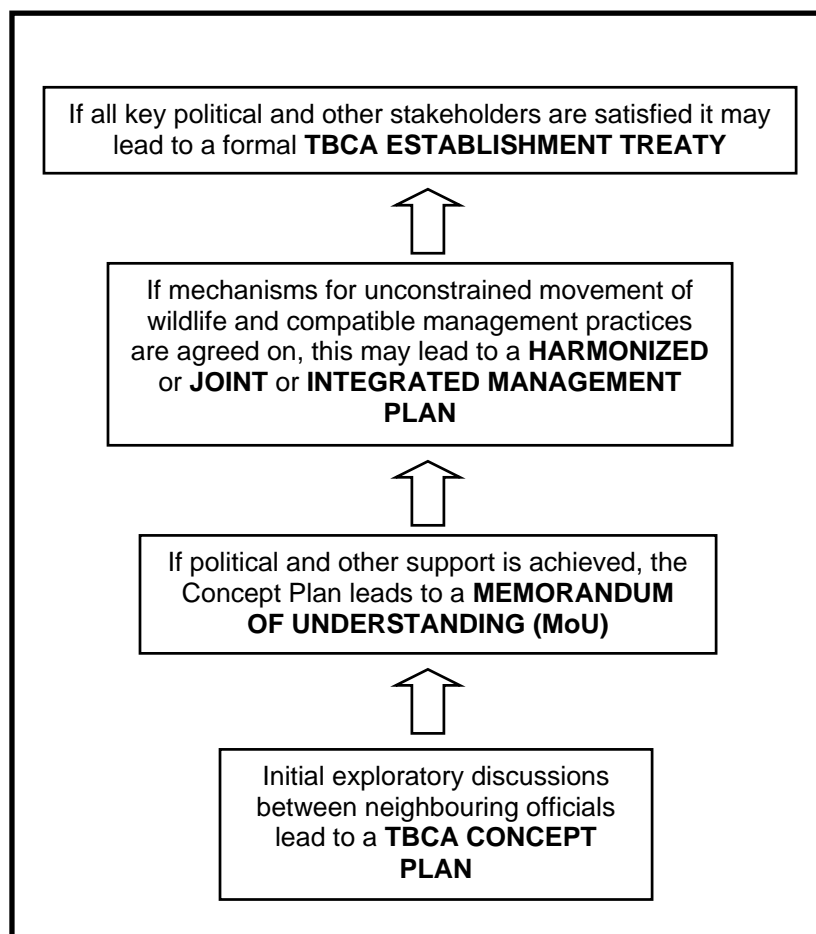
4.2 THE QUESTION OF SCALE.

Security issues vary in their nature and importance, and they have to be dealt with accordingly. So, for example, petty shoplifting is as valid a security concern as international

drug smuggling, but the issues clearly have different priorities and national impact. The various security stakeholders will not only have to identify the security issues which become relevant in TBCA planning, they will also have to decide at which level to deal with them.

Some security issues will need to be agreed on and are so important that they may have to be embedded within the highest International Treaty signed between the partner countries (e.g extradition; harmonising of legislation; institutional representation by security stakeholders, etc), while some other issues are perhaps less contentious and can be taken up within the Joint Management Plan which guides the collaborative management of the overall TBCA (e.g. 'hot pursuit' arrangements; joint patrols; cross-border security liaison mechanisms; border closure hours; etc), while some security matters may by agreement be left as internal decisions within particular component areas making up the TBCA (prevention of shoplifting; etc). Figure 4.1 broadly depicts the process of TBCA formation and the various agreements or formal commitments between partner countries. Security issues need to be addressed at each of these levels.

FIGURE 4.1: KEY MILESTONES IN INTERNATIONAL RELATIONS DURING TBCA FORMATION



4.3 SECURITY ISSUES WHICH COMMONLY ARISE FROM TBCA AGREEMENTS

This section should be read in conjunction with the discussion under 2.2.5 earlier in this Manual.

4.3.1 Extradition

Many countries already have regional agreements regarding extradition, but TBCA planners need to verify what the legal stipulations entail. The need for this arises as each country has sovereign laws which may differ from those of an adjoining country, and criminals may cross the international boundary to exploit these differences. One obvious example relates to criminals attempting to escape pursuing law enforcement officials, and if necessary to be captured in a country which has more lenient laws or penalties. If a criminal commits a crime in country A and moves into and is captured by TBCA officials in country B, these officials need to know what arrangements are in place to deal with the situation. Where extradition agreements already exist between countries this will be reflected within some document which should be available to and understood by TBCA security officials. In the absence of such an agreement some undertaking should be captured within the International Treaty establishing the TBCA.

4.3.2 Evidence

If a criminal is being prosecuted in country A but critical evidence resides in country B, then the legality of the moving of evidence from the one country to another may in some cases also become a matter of potential dispute. Security officials should be aware of this and preferably pre-emptively agree on what can or should be done in such events.

4.3.3 Use of Force

Countries tend to differ substantially in the degree of freedom which security forces have to use force to affect an arrest. In many countries 'minimum force' is legally stipulated and enforced, while in others a blind eye is taken and in yet others a 'shoot-on-sight' approach is permissible in some cases. Some understanding needs to be reached between security officials working within a TBCA as to the handling of criminals crossing the boundary, whether the understanding is to adopt the practice of the country with the most stringent legal requirement, or to simply apply the measures in practice within the country in which the pursuit and arrest is being made. This may need to be included in a legal document, Memorandum of Understanding or in the Joint Management Plan.

4.3.4 Jurisdiction

Every country has its own legal system and each country has sovereign rights within its borders. While two or more countries may engage in a TBCA and all fences and artificial barriers between these countries be removed, this by no means implies that any of the partner countries has relinquished any measure of sovereignty or rights. The jurisdiction of security personnel therefore stops at the point where two countries meet, and formal agreements will have to have been made which guide and dictate what actions are permissible in the event that criminals are being pursued and cross from one country to another. If such agreements are lacking, or have not been properly ratified by partner countries, then officials from country A are obliged to cease pursuit of a criminal the moment that criminal crosses the boundary. Clearly, some agreement needs to be documented to avoid such situations.

4.3.5 Standardization

Each country participating in the TBCA is likely to have its own standards, equipment and methods based on historical development, and also systems to cope with security situations. However, to give effect to the objectives of a TBCA, which in large measure is to achieve

joint management or at least harmonized or compatible management of the adjoining component areas, there will be great advantage in striving for some measure of standardisation or narrowing the differences in procedures etc which exist between the security forces of the partner countries. Not the least of these is the need to develop agreement on lines of communication so that security operators can talk to each other, which means standardized language, equipment, radio channels, etc. However, for the purposes of this discussion what is meant here are higher order issues which require agreement and perhaps need to be captured within an International Treaty, MoU or Joint Management Plan. Such issues may be the cause of significant friction or resentment and lead to a breakdown in collaboration, and could be caused by something as simple as differences in salary structures between comparable security forces on either side of the boundary. Pursuit and arrest of criminals is complicated when security elements of one country have operating standards which are well below that of an adjoining country, and this situation could be at least partially resolved by agreeing on joint training courses. Mutually agreeable Codes of Discipline also contribute towards harmonious collaboration and improved cross-border security.

4.3.6 Harmonisation of Laws and Regulations

The need to review disparate and often conflicting legislation has been discussed elsewhere in this Manual, but bears repeating here. While some principles relating to this issue may need to be included in the International Treaty or equivalent legal instrument which establishes the TBCA, there are many issues which need to be addressed at lower level and which are essential to the smooth functioning of the TBCA. Some of these include having to agree on standardized times of travel by tourists within the TBCA (imagine a tourist travelling in TBCA component A where travel is allowed until 8pm, but is unaware that travel times are restricted and gates close at 6pm in TBCA component B where such a tourist may have reserved accommodation). Other examples are differences in speed restrictions within a TBCA and associated speeding fines within different component areas of a TBCA. Punishment for the same offence may differ dramatically between countries as well, and may cause poachers to focus their activities in one component of the TBCA which is in a country having more lenient fines than the other. Most of these agreements between officials managing a TBCA should be reached *before* the TBCA is established, and these agreements should ideally be embedded within the Joint Management Plan which guides the overall management of the combined TBCA.

4.3.7 Border Crossings

The immigration departments and also officials responsible for Customs and Excise of each of the countries participating in the TBCA will have a major say in discussions and eventual agreements relating to the placement, staffing and functioning of points at which tourists and goods may cross between these partner countries, and may also insist that such agreements be taken up either in the Establishment Treaty or Joint Management Plan. The factors which influence these decisions and agreements have been discussed at some length earlier in this Manual, and are of fundamental importance as to how tourist flow will occur within the TBCA and also between partner countries.

4.3.8 Emergency Management

Given the nature of a TBCA where border fences are removed and particularly if free flow of people occurs within the boundaries of the TBCA, it becomes desirable to have a centralized security management centre or at least some mechanism which ensures that in times of a crisis - such as a busload of visitors from country A having fallen off a bridge in country B – a 'virtual' Security Emergency Management Centre can be established which links the top or relevant security officials from the countries involved. This will require pre-agreed procedures

and infrastructure being in place, and is best achieved if the principle of co-operative management is embedded in the International Treaty and the details of Security collaboration are explicitly agreed on and elaborated in the Joint Management Plan.

4.3.9 Airspace control

Aircraft are used in protected areas for a variety of reasons, including aerial census of wildlife stocks, research purposes, game capture operations, fire-fighting, crime-fighting, routine patrol, and also in some cases to ferry tourists from international or other airports to their accommodations within the TBCA. In addition to these flights, there will also be a need either routinely or exceptionally for commercial, military or other flights to overfly the TBCA. It may be part of the agreement during the establishment of the TBCA that such flights can now be undertaken throughout the entire area of the TBCA, but to avoid misunderstandings and ensure some standardisation the following aspects should be given consideration:

4.3.9.1 Minimum Flight Heights

Agreement should be reached on standardised flying heights to be maintained when flying within the airspace over the TBCA. Many protected areas have negotiated agreements with civil aviation authorities that commercial or sport flights may not take place over such protected areas, except in the case of international flights which fly very high at a level which does not create a disturbance to either wildlife or tourists. If exceptions are to be allowed, these instances should be agreed on and the conditions clearly stipulated.

4.3.9.2 Official Internal Flights

Rules and guidelines for aircraft on official work-related flights should be developed in conjunction with all security stakeholders, including in particular those from Immigration as well as Customs & Excise. Aircraft provide ideal opportunities for smuggling of various goods, including drugs and weapons. Such agreement should include details regarding route notification or flight plans, who should be informed regarding intended flights, who may authorize such flights and where are records kept and who/where can enquiries be directed in the event of suspicious flights, what are the passport or visa implications of cross-border flights, passenger lists and what are the guidelines regarding landing fees and other costs. Clearly, the issue of flight co-ordination is potentially complex and needs to be very clearly stipulated within the Joint Management Plan. This issue again serves as motivation for some form of Central Security Management or Central Security Co-ordination facility or mechanism.

4.3.9.3 Private aircraft

In some protected areas it is permissible for tourists or other guests to enter by private aircraft, and these arrangements will have to be discussed during the planning phase of a TBCA, and clear understanding be reached as to operational rules regarding use of private aircraft overflying TBCA airspace.

4.3.9.4 International Flights

It may be that a TBCA has landing facilities which make it possible for aircraft to fly directly from a foreign country, whether carrying freight or passengers. These arrangements, if permitted, will have to be stipulated and mutually acceptable guidelines included in the Joint Management Plan.

4.3.9.5 Roads and Bridges

Irrespective of the source of funding for particular roads and bridges, the right to free and unobstructed use of such infrastructure by appropriate security forces or elements having a legitimate need to do should be included in the international TBCA Establishment Treaty. Furthermore, it should be understood and agreed in writing that in cases of need, security elements will have the right to close and secure any road or bridge or other infrastructure relating to access, and to stop and search vehicles. Where such roads or bridges provide

access to the border and materially affect the adjoining country, such implications need to be discussed and processes of operations agreed upon.

4.3.9.6 *Integrated Information Technology Data Exchange*

While the overall principle of co-operation between security and other officials should be embedded within the TBCA Establishment Treaty, the details thereof should be stipulated within the Joint Management Plan. This includes a section devoted to the degree to which state departments or other TBCA units are willing to share information and have access to databases, as well as the procedures and mechanisms involved. The ideal would be that all immigration and policing matters related to people entering the TBCA should be captured on one database or linked in a compatible manner and accessible to all appropriate officials within the broader TBCA. The implications of this are that all officials operating at individual protected area access points (gates, airfields, harbours), border control points, base stations, and even key patrol stations, should have access to such information by means of radio or computer. Not only does such a situation allow rapid tracking of known or suspected criminals, allow early warning of wrongdoers heading in a particular direction, but it helps in many other ways such as allowing management staff to determine when the daily visitor capacity of the area has been reached, at very short notice.

4.3.9.7 *Radio communications*

Agreement should be reached between security personnel operating within the different countries making up the TBCA – and even between agencies in the same country – regarding radio compatibility, frequencies and procedures to enable clear lines of communication between security officials. This may need to be captured within the Joint Management Plan.

BOX 4.1: POLICE COOPERATION ON INTERNATIONAL BORDERS IN EUROPE: GERMAN - FRENCH TRANSBOUNDARY COOPERATION IN THE REGION OF THE UPPER RHINE VALLEY

Political and Legal Foundations

The first inter-governmental agreement on German-French police cooperation was signed in 1977. With strengthened establishment of the European Union during the 1990s, the development of transboundary police cooperation between the two countries was greatly expanded.

As a follow-up of the 'European Union Treaty of Maastricht', in 1992 a convention on the daily cooperation between German and French police stations in the border area was agreed on.

The Schengen Agreement came into force in 1995 which in a step-wise process reduced border controls until complete abolition. Consequently transboundary police cooperation became more and more important, particularly in border regions.

Finally, the Agreement of Baden-Baden in 1995 and the Treaty of Mondorf in 1997 declared the establishment of German-French commissionerships (which are also the basis of cooperation for the federal and national border police as well as for the customs authorities), thereby fostering the development of very concrete and practical ways of cooperation along and across the border.

In 2002 the Convention of Mannheim facilitated the transboundary police-station cooperation in the Rhine Valley area.

The Different Forms of Cooperation

Current cooperation in the region takes place at different levels and in different areas, based on European treaties, supra-regional, regional, sub-regional and local agreements. Some examples of best practice include:

- ❑ *Administration:*
In 1999 Germany and France inaugurated a joint administrative centre in Offenburg. Here German and French police-officers work closely together under the same roof. Their main tasks are to gather, analyze and exchange relevant information, in order to perform joint assessments of specific problem-situations.
- ❑ *Specific Operational Situations:*
The national police stations exchange all necessary documents and information across the border. German and French policemen use compatible radioset-systems. Each country sends liaison-agents to the neighbouring police-station, and they exchange advisors and observers.
- ❑ *Education, Training and Advanced Training:*
The language barrier is only a minor problem, as most of the German and French policemen speak and understand their neighbour's language or at least regional or local dialect.

A bigger problem is the cultural-based difference in perception of what security is. This is manifest in different legal and judicial structures and day-to-day applications. Each of the partners has the challenge of accepting and respecting the other's "culture of security and police".

As a consequence the 'EURO-Institute for Transboundary Cooperation' (see *box*) offers workshops and seminars to German and French police-officers to improve understanding of their colleagues' organisation, culture and work-system. In addition, the national police-academies are increasingly organizing and facilitating cross-border exchanges.

The Council of Europe has decided on the establishment of a European Police Academy which will offer advanced training especially to high ranking police officers.

Contributed by Roland Stein, Transboundary Coordinator, Transboundary UNESCO Biosphere Reserve "Pfälzerwald – Vosges du Nord"

5. The Security Planning Process

5.1 INTRODUCTION

A specific security challenge needs first to be properly understood if an optimal solution and approach is to be developed. The elements making up the particular security problem or challenge may also have to be compartmentalized so as to allocate priorities and associated funding. Theft of small items from accommodation units is clearly a different order of magnitude to the challenge presented by masses of refugees flooding in from an adjoining war-torn country. But if the pilfering were to escalate then its particular priority rating may also change. Confronting crime and other security challenges in a TBCA should therefore be an ongoing process of monitoring and review, and security activities must ideally be measurable in some manner to assess efficiency, and justify outputs relative to funding. A shifting array of security threats and crises means that TBCA managers and other authorities will have to engage in a continuous series of exercises to address the issues, and some of the more generic processes are discussed below.

5.2 DEFINITIONS

The following terms and concepts will be used during this discussion, and are used in the following contexts:

- 5.2.1 *Plan*: The plan represents a coherent, holistic and detailed integrated method of how a proposed exercise is to be executed in order to address a particular problem. It integrates all the courses of action proposed to and selected by the senior authority, and includes the support courses of action (those elements which assist the main effort by means of logistics, blocking forces, aircraft usage, legal actions etc).
- 5.2.2 *Campaign planning*: A campaign is usually a series of related operations designed to achieve either a crime goal or a strategic end state (e.g. an acceptable level of crime within the TBCA).
- 5.2.3 *Operation*: An operation is either a single or a series of related anti-crime actions implemented over a defined period of time to achieve a clear single aim within the scope of the planned campaign.
- 5.2.4 *End State*: That state reached at the end of a campaign that has achieved the desired result.
- 5.2.5 *Centre of Gravity*: That aspect, item, or feature which is so vital and so critical that without it an organization cannot continue or succeed in its purpose.
- 5.2.6 *Decisive Point*: This is a tangible event, possibly one of many such decisive points along a chain of events – called a line of operation – the successful outcome of which is a precondition to the successful elimination of an opponent's centre of gravity.
- 5.2.7 *Decision Point*: This is a point in time along a line of operation when a major decision on the next series of actions needs to be taken, as a result of a critical point in a situation being reached as planned. A decision point can also occur during a decisive point.
- 5.2.8 *Line of Operation*: A Line of Operation comprises a series of decision points, linked in an order of sequence to achieve an objective, and constitutes a direct path to a defined opponent's centre of gravity, and thereafter leads on to the campaign end state where it meets up with other lines of operation. A campaign will most likely have at least four lines of operation and each line represents an independent and specific action needed to reach the campaign end state.
- 5.2.9 *Sequencing*: An arrangement of events or decision points that need to be carried out in a set sequence to attain an objective.

5.2.10 *Phase*: The logical breakdown of an operation into useful segments to make the plan more readily understood.

5.2.11 *Focus of Main Effort (FME)*: The senior authority having appreciated where the best and most sensitive point or place of his opponent's structure/ organisation/operation is, decides to concentrate that degree of force necessary at that point and at a particular time, to successfully conclude an operation or phase of operation. This is called the focus of main effort. It is possible to have one FME per line of operation and one main one for a campaign.

5.3 CAMPAIGN LINES OF OPERATION: CHARACTERISTICS.

Lines of Operation are products of a process of analysis of the entire campaign. Lines of Operation include not only the planned operations but also any contingency plans that may have been developed to cover possible shortfalls in the main plan. It allows for one line per operation, and ultimately linking together all operations and joint decision points and centres of gravity. Decision points, decisive points, centres of gravity and focus of main effort are synchronised per line. 'Joint links' indicate activities directed against joint decisive points *en route* to the campaign centre of gravity. Foci of main effort are linked by a critical path depicting where the senior campaign authority wishes to focus attention and where to exploit success by deploying reserve forces.

FIGURE 5.1 LINES OF OPERATION DIAGRAM

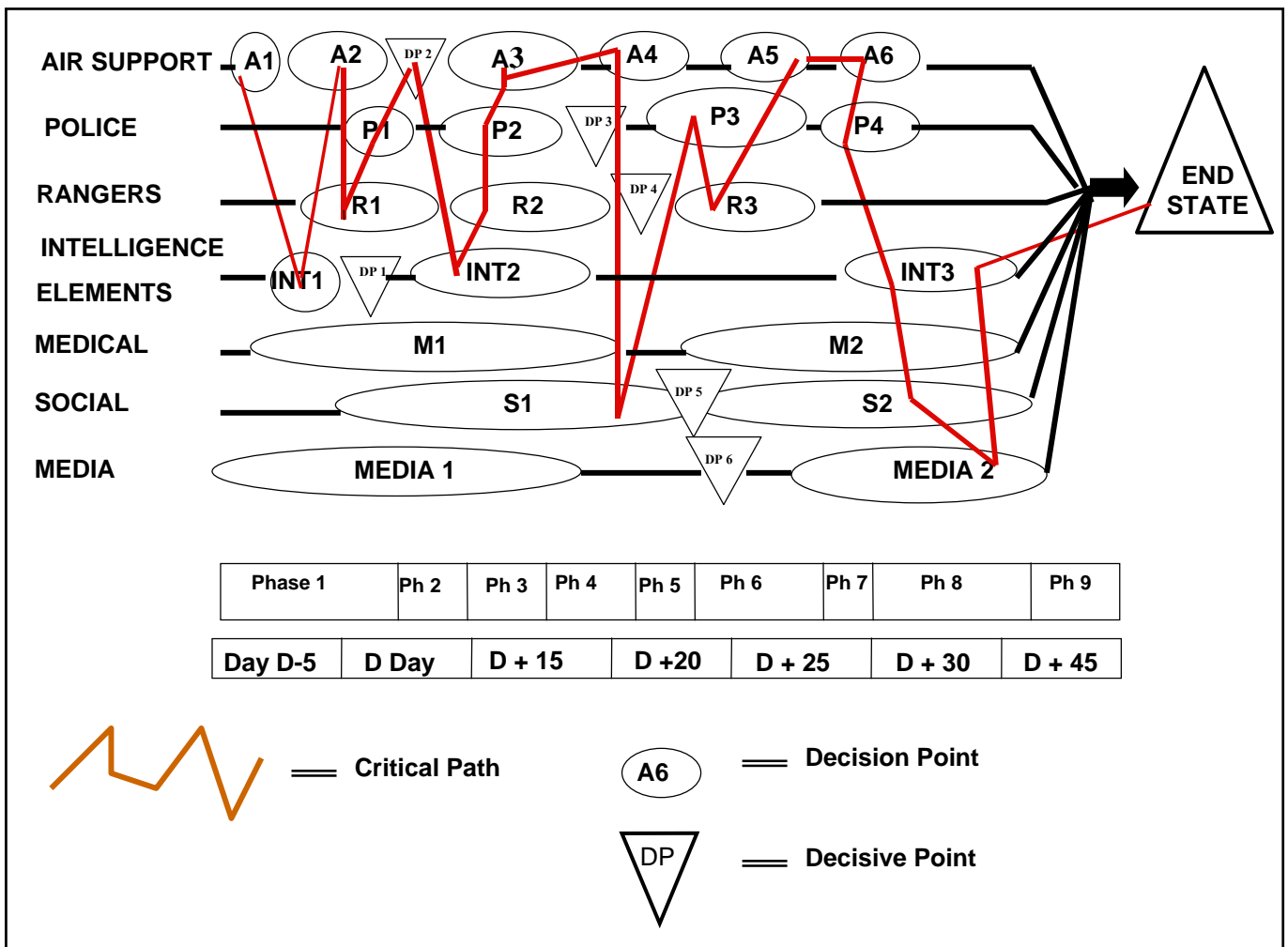


TABLE 5.1 EXAMPLE OF A “TASK TABLE” THAT SUPPORTS “LINES OF OPERATION DIAGRAM”

Operational Line	Task	Human & other resources	Responsible authority
Air Support	A1. Air-lift of agents A2. Aerial observation of target area A3. Airlift secondary agents A4. Air support to P2 A5. Air support to P3 Standby Medivac Command and Control A6. Medivac injured	? x 'X' light aircraft ? x 'Y' helicopters, one of which fitted for Medivac	Operational Chief in Charge (CIC)
Police	P1. Operational deployments start D day at 05h00; surround & take over poacher bases, aided by Rangers P2. Find & destroy traps P3. Mop up of area P4. Consolidation	? x police members; ? x detectives; ? x 'sniffer' dogs Detectives & dogs depart	Police Chief; liaises with CIC
Rangers	R1. Assist police; identify poacher bases etc R2. Deploy to escape routes & block such routes R3. Investigate evidence & support police	? x rangers per police group; ? x personnel as reserve ? x rangers per escape route; ? x personnel as reserve All personnel involved	Police Chief
Intelligence operatives	I1. Deploy D –5 to gain information I2. Confirmation & observation of Target Area; guide forces in I3. Confirm/Establish effect of operations and social implications	? x operatives ? x 'X' helicopters	Operational CIC
Medical	M1. Medics to accompany operational deployments; start D-Day at 05h00. Aid post at operational HQ ready D-Day –2 days. M2. Continue deployment & assistance as required	? x doctor in base ? x medics with each police group	Police Chief; liaises with doctor
Socio-economic measures	S1. Deploy into target area and monitor results; determine any new capacity building or upliftment tasks and assist target groups to achieve such aims S2. Continue tasks and prepare feedback reports as well as Effect Analysis	? x skilled persons per target area	TFCA CEO
Media	M1. Conduct media & needs analysis prior to and during operation. Prepare Press Releases plus photos. Assist & safeguard Press in area. M2. Continuously monitor situation & keep CEO and CIC updated. All Press Releases to be approved CEO & CIC.	? x Media Team per Police Group once operation in advanced/final stages. ? x Public Relations Officer designated and responsible for dealing with Press.	CEO at Base; liaises with Police Chief & Operational CIC

5.4 PLANNING LEVELS

At the Campaign level, the security forces in consultation with other senior members of TBCA management need to determine what their strategic end state should be over the medium to long term. Woven into this will be political imperatives from the various countries involved. For example, if poaching is perceived as a high priority threat to the TBCA — which could result in reduced foreign funding, tourism and therefore a direct effect on state finances — then political involvement is unavoidable. At the national strategic level the state will demand that something be done about the problem. This translates into a goal for the TBCA management staff. The security forces will therefore need to develop a “campaign” plan to deal with the problem.

The operational level links the strategic *WHAT* (overall campaign goal) to the *HOW* (how it can be achieved), the latter being the tactical actions required at ground level. The operational level also requires that the *WHO*, *WHEN*, *WHERE* and *WHAT THEREAFTER* (the actions that take place after, or as a result of the operation) aspects of a plan be developed. The operational level will yield the broad plan that will need to be refined into the tactical action plan so as to give effect to the strategic direction received from senior management level.

The operational level CIC or Chief in Charge (CIC) could be the Chief Intelligence Officer (CIO) or Chief Security Officer (CSO) of the park or even in certain circumstances an outside security official from the police or military. The operational level CIC must be able to develop a plan in the same way that a musician writes a piece of music, although in this instance the operational level CIC must also play the part of conductor as well. The campaign is the baton in the hands of the operational level CIC and uses it to achieve the strategic results that are required through effective deployment of the tactical forces at ground level.

An expectation many people often have is to demand results within an unrealistic short period of time. Today's decisions may only bear fruit in a week or month's time or even longer, because of the uncertain and unpredictable security environment the TBCA finds itself in. At the same time the operational level CIC will have to keep his or her superiors and politicians satisfied as they wait for results from more junior levels, who are implementing tactical plans derived from the operational plan!

5.5 PLANNING PRINCIPLES

In planning and directing the campaign, the operational level CIC should – to the extent possible – adhere to a number of guiding principles which assist in giving effect to his or her plans. These principles are:

- 5.5.1 *Conformance to Strategic Goals.* Ensure that the intentions and campaign end state are clearly conveyed to subordinates and are also in line with strategic directives received from higher authority.
- 5.5.2 *Correct Application of Subordinate Abilities:* The operational level CIC must ensure that the plan and end state are understood by subordinates and within their ability to achieve.
- 5.5.3 *Apply Medium to Long Campaign Vision:* The operational level CIC should not become bogged down with the nitty gritty daily planning and operational problems, but rather ensure that the strategic goals are being attained by the tactical activities of the deployed forces.
- 5.5.4 *Utilize Integrated Tactics to Obtain the Strategic End State:* The operational level CIC should use all the available security force ‘instruments’ to achieve the Strategic End State. These instruments need to be correctly trained or

harnessed, integrated correctly and concentrated at the correct point to be most effective against the criminal or other threat.

5.5.5 *Maintenance of the Initiative by Flexible Use of Reserves:* The freedom to operate against a threat will depend on the availability of sufficient people to do the job. The judicious application of reserves at the right time and place can often result in a favourable situation being developed, and ensures the ability to exploit the situation as it develops. In this way the initiative or advantage can be taken from the criminal and exploited to the benefit of security personnel.

5.5.6 *Acceptance of Affordable Risks:* The operational level CIC should bear in mind that there will never be a 'perfect moment' to implement a plan. Every situation carries with it its own inherent risks and if the CIC waits for a better moment the initiative can be lost and this may result in precisely those losses the CIC intended to avoid. The ability to take calculated risks will allow the CIC to 'steal a march' on the opponent and mark out a successful leader from the unsuccessful ones.

5.6 PLANNING GUIDELINES

Planning is by far the most important responsibility of the operational level CIC. The Planning Process initially aims at conceiving a campaign plan using a process of analysis with appropriate staff to ensure that all relevant facts are available to the CIC during formulation of the plan. The campaign plan should address the full duration of the campaign which may still be weeks or even months ahead. The plan must give attention to both the *WHAT* and the *HOW* at the strategic level and also analyse through to tactical level how the plan will be implemented. The operational level CIC has to ensure that the plan will work at the coal-face. This is only possible if all variables have been assessed and reasonable assurance obtained that sufficient resources will be available. However, the CIC will only have checked this in a broad manner, without becoming too involved in the operational planning responsibilities of subordinates.

The operational level CIC should not - once the plan has been developed and put into effect - consider that his or her operational involvement is at an end. The CIC has the additional responsibilities to oversee execution of the plan by subordinates, and develop contingency plans to counter all foreseeable eventualities that the criminals or other forces may conceive, within the bounds of available funding and other resources. These contingency plans should also be fully capable of being rapidly translated into executable plans at short notice. The Strategic Intention of the campaign plan must also be kept in mind at all times. The contingency plans will to some extent be based on assumptions as to what the criminals might do under certain circumstances. Experience and good planning will reduce the margin of error in these plans, and thereby increase the speed of implementation as the situation demands.

Once a campaign has been launched, the operational level CIC and his staff will busy themselves with the next plan, thereby maintaining the pressure on the criminals and so keeping the initiative.

5.7 RESPONSIBILITIES OF THE OPERATIONAL LEVEL CIC

The CIC has to ensure that a structure is developed that will be capable of controlling the forces involved in the operations. This structure should be able to accommodate the possibility of foreign security forces being involved, as indeed also own-country forces from outside the TBCA. All these disparate forces should be viewed as synergistic opportunities and made to work together in an efficient manner. The allocation of functional responsibilities

and reporting and command channels are the responsibility of the CIC and to ensure that they work effectively.

The CIC will have to ensure that all levels of command understand the campaign end state and also the various other end states that may arise in subordinate planning. He or she should ensure that no clashes of interest develop as a result of the various plans and that the plans are correctly sequenced and resource priorities properly allocated.

The operational CIC has to analyse the Strategic End State and goal or goals received from higher level. The goal/s need to be broken down further into achievable operational and tactical objectives for lower level subordinates. The CIC should also analyse the goal/s in a manner which enables an understanding of the context at national and TBCA level, within the framework of the given Strategic End State. As described earlier, if a goal is set to end poaching in the TBCA, it must be seen within the National and TBCA context to grasp what the Strategic End State means or should mean. A clear strategic end state must be given in order for the campaign planning to be successful. Where the operational level CIC has not been given a Strategic End State due to circumstance, the CIC should develop one personally and present it for acceptance. Any misunderstandings at this level as to the Strategic End State may well end in a misdirected campaign and a possible failure to achieve meaningful results. Once the Strategic End State is grasped, it becomes easier to develop end states for the operational and tactical levels because together they will form a pyramid ending at the strategic level. The tactical objectives must be sequenced; i.e. not all objectives can be simultaneously achieved and must therefore be carried out in order of priority, to achieve the operational end state in the most cost effective way.

The CIC should protect staff and other subordinates from interference from any source. He or she will function as a buffer and relay for any requests and demands from higher level seniors.

The operational level CIC will decide when and how any reserve forces or funding are allocated in order to maintain the strategic initiative. To do this, however, the CIC must keep in touch with what is going on at ground level so as to maintain a feel for the campaign. Failing to do so may result in an incorrect allocation of resources, often to the loudest voice, and so possibly misdirect the whole campaign.

The operational level CIC should strongly resist the temptation to become involved in the conducting of tactical activities. Not only is this the preserve of his or her subordinates, but the CIC may well lose sight of the big picture while chasing the ball and so fail to carry out his/her responsibilities at higher level.

5.8 CAMPAIGN TERMINATION

The operational level CIC should have a clear understanding of when and how the campaign should end.

During the initial planning, the strategic end state was developed, which will indicate what the situation should resemble when the campaign ends. In other words the campaign must end on favourable terms to the State Departments involved, in line with their departmental mandates or strategies. Other State Departments may in turn use the final end state of the security forces campaign to initiate their own particular campaign.

The operational level CIC must - prior to ending his or her campaign - have a clear understanding of the situation and that success has indeed been achieved.

The CIC must then re-deploy his or her staff or forces in order to capitalise on the situation and prevent any reversion to the previous situation.

The CIC will have to ensure that he or she is able to support any other State Department strategies in the area and thereby assist in achieving a political or State end state. The CIC should then also develop and implement a campaign exit strategy which will tie in with the follow up stager or next campaign plan.

5.9 THE PROBLEM SOLVING PROCESS

5.9.1 Introduction

As with most problems, the best way to address a challenge is to approach it in a logical and holistic manner. The problem solving process presented here is useful not only for the security environment but also for all situations with minor adaptations. The methodology remains the same even if the complexity of the problem changes.

The security challenges facing a TBCA demand a systematic approach and requires that all available facts be marshalled in preparation for the problem solving process. The size of the problem or challenge will dictate the volume of work required to arrive at a correct solution. For example, poaching as sole issue represents a problem of much smaller scale than that presented by ensuring the security of an entire multinational park.

5.9.2 Analysis Procedure

The problem solving process will first be provided in broad outline to give the reader an overall understanding of the entire process before moving on to the component parts for detailed discussion and analysis.

The following steps need to be followed to go through the process effectively:

The analysis procedure is initiated by either the CEO or his/her political superiors who require that a particular problem affecting the TBCA or State be solved. Usually a National Strategic End State with clearly identified goals will be available for overall guidance, or will have to be developed at ministerial/departmental level or by the CEO. If the CEO is the originator of the analysis procedure then it may be that the problem has no national implications and that the end state would be limited to regional or TBCA level.

The designated operational CIC should analyse the End State and goal/s, as this will allow him/her to arrive at an operational end state and determine lower level goals and objectives to achieve the operational end state. This process is generally referred to as campaign planning. Close aides assist the CIC in developing the plan. The campaign plan is then presented to subordinate officials to guide and direct them in achieving their specific objectives. It is good practice, although not always feasible, to engage such subordinate officials in the development of the operational CIC's campaign plan. Knowing what is expected of them, the subordinate officials then go their own way to develop their own operational plans which need to be integrated with each other and also with the higher level campaign end state.

As part of the next process, the CIC should task the intelligence officials to produce a document detailing the nature of the threat or problem confronting the CIC.

The CIC's campaign planning process continues as follows:

Having received the Intelligence Review of the situation, the CIC will analyze the situation usually according to the headings listed below, and perhaps a few others that may be relevant in a particular situation to arrive at an operational end state. The CIC will also have to analyze the situation in the context of the *strategic* end state handed down from higher level. As indicated earlier, if a strategic end state has not been received the CIC will have to

develop one for higher-level approval to provide context for the entire exercise, following the same procedure as for the CICs own operational end state.

- 5.9.2.1 *Political Constraints:* Consider political resolve – is there a need to demonstrate determination? Avoid alienating various groups, neighbours, etc.
- 5.9.2.2 *Legal:* Laws of Armed Conflict; different approaches to law between countries; powers of security forces; extradition and laws of evidence.
- 5.9.2.3 *Moral:* Attitude of park officials; effect of casualties thus far and in future; attitude of tourists and general population.
- 5.9.2.4 *Time Factor:* How much time is available before deployment; when are results expected; by whom? How long before any forces can begin to operate in terms of a plan?
- 5.9.2.5 *Financial:* Restrictions? Availability?

An example of a strategic end state could be; *“The XYZ TBCA must find itself in a situation where there is political stability and economic well being between the countries involved, with the security situation normalised and only minor poaching occurring from time to time.”*

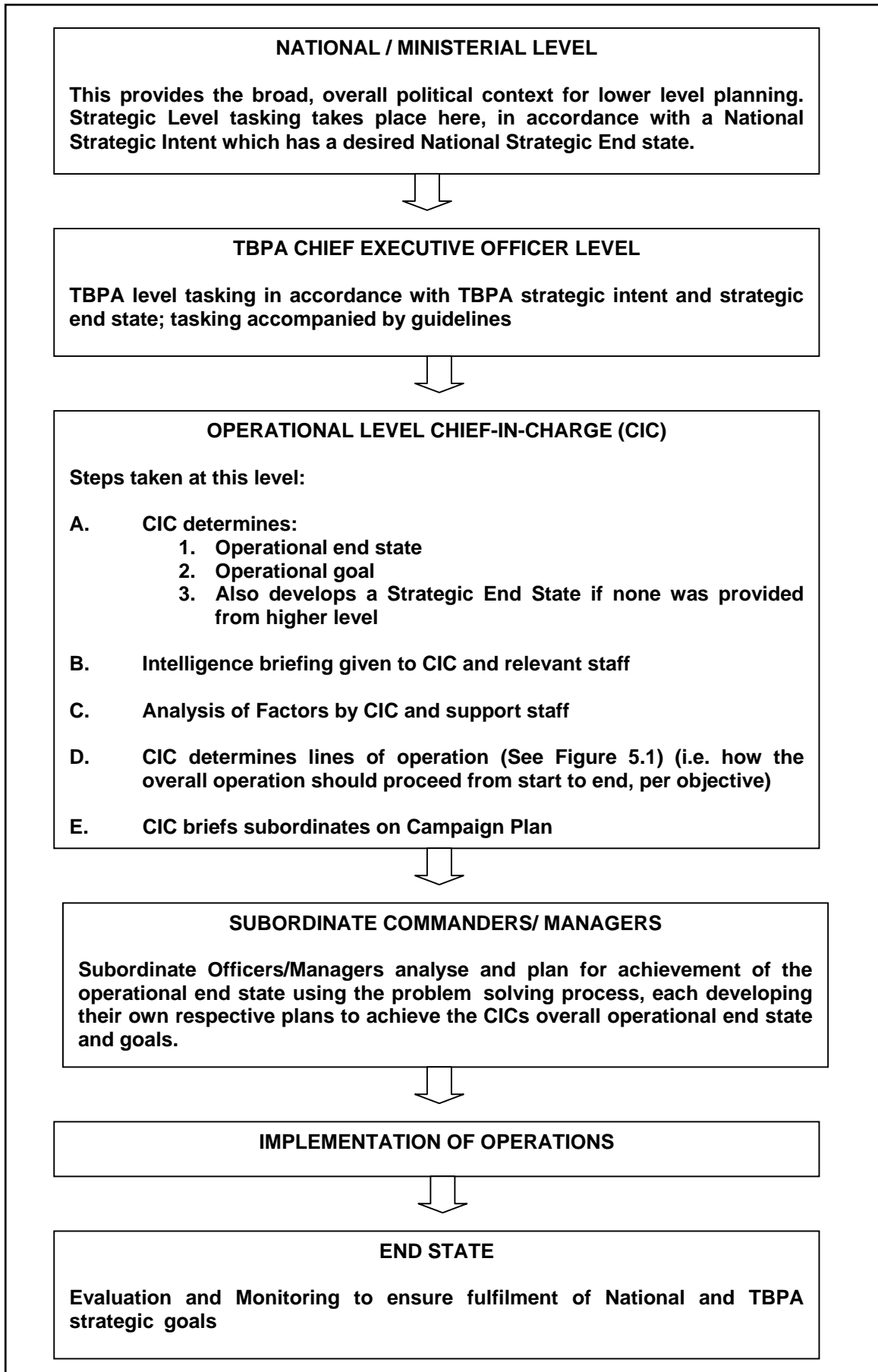
An example of a operational end state could be; *“The security situation within the XYZ TBCA is of such a nature that the only security forces necessary in the park are the rangers in the field and security guards at the entrance gates, with little criminality except for occasional minor crimes from time to time. The security forces are able to freely conduct anti crime drives across national borders with maximum international cooperation and minimum restrictions.”*

Having identified the operational end state the CIC must determine what he/she feels is the criminal centre of gravity encapsulated within the threat analysis provided by the intelligence officials (as reminder, centre of gravity is that aspect without which an organisation cannot continue or maintain its purpose). Such a centre of gravity could be; *“The poachers ability to use the local population to hide in while disposing game carcasses to the outside market.”*

The CIC will now have to determine lines of operation between the current situation and the desired operational end state. Lines of operation will need to be identified to achieve the end state and also all the decision points and decisive points along each of those lines. Each line or operation must lead the personnel allocated to that specific operation through the criminal's centre of gravity relevant to that operation. Each line of operation will therefore represent a particular operational task or specific operation, for example a line of operation could be *“To prevent the poachers from crossing a particular stretch of park border line”*. Another line could be *“To identify criminal elements in the local population bordering on the park”*. A third line could be *“Socio-economic operations amongst bordering communities to reduce the population's dependence on poaching”*. The CIC will need to identify the critical steps to negate the centre of gravity of each line of operation, thereby achieving the operational end state and collectively also a successful conclusion to the overall campaign.

The lines of operation – as identified by the CIC in conjunction with appropriate staff – are then handed to subordinate managers or officers. These plans will serve as guidelines for the achievement of their own operational plans. The subordinate officers will in turn proceed with their own analyses of the problem in keeping with the guidelines provided to them.

FIGURE 5.2 OUTLINE OF OVERALL CAMPAIGN PLANNING PROCESS



5.10 PROBLEM SOLVING PROCESS LAYOUT.

Below is a framework of the analysis process the tactical level officers will have to follow, in order to develop the activities along a line of operation to reach the operational end state. A detailed discussion of each heading follows after the overview.

5.10.1 Review of the Situation facing the TBCA (Environmental Scan.)

Terrain orientation (physical features of the terrain)
 Threats to the Park. Includes all aspects...criminal, social, etc.
 Security Forces available. Identifies all possible assistance.
 Infrastructure. Built up areas, transport systems, etc.
 Tourism.
 Finance available.
 Anything else of relevance.

5.10.2 Aim: Define your Aim. (What do you wish to achieve?) For example, "To combat all criminal/ Illegal activity in the Park".

5.10.3 End State: Determine what the End State should be or resemble.

5.10.4 Factors: Draw up a list of critical Factors which directly or indirectly affect the problem. These factors will need to be analysed individually and also in terms of their interdependence (e.g. transport, as a factor, is influenced by roads or communication networks/infrastructure). The following can serve as a guideline list of possible factors for analysis:

5.10.4.1 *Terrain:* How does the terrain lend itself to exploitation by the illegal activities of the criminals.

5.10.4.2 *Security Forces:* All organizations that can assist.

5.10.4.3 *Criminal Activities:* What is it that they can do which will affect the Park? (Corruption can be viewed as separate factor if need be.)

5.10.4.4 *Legal:* What is the effect of the law on security force operations and criminals.

5.10.4.5 *Communities:* This will include not only the population living around a TBCA but also people residing within (staff, temporary workers etc).

5.10.4.6 *Tourism:* Where do tourists come from and how do they access the area, where do they stay, what do they tend to visit, methods of travel, peak and trough tourism periods, tourist agencies and structures.

5.10.4.7 *General:* Other factors could be; Infrastructure; IT/ Communications; Finance; Poaching; Stock encroachment; Illegal migrants; Refugees, etc.

5.10.5 Global Conclusions.

This involves listing all the conclusions reached for all the various factors, and developing larger conclusions which draw together all these component sub-conclusions. This process will be described in greater detail later in the main discussion.

5.10.6 Options. Having analysed each factor and come to conclusions in each case, possible options must now be determined. These are very broad scenarios which are not in great detail but encapsulate the conclusions previously reached and yet differ from each of the other options. This aspect will be discussed in more detail later.

5.10.7 Courses of Action. The next step in the process is to thoroughly consider the options identified above to see if various elements of the different options can be combined to arrive at optimum results. This step is referred to as identifying possible *Courses of Action*, and will be discussed in more detail later.

The CoA's are then accurately costed as the final step in confirming the best CoA.

Once accepted, the final CoA is developed into an *Action Plan* giving the required goals, objectives, etc, which are coupled to costs and target dates provided by managers.

The final step is implementation and management.

5.11 DETAILED ANALYSIS PROCEDURE

5.11.1 Review of the situation/environmental scan

5.11.1.1 Terrain Orientation (physical features of the terrain). The requirement for a detailed briefing of the terrain will depend mainly on the current level of knowledge that the CIC has on the terrain. It is usually necessary for at least some briefing on terrain so as to put terrain in perspective relative to the problem and its location. Maps, photographs and diagrams usually assist in such orientation. Terrain also includes the location of built up areas and similar details. At the end of the briefing the audience should have a clear idea of what the terrain looks like and of course the geographic location of the area. It may be advisable at this stage already to examine the terrain and divide it up into rough sectors that are easily identified as geographical entities, thereby facilitating analysis. Should there be a need to divide a terrain into sectors this needs to be formalized, as all subsequent factors will be analysed within these sectors. It may happen that some factors – or elements of a factor – do not lend themselves to such sectoring, but this should not be considered as a serious problem as long as the bigger picture is kept in mind.

5.11.1.2 Threats to the Park. This includes a broad range of issues, including criminal, social, or others. It is critically important that the right questions be asked and thoroughly discussed, as important elements of the criminal or other situation may be overlooked and result in a misdirection of effort. The CIO or delegated staff or members of the intelligence community will normally present the threat situation. This presentation will indicate the type and range of criminal activities under review, but it should also attempt to provide a clearer understanding of who and what the threat consists of and its organization. Photographs, diagrams of the criminal chain of command, inter-connectivity with other organizations, graphs and details of incidents should all be available if required to give the audience a clearer understanding of the total nature of the threat facing the TBCA or relevant area.

5.11.1.3 Security Forces Available. This refers to a complete categorisation of all the security forces available or deployed in the area

whether under control of the TBCA or not. The key issue here is that an organization which may not be under control of TBCA management but still operating in the same area, may well have an influence on criminal activities in that area. This review should include a list of all personnel, vehicles and aircraft available plus their capabilities, restrictions, limitations and periods of deployment. Costs can also be mentioned if relevant. It is often useful to list operational and other bases/locations associated with these security force elements.

5.11.1.4 *Legal Matters.* National and international laws need to be constantly kept in mind and serve as guide during all planning. Legal staff or advice should be readily accessible during the planning phase, as legal input may be required regarding legality and consequences of planned actions.

5.11.1.5 *Communities.* All the various communities present in the area should be listed and discussed. The nature, location, attitude, activities etc of all people living in the area are important in operational planning and actions. It may be important to identify factions or elements within such communities and their allegiances or at least attitudes towards security forces.

5.11.1.6 *Tourism.* What are the actual and potential tourist attractions in the TBCA? What routes will be followed to reach them and what methods of transport are used? Is there a history of attacks in the area, including dates, times and locations? What was the result of these attacks in terms of arrests and convictions? What was the affect on the tourism industry? What are the tourism drivers in the region and what is the spending power/impact of these drivers (i.e. how important is this?).

5.11.1.7 *Illegal persons.* Are there any persons living illegally in the TBCA? If so how many and where do they occur. Where do they come from? How long have they stayed in the park? What are their attitudes towards tourists and the park officials? Do they have a history of criminality? How do they survive, what do they do?

5.11.1.8 *Poaching.* What poaching occurs in the TBCA? Where does it occur and who can be linked to this. What is the history of the poaching and the attitude of poachers towards the rangers/security elements? What tactics, size of groups, leaders, weapons do they have? Are they aggressive? What type of wildlife do they hunt and what are their methods. Do they use transport? Where do they sell or use the poached items. What can be done about the buyers? What is the incidence of bribery amongst TBCA staff in relation to the poachers?

5.11.1.9 *General.* There are many other factors to assess, and the analyst will need to identify those relevant to the situation and proceed accordingly. Nevertheless, all factors identified will need to be analysed as indicated in the discussions below. It is possible that after identifying a factor and doing some preliminary work on it, it becomes clear that a particular factor is irrelevant and can be discarded.

5.11.2 Aim

The CIC usually has one of two situations arising: either he or she is given a mission or task to carry out by seniors or, in the absence of such direction and for whatever reason, he or she decides that a particular action needs to be implemented.

5.11.2.1 *Self-initiated Action:* When such a situation arises and the CIC decides to act on own initiative, the CIC should be guided by some or all of the following aspects:

5.11.2.1.1 Have any general guidelines or intentions been received from higher authority that would enable the CIC to carry out this particular operation within such guidelines/intentions?

5.11.2.1.2 Legal implications of the intended action, if any.

5.11.2.1.3 The abilities and limitations of available forces/resources relative to those available to the opposing forces or the situation being addressed.

5.11.2.1.4 The influence of the population and terrain.

5.11.2.1.5 The nature of the criminals or the problem – which could be anything from a fire, flood or major refugee influx.

5.11.2.2 *Task or Mission Received.* The CIC must analyse instructions in order to clearly understand the full implications of the mission and what outputs are expected. This means considering the following elements:

5.11.3 Operational End State.

In order to determine what the Operational End State should be or resemble, the CIC must examine and base it on the Strategic End State that has been handed down by higher authority. The Operational End State will differ from the higher end state, as the parameters will be more closely drawn at the lower level. The higher level will be aimed more strategically while at ground level the perspective will be more tactical and focused on the details of the task at hand.

5.11.3.1 *Mission Given.* The CIC must assess what precisely is required of him or her. If this can be answered unambiguously then this will form the core of the CIC's mission and form the basis of the tasks handed on to the personnel to be deployed.

5.11.3.2 *Type of Operation.* The nature or type of the operation must be clearly understood. For example, is it a search of an area for hidden contraband, searching for illegal persons, launching a rescue mission of some sort, or do elements of all of these form part of the operation?

5.11.3.3 *The Specific or Possible Tasks.* A number of tasks will be identified from the mission, and means to address these tasks will have to be found during the analysis phase which will now follow. For example, if the mission is to search an area for hidden weapons, then the specific task is clearly one of a cordon and search. Examples of possible tasks that could arise out of a mission to solve a devastating fire or flood might be as follows and can be increased or reduced as the analysis process proceeds:

5.11.3.3.1 Where are suitable areas to launch boats?

5.11.3.3.2 How will the deployed workers reach the disaster area?

5.11.3.3.3 What are the transport logistic implications?

5.11.3.3.4 How are communications going to work?

5.11.3.3.5 How is casualty evacuation going to work? etc.

Having effectively analysed the mission, the aim of the operation must be formulated by the CIC keeping in mind what the Operational End State must be. The CIC's aim must be clear and unambiguous and is based logically on the mission given and the Operational End State. The aim will be in the singular and focus on the most important elements of the task. For example, "*To search area 'X' for hidden illegal weapons and animal traps*". Note that a multiple aim would include, for example, *.....'and stop all illegal poachers from entering the area'*. This would clearly give rise to two different activities with differing focus areas.

The aim must serve as guide throughout the analysis process and serve to focus attention on the reason (aim) for the operation. The aim should also be cleared with higher authority to confirm that efforts are not misdirected.

5.11.4 Analysis of the relevant factors

5.11.4.1 *Terrain*. The analysis of this factor determines the tactical and logistical possibilities of the terrain, and also how it has an influence on the achievement of the criminals objectives.

Terrain is a neutral factor that has an influence on both the criminal and own security forces. The critical aspect of the analysis is to determine how the terrain will influence the criminal's plan of action.

The following aspects may warrant analysis:

5.11.4.1.1 Topography. Mountain ranges, summits, plains, densely overgrown areas, swamps and forests. The influence on movement, possible hiding areas and approach-routes as they would affect the opposing sides.

5.11.4.1.2 Hydrography. Rivers, dams and lakes.

5.11.4.1.3 Obstacles. What natural and man-made obstacles are there and what is their influence on mobility of both sides; i.e the ability to get friendly forces where they need to be and the identification of possible routes around potential obstacles.

5.11.4.1.4 Infrastructure. Roads, railway lines, airports, harbours, airfields, power lines etc. How and where do these have an influence on both sides, and so affecting possible plans?

5.11.4.1.5 Negotiability. What is the affect of weather and flooding on the mobility of personnel to move in any direction? This relates to both dry and wet seasons.

Conclusions from this factor could cover, in a broad sense, where the criminals may move, set up bases, drive through easily to reach an objective etc. Conversely, what does the

terrain allow own forces to do in attempting to prevent or capture the criminals? A planner could identify possible ambush sites or areas that need to be blocked off to prevent the criminals from passing by or to capture them.

- 5.11.4.2 *Criminal Threat.* There are a number of facts that need to be analysed to achieve positive action that will address the criminal threat. Each fact must be approached in a manner that will lead to a conclusion that ultimately results in an action which is measurable in time and space.
- 5.11.4.3 *Organisation.* By examining the structure of the criminal organisation, the aim is to find an aspect that can be turned in your favour. For example, by carefully examining who and what comprises the structure of a community hosting criminal elements, it may be possible for a member of the intelligence community to infiltrate and gain intelligence as to the next act that the criminals wish to perform. The criminal organisation may consist of people from differing ethnic backgrounds. This offers the potential for this to be exploited by launching an information war against elements of the organisation, resulting in one or more from the gang to surrender or provide information. This in turn provides opportunity to erode the sense of cohesion within the criminal organisation and enable infiltration and subsequent criminal charges to be laid against key or appropriate people. The identification of exploitable trends or habits by the top structure, such as regularly frequenting certain areas/bars etc, also allows for possible infiltration of those places to follow the leaders and so launch operations to arrest them or to conduct deliberate misinformation operations to mislead the leaders into actions in accordance with the needs of security forces. Continuing analysis of a criminal organisation can therefore contribute in a major way towards actions supporting or achieving the operational end state.
- 5.11.4.4 *Tactics and Weapons.* The criminal organisation may have a range of weapons at its disposal. These will have a specific firing range, in accordance with which security personnel will have to be deployed. A conclusion may be that bullet-proof jackets should be provided, along with bullet-proof vehicles under certain conditions. Other conclusions could be that the launching of the operation should occur at night to reduce the effectiveness of their weapons, or deployment of persons by helicopter to achieve surprise which will also contribute towards neutralising the effectiveness of criminal weapons and reducing own casualties. The methods used by a gang to poach game may lead to identifying areas that they are most likely to operate in and therefore deploying people into such areas for pre-emptive action. The tendency to steal and use a particular type of vehicle on certain routes could lead to the identification of certain routes for observation by security observation parties, coupled to the trend that these vehicles may be mainly stolen on certain days and they on average take 'x' length of time to arrive in the area. The size of the gangs will lead one to observe trails and paths in certain areas for signs of use into or out of such areas. These tendencies or routine activities could lead to possible deployments to capitalize on such trends. Knowing the

reaction of the gangs on being discovered may lead to deploying security force elements in a manner calculated to counter such attempts to escape, given that the area has been reconnoitred and analysed effectively as discussed under '*Terrain*'. The attitude of the criminal organisation members towards the local population may lend itself to exploitation and deployment of security forces. The nature of the reaction of gang members to security force activities against them should also be analysed and counter-measures developed, perhaps requiring a measure of retraining of the security elements. These are all actions that will arise out of a detailed analysis, contributing towards effective measures against the threat or problem.

- 5.11.4.5 *Conclusions on Criminal Threat/Problem.* Clearly there are many conclusions that can be made, based on the nature and threat posed by the criminals or problem. The aim is to identify a definite action as an outcome of the analysis, which could help when added to all the other conclusions from the other factors and contribute to an effective plan. An example of a conclusion emanating from factor '*Criminal Threat*' could be that; '*Given that poacher gang (code name Andrew) operate in a gang of twelve and are armed with AK 47 rifles and always operate in the Luvuvhu area on full moon nights and are expected to do so on the 22 April, the SF will deploy patrols into 'x' and 'y' areas to confirm the gang is on route and the possible timings of their arrival at possible poaching sites. The SF will also mount observation posts equipped with night-sight binoculars at points 'a, b, c and d' to confirm target areas of the poachers and mount vehicle patrols in the following areas (e, f, g.) to scare off the poachers from operating in those areas. Once a degree of certainty has been arrived at as to the actions of the poachers a strike force will be activated to deal with the poacher group*'. From the Criminal Threat factor one can only identify certain actions that can take place, but these actions will remain as possibilities until the supporting plans derived from the rest of the analysis have been completed. These will come from analysing other factors which indicate where likely observation posts are to be found, where and what radios and communication systems need to be placed, how long it will take to arrive at the deployment area once the signal has been given and what should be done with any casualties and captured prisoners.
- 5.11.4.6 *Permanent Population.* Most communities living in or adjacent to conservation areas are law-abiding and often assist in broader conservation goals by providing essential services or tourism products. However, as in any community, they may also serve as source for criminal elements. If the majority members of a population in area 'A' are very poor and have difficulty in accessing sufficient food and also have too few jobs to sustain the needs of the community, it may lead to the deduction that some members of the community may be tempted into smuggling and poaching of game. This could also lead to the involvement of criminals from area 'Y' etc using people from impoverished area "A" to carry out their bidding. Conclusions flowing from these deductions could be that security personnel will need to develop or encourage a skills development programme in the area to enable such people to

generate sustainable income. This may turn law-abiding members away from the criminal elements among them and even encourage some of them to provide information on wrongdoers. This then identifies the necessity of having a sound informant handling and payment process. Broad details of this may be as follows: Who is to start the skills development programme, with what resources, starting when, and so on. Further conclusions could be that it is necessary to deploy undercover teams into areas identified from a study done of tendencies or trends, to find possible routes used by the local population into the TBCA and act as the eyes and ears of security units to deal with such incursions. The numbers of teams and the size of the reaction forces could already be suggested although not vital at this stage. Remember the reason for analysing the population: It is to be able to determine what actions are needed by own forces and what the reaction could be to such deployments, as well as the expected actions of the criminal elements.

- 5.11.4.7 *Legal Implications.* Conclusions emanating from analysing the legal implications of any operation are of considerable importance as it may relate closely to public relations aspects and publicity in general. This in turn may affect fund raising and donor funds currently being sourced. Tourism is directly affected by publicity, which has an affect on income. The legal officers involved in planning should consider all the relevant factors affecting the operation, including the following: What are the rules of engagement when in contact with an aggressive criminal? What should be the response in the event of someone being killed or injured? Do Memorandums of Understanding need to be drafted where cross-border operations are considered? Should a lawyer be on hand during the operation and where should he/she be positioned?
- 5.11.4.8 *Time and Distance.* All operations are dependant on time and distance. If it is not known how far it is to a particular place then the time of arrival cannot be determined. This factor embraces all the information relating to routes, land, sea and air plus the influence of weather and time of day or night. The criminal's reaction to the deployment of forces will also have an effect on the movement of the forces and will have to be given due consideration. This needs to be done at a practical level, for example: The actual time it takes to travel at a specific speed along route 'z' with a convoy of vehicles, numbering for example 10. This is repeated with all the possible and relevant routes that the Security units and criminals could use to implement their plans. This factor can best be understood by displaying it tabularly. The analysis will lead a person to the best and or most likely route to approach a particular objective by all parties. The state of readiness, availability and or location of available forces for the operation should be considered, as also the amount of time available to carry out the operation. This is done by identifying '*time now*' and what actions need to be carried out, measured as '*time required*'.

Having established these facts, the next analyses include: is the time available sufficient to carry out the operation? If not, then what should be done to ensure sufficient time, such as for example re-examining time allocated for actions as listed below. Concurrent activity can save

time by, for example, taking along all the groups on the reconnaissance trip. Another important aspect to consider is the travelling time of the component parts of the operation to get to the grouping area, or to the deployment area. Poor timing is a sure way to ruin an otherwise good operation. The various routes for the deployments should be analysed for the effect of time and distance on the operation. Usually the time-tables thus prepared can be used for the writing of the orders and even for the carrying over of the orders. The ultimate conclusion of this factor is to establish whether sufficient time is available, and the proposed start time for the operation.

Time Now:	23 June 12h00.
Do reconnaissance of target area:	5 hours 30 min.
Plan and write operation:	18 hours.
Give orders:	1 hour 25 mins.
Subordinate preparations and reconnaissance etc.	24 hours
Subordinates give orders:	2 hours 40 mins.
Rehearsals for operation:	2 hours 40 mins.
Preparations for move to deployment area:	4 hours 25 mins.
Travelling time to arrive at target:	6 hours 40 mins.
Possible start time of operation: (dependant on many factors including enemy actions)	'x' time
Time taken for operation:	5 hours 30 mins.
Travel back to base:	7 hours 50 mins.
Approximate time back in base:	'y' June

Therefore the start time for the operation will be 'X' hour and this is within the time parameters set for the operation.

5.11.5 Global conclusions

At this stage it may be useful review the completed factors and list all the various conclusions reached. Once this has been done by factor, it should be possible to start identifying main or global conclusions that will bridge the conclusions of a series of factors. Terrain and Criminal Organization may together present a global conclusion that could be something like; *"Security Force observation posts must be placed on the following likely hills 'x', 'y', 'z' looking in the following area for the following poachers 'a', 'b', 'c', with not less than five men each, armed as follows..., due to the strength of the poachers operating in the area. They should deploy on a full moon, the earliest being next week Friday, and they should be dropped off no closer than 'w' place to prevent warning being given. They must be able to stay for at least four days while the reaction force moves into position identified as either 'q' or 't' in order to----- etc".*

This kind of global conclusion will start to formulate a rough plan of action or 'Options' as referred to below. In a well thought out analysis the options to be dealt with next will represent alternative plans, each of which is worthy in its own right but must be weighed up to find the best amongst them.

5.11.6 Options

Having analysed each factor and arrived at conclusions in each case, possible options must now be determined. These need only represent broad scenarios without much detail, but encapsulate the conclusions previously reached. Each option needs to differ from others in at least three aspects (such as timings, deployment of security personnel, movement control on roads etc). Normally an attempt should be made to identify at least three options so as to allow the CIC greater freedom in deciding which option to adopt. The CIC should also

arrange the options in prioritized sequence to allow for subsequent changes of plan and also to develop contingency plans to cover all eventualities.

An option would therefore be a written explanation of one of several methods (options) capable of solving a problem. This method should be a logical and effective way of dealing with the particular problem, but represents only one of the possible choices. However, only one option can ultimately be used although it is possible to combine options and so form an additional option. The option is therefore a concise summing up of a possible solution which if chosen needs to be expanded and formulated as the best course of action to resolve the particular problem. It is useful to diagrammatically illustrate such an option to support and clarify the written material.

Once the CIC has chosen the best options or combination thereof and prioritized them, the staff should develop them into courses of action as indicated below.

5.11.7 Courses of action

The next step in the overall planning process is to thoroughly consider the identified options to see if various elements of the different options can be combined to arrive at optimum results. This step is referred to as identifying possible *Courses of Action*. In doing so the aim is to identify at least two courses of action (CoA) and these will be further developed in detail even to the extent of a fairly accurate costing. Potential CoAs should fit within available funding and other constraints. These potential solutions are now weighed up against each other to determine potential flaws. This sub-process is also looked at from the criminal perspective to see how they would react to the solution. Where shortfalls and opportunities for criminal activities exist, the CoA is adjusted to overcome the identified weakness. Contingency courses of action should cover potential unexpected changes of plan by the criminals, poachers etc.

Having reached this stage it becomes relatively easy to evaluate the CoAs against each other, and to arrive at the best and most cost-effective plan. If one plan is more expensive than another it should not automatically be discarded or necessarily affect the final decision. Additional unanticipated funding may be forthcoming and so affect the final outcome. The suggested and alternative CoA will normally be presented to the responsible person who has authority over the development of the TBCA for approval and selection of the best CoA, and the decision may be based on factors other than finance alone.

The CoA's are then accurately costed as the final step in confirming the best CoA.

Once accepted, the final CoA is developed into an *Action Plan* giving the required goals, objectives, etc, which are coupled to costs and target dates provided by managers.

5.11.8 Action plan

The accepted CoA should now be developed into an Action Plan. This will indicate the various goals and objectives allocated to subordinate managers or officers, and also funding and logistic guidelines or constraints as well as target dates to be adhered to.

Such a plan should include a clear and definite task for each of the role players, indicating who should do what, where, when and with what personnel and equipment. Timings must be given in terms of the start times, completion times and what the end result or state should be. The more strategic the plan the less detail included and the more scope for initiative is left for the subordinate officers. The lower the level of the plan, progressively less initiative will be made available to the junior officials within certain parameters.

An example of a low level tactical plan tasking of a component of a force could be; "*Mr 'X' is to take five rangers and drive in their allocated transport to Redhill and there leave their*

vehicle. They will walk unseen up to the Gansi river and at the first bend after the 'S' establish an observation post with the aim of identifying all people who use the river. They will stay in position until day-break on the fourth day at which stage they will retrace their steps back to base". In reality much more detail could be expected, to ensure precise compliance with the instructions and that the subordinates are fully aware of the CIC's wishes. The more experienced the subordinate the less precise the detail required.

A strategic level tasking of a component of a force could read: "Mr 'X' is to take control of the Southern sector of the park and in so doing bring to an end all illegal acts in the area. A progress report is to be presented at the end of four months. This process will constitute phase one of Operation Thrasher. Successful completion of this phase will result in starting of phase two, subject to the degree of success and any corrective actions needed prior to the start of phase two".

A critical requirement separates the writing of the analysis and the tasking of subordinates, and that is to ensure that the conclusions of the analysis are not only correct but also feasible. To this end the following essential step is required.

5.12 EVALUATION OF THE PLAN

Any plan needs to be evaluated and tested to confirm it can work. The CIC and his/her staff must confirm the feasibility of the plan before it is converted into an operational tasking of the forces available and the final confirmation of the costs of the plan.

The most suitable method to evaluate the feasibility of a plan is to role-play the elements of the plan with the parties involved. This way every person gets to know what they are expected to do and all possibilities are checked and confirmed. The timings and distances should be adjusted for the game plan. The security of the plan must be ensured as this could compromise the operation. It is possible and advisable to change certain dates and place names to hide the nature of the operation from informers if doubt exists as to the security of the plan.

All problems should be identified and investigated to determine solutions. The solution is workshopped to confirm suitability and implemented where acceptable.

5.13 TASKING OF SUBORDINATES

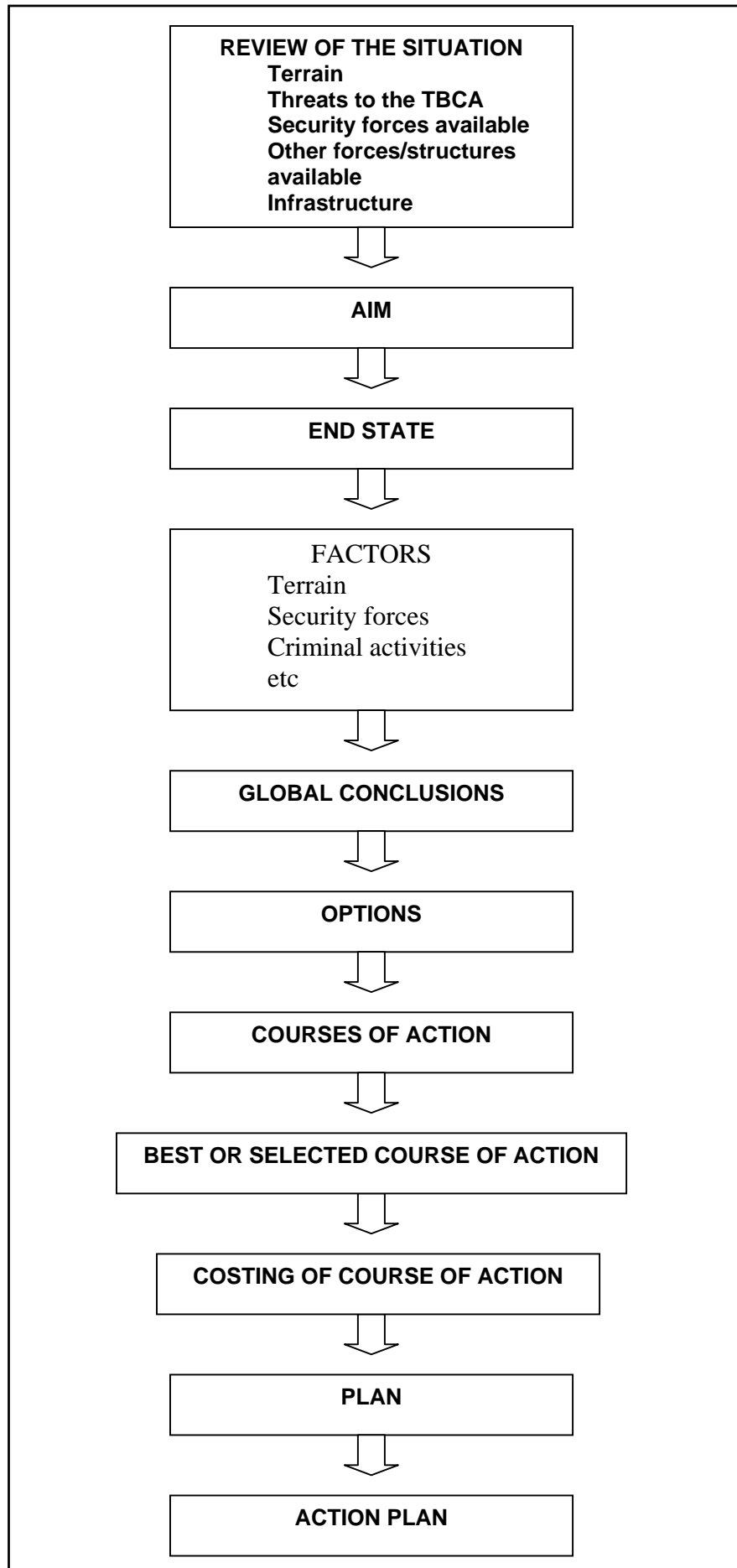
It is not the intention here to be prescriptive as to the method that TBCA managers or security force personnel should use to convey instructions to their subordinates. There are many differing methods which involve both verbal and written formats. Clearly a written format is preferred as it can be referred to repeatedly, promotes close adherence to instructions, and will reduce recriminations later if errors creep into an operation. Verbal explanations supporting and clarifying the written instructions are strongly advised.

The higher up the authority ladder the less need there is for detailed instructions. The intent and the end state may well be all that is necessary to launch a successful operation. Conversely the lower down the more detail is necessary.

5.14 CONCLUSION

The success of any TBCA is dependant on many interlinked factors. Not the least of these is that the park must be administratively well organized, and the security affairs of the area must be properly in place. If the security of a TBCA is poor there may well be fewer animals, tourists, revenue and jobs. Additionally, those who visit the TBCA will be continually subject to petty and grand theft and will go home as bad ambassadors for the TBCA and the countries involved.

FIGURE 5.3 DIAGRAMATIC FLOW OF ANALYSIS PROCEDURE



6. Training, Monitoring, Evaluation

6.1 INTRODUCTION

Criminals adopt new techniques to circumvent existing security measures, technology advances and gives a competitive advantage to those who keep abreast, social and political situations change which require modifications in security approaches...for these and many other reasons it is important that security staff not only be effectively trained to do their job, but that all members have regular refresher or re-training courses to maintain appropriate operational efficiency within a dynamic, continually evolving environment. Unlike in many other service sectors or functional departments, security staff are regularly confronted with situations which may result in legal consequences, media attention or public scrutiny of actions taken during the course of their work. Apprehending a petty criminal may suddenly go very wrong if the thief grabs a hostage and threatens to kill...quick decisions need to be made which have serious consequences if the subconscious and almost intuitive guidance of training and experience is inadequate. So training to provide understanding of the nature, context and consequences of a wide range of security situations is critically important for security staff, and to provide them with the necessary skills and confidence to cope with what usually are unpredictable and unscripted challenges.

However, to effectively discharge their security mandate, managers also need to periodically review and assess how well they are doing in terms of the bigger picture within which they operate...I may be winning a lot of smaller battles, but is this contributing towards achieving the overall security objectives for the area? And so it becomes necessary to develop a Monitoring and Evaluation process which will provide information on how effectively the security mandate is being performed, and what corrective measures may need to be implemented to regain balance and optimal achievement of objectives... indeed even assessment of whether the correct objectives have been formulated!

6.2 TRAINING

The circumstances, resources and expectations faced by security units in different parts of the world vary widely, and it would be inappropriate here to develop a training programme which could simultaneously address the detailed needs of, for example, a remote and sparsely populated jungle TBCA in South America and yet also the needs of a heavily visited TBCA in Europe. Specific detailed training manuals for the various functional units (military, police, immigration, etc) already exist – and often run into several volumes – so all we will try to do here is to outline a generic framework of the kinds of exposure which security elements involved in TBCAs should receive.

Of course maintenance of security within a TBCA is not the sole responsibility of security personnel, but of everyone working within or impacting upon a TBCA. This means that conservation managers, tourism managers and other department managers also need to be trained and exposed to security issues, as they have contributory roles in the maintenance of security in the TBCA. All these people are roleplayers and stakeholders, and they need to understand what the issues are and to contextualize these issues within their own working environment. A security-training programme should therefore also include key 'non-security' officials as target audience.

Below is a proposed outline for a two to three day programme which should cover most of the security aspects relevant to key TBCA stakeholders. The depth of discussion will determine the time required, and should be tailored to meet the needs of the particular target

group. For the purposes of this manual, stakeholders have been clustered into two main groups:

- Security agencies/departments/units involved in the planning, implementation or operations of TBCAs, to provide an understanding of the special circumstances within TBCAs and the various elements and situations involved.
- Conservation and other 'non-security' TBCA officials who need to gain deeper understanding of the need for security measures and nature of security issues.

6.2.1 Cross-functional (Inter-disciplinary) training programme to introduce stakeholders to the various Security elements involved in TBCA management

Module 1: Introductory background

Personal assessment exercise: How much do I know about conservation and security issues? (mini-questionnaire; one-word or yes-no responses, as a self-evaluation which should assist participants at end of course to review whether they benefitted from attendance or not) (10 –20 minutes)

Presentation: The need for biological conservation...why conserve?

Presentation: History of conservation, Protected Areas, leading to TBCAs (including benefits such as biodiversity, socio-economic, collaboration etc)

Presentation: Contrasting and generic examples of Security Issues facing conservation around the world

Module 2: Transboundary Protected Areas in practise

Overview of a specific TBCA as example (processes, successes & failures):

(Instructor must choose a TBCA which the audience can identify with, and the presentation ideally made by someone who has personal experience of the security issues in that TBCA)

Principles and broad content of various International Commitments

- Broad (various international Protocols & Conventions, such as the Convention on Biological Diversity)
- Regional Treaties (portions relevant to TBCA, as affected by agreements in, for example, European Union, ASEAN, SADC, etc)
- Memoranda of Understanding (e.g such as those between the Partner Countries participating in the TBCA)
- Joint Management Plan (according to which the TBCA will be managed across international boundaries)
- Treaty (by which the TBCA is established between partner countries, if such a Treaty is present)

Stakeholder participation (Who? Scale? Processes?)

Institutional frameworks

Working Group Session (What are the likely Security Issues in TBCAs? Working groups to be separated into conservationist and security personnel groupings; This is an exercise to illustrate to the people during plenary feedback how the two groups have different perspectives regarding 'Security' and how both groups are also still likely to have missed many important elements).

Module 3: Security Issues

Implications of free movement of wildlife (disease, threats to people, etc)

Implications of less restricted movement of people (Immigration, customs & excise, border posts, etc)

Tourist sensitivities and perceptions

Community issues
 Legal issues
 Operational issues (use of force, joint operations, standardisation, etc etc etc)
 Communications
 Management of emergencies and disasters
 Roles and responsibilities
 Operational areas and bases
 War and conflict situations

Module 4: The security planning and implementation process

Module 5: Field trip

To expose people to border situations in conservation areas (for example, accompany a Ranger Scout group on simulated anti-poaching operation to experience firsthand the limitations and challenges faced in resources, communications, and the conditions associated with a patrol through bush or forest. What equipment is required, what kind of person is required, what kind of conditions do you have to cope with, how do you arrest a poacher, what do you do with the poacher after arrest, etc etc)

Module 6: Review of course achievements and possible follow-up requirements

(break-up into a few working groups to produce review outputs, and then a facilitated plenary feedback and discussion)

6.3 MONITORING AND EVALUATION

Identifying security challenges and allocating resources and responsibilities to address these challenges represents a good start, but reality checks need to be built in to review how appropriately and effectively mandates are being pursued and objectives reached...i.e. *“Although we are all working very hard, are we truly making a difference to the security situation and are we doing so in the most effective way using all available resources”?*

Most organisations and institutions have a clear Vision and/or Mission which they consider to be the primary mandate or purpose for their existence, and these higher level Vision or Mission statements are underpinned by various hierarchies of goals and objectives aimed at achieving the Vision and Mission. This should also be true for TBCAs and the constituent conservation areas making up such TBCAs. Effective organisations will have infrequent review processes to test whether the Vision and Mission statements are still relevant, more frequent review to see if Objectives remain appropriate, and regular assessments to see if meaningful progress is being achieved in reaching the objectives.

TBCAs and conservation areas differ internationally, within one country, and sometimes even within one TBCA in terms of the level they have reached in developing management planning and objectives frameworks for constituent areas. It is therefore difficult to develop a set of generic questions which could be asked to test the efficiency in which the security mandate of a TBCA is being achieved. Even so, we suggest a series of questions below which could be the basis of a simple analysis of whether the security processes and issues within a TBCA are being effectively employed or addressed. While perhaps simplistic at first glance, the questions remain relevant for the most sophisticated of TBCAs and also those in the earliest stages of development. The answers to these questions should provide some guidance as to where shortfalls exist and where improvements may be required.

1. Compile a comprehensive list of issues which represent the full scope of security threats or impacts within the TBCA.

2. Has responsibility and authority been assigned to a specific person or unit for each of the elements listed above?
3. Is such responsibility and authority as referred to in 1 and 2 above present in each of the component areas making up the TBCA?
4. How well is each of these issues being addressed?

Issue	Consistent underachievement	Limited but clear progress	Generally acceptable, some shortfalls	Consistently well
Plant poaching				
Animal poaching				
Arson				
Theft				
Smuggling				
Poor communication				
etc				

5. Is there opportunity for periodic review of security issues?

None at all	Rarely, less than annual	Once a year	Regular, scheduled meetings

6. Are the various security issues being ranked in terms of importance, and available resources being allocated accordingly?
7. Are security issues receiving the policy, budgetary and management support they require?

Issue	Policy support			Budgetary support			Management support		
	Poor	Can improve	Good	Poor	Can improve	Good	Poor	Can improve	Good
Plant poaching									
Animal poaching									
Arson									
Theft									
Smuggling									
Poor communication									
etc									

8. What are the factors contributing to sub-optimal achievement of security objectives (if any)?

Issue	Poor planning	Lack of funds	Staff shortage	Poor collaboration	etc	etc
Plant poaching						
Animal poaching						
Arson						
Theft						
Smuggling						
Poor communication						
etc						

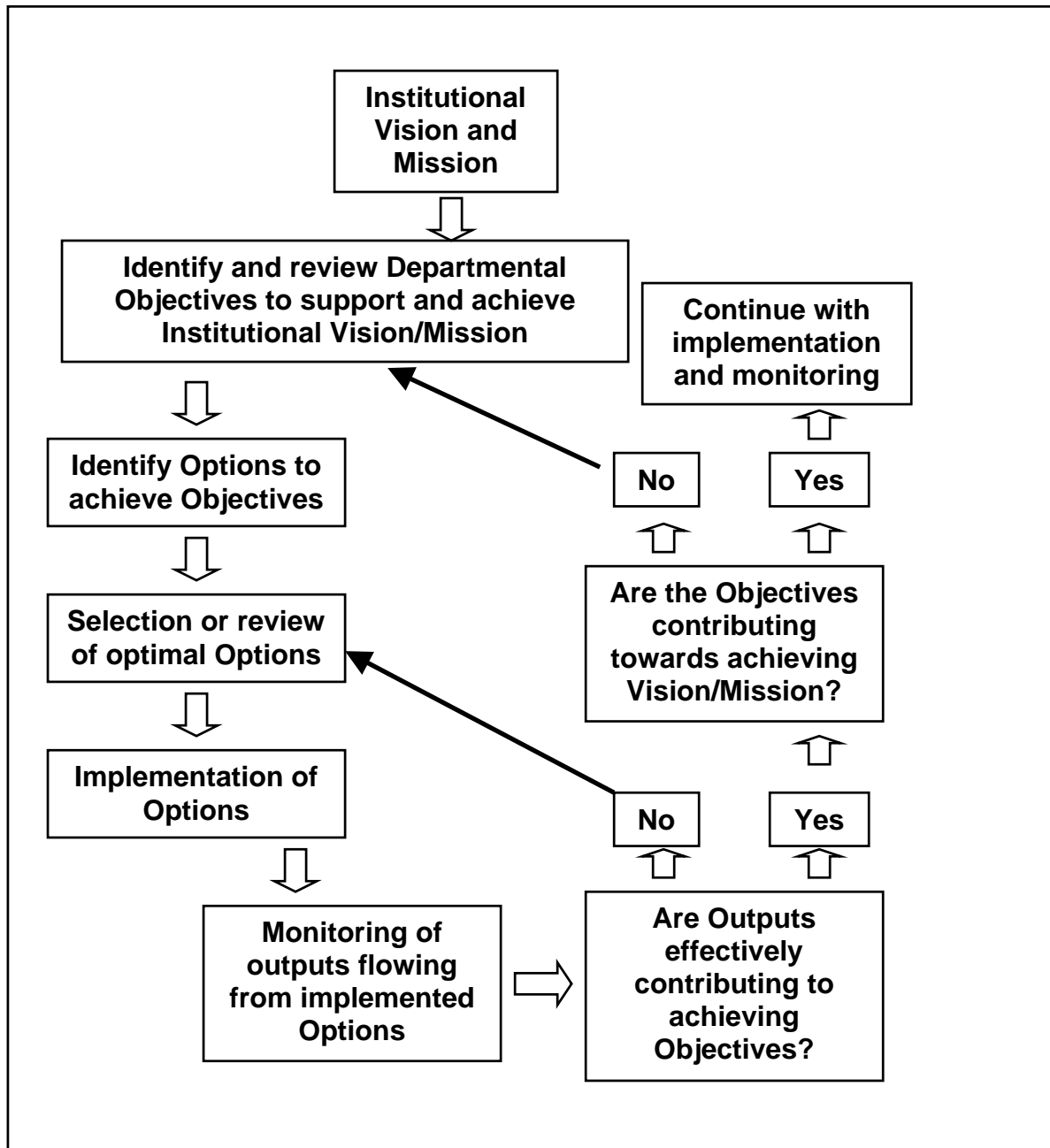
9. What is being done to remedy any current or potential shortfall in addressing security issues?
10. Do meetings take place which bring together across boundaries the following TBCA stakeholders or roleplayers:
 - rangers of the various partner countries
 - border police of the various partner countries
 - conservation managers
 - other security stakeholders
11. Are there structured meetings/forums enabling periodic interaction between:
 - different security stakeholders (eg. police and defence force and immigration authorities etc)
 - conservation managers and security managers
 - security managers and communities
 - etc
12. Do effective infrastructural means exist for communication within and between the various areas making up the TBCA, such as:

Radio	Telephone (landline)	Telephone (mobile)	e-mail	roads	landing strips for aircraft	etc
13. Are these communication methods being effectively used?
14. Have effective procedures for routine and emergency communication within and between security stakeholders been established?
15. Are these procedures being effectively implemented?
16. Have protocols or guidelines been developed for optimal operations and mutual assistance in the event of cross-border 'hot-pursuits' and similar international situations having legal implications?
17. etc etc

It is important that these monitoring actions be effectively evaluated and incorporated into the overall management process. While self-policing occurs to some extent within each section or unit within an organisation (we all practice self-criticism and adopt remedial actions within our own work), it is important that independent review also take place from outside the particular unit or section.

In Figure 6.1 we outline a simplified process for periodic evaluation of broad progress towards achieving the security objectives in a TBCA.

FIGURE 6.1: THE MONITORING AND EVALUATION CYCLE



7. Key Lessons Learned

A substantial number of TBCAs have been established in various parts of the world in recent years, yielding many lessons and a considerable degree of understanding of processes and associated difficulties. As far as Security arrangements are concerned, it is difficult to generalize because the security challenges vary so widely in different parts of the world, and even in different parts of a Region. Nevertheless, some key insights and lessons can be extracted, and are offered below.

7.1 INVOLVE KEY SECURITY AGENCIES EARLY IN THE TBCA PLANNING STAGES

Big ideas often have humble beginnings, and so too in the case of TBCAs. It will in many cases be a few conservationists talking to colleagues across the border about the benefits of linking the contiguous areas through compatible management. The Concept Plans that may flow from these ideas are usually also drafted by conservationists, and only some time later when the idea is on a roll at higher political level does it become apparent that critical national security roleplayers need to be engaged and involved. It then takes a period of time to convince these security stakeholders that they need to be involved in something the security people may initially perceive as a group of environmentalists running off again on some 'Save the Planet' scheme, that they should allocate time and resources in an already crowded schedule and tight budget, and that they should expend focussed energy and thought on a theme (conservation) which is not quite within their normal ambit of activities, and a certain degree of reticence may have to be overcome. This results in a hiccup in the planning and implementation process which creates frustration at various levels, often right up to ministerial political level. To avoid such delays and frustrations, and to develop plans that are integrated and don't have to be modified (often drastically) at a late stage due to the concerns of a critical security stakeholder, it is essential that all key security departments (Police, Defence, Intelligence, Immigration, Customs & Excise, etc) be involved early in the TBCA planning and implementation phases. Not only will this allow the various security departments to develop a clear understanding of the motivations for the TBCA and therefore become willing partners at an early stage with appropriate input and cooperation, but it allows these agencies to prepare budgets to accommodate the security needs of the TBCA implementation phase. Even relatively low expenditures involved in planning phases such as repeated helicopter or other inspection flights of border areas, travel and accommodations costs, etc will strain budgets and cause irritation if such agencies did not have advance warning, and may require assistance from donor agencies and thereby contribute to depleting funding sources. When larger expenses are involved, such as the creation of new border posts and employment of new staff, then many of these departments work in three-year cycles and cannot accommodate shorter term demands for capital expenditure.

7.2 THERE IS GREAT BENEFIT IN AN OVERALL, CENTRALIZED SECURITY MANAGEMENT UNIT

TBCA managers need to consciously recognize that the success of a conservation area is dependent not only on Finance, Human Resources, Tourism, Wildlife Conservation and the other traditional divisions or emphases, but equally also Security. As a cross-cutting issue it is difficult to adequately allocate responsibility for Security to any one of the traditional line departments, especially in current times when security threats have become increasingly sophisticated and pervasive. While elements of security may be embedded within each of the more traditional line departments (Tourism will have their Gate Guards, Shop Security Guards, etc; Wildlife Conservation will have their Rangers and Scouts etc, and so on), there is a very real need for overall co-ordination and streamlining to avoid duplication, assumptions that someone else is fulfilling a particular function, and ensuring a 'Bigger

Picture' is maintained. Having an overall centralized security management centre also dramatically contributes to effective crisis or disaster management such as in the case of hijackings, aircraft crashes, border clashes and refugee episodes, etc. In such cases the centralized management facility will function as an Incident Management Centre to coordinate the various de-centralized security roleplayers, both within and outside the TBCA. There is nothing that destroys tourist or public confidence as much as a delayed, unprofessional and unco-ordinated response to a security crisis, and such a damaged image always takes a very long time to recover, sometimes associated with loss of tourism revenue. In the case of a TBCA, these security issues take on an international cross-border dimension, potentially affecting national relations, and therefore becomes critical that a dedicated and specialized security management centre be instituted to integrate and coordinate security activities not only within a particular component of a TBCA, but also between different components.

7.3 ENGAGE IN A THOROUGH PROCESS OF BROAD STAKEHOLDER PARTICIPATION

'Security' should not be viewed by TBCA planners from a negative and narrow perspective restricted to punishment and retribution, but rather in a broader holistic manner which addresses all the issues that will make the TBCA more 'secure'. This includes ensuring effective information exchange between all stakeholders involved in the development of a TBCA, so that complete understanding of the motivations and benefits of the TBCA are understood and 'buy-in' achieved by all parties. It will probably not be possible to please everyone, but if effective information exchange and public participation did occur, then a majority consensus will support the process of implementation of the TBCA and make it much more difficult for detractors to gain a significant 'voice'. If the TBCA has followed due process and enjoys broad support, it makes the TBCA more secure. Local communities neighbouring a TBCA, especially those having low levels of literacy and precarious income, easily have their expectations raised by talk of increased tourism and job opportunities etc, making it essential that all discussions should be well understood, open and truthful. Disillusioned, poverty-stricken communities can result in chronic long-term security problems of poaching, theft, negative image to tourists, and poor media representation.

7.4 FAIR PRACTICE CONTRIBUTES TO A MORE STABLE SECURITY ENVIRONMENT

Care should be taken to engage in fair practise, and not to (for example) favour one NGO over another without good and defensible reasons. Such unfair practice on the part of TBCA planners or managers could easily result in the alienation of goodwill or outright resentment, which may lead to disruptive influences where communities or other key stakeholder groupings are sometimes misled or manipulated into actions detrimental to the TBCA.

7.5 HAVE A CLEAR UNDERSTANDING OF THE SECURITY ISSUES AND HOW TO DEAL WITH THEM

An integrated security network and plan contributes in very large measure to the successful maintenance of security within a TBCA. This will require an institutional framework allowing all security stakeholders to meet periodically for information exchange, discussion of security issues, and maintenance of an agreed-upon security framework. This security framework is underpinned by having a clear understanding of what the security issues are within a TBCA, that all the necessary security stakeholders are involved to properly engage the spectrum of security issues, that all security stakeholders have a clear understanding of who is responsible for what, and that the necessary communications and other infrastructure are in place.

7.6 CONFLICTING LEGISLATION AND MUTUALLY AGREED 'RULES OF ENGAGEMENT'

Incompatible legislation applicable in different components of a TBCA complicate, delay and sometimes render security functions inefficient. It is therefore necessary that security stakeholders meet, identify and discuss mechanisms to address conflicting legislation early in the planning or implementation process of a TBCA. This may require that specific issues be taken up in the TBCA International Establishment Treaty or other contractual undertaking, or legislative processes engaged in to attempt harmonising of legislation between the TBCA Partner Countries, or at the very least a mutual understanding be developed and accepted by TBCA partners on 'Rules of Engagement' to deal with emergencies or situations of mutual impact or concern regarding operations affected by the international boundary line.

7.7 CLARITY OF FUNCTIONS AND LINES OF INTERACTION

Although implied and sometimes clearly stated in foregoing sections, it bears emphasising that with so many security stakeholders involved in a TBCA, a clear understanding must be maintained amongst all roleplayers regarding roles, functions and responsibilities, and that clear structures for interaction are developed, and that clear lines of communication are established. Having such clear structures and mechanisms will contribute towards reducing friction, tension, misunderstandings and shortfalls in efficiency.

ANNEXURE 1

Draft Code for Transboundary Protected Areas in times of peace and armed conflict

Extracted from Sandwith, T.S., Shine, C., Hamilton, L.S., and D.A. Sheppard. 2001. *Transboundary protected areas for peace and co-operation*. Gland, Switzerland and Cambridge, U.K.: IUCN. (With permission).

Draft Code for Transboundary Protected Areas in times of peace and armed conflict

Extracted from Sandwith, T.S., Shine, C., Hamilton, L.S., and D.A. Sheppard. 2001. *Transboundary protected areas for peace and co-operation*. Gland, Switzerland and Cambridge, U.K.: IUCN. (With permission).

Explanatory notes

This Draft Code is offered to neighbouring States, jurisdictions and other stakeholders concerned with the establishment and management of TBPAs. It may be used in its present form or as a basis for developing a comparable code suited to the particular needs of a country or region. IUCN would welcome requests for technical assistance in interpreting the Draft Code and applying it to particular local or regional circumstances.

It is recommended that the Draft Code be made widely available to protected area authorities, key sectoral agencies, the armed forces (including border and coast guards), local governments, relevant non-governmental organisations, the media and other interested parties, especially in border regions.

A supportive education programme will be needed for this Draft Code to reflect the aims and guide the actions of all concerned interests. Awareness-building should be carried out on a continuing basis with all sectors of society, to foster broad acceptance of the need to conserve biodiversity and ecosystem services and to protect the integrity of TBPAs, even in emergency situations.

Rationale for the Draft Code

The Draft Code aims to contribute to the progressive development of legal and institutional frameworks for the establishment and management of TBPAs in times of peace or armed conflict.

Context

Many States, sub-national units and autonomous areas share at least one land, freshwater or marine boundary.

These boundaries were usually established for political or other social reasons, without reference to land or water systems. Often they divide ecosystems of particular importance for terrestrial or aquatic biological diversity.

Much of the world's remaining natural habitat is to be found in border regions, as political boundaries are often located in remote and sparsely populated areas with a distinct ecological identity to which animals, plants and human culture and practices have adapted over time. At the same time, border regions and their inhabitants may be particularly vulnerable to encroachment, dispute and armed conflict, which can be caused or aggravated by environmental degradation or unsustainable patterns of land and water use.

Progress to date

Transboundary co-operation can take many forms. Many States and stakeholders in civil society are already actively engaged in bilateral and regional initiatives on environmental and humanitarian issues. Co-operation over shared natural systems and resources can lay the foundation for deeper ongoing co-operation between neighbouring States, communities and other stakeholders. Moreover, the armed forces in many countries already play a constructive role in environmental conservation and management in border regions.

The international community, within and outside the United Nations system, has reached agreement on a series of legal instruments to address environmental and humanitarian issues. Many of these are particularly relevant to transboundary co-operation and to protection of border areas and communities (see Annex to the Draft Code).

Opportunities to extend transboundary co-operation

Natural systems that straddle political boundaries can be most effectively managed as functional units at the scale of the regional landscape and would therefore benefit from appropriate mechanisms for long-term transboundary co-operation. While the establishment of TBPAs for integrated conservation and development can enhance environmental protection, it can also reinforce political security and provide multiple benefits to local communities and indigenous peoples.

The existence of TBPAs and their buffer zones can help reduce tensions, rebuild divided communities, promote freedom of movement and create new opportunities for sustainable development, including low-impact regional tourism. Such areas can also make an important contribution to regional biodiversity conservation programmes, especially where they form part of a coherent ecological network. Neighbouring States, which often have different levels of technical expertise, knowledge, capacity and financial resources, can benefit by combining their respective strengths through transboundary co-operation.

Part I. Introductory provisions**1. Objectives**

This Draft Code proposes an enabling framework to promote transboundary co-operation through the establishment and management of TBPAs in order to:

- (a) conserve biological and cultural diversity in major transboundary ecosystems, promote a culture of peace and enhance opportunities for sustainable development, particularly for local communities, indigenous peoples and women;
- (b) promote the conservation and environmentally sound management of transboundary water catchment areas;
- (c) promote the sustainable and equitable utilisation of natural resources in and around TBPAs;
- (d) contribute to the development of equitable mechanisms for co-operation and benefit-sharing;
- (e) contribute to conflict prevention and the building of trust, confidence and security;
- (f) prevent or minimise any adverse impacts of military activities on TBPAs; and
- (g) provide a tool for the peaceful settlement of disputes affecting TBPAs and the re-establishment of peaceful conditions and restoration of damaged ecosystems after armed conflict.

2. **Use of terms**

For the purpose of this Draft Code:

- (a) “Transboundary¹ protected area (TBPA)” means an area of land and/or sea which straddles one or more boundaries between states, sub-national units such as provinces and regions, autonomous areas and/or areas beyond the limits of national sovereignty or jurisdiction, whose constituent parts are especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed co-operatively through legal or other effective means”.

A TBPA can be terrestrial, aquatic or mixed. Subject to national legislation, it may include land and water in public, communal and private ownership and management responsibilities may be allocated to public or private stakeholders.

- (b) “State” should be interpreted, where the national context so requires, to include sub-national political units, such as provinces, regions and cantons, and autonomous areas that have competence for the establishment and management of protected areas.
- (c) “Water” includes atmospheric, marine, ground and surface fresh water. References to “aquatic” should be interpreted accordingly.
- (d) “Armed conflict” refers to any violent conflict, whether international or non-international, whether declared or not, and whether the parties to the armed conflict are regular or irregular armed forces.
- (e) “Dispute” refers to any non-violent conflict.

3. **Scope**

This Draft Code applies to TBPAs that are managed, without prejudice to the sovereign equality and territorial integrity of the States concerned, to conserve biological and cultural diversity and promote peace and security.

Many of its provisions are also relevant to:

- (a) areas managed for environmentally sound and sustainable development around TBPAs;
- (b) natural areas located near to political boundaries that are or could be managed for conservation and peace objectives; and
- (c) other protected areas within or beyond the limits of national jurisdiction.

¹ The Draft Code uses the term “transboundary” consistently with the terminology used in several treaties (e.g. Convention on Migratory Species, ASEAN) and by many institutions (e.g. Conference of the Parties to the Convention on Biological Diversity, IUCN-The World Conservation Union). However, it is recognised that appropriate terminology will vary between regions and countries. “Border” and “transborder” are commonly used in the United States but less in Europe or Africa. “Frontier” and “transfrontier” are used in Europe (the French translation is *transfrontalière*) and in Southern Africa, but are less appropriate to the American context. The terms “frontera” and “transfrontera” are widely used in Spanish.

Part II. Basic principles and duties

4. *Environmental rights and responsibilities*

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to utilise their resources to meet their environmental and sustainable development needs, and the responsibilities:

- (a) to protect and preserve the environment within the limits of their national jurisdiction; and
- (b) to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond national jurisdiction.

5. *Co-operation*

States and other stakeholders shall co-operate on the basis of equity and reciprocity to conserve, manage and restore or rehabilitate biological and cultural diversity in TBPAs. They should ensure that utilisation of natural resources is sustainable and that benefits are shared equitably, taking into account the rights, interests and respective capacities of local communities, indigenous peoples and other stakeholders.

6. *Prevention*

Protection of the environment is best achieved by preventing environmental harm rather than by attempting to remedy or compensate for such harm. Programmes, policies and activities in and around TBPAs should be planned and conducted so as to prevent or minimise such harm.

7. *Precaution*

In decision-making affecting TBPAs and their immediate surroundings, lack of scientific certainty shall not be used as a reason to postpone action to avoid potentially serious or irreversible harm to the TBPA.

8. *Transboundary environmental effects*

Where a proposed activity may generate transboundary environmental harm, especially to a protected area, an environmental and, where appropriate, social impact assessment shall be undertaken. There should be prior and timely notification to potentially affected States and consultation should be carried out in good faith with such States and with potentially affected persons.

Potentially affected persons in other States shall be granted access to and due process in administrative and judicial proceedings, without discrimination on the basis of residence or nationality.

9. *Military and hostile activities*

States with legal authority over a protected area should not use it for strategic or military purposes. Military and hostile activities damaging to TBPAs shall be avoided. Consideration should be given to formally demilitarising TBPAs.

Part III. Establishment and management of TBPA**10. Basic legal and institutional framework**

Each State should establish or, where necessary, strengthen its legal and institutional framework for the creation and effective management of a representative system of protected areas. Such a system should specifically provide for:

- (a) the conservation of areas containing major ecosystems, endangered habitat types, high biodiversity and high endemism, through a range of protected area management categories providing for different conservation objectives;
- (b) the linking of protected areas via natural habitat corridors into bioregional networks to encourage natural animal movements, the connection of populations and gene pools and rational conservation and management of biodiversity;
- (c) the establishment of buffer zones around protected areas to promote environmentally sound and sustainable development, including wildlife-based forms of land-use and low-impact tourism; and
- (d) the incorporation of measures to safeguard the integrity of protected areas into regional land-use planning and sectoral programmes and policies.

11. Establishment of TBPA

1. Special consideration should be given to establishing contiguous protected areas to promote environmental protection, peace and development in the following situations:
 - (a) where a natural system or water catchment straddles one or more boundaries and, consistently with the ecosystem approach, should be managed as a single ecological unit to maintain essential ecological processes and life-support systems;
 - (b) where local communities and indigenous peoples in natural areas are linked across boundaries by shared ethnic or socio-cultural characteristics, traditions and practices;
 - (c) where the management or use of shared natural resources is or may become a locus of contention;
 - (d) where a boundary dispute involves unresolved claims to land or marine areas; or
 - (e) to rebuild confidence and security for local communities and indigenous peoples and provide a stable foundation for conservation and sustainable development after a period of armed conflict.
2. Where a State or other stakeholder wishes to establish or enlarge a protected area contiguous to a boundary, all parties concerned should co-operate in examining the possibility of establishing a corresponding protected area or appropriate conservation measures on the other side of the boundary. Where appropriate, the States concerned should consider proposing such areas for joint designation under relevant multilateral environmental instruments.
3. The public, including affected local communities and indigenous peoples, non-governmental organisations, women's organisations and other stakeholders, shall be consulted as part of a transparent and participatory process before any decision is taken to establish or enlarge a protected area contiguous to a boundary. Where practicable, issues related to land tenure and rights of access to and use of natural

resources in the TBPA shall be taken into consideration during this consultation process.

4. Where appropriate, States or other stakeholders may call on the good offices of a neutral third party to facilitate consultation over the establishment of contiguous protected areas as well as the development of harmonised policies and management plans for the area.

12. *Legal basis for co-operative management of TBPA*

1. States should use their best endeavours to remove legal and institutional obstacles to co-operation, harmonise relevant legal measures and establish a positive framework for co-operative management of the TBPA concerned.
2. Appropriate frameworks will vary for each TBPA. They may be strengthened over time to reflect changes in circumstances, capacity and political and public awareness. The range of options includes:
 - (a) formal agreements between neighbouring States to consult and co-operate with each other, ranging from a bilateral treaty to a joint declaration, memorandum of agreement or letter of intention;
 - (b) delegation by each State of powers to a designated authority to coordinate the management of the protected area with that of the contiguous protected area, to implement agreed conservation and management objectives and to enter into further agreements for this purpose;
 - (c) administrative agreements between counterpart environment, resource management and/or planning agencies, such as memoranda of understanding or co-operation;
 - (d) creation of a single management authority for the TBPA;
 - (e) customary or vernacular resource management agreements that provide a basis for establishing collaborative management processes with indigenous peoples, local communities and local governing bodies;
 - (f) contractual agreements between relevant stakeholders, including private sector interests and non-governmental organisations; and
 - (g) the designation of focal points or programme coordinators for the TBPA as a whole, or for each of its constituent parts.
3. States and other stakeholders shall carry out exchange of information, notification, timely consultation and other forms of co-operation regarding the TBPA in the spirit of good neighbourliness.

13. *Harmonised or joint management planning*

1. Competent authorities and other stakeholders with rights and interests in the TBPA should co-operate to develop compatible strategies for long-term conservation and management of the area concerned. They should take account of sustainable traditional practices, different levels of institutional and technical capacities and the need for mutual assistance and support in implementing agreed management objectives.

2. Harmonised, coordinated or joint management planning and programmes should be developed for the specific purposes outlined below:
 - (a) capacity building;
 - (b) wildlife management, including population control where appropriate;
 - (c) ecological monitoring;
 - (d) promotion of regional opportunities for low-impact tourism. Where possible, this should include the lifting or relaxation of border controls for visitor movements within the TBPA;
 - (e) planning of appropriate infrastructure for visitor access and other compatible human activities;
 - (f) strategic environmental assessment, environmental impact assessment and risk assessment procedures;
 - (g) public information, community awareness, education and research;
 - (h) co-operative law enforcement, involving members of local communities where appropriate; and
 - (i) financial planning and fundraising, including where appropriate measures for the equitable apportionment of revenues generated by constituent parts of the TBPA.
3. Effective management of the TBPA should be based on constructive relationships with:
 - (a) national, sub-national and local authorities;
 - (b) sectoral authorities (especially those with jurisdiction over environment, natural resource management, tourism, water resources, planning, mining, foreign affairs, customs and immigration, defence, maritime affairs and coastguard services);
 - (c) the private sector (especially companies and individuals that carry out activities that may affect implementation of the protected area management plan);
 - (d) local and, where applicable, national non-governmental organisations;
 - (e) inter-governmental organisations (including, where applicable, the institutions established under multilateral environmental agreements, including the regional seas conventions); and
 - (f) the media.

14. *Environmental impact assessment*

Strategic, environmental and, where appropriate, social impact assessments shall be conducted, in accordance with international best practice, for programmes, policies and activities which may have adverse impacts on TBPA, taking into account their scope, duration, intensity and potential cumulative impacts when combined with other activities.

15. Emergency planning for TBPA

1. In order to safeguard TBPA in emergency situations, including natural disasters, States and other stakeholders should co-operate to establish emergency prediction and information procedures and to plan coordinated responses.
2. Where appropriate, joint emergency response procedures should be developed with regard to armed conflict in or around TBPA.

16. Defence planning and military activities in times of peace

1. All armed forces should adopt and publish appropriate environmental guidelines, especially applicable to rules of engagement. Potential adversaries should be invited to conform to reciprocal humanitarian and environmental constraints.
2. In furtherance of the Draft Code, armed forces and other interested parties shall be informed of the location of and rules or guidelines applicable to TBPA. These rules and guidelines should be incorporated into relevant military manuals.
3. States and other stakeholders should not locate military personnel, installations and equipment in or near to TBPA where this could generate environmental harm to such areas. The testing or use of weapons, including landmines, should be prohibited in TBPA.
4. Contiguous states may co-operate to designate high-priority protected areas as non-defended localities or demilitarised zones under Articles 59 and 60 of Additional Protocol I to the Geneva Convention of 12 August 1949 (see Annex to Draft Code). Areas designated for this purpose should be completely demilitarised and permitted activities should be limited to those compatible with the management plan. Provision should be made for enhanced protection, monitoring, early warning and reporting mechanisms where the natural and/or cultural values of the area are under threat. High-priority protected areas may in particular include:
 - (a) sites designated as World Heritage Sites under the 1972 Convention for the Protection of the World Cultural and Natural Heritage and sites designated for protection under the 1954 Convention on the Protection of Cultural Property in the Event of Armed Conflict;
 - (b) transboundary sites of international importance that are wholly or partly included in the Ramsar List of Wetlands of International Importance, the World Network of Biosphere Reserves or regional lists or networks of specially protected areas.

17. Establishment of offences concerning TBPA

States should take all measures necessary to establish jurisdiction, create offences relating to damage to TBPA during armed conflict and empower designated institutions to prosecute alleged offenders and take enforcement action. Such offences may include:

- (a) making TBPA and the natural resources within them the object of attack;
- (b) using the TBPA or its immediate surroundings in support of military action;
- (c) causing significant, widespread, or long-term environmental damage to a TBPA.

Part IV. TBPA in times of armed conflict**18. General obligations**

All armed forces, whether regular or irregular, should continue to observe the principles and rules of international environmental and humanitarian law to which the parties to the conflict are bound in times of peace. Natural and cultural resources shall not be pillaged under any circumstances.

19. Rules specific to TBPA

1. Parties to the armed conflict shall not take action to turn the TBPA into a military objective or use it for any strategic advantage.
2. The parties shall take all practicable steps to protect the TBPA from attack and, if attacked, to minimise any damage to the area.
3. The parties shall take all feasible precautions in their choice of means and methods of attack with a view to avoiding or minimising incidental damage to TBPA.
4. If a party to the armed conflict moves military installations, equipment or personnel into the TBPA, or otherwise takes action that converts the TBPA into a military objective, the TBPA may lose its immunity from attack while it remains a military objective. However, any military response measures shall:
 - (a) be decided upon only by the highest operational level of command
 - (i) on the basis of exercising the legitimate right of self-defence,
 - (ii) only if the attack is the sole militarily feasible option,
 - (iii) taking all feasible precautions in the choice of means and methods of attack, with a view to avoiding or minimising direct and incidental damage to the area, and
 - (iv) only after advance warning is issued to opposing forces allowing reasonable time for those forces to redress the situation;
 - (b) be proportionate to the military objectives involved, with a view to minimising direct and incidental damage to the TBPA; and
 - (c) be cancelled or suspended if it becomes apparent that the damage to the TBPA will be excessive or disproportionate.
5. If a single armed force occupies the TBPA, those with authority for that force shall comply with the objectives and rules applicable to the TBPA.

20. Steps towards negotiation and resolution

1. If armed conflict or other complex emergency situations develop that are outside the control of the protected area authorities, these authorities or other stakeholders should immediately appeal to all parties to the conflict to respect the integrity of the protected area and to abide by the environmental and humanitarian principles of this Draft Code. This appeal may be public or private, as appropriate. It shall be clearly neutral in character and have no intent to give strategic advantage to any party to the armed

conflict. . Liaison, where appropriate, may be carried out by a neutral third party, such as the International Committee of the Red Cross or IUCN-The World Conservation Union.

2. States or other stakeholders may urgently seek the good offices of the Secretary General of the United Nations, UNESCO, the President of the International Committee of the Red Cross, IUCN, regional economic integration organisations, non-governmental organisations or other bodies for help in negotiating an end to the conflict or complex emergency situation and obtaining humanitarian and other assistance.
3. Where an armed conflict threatens internationally-protected habitats or populations of species, possibly through increased poaching and illegal wildlife trade, States or other stakeholders should urgently notify the relevant treaty secretariats to promote the adoption of available sanctions or recommendations by Parties to the instruments concerned.

21. *Displaced people and refugees*

Where a TBPA or its immediate surroundings becomes a refuge for displaced people or refugees, the protected area authority, other competent authorities and outside agencies shall co-operate closely to minimise adverse impacts on the area concerned in accordance with the UNHCR Guidelines on Prevention of Environmental Impacts Related to Refugees Operations (UNHCR, 1996).

Part V. TBPA after armed conflict

22. *Identification and assessment of damage*

States and other stakeholders should co-operate to identify and assess damage inflicted on the natural and cultural environment of a TBPA as a result of activities associated with armed conflict, as well as sources of disturbance that continue to threaten the area.

23. *Restoration and rehabilitation*

1. Plans should be developed by local, regional/provincial and national government agencies in close consultation with affected local communities, indigenous peoples and other stakeholders to restore and rehabilitate the natural and cultural integrity of the TBPA.
2. Priority for environmental restoration should be given to habitats of rare, threatened and endemic species, to critical native vegetation communities and to fragmented natural areas and corridors. Measures should be taken to remove or contain continuing sources of disturbance to the TBPA. All emplaced land mines and other explosive remnants of war should be located and rendered harmless.
3. Relief and development funding should be directed according to the priorities agreed during the restoration and rehabilitation planning process.
4. To maintain donor confidence, it may be beneficial to establish emergency trust or out-of-country funds until long-term peace is assured.

24. *Post-conflict policy changes*

Post-conflict policy changes should be subject to impact assessment, and subsequently monitored, where they may adversely affect a TBPA. Key programmes and projects for prior assessment may include the establishment of refugee, agriculture and livestock resettlement areas and the authorisation of new infrastructure or industrial and extractive operations in or near to the area concerned.

25. *Enforcement measures*

1. States shall take all necessary measures, where appropriate in co-operation with other States and/or relevant international bodies, to prosecute those alleged to have committed offences relating to TBPA.
2. Where appropriate, States shall co-operate to facilitate the extradition of those persons charged with offences relating to implementation of this Draft Code.
3. Consideration should be given to seeking compensation and reparation to promote the restoration and rehabilitation of the TBPA concerned.

Part VI. Measures to promote and enhance compliance**26. *Compliance and dispute avoidance***

States and other actors involved in managing TBPA shall co-operate to ensure compliance with this Draft Code and to avoid disputes. Procedures and mechanisms to enhance compliance should be simple, transparent and non-confrontational and may include joint or impartial third-party fact-finding missions and the provision, to the extent possible, of technical and financial assistance.

27. *Peaceful approaches to settlement of disputes*

If a dispute over the interpretation and application of this Draft Code does arise, States and other actors should seek resolution through peaceful means, such as:

- (a) negotiation and enquiry;
- (b) mediation and conciliation, where appropriate through the good offices of neutral countries, regional agencies or arrangements, or appropriate organisations;
- (c) arbitration or judicial settlement.

28. *Relationship between the Draft Code and international conventions*

The provisions of this Draft Code should be read consistently with the rights and obligations established under existing international agreements, except where the exercise of such rights and obligations would seriously threaten a TBPA. Parties shall implement this Draft Code with regard to the marine environment consistently with the rights and obligations under the 1982 United Nations Convention on the Law of the Sea.

29. *Financial support*

To maximise the potential benefits of transboundary conservation, States, inter-governmental agencies, non-governmental organisations, public and private bodies and individuals are encouraged to provide technical assistance and financial or other support at the request of the States or protected area authorities concerned.

30. *Monitoring and revising the Draft Code*

The Draft Code is a dynamic instrument that may need to be updated at intervals to take account of legal, ethical, socio-economic and technical developments and constraints and to ensure that it is both relevant and effective. It should be considered for review, by appropriate bodies and States that have endorsed the Draft Code, at intervals of five years or less where considered necessary.

Annex to the Draft Code

Components of the international legal regime on environmental and humanitarian issues

- (a) *Instruments for conservation, sustainable use and restoration of biological diversity and ecosystem services across boundaries*
- Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar, 1971);
 - Convention for the Protection of the World Cultural and Natural Heritage (Paris, 1972);
 - Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington, 1973);
 - Convention on the Conservation of Migratory Species of Wild Animals (Bonn, 1979);
 - Convention on the Law of the Sea (Montego Bay, 1982);
 - World Charter for Nature (New York, 1982);
 - Convention on Biological Diversity (Rio de Janeiro, 1992);
 - United Nations Framework Convention on Climate Change (Rio de Janeiro, 1992);
 - Rio Declaration on Environment and Development (Rio de Janeiro, 1992);
 - United Nations Convention to Combat Desertification (Paris, 1994);
 - Convention on the Law of the Non-Navigational Uses of International Watercourses (New York, 1997), as well as relevant regional and bilateral conservation instruments and relevant protocols to certain regional seas conventions
- (b) *Instruments concerning respect for human rights*
- Universal Declaration of Human Rights (New York, 1948);
 - Convention on the Prevention and Punishment of the Crime of Genocide (New York, 1948);
 - Convention Relating to the Status of Refugees (Geneva, 1951) and its Protocol Relating to the Status of Refugees (New York, 1967);
 - International Convention on the Elimination of All Forms of Racial Discrimination (New York, 1965);
 - International Covenant on Civil and Political Rights (New York, 1966);
 - International Covenant on Economic, Social and Cultural Rights (New York, 1966);
 - Convention on the Elimination of All Forms of Discrimination against Women (New York, 1979);
 - Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (New York, 1984);
 - ILO Convention concerning Indigenous and Tribal Peoples in Independent Countries (Geneva, 1989);
 - Convention on the Rights of the Child (New York, 1990)
- (c) *Instruments prohibiting environmentally damaging methods or means of warfare and/or mandating protection of the natural or cultural environment against avoidable harm in areas of armed conflict*

- Convention on the Protection of Cultural Property in the Event of Armed Conflict (The Hague, 1954);
- Declaration on Principles of International Law concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations (New York, 1970);
- Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques (New York, 1976), Protocols I and II Additional to the Geneva Convention of 12 August 1949 respectively relating to the Protection of Victims of International Armed Conflicts (Berne, 1977);
- Protection of Victims of Non-International Armed Conflicts (Berne, 1977);
- Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects (New York, 1981);
- Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (New York, 1993);
- Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction (Ottawa, 1997);
- Statute of the International Criminal Court (New York, 1995);
- The customary law of war and the IUCN Draft Convention on the Prohibition of Hostile Military Activities in Protected Areas.

ANNEXURE 2

TREATY

BETWEEN

THE GOVERNMENT OF THE REPUBLIC OF
MOZAMBIQUE,

THE GOVERNMENT OF THE REPUBLIC OF
SOUTH AFRICA

AND

THE GOVERNMENT OF THE REPUBLIC OF
ZIMBABWE

ON THE ESTABLISHMENT
OF THE
GREAT LIMPOPO TRANSFRONTIER PARK

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As an affiliation of nations steeped in a common tradition of close association with our sustaining earth, Mozambique, South Africa and Zimbabwe join in recognition of our mutual responsibility to protect and preserve our natural resources for the common good of all.

We embrace this responsibility as Partners and undertake to develop a wildlife sanctuary across political boundaries, where animals may freely roam and flourish in keeping with natural ecological processes.

We do this because as sure as the flower and the bee depend on each other for survival, so too the well-being of humankind is bound to our effective custodianship of the natural heritage entrusted to us.

We furthermore undertake to uphold high ideals and standards in jointly managing this natural treasure, for the spiritual and social upliftment of our people, and for succeeding generations to come.

PREAMBLE

The Government of the Republic of Mozambique, the Government of the Republic of South Africa and the Government of the Republic of Zimbabwe (hereinafter jointly referred to as the "Parties" and in the singular as a "Party");

RECOGNISING the principle of sovereign equality and territorial integrity of their states;

TAKING ACCOUNT of the benefits to be derived from close co-operation and the maintenance of friendly relations with each other;

CONSCIOUS of our responsibility to conserve and sustainably use natural resources for present and future generations;

ACKNOWLEDGING the necessity to conserve the environment for the benefit of all the people of Southern Africa;

RECOGNISING the important role of the private sector and local communities in the promotion and sustainable use of natural resources;

RECALLING that the countries establishing the Great Limpopo Transfrontier Park are signatories of, or parties to, the Convention on Biological Diversity (Rio de Janeiro, 1992); the United Nations Convention to Combat Desertification (Paris, 1994); the Treaty of the Southern African Development Community (SADC) (Windhoek, 1992); the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) (Washington, 1973), as well as other Conventions and Agreements of relevance; and

DESIRING to promote ecosystem integrity, biodiversity conservation and sustainable socio-economic development across international boundaries;

HEREBY AGREE as follows:

ARTICLE 1**Definitions**

In this Treaty:

- (a) "conservation" means the protection, maintenance, rehabilitation, restoration and enhancement of ecological processes, natural resources and the environment;
- (b) "conservation area" means an area designated for conservation;
- (c) "Co-ordinating Party" means that country which on a rotational basis of two years shall be held accountable for routine initiation of meetings and achieving overall co-ordination of activities relating to management of the Great Limpopo Transfrontier Park, as provided for in Article 12;
- (d) "Transfrontier Park" means the Great Limpopo Transfrontier Park as established in terms of Article 2;
- (e) "TFCA" means the larger Transfrontier Conservation Area as provided for in Article 3;
- (f) "JMB" means the Joint Management Board as provided for in Article 11;
- (g) "Joint Management Plan" means the management plan for the Great Limpopo Transfrontier Park provided for in Article 13;
- (h) "local communities" or "communities" means groups of people living in and adjacent to the area of the Great Limpopo Transfrontier Park, bound together by social and economic relations based on shared interest;

- (i) "Management Plan" means the specific plan providing for the management of a constituent area making up the Great Limpopo Transfrontier Park;
- (j) "Ministerial Committee" means the Ministerial Committee as provided for in Article 10;
- (k) "National Implementing Agency" means that national institution as formally designated by each government respectively which shall be responsible for the effective management of the Great Limpopo Transfrontier Park, as provided for in Article 8.

ARTICLE 2

Establishment

The Parties hereby establish the Great Limpopo Transfrontier Park, which for the purpose of conservation, socio-economic development and for public enjoyment shall integrate the areas detailed in Article 3, and reflected in the map contained in the annexure to this Treaty.

ARTICLE 3

Geographic delimitation

- (1) For the purpose of conservation, socio-economic development and public enjoyment, the Transfrontier Park shall integrate the following areas:
 - (a) In Mozambique, the area known as -

Limpopo National Park;
 - (b) in South Africa, the areas known as -
 - (i) Kruger National Park; and

- (ii) the Makuleke Region;
- (c) in Zimbabwe, the areas known as -
- (i) Gonarezhou National Park;
 - (ii) Malipati Safari Area;
 - (iii) Manjinji Pan Sanctuary; and
 - (iv) the community areas which constitute the biodiversity corridor linking Gonarezhou to the Kruger National Park further south.
- (2) The area adjacent to the Transfrontier Park, comprising compatible conservation areas but not lending itself to formal integration with the Transfrontier Park, shall be managed as a Transfrontier Conservation Area.
- (a) In Mozambique these areas include the Banhine and Zinave National Parks, the Massingir and Corumana areas, as well as the interlinking regions;
 - (b) In South Africa and Zimbabwe the areas forming part of the Transfrontier Conservation Area shall include the various privately-owned and state-owned conservation areas directly bordering the Transfrontier Park and which shall be identified in future.

ARTICLE 4

Objectives

The objectives of the Transfrontier Park shall be to –

- (a) foster trans-national collaboration and co-operation among the Parties which will facilitate effective ecosystem management in the area comprising the Transfrontier Park;

- (b) promote alliances in the management of biological natural resources by encouraging social, economic and other partnerships among the Parties, including the private sector, local communities and non-governmental organisations;
- (c) enhance ecosystem integrity and natural ecological processes by harmonising environmental management procedures across international boundaries and striving to remove artificial barriers impeding the natural movement of wildlife;
- (d) facilitate the establishment and maintenance of a sustainable sub-regional economic base through appropriate development frameworks, strategies and work plans;
- (e) develop trans-border eco-tourism as a means of fostering regional socio-economic development; and
- (f) establish mechanisms to facilitate the exchange of technical, scientific and legal information for the joint management of the ecosystem.

ARTICLE 5

Principles

- (1) The sovereign rights of each Party shall be respected, and no Party shall impose decisions on another.
- (2) The process of managing the Transfrontier Park shall be done through joint decision-making by accredited country representatives, in terms of this Treaty.
- (3) The Parties undertake to follow relevant regional and international treaties and protocols in the development and management of the Transfrontier Park.

ARTICLE 6**Co-operation**

- (1) The Parties shall ensure that the Transfrontier Park is managed in accordance with the broad objectives, as outlined in Article 4, and in particular the Joint Management Plan.

- (2) The Parties shall -
 - (a) consult, assist and support each other in the implementation of this Treaty;
 - (b) promote an integrated and co-ordinated management of the Transfrontier Park for its optimal benefit;
 - (c) use their best endeavours to harmonise legislation and policies to facilitate integrated and complementary conservation and socio-economic development activities;
 - (d) ensure that effective measures are implemented and maintained to address issues relating to customs and immigration, security and borderline control, public health, wildlife diseases and other matters which affect relations between the Parties;
 - (e) synchronize related development actions in areas bordering each other ; and
 - (f) enter into further agreements which may be required to give effect to the spirit and intent of this Treaty.

ARTICLE 7**Security and Borderline Control**

- (1) The Parties acknowledge that the Defence, Police, Security and other state agencies responsible for national border integrity are entitled to perform statutory functions of borderline protection and control as may be permitted by domestic law.

- (2) The Parties undertake that where necessary the activities of such state agencies shall be coordinated between the Parties and will be so done with sensitivity for the areas, management objectives and eco-tourism activities in and around the areas of activity.

- (3) The Parties further undertake that where agreement to that effect has been reached, fences shall be erected or retained and that such fences shall be kept in effective condition in accordance with specifications and standards to be agreed upon. Where such fences have been agreed on, the cost of erecting and maintaining such fences shall accrue to the authorities responsible for the particular constituent area in which a particular fence or part thereof exists.
- (4) Where fences have been removed from previous international boundaries, each Party undertakes to respect the sovereign rights of a bordering Party and not to allow its officials to cross into a bordering Party's territory, unless previously agreed on through either arrangement with the JMB or appropriate communication between mandated security or other designated agencies of the Parties.

ARTICLE 8

Implementation

Each Party shall –

- (a) designate a National Implementing Agency responsible for the effective management of the respective constituent areas within its own country;
- (b) delegate such powers and functions to its National Implementing Agency as are required for the effective implementation and co-ordination of all activities relating to the management of the Transfrontier Park.

ARTICLE 9

Institutional Framework

The following bodies shall be responsible for managing the Transfrontier Park:

- (a) The Ministerial Committee;
- (b) the Joint Management Board;
- (c) the Co-ordinating Party
- (d) other bodies may be established if required

ARTICLE 10

The Ministerial Committee

- (1) The Ministerial Committee shall consist of the Ministers mandated by the respective Parties.
- (2) The Ministerial Committee shall –
 - (a) be responsible for the overall policy guidance in the management of the Transfrontier Park;
 - (b) be chaired on a rotational basis;
 - (c) meet at least once a year; and
 - (d) monitor the effectiveness of the implementation of the Joint Management Plan.
- (3) The decisions of the Ministerial Committee shall be taken by consensus.

ARTICLE 11**The Joint Management Board**

- (1) The JMB shall consist of the following representatives -
 - (a) Two from each of the National Implementing Agencies of the Parties;
 - (b) one from the national institutions responsible for borderline control of the Parties;
 - (c) one appointed as deemed fit by each of the Parties.

- (2) The JMB shall -
 - (a) be responsible for periodic revision and implementation of the Joint Management Plan for the Transfrontier Park, in accordance with Article 13 (2);
 - (b) determine mechanisms for administering funds received specifically for the Transfrontier Park;
 - (c) be responsible for identifying financial needs and sourcing such funds as are required to achieve the effective implementation of the Joint Management Plan;
 - (d) establish such committees as may be necessary;
 - (e) provide reports to the Ministerial Committee.

- (3) The JMB shall -
 - (a) be chaired and hosted on a rotational basis; and
 - (b) meet on a quarterly basis.

- (4) Decisions of the JMB shall be taken by consensus.

- (5) A quorum at all meetings of the JMB shall consist of six representatives of whom one shall be an appointee of the Mozambican National Implementing Agency, one from the South

African National Implementing Agency, one from the Zimbabwean National Implementing Agency, and one other representative from each of the Parties.

ARTICLE 12

The Co-ordinating Party

- (1) A specific Party shall be designated on a rotational basis as Co-ordinating Party in order to promote accountability and sustain momentum in the management of the Transfrontier Park.
- (2) The Co-ordinating Party shall be appointed for a period of two years.
- (3) A Party may elect to forfeit its designation as Co-ordinating Party, depending on the circumstances, in which event the function shall rotate to the next eligible Party.
- (4) The JMB shall recommend the appointment of the Co-ordinating Party with final designation vesting in the Ministerial Committee.
- (5) The Co-ordinating Party shall -
 - (a) co-ordinate the activities associated with the management of the Transfrontier Park;
 - (b) ensure that an effective JMB is maintained, with full representation by all the Parties and that a working programme focussed on achieving the objectives of the Transfrontier Park is sustained;
 - (c) co-ordinate, with full participation of all relevant stakeholders, the implementation and periodic revision of an effective Joint Management Plan for the Transfrontier Park;
 - (d) apply, in the management of the Transfrontier Park, processes and procedures which are in accordance with the relevant regional and international treaties and protocols;

- (e) prepare reports for the Ministerial Committee and the JMB;
- (f) facilitate the convening of meetings held to give effect to this Treaty;
- (g) liaise with the Parties in identifying sources of funding and joint activities that require funding.

ARTICLE 13

Management Plans

- (1) Each National Implementing Agency shall be responsible for ensuring that the Management Plan for its areas are periodically revised.
- (2) The JMB shall be responsible for ensuring that an overall, Joint Management Plan is maintained, periodically revised, and implemented. This Joint Management Plan shall address tourism flows, revenue matters, and other issues of common interest and mutual impact.

ARTICLE 14

Financing

- (1) Sourcing of funds required to achieve the effective implementation of the Joint Management Plan shall be done either directly or indirectly from the National Implementing Agency of each Party, donor agencies, aid agencies, or other means approved by prior consent of the Ministerial Committee.
- (2) The administration of funds shall be undertaken by the Financial Departments or equivalent structures within each of the National Implementing Agencies of the Parties, or by donor agencies or aid agencies. However, this arrangement is in no way meant to detract from the ability of the JMB to decide and prioritise on financial needs, and decision-making regarding expenditure to ensure the achievement of the objectives of this Treaty.

ARTICLE 15

Settlement of Disputes

- (1) In the event of any dispute arising between the Parties as to the interpretation, application or performance of this Treaty including its existence, validity or termination, such dispute shall be settled amicably through consultation and negotiation between the Parties, through the diplomatic channels or be referred for mediation.
- (2) Should the dispute not be resolved in the manner referred to above, any Party may submit the dispute for final and binding arbitration in accordance with The Hague Permanent Court of Arbitration Optional Rules for Arbitrating Between Two States and as modified by the Parties if required, as in effect on the date of signature of this Treaty.
- (3) The appointing authority shall be the Secretary General of the Permanent Court of Arbitration in The Hague.

ARTICLE 16

Amendments

This Treaty may be amended by mutual consent of the Parties through an exchange of notes between the Parties through the diplomatic channel.

ARTICLE 17

Reservation

The articles of this Treaty shall not be subject to reservation.

ARTICLE 18

Depository

The Secretary General of the United Nations shall be designated as the depository of this Treaty.

ARTICLE 19

Entry into Force

- (1) This Treaty shall enter into force on the date on which each Party has notified the other in writing, through the diplomatic channels, of its compliance with the constitutional requirements necessary for the implementation of this Treaty. The date of entry into force shall be the date of the last notification.
- (2) In the event of any one Party signing this Treaty but not notifying the other Parties of compliance of constitutional requirements within that country, then the Treaty will only enter into force between those countries which have duly signed and notified each other of compliance of constitutional requirements.

ARTICLE 20

Withdrawal or Termination

- (1) Any of the Parties may give 12 months written notice in advance to the other Parties through the diplomatic channels of its intention to withdraw from this Treaty, in which event the Treaty shall remain in force between the remaining two Parties.
- (2) In the event of the Treaty being enforced between two of the Parties it shall remain in force until terminated by any of them giving 12 months written notice in advance to the other Party through the diplomatic channel of its intention to terminate it.

ANNEXURE 3

**SADC Protocol on Wildlife Conservation and Law
Enforcement**

SADC Protocol on Wildlife Conservation and Law Enforcement

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PREAMBLE

WE, the Heads of State or Government of:

The Republic of Angola
 The Republic of Botswana
 The Democratic Republic of Congo
 The Kingdom of Lesotho
 The Republic of Malawi
 The Republic of Mauritius
 The Republic of Mozambique
 The Republic of Namibia
 The Republic of Seychelles
 The Republic of South Africa
 The Kingdom of Swaziland
 The United Republic of Tanzania
 The Republic of Zambia
 The Republic of Zimbabwe

AFFIRMING that Member States have the sovereign right to manage their wildlife resources and the corresponding responsibility to sustainably use and conserve these resources;

NOTING that Article 5 of the SADC Treaty states that the sustainable use of natural resources and effective protection of the environment is one of the objectives of SADC;

NOTING also that Article 21 of the SADC Treaty designates natural resources and environment as an area of co-operation for SADC Member States;

AWARE that the conservation and sustainable use of wildlife in the SADC Region contribute to sustainable economic development and the conservation of biological diversity;

CONVINCED that the viability of wildlife resources in the SADC Region requires collective and co-operative action by all SADC Member States;

CONVINCED also that the conservation and sustainable use of wildlife in the SADC Region depend on the proper management and utilisation of wildlife, including enforcement of laws governing such use ;

RECOGNISING that the survival of wildlife depends on the perceptions and development needs of people living with wildlife;

BELIEVING that the regional management of wildlife and wildlife products will promote awareness of the socio-economic value of wildlife and enable equitable distribution of the benefits derived from the sustainable use of wildlife;

ACKNOWLEDGING the need for co-operation among Member States in enforcing laws governing wildlife, in sharing information about wildlife resources and wildlife law enforcement, and in building national and regional capacity to manage wildlife and enforce the laws that govern it;

RECALLING that all SADC Member States are members of the International Criminal Police Organisation (Interpol), and that all are signatories or parties to the Convention on Biological Diversity (Rio de Janeiro, 1992), the African Convention on the Conservation of Nature and

Natural Resources (Algiers, 1968) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Washington, 1973);

NOTING ALSO the agreement for the establishment of the Southern African Convention for Wildlife Management (SACWM, 1990), the Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora (Lusaka, 1994) and the Master Plan for the Security of Rhino and Elephant in Southern Africa (1996);

DESIRING to establish a common framework for the conservation and sustainable use of wildlife resources in the SADC Region and to assist with the effective enforcement of laws governing those resources;

HEREBY agree as follows:

ARTICLE 1 DEFINITIONS

In this Protocol the terms and expressions defined in Article 1 of the Treaty shall bear the same meaning unless the context otherwise requires.

In this Protocol, unless the context otherwise requires:

"Community-based wildlife management" means the management of wildlife by a community or group of communities which has the right to manage the wildlife and to receive the benefits from that management;

"Conservation"

means the protection, maintenance, rehabilitation, restoration and enhancement of wildlife and includes the management of the use of wildlife to ensure the sustainability of such use;

"State Party"

means a member of SADC that ratifies or accedes to this Protocol;

"Sustainable use" means use in a way and at a rate that does not lead to the long-term decline of wildlife species;

"Transfrontier conservation area"

means the area or the component of a large ecological region that straddles the boundaries of two or more countries, encompassing one or more protected areas, as well as multiple resources use areas;

"Taking" means the hunting, killing, injuring, capturing, harassing, collecting, picking, uprooting, digging up, cutting, destruction and removal of any species of wildlife and include any attempt to engage in such conduct;

"Wildlife"

means animal and plant species occurring within natural ecosystems and habitats;

ARTICLE 2 SCOPE

This Protocol applies to the conservation and sustainable use of wildlife, excluding forestry and fishery resources.

ARTICLE 3 PRINCIPLES

1. Each State Party shall ensure the conservation and sustainable use of wildlife resources under its jurisdiction. Each State Party shall ensure that activities within its jurisdiction or control do not cause damage to the wildlife resources of other states or in areas beyond the limits of national jurisdiction.

2. Pursuant to the attainment of the principles contained in Article 3 of this Protocol, States Parties shall:

a) ensure co-operation at the national level among governmental authorities, non-governmental organisations hereinafter referred to as NGOs, and the private sector;

b) cooperate to develop as far as possible common approaches to the conservation and sustainable use of wildlife; and

c) collaborate to achieve the objectives of international agreements which are applicable to the conservation and sustainable use of wildlife and to which they are party.

In implementing this Protocol, States Parties shall:

a) take such policy, administrative and legal measures as appropriate to ensure the conservation and sustainable use of wildlife;

b) take measures as are necessary to enforce national legislation pertaining to wildlife effectively; and

c) cooperate with other Member States to manage shared wildlife resources as well as any transfrontier effects of activities within their jurisdiction or control.

ARTICLE 4 OBJECTIVES

1. The primary objective of this Protocol is to establish within the Region and within the framework of the respective national laws of each State Party, common approaches to the conservation and sustainable use of wildlife resources and to assist with the effective enforcement of laws governing those resources.

2. To this end, specific objectives of this Protocol shall be to:

a) promote the sustainable use of wildlife;

b) harmonise legal instruments governing wildlife use and conservation;

c) enforce wildlife laws within, between and among States Parties;

- d) facilitate the exchange of information concerning wildlife management, utilisation and the enforcement of wildlife laws;
- e) assist in the building of national and regional capacity for wildlife management, conservation and enforcement of wildlife laws;
- f) promote the conservation of shared wildlife resources through the establishment of transfrontier conservation areas; and
- g) facilitate community-based natural resources management practices for management of wildlife resources.

ARTICLE 5 INSTITUTIONAL ARRANGEMENTS

1. The institutional arrangements shall be:

- a) the Wildlife Sector Technical Coordinating Unit;
- b) the Committee of Ministers responsible for Food, Agriculture and Natural Resources;
- c) the Committee of Senior Officials; and
- d) Technical Committee.

2. The Committee of Ministers responsible for Food, Agriculture and Natural Resources shall:

- a) be composed of Ministers responsible for Food, Agriculture and Natural Resources in Member States;
- b) meet at least once a year; and
- c) be chaired by the Minister representing the Member State co-ordinating for Food, Agriculture and Natural Resources.

3. The functions of the Committee of Ministers shall include:

- a) adopting regional wildlife policies and development strategies;
- b) considering and approving any amendment to the policies and strategies;
- c) providing policy guidance with respect to matters referred to it by the Committee of Senior Officials;
- d) considering and approving the sectoral Annual Report before submission to the Council;
- e) submitting proposals to the Council for amending the provisions of this Protocol;
- f) supervising the implementation of this Protocol;
- g) supervising the work of any Committee or Sub-committee established under this Protocol;

4. The Committee of Senior Officials shall:

- a) consist of administrative heads of Ministries responsible for wildlife or their representatives;
- b) meet at least once a year;
- c) be chaired by the nominated officials representing the country responsible for Food, Agriculture and Natural Resources.

5. The functions of the Committee of Senior Officials shall include:

- a) assessing the requirements of and the need for updating and amending the regional policy and development strategies;
- b) reviewing and coordinating the activities of the Committees;
- c) considering any amendment to this Protocol;
- d) reporting to the Committee of Ministers of Food, Agriculture and Natural Resources on matters relating to the implementation of the provisions contained in this Protocol;
- e) reviewing the work of the Wildlife Sector;
- f) approving the documents prepared by the Wildlife Sector Technical Coordinating Unit (hereinafter referred to as WSTCU) to be submitted to the Committee of Ministers of Food, Agriculture and Natural Resources;
- g) monitoring the implementation of this Protocol; and
- h) performing such other functions as may be determined by the Committee of Ministers.

6. The Wildlife Sector Technical Committee (hereinafter referred to as WSTCU) shall comprise the Heads of Wildlife Departments or their representatives and shall:

- a) meet at least once a year;
- b) be chaired by the official representing the country responsible for co-ordinating the Wildlife Sector

7. The functions of the Wildlife Sector Technical Committee shall be to;

- a) supervise the implementation of this Protocol; and
- b) co-ordinate development of policy guidelines for common SADC regional approaches to the conservation and sustainable use of wildlife.

8. The WSTCU shall:

- a) be the Secretariat responsible for implementing this Protocol at the regional level;

- b) co-ordinate with the designated sectoral contact points;
- c) co-ordinate the efforts of States Parties to adopt common approaches to the conservation and sustainable use of wildlife, to harmonise their applicable legislation, and to co-operate in necessary law enforcement;
- d) support the efforts of Governments and NGOs to ensure the conservation and sustainable use of wildlife and the involvement of local communities in such efforts;
- e) promote such co-operation between the national wildlife law enforcement authorities, communities and by NGOs, on all issues related to enforcement;
- f) serve as the regional clearinghouse for the exchange of information;
- g) co-ordinate SADC regional programmes for research and capacity building in the management of wildlife;
- h) liaise with other SADC sectors to promote intersectoral co-operation in wildlife management; such as standardising veterinary regulations which govern the movement of wildlife and wildlife products; and
- i) perform any other task which may be assigned by the Council for the purpose of implementing this Protocol.

ARTICLE 6

LEGAL INSTRUMENTS FOR THE CONSERVATION AND SUSTAINABLE USE OF WILDLIFE

1. States Parties shall adopt and enforce legal instruments necessary to ensure the conservation and sustainable use of wildlife as provided in Article 7 of this Protocol.
2. States Parties shall endeavour to harmonise national legal instruments governing the conservation and sustainable use of wildlife; such harmonisation shall include but not be limited to standardising:
 - a) measures for the protection of wildlife species and their habitat;
 - b) measures governing the taking of wildlife;
 - c) measures governing the trade in wildlife and wildlife products and bringing the penalties for the illegal taking of wildlife and the illegal trade in wildlife and wildlife products to comparable deterrent levels;
 - d) powers granted to wildlife law enforcement officers;
 - e) procedures to ensure that individuals charged with violating national laws governing the taking of and trading in wildlife and wildlife products are either extradited or appropriately sanctioned in their home country;
 - f) measures facilitating community based natural resources management practices in wildlife management and wildlife law enforcement;

g) economic and social incentives for the conservation and sustainable use of wildlife;

h) measures incorporating obligations assumed under applicable international agreements to which Member States are party;

i) any other measures which the Council may deem necessary.

3. The WSTCU shall co-ordinate initiatives of Member States to harmonise national legislation governing the conservation and sustainable use of wildlife.

ARTICLE 7 WILDLIFE MANAGEMENT AND CONSERVATION PROGRAMMES

1. States Parties shall establish management programmes for the conservation and sustainable use of wildlife and integrate such programmes into national development plans.

2. States Parties shall assess and control activities which may significantly affect the conservation and sustainable use of wildlife so as to avoid or minimise negative impacts.

3. Measures which shall be taken by States Parties to ensure the conservation and sustainable use of wildlife shall include -

a) the protection of wildlife and wildlife habitats to ensure the maintenance of viable wildlife populations;

b) prevention of over-exploitation and extinction of species;

c) restrictions on the taking of wildlife, including but not limited to restrictions on the number, sex, size or age of specimens taken and the locality and season during which they may be taken; and

d) restrictions on trade in wildlife and its products, both nationally and internationally, as required by relevant international agreements.

4. States Parties shall establish or introduce mechanisms for community-based wildlife management and shall, as appropriate, integrate principles, and techniques derived from indigenous knowledge systems into national wildlife management and law enforcement policies and procedures.

5. States Parties shall, as appropriate, establish programmes and enter into agreements:

a) to promote the co-operative management of shared wildlife resources and wildlife habitats across international borders; and

b) to promote co-operative management, the conservation of species and populations and the marketing of their products.

6. States Parties shall, as appropriate, promote economic and social incentives to encourage the conservation and sustainable use of wildlife.

7. States Parties shall, as appropriate, develop programmes and mechanisms to:

- a) educate the general public and raise public awareness concerning issues of the conservation and sustainable use of wildlife;
- b) build national and regional capacity for wildlife management and law enforcement;
- c) promote research which contributes to and supports the conservation and sustainable use of wildlife.

8. States Parties shall in recognition of the important role played by rural communities in the conservation and sustainable use of wildlife, promote community-based conservation and management of wildlife resources.

9. States Parties shall, in recognition of the location of key wildlife resources near international boundaries, promote the development of trans frontier conservation and management programmes.

ARTICLE 8 INFORMATION SHARING

1. The States Parties shall establish a regional database on the status and management of wildlife. The regional database shall:

- a) comprise data on all wildlife resources within the Region; and
- b) be accessible to States Parties and to the general public.

2. The WSTCU shall:

- a) co-ordinate surveys of all wildlife databases in the SADC Region;
- b) on the basis of the results of the surveys, coordinate the establishment of a Regional database which complements those already in existence;
- c) co-ordinate the development of standard methodologies for wildlife inventories;
- d) upon request assist efforts at the national level and co-ordinate efforts at the regional level to gather data for incorporation into the regional database;
- e) serve as the clearing house mechanism for the regional database;
- f) ensure that the regional database is linked with other appropriate databases in the Region and that it is mutually accessible; and
- g) perform any other task necessary for the establishment and functioning of the regional database.

ARTICLE 9 CO-OPERATION IN WILDLIFE LAW ENFORCEMENT

1. States Parties shall take the necessary measures to ensure the effective enforcement of legislation governing the conservation and sustainable use of wildlife.
2. States Parties shall allocate the financial and human resources required for the effective enforcement of legislation governing the conservation and sustainable use of wildlife.
3. States Parties shall enforce legislation governing the conservation and sustainable use of wildlife, particularly in trans frontier contexts. Such enforcement shall include:
 - a) coordinating with their designated Interpol National Central Bureaus (Interpol NCBs);
 - b) exchanging information concerning the illegal taking of, and trade in, wildlife and wildlife products;
 - c) co-ordinating efforts with wildlife law enforcement authorities and Interpol NCBs to apprehend illegal takers and traders and to recover and dispose of illegal wildlife products; and
 - d) undertaking any other initiatives which promote the effective and efficient enforcement of wildlife laws and regulations within, between and among States Parties.
4. Through the designated Interpol NCB, the wildlife law enforcement authorities in a State Party may request from the designated Interpol NCB in any other State Party or States Parties any assistance or information which may be required to locate, apprehend, or extradite an individual charged with violating the wildlife laws of the State Party.
5. The wildlife law enforcement authorities in each State Party shall provide to the designated Interpol NCB in that Member State all available data on, inter alia, the location and movements of illegal takers and traders and the location of routes for illegal transfrontier trafficking in wildlife and wildlife products, except where the provision of such information would jeopardise investigations or impinge on the security of a State Party.

ARTICLE 10 CAPACITY-BUILDING FOR EFFECTIVE WILDLIFE MANAGEMENT

1. States Parties shall co-operate in capacity-building for effective wildlife management.
2. States Parties shall endeavour to incorporate into existing training programmes, techniques such as community-based natural resources management and administration, indigenous knowledge systems as well as current practices in both the wildlife management and wildlife law enforcement fields.
3. States Parties shall identify aspects of wildlife management and wildlife law enforcement for which adequate training programmes are not available within the Region and shall establish training programmes to meet the needs identified.

4. The WSTCU shall co-ordinate, at the regional level, initiatives of States Parties to standardise and initiate training programmes.

ARTICLE 11 FINANCIAL PROVISIONS

1. States Parties shall allocate the necessary financial resources for the effective implementation of this Protocol at the national level.

2. Member States shall meet their own expenses for attending meetings of the WSTC .

3. Member States shall create a fund known as the Wildlife Conservation Fund for programmes and projects associated with this Protocol pursuant to Article 25 of the Treaty.

4. Other resources of the Wildlife Conservation Fund may include grants, donations, technical assistance and funds for specified projects and programmes pursuant to this Protocol.

ARTICLE 12 SANCTIONS

1. Sanctions may be imposed against any State Party which:

a) persistently fails, without good reason, to fulfil obligations assumed under this Protocol; or

b) implements policies which undermine the objectives and principles of this Protocol.

2. The Council shall determine whether any sanction should be imposed against a State Party and shall make the recommendation to the Summit if it decides that a sanction is called for. The Summit shall decide, on a case-by-case basis, the appropriate sanction to be imposed.

ARTICLE 13 SETTLEMENT OF DISPUTES

Any dispute arising from the interpretation or application of this Protocol which cannot be settled amicably shall be referred to the Tribunal for adjudication.

ARTICLE 14 ANNEXES

1. States Parties may develop and adopt annexes for the implementation of this Protocol.

2. An annex shall form an integral part of this Protocol unless the annex contains a provision stipulating otherwise.

**ARTICLE 15
AMENDMENT**

1. An amendment to this Protocol shall be adopted by a decision of Members of the Summit who are Parties to this Protocol.

2. A proposal for the amendment of this Protocol may be made to the Executive Secretary by any State Party to this Protocol. Within thirty (30) days of receipt, the Executive Secretary shall notify the States Parties to this Protocol of any proposal for amendment. Three (3) months after notification, the Executive Secretary shall submit the proposal for amendment to the Council for preliminary consideration.

**ARTICLE 16
SIGNATURE**

This Protocol shall be signed by the duly authorised representatives of the Member States.

**ARTICLE 17
RATIFICATION**

This Protocol shall be ratified by the signatory Member States in accordance with their constitutional procedures.

**ARTICLE 18
ENTRY INTO FORCE**

This Protocol shall enter into force thirty (30) days after the deposit of the instruments of ratification by two-thirds of the Member States.

**ARTICLE 19
ACCESSION**

This Protocol shall remain open for accession by any Member State.

**ARTICLE 20
RESERVATIONS**

No reservations shall be made to this Protocol.

**ARTICLE 21
WITHDRAWAL**

1. Any State Party wishing to withdraw from this Protocol shall give written notice of its intention, six (6) months in advance, to the Executive Secretary. Withdrawal shall be effective on the date of expiration of the notice period.

2. Any States Parties withdrawing from this Protocol shall:

a) cease to enjoy all rights and benefits under this Protocol from the effective date of the withdrawal;

b) remain bound to the obligations assumed under this Protocol for a period of twelve (12) months from the date of withdrawal.

ARTICLE 22 TERMINATION

This Protocol may be terminated by a decision of the Summit.

ARTICLE 23 DEPOSITARY

1. The original text of this Protocol and all instruments of ratification and accession shall be deposited with the Executive Secretary who shall transmit certified copies to all Member States.

2. The Executive Secretary shall register this Protocol with the Secretariats of the United Nations and the Organisation of African Unity.

IN WITNESS WHEREOF, WE, the Heads of State or Government, or duly authorised representatives of SADC Member States have signed this Protocol.

DONE at Maputo, on the 18th day of August, 1999, in two (2) original texts, in the English and Portuguese languages, both texts being equally authentic.

REPUBLIC OF ANGOLA
REPUBLIC OF BOTSWANA
DEMOCRATIC REPUBLIC OF CONGO
KINGDOM OF LESOTHO
REPUBLIC OF MALAWI
PUBLIC OF MAURITIUS
REPUBLIC OF MOZAMBIQUE
REPUBLIC OF NAMIBIA
REPUBLIC OF SEYCHELLES
REPUBLIC OF SOUTH AFRICA
KINGDOM OF SWAZILAND
UNITED REPUBLIC OF TANZANIA
REPUBLIC OF ZAMBIA
REPUBLIC OF ZIMBABWE

8. References

Braack, L.E.O. *In Press*. African National Parks under Challenge: Novel approaches in South Africa may offer respite. IN: GORDON, M., and BARTOL, S. (Eds.). *Experimental approaches to Conservation Biology*. University of California Press, Los Angeles.

Braack, L.E.O., and Greyling, L. *In Preparation*. Stakeholder consultation and participation in conservation planning – Importance and Process.

Braack, L.E.O., and Peddle, D. 2003. Security and Border Control. IN: Braack, L.E.O., Petermann, T., and Lerise, F. March 2003. *Transboundary Protected Areas: Guiding Approaches and Processes in East Africa*. Unpublished report of a workshop 24-28 February 2003 arranged by Internationale Weiterbildung und Entwicklung (InWEnt), Zschortau, Germany.

De Villiers, B. 1999. *Peace Parks – The Way Ahead: International Experience and Indicators for Southern Africa*. HSRC Publishers, Pretoria. 148pp

East African Community Secretariat, in conjunction with the German Agency for Technical Co-operation (GTZ). 2002. *The Treaty for the Establishment of the East African Community. Signed on November 30th 199, Entered into Force July 7th 2000*. Arusha, Tanzania.

Griffin, J., Cumming, D., Metcalf, S., t'Sas-Rolfes, M., Singh, J., Chonguica, E., Rowen, M., and Oglethorpe, J. 1999. *Study on the Development of Transboundary Natural Resource Management Areas in Southern Africa*. Biodiversity Support Programme, Washington, DC, USA.

Hall-Martin, A., and Modise, S. 2002. *Existing and Potential Transfrontier Conservation Areas in the SADC Region*. Unpublished Report prepared for and funded by the Peace Parks Foundation, the Regional Tourism Organisation of Southern Africa, and the Development Bank of Southern Africa. 143pp.

IUCN. 1994. *Guidelines for protected area management categories*. CNPPA with the assistance of WCMC. IUCN, Gland, Switzerland and Cambridge, U.K.

Oxford English Dictionary, Volume IX. 1978. Oxford University Press, Oxford.

Petermann, T., and Braack, L.E.O. 2002. *Transboundary Protected Areas: Guidelines for Good Practises and Implementation*. Unpublished report of a workshop 25-30 November 2002, arranged by Internationale Weiterbildung und Entwicklung (InWEnt), Zschortau, Germany.

Ponce, C., and Alcalde, M. 2003. The Condor Corridor. *Tropical Forest Update* 13(2): 13-14.

Sandwith, T., Shine, C., Hamilton, L. and Sheppard, David. 2001. *Transboundary Protected Areas for Peace and Co-operation*. IUCN, Gland, Switzerland and Cambridge, U.K. xi + 111pp.

Shambough, J., Oglethorpe, J. and Ham, R. (with contributions from S. Tognetti). 2001. *The Trampled Grass: Mitigating the impacts of armed conflict on the environment*. Washington, DC, USA.: Biodiversity Support Programme.

Southern African Development Community (SADC) Wildlife Sector Technical Co-ordinating Unit. 1999. *Protocol on Wildlife Conservation and Law Enforcement*. Signed 18th August 1999, Maputo Mozambique.

Tallone, G. 2003. Siachen Peace Park: a case study for the valorisation of high mountain ecosystems. *Unpublished presentation during the 5th World Parks Congress, Durban, South Africa, September 2003. (evk2cnr@mountnet.net)*.

The DMZ Forum (for Peace and Nature Conservation). 2003. *Toward Peace and Environmental Security for Korea*. The DMZ Forum, Inc, East Meadow, NY, USA (www.dmzforum.org).

van der Linde, H., Oglethorpe, J., Sandwith, T., Snelson, D. and Tessema, Y (with contributions from A. Tiega and T. Price). 2001. *Beyond Boundaries: Transboundary Natural Resource Management in Sub-Saharan Africa*. Washington, D.C., USA.: Biodiversity Support Programme.