Future prospects of information warfare and particularly psychological operations

Mario Silvino Brazzoli

INTRODUCTION

The SA Army recently formulated its vision (SA Army Vision 2020) and is currently drafting plans to implement it. These plans should be finalised by the end of 2006, after which implementation down to the lowest level will take place. The SA Army must, however, remain abreast of current developments and trends that will impact on the future to ensure that it remains future-orientated and that its preparation meets the challenges of tomorrow.

The SA Army's hosting of a seminar on 1 and 2 November 2006 is intended as a 'reality check' to ensure that all challenges for future warfare have been addressed in Vision 2020 and as such it will be attended by the army leaders who have to implement the Vision 2020 plans.

Information warfare is identified as an 'effecter' on the battlefield, as the offensive capabilities can have a destructive impact on the information and communication technology (ICT) integrated into today's military. The perception that we need to prepare for a low technology 'African' operational scenario can be dangerous, as money can buy ICT overnight and change the operational environment significantly.

Information warfare (IW) and particularly psychological operations (PsyOps) are major elements in the challenges for future warfare and this paper will consider the future of IW with specific reference to PsyOps.

The challenges for future warfare will be discussed first in order to shed light on the origins and strategic drivers of IW. Background information about IW in the SANDF is then provided, followed by the

description of PsyOps as part of IW. We will also look at the future relevance of and prospects for the application of IW and PsyOps in Africa, as well as the support needed from the SA Army to execute such applications. Force preparation to counter IW and PsyOps attacks will be discussed as an important aspect of the support to the SANDF IW capability.

THE CHALLENGES OF TOMORROW

There is an enduring need in military thinking to deal with the future: be it the very near future in battle or the more distant future for strategic planning. Currently an evolving debate is taking place on the future of war and more and more literature is available on the subject, containing both optimistic and pessimistic views. There are also differing views about whether the future is a continuity of or a change from the present. Is it evolution or revolution? Will we need faster and better tanks or will we have small, unmanned vehicles delivering the necessary firepower?

Both evolution and revolution will bring about shifts in technological innovations, and have already done so. They have led to the information revolution, the advances of computerised information, communication technologies and related innovations. Major changes have taken place in the way we collect, store, process, communicate and present information. This includes the diffusion of ideas and the sharing of information. There are also other factors that have an influence on the evolution or revolution of the future, e.g. ideology, economy, education, innovation, tradition or resistance to change, etc.

Traditional or conventional warfare has already been affected by changes in the global environment. First, there is transparency in this environment owing to the speedy distribution of information, which has also led to regional/global cooperation. Secondly, asymmetrical warfare is challenging the parameters of the military domain. There are no limits or rules in this kind of warfare. It is usually radical and associated with terrorism or crime. Thirdly, there is a global move away from lethal modes of war towards non-lethal modes and ultimately, ideally, a warless future.

Through the ages, it has been evident that the most significant effect on warfare is brought about by human advancement. It is this advancement that has brought us into what we now refer to as the information age. This is an age where humankind believes that knowledge is power. It is

also an age where technology has made the large-scale distribution of information, and thus knowledge, possible. This includes printed media, electronic media, the Internet and telecommunications. Information and information technology are now considered weapons in achieving national objectives via military activity. The information revolution will also change the application of force in the future and determine the way future wars will be fought. The force that has the best information at its disposal will dominate the battlefield of the future. Information is also a strategic resource that may prove valuable and influential in all spheres. This is called information superiority. It has always been the aim of any military force and will play an even more significant role in the future. Information warfare focuses on this aspect of our changing environment.

The information age is characterised by the use of sophisticated information and communication systems. In the case of the military, the availability of these systems has contributed to the better synchronisation of effects in the battle space, improved command and control and increased lethality and responsiveness. However, the mere presence of these systems has created new vulnerabilities and challenges to national and defence security. It is therefore extremely important for the SANDF both to make the most of the advantages offered by modern information and communication systems and to mitigate the vulnerabilities resident in these systems.

It therefore follows that information warfare (IW) is defined as all actions taken to defend the military's information-based processes, information systems and communications networks and to destroy, neutralise or exploit the enemy's similar capabilities within the physical, information and cognitive domains.

BACKGROUND TO INFORMATION WARFARE

A simplified model of the world consists of three domains where occupants conduct their affairs, including doing battle, i.e. the physical, information and cognitive domains. These domains can be summarised as follows:

- The physical domain relates to things perceived through the senses as opposed to the mind or to physics or the operation of natural forces generally. For the military, it is the domain where firepower,

protection and manoeuvre take place across ground, sea, air, space and electromagnetic dimensions. It is the domain where physical sensors, platforms and the communication networks that connect them reside.

- The information domain is where facts or knowledge reside and is represented or conveyed by a particular sequence of symbols, impulses or characterisations. In this domain information is created, manipulated and shared. For the military, it is the domain that enables the communication of information among defence personnel. It is also the domain where the command and control of modern military forces is exerted and where a commander's intent is conveyed.
- The cognitive domain relates to knowledge acquired through thought, experience and the senses, resulting in a perception, sensation or intuition. It is also the place where understanding, beliefs, norms and values reside and where decisions are made. For the military, this is the domain where battles and wars may be won or lost. This is the domain of intangibles: leadership, morale, unit cohesion, level of training, experience, degree of situational awareness and public opinion. Key attributes of this domain have remained relatively constant since Sun Tzu wrote *The Art of War.*

The accompanying figure depicts the above battle space domains.

Note that all the contents within the cognitive domain have passed through a filter labelled human perception. This filter consists of the individual's world view, the body of personal knowledge the individual brings to the situation, his experience, training, values and capabilities (e.g. intelligence, personal style, perceptual acuity, etc.). Since these perceptual filters are unique to each individual, individual cognition is also unique. There is one reality (physical domain). This reality is transformed, by the application of selected data, into knowledge by systems and actors in the information domain.

Although there are attempts to make the cognitive activities of military decision-makers similar, using training and formal shared-experience events, they nevertheless remain unique to each individual. The differences are more significant between individuals from different services, generations, cultures, etc. than they would be for individuals from the same unit, service, culture, etc. This complicates the command and control of activities in the cognitive domain.

Similarly to the simplified model of the world, any military operation can be simplified by reducing the elements of the operation to an instance

Figure 1: Battle space domains
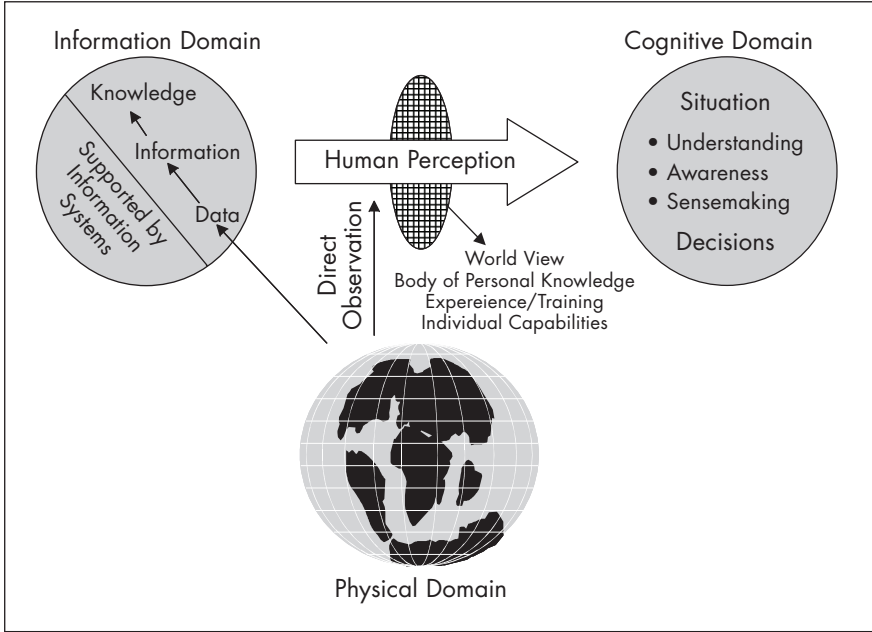
of the 'observe, orientate, decide, act' (OODA) loop. The OODA loop uses command and control, computers, communication, information, intelligence, infrastructure, reconnaissance and surveillance (C4I3RS) to provide the required information-in-warfare on which commanders at all levels of war depend to provide situational awareness. The sum of information-in-warfare and information warfare gives rise to the construct known as information operations.

In order to structure the IW actions of attack, defend and exploit in terms of the OODA loop, IW in the SANDF is organised into six functional areas or pillars, namely command and control warfare (C2W), intelligence-based warfare (IBW), information infrastructure warfare (IIW), electronic warfare (EW), network warfare (NW) and psychological operations (PsyOps).

The C2W pillar ensures the integrity and effectiveness of the decide element and the link between the decide and act elements of the OODA loop and aims to degrade that of the enemy, i.e. C2W ensures that your own head remains connected to your body and aims to remove the head of the enemy.

The IBW pillar aims to enhance the effectiveness of the observe element and to degrade that of the enemy, i.e. IBW enhances your own sensor-to-shooter effectiveness and degrades that of the enemy.

The IIW pillar aims to protect your own information infrastructure and attack or exploit that of the enemy. Information infrastructure in this sense includes not only the communications and network hardware, but also infrastructure such as electrical and fuel supplies that information systems depend on for their continued operation.

The combination of the C2W, IBW and IIW pillars are known as the application domain and the effects required of this domain include destroying, denying, degrading, disrupting, misleading and influencing, as well as preventing the enemy from employing the same tactics against your and your allies' OODA loop elements across the battle space domains.

The EW pillar ensures the availability of the electromagnetic spectrum for your own use, while preventing or exploiting the enemy's use of the spectrum.

The NW pillar is necessary for the protection of your information networks and to attack or exploit enemy information networks.

The activities of the PsyOps pillar are aimed at influencing the attitudes and behaviour of selected target audiences (enemy, foreign, hostile, friendly or neutral) in order to support the achievement of military objectives.

The combination of the EW, NW and PsyOps pillars is known as the enabling domain, as it is in this domain that activities are executed (in an integrative and synchronised approach) to achieve the desired effect in the application domain.

THE PSYOPS PILLAR IN INFORMATION WARFARE

The history of PsyOps spans that of the human race. Sun Tzu strongly advocated the use of PsyOps as a force multiplier as early as 500 BC with maxims like, 'Kill one, frighten ten thousand'. Another early example is occurs in the Book of Judges and took place in 1245 BC when Gideon used lamps to confuse the Midean army as to the size of his own force. More recent examples relate to World War II, Vietnam, the USA's present activities in Afghanistan in Operation Enduring Freedom and the major impact of September 11.

PsyOps in the SANDF is defined as 'planned and co-ordinated psychological activities, including political, economic and military

actions, in peace, military operations other than war and war, in order to influence … emotions, motives, objective reasoning and ultimately attitudes and behaviour to secure the achievement of national and military objectives'.

The ability to manage and change the perceptions of a targeted audience is considered the fourth instrument of power available to a state, the other three being the diplomatic, the economic and the military powers. States not having the required capability for perception management and for countering the perception management capabilities of other states and groups posing a threat to their national security and economic well-being tend to become soft and vulnerable to external forces seeking to undermine the morale and culture of their people and the authority of their governments.

PsyOps refer to the same techniques of influencing the minds of the people. This power has hard and soft aspects. The hard aspect relates to creating in the minds of people negative perceptions of their state, government, society, etc. in order to sow seeds of alienation. The soft aspect refers to projecting before the targeted audience attractive images of the state or group directing the operation in order to create a desire to follow its lead. Both these aspects have the ultimate objective of subverting the mind of the audience and influencing it to act unconsciously as desired by the state or group directing the operation.

In the military context, it is important to note that everything has a psychological effect on a soldier; from the uniform he wears to the infrastructure around him. Everything we sense and experience creates a perception that is different for every individual and that will affect each person's behaviour. These perceptions and consequent behaviours are extremely difficult for a third party to predict.

DEFENSIVE AND OFFENSIVE PSYOPS

PsyOps can be defensive and offensive. Defensive PsyOps entail the shielding and protecting of one's own forces against PsyOps attacks, whether deliberate or accidental, and also identifying and diminishing one's vulnerabilities. This will include military aspects such as leadership, corporate communications, morale and psychological well-being. The SANDF strategy for information warfare defines the required defensive PsyOps capability as follows:

- Identify, predict and understand the enemy/adversary and other PsyOps threats to identified target groups (i.e. own, allied and neutral foreign forces and populations)
- Identify, know and understand the vulnerabilities of identified target groups (i.e. own, allied and neutral foreign forces and populations) to the enemy/adversary and other PsyOps threats
- Proactively strengthen identified target groups (i.e. own, allied and neutral foreign forces and populations) in order to reduce the probable effect of enemy/adversary and other PsyOps activities on them
- Proactively shield identified target groups (i.e. own, allied and neutral foreign forces and populations) from enemy/adversary and other PsyOps activities by warding off and resisting these attacks/activities
- Co-ordinate an appropriate response[1] in order to counteract or neutralise the effect of enemy/adversary and other PsyOps activities against identified target groups (own, allied and neutral foreign forces and populations)

Offensive PsyOps entails the planning and execution of activities in order to create, induce or strengthen attitudes or behaviour detrimental to the enemy and favourable to one's own objectives. According to the SANDF strategy for information warfare, the required offensive PsyOps capability will include the ability to:

- Identify, know and understand the vulnerabilities of identified target groups (i.e. enemy/adversary, foreign and neutral forces and populations) to be exploited by one's own and others' PsyOps
- Develop, provide, deploy and sustain systems to conduct offensive PsyOps in all areas required
- Plan (and if needed conduct) full-spectrum (overt and covert) offensive PsyOps
- Influence the perceptions, attitudes and behaviour of the enemy and other specified target groups in all the required areas, by co-ordinating all 'psychological activities'[2] to achieve the desired psychological effect

PRINCIPLES OF PSYOPS

The first principle of PsyOps is that they must support the commander's intent. It is thus crucial that they form part of the campaign planning from the very beginning. This implies that commanders at all levels need to be aware of PsyOps. The very best PsyOps programme will fail if the same message is not carried forward at all levels.

Some of the other principles of PsyOps mentioned in the doctrines of NATO and other states include timeliness, research, cultural knowledge, co-ordination, honesty, credibility and appropriate style. Getting the message across relies on a clearly-defined mission, analysis of the target population, a course of action and a reliable medium for transmission and continuous evaluation for relevance to the goals of the mission. The Directorate of Information Warfare is in the process of compiling the SANDF PsyOps doctrine, which will define the principles of PsyOps relevant to South Africa.

TOOLS OF THE TRADE

'Tools of the trade' relates to the level of war being supported. At the strategic and operational levels are mediums such as the international and local press, the Internet, radio and television, and at the tactical level personal conversations and phone calls, e-mails, posters, leaflets and loudhailers (sky-shout or ground-shout).

The SANDF is currently involved in a number of important missions in co-operation with military forces of other countries in operations other than war. PsyOps can make a significant contribution to success in these types of operations. This includes anti-rebellion campaigns, mine awareness campaigns and humanitarian relief.

FUTURE RELEVANCE AND PROSPECTS FOR APPLYING INFORMATION WARFARE/PSYOPS IN AFRICA

The information age implies a high level of dependence on technology and this dependence will increase in the future. One should not make the mistake of viewing African countries as lacking in technological development, especially with regard to ICT. Nearly everyone in the Democratic Republic of Congo uses a cellular phone and an Internet café can be found on every second street in every town. The fact that most African countries did not start developing their ICT infrastructure until recently means that they have managed to bridge the technology gap and have leapfrogged toward establishing modern ICT infrastructures. Some of the main cellular phone networks in the USA, for example, still make use of analogue technology and are starting to switch to digital technology only now, while most African developing countries are already using digital technologies.

It is very interesting to note the high level of importance given to IW and PsyOps in the defence forces of the developed countries. The USA, for example, has an entire regiment dedicated to PsyOps. Furthermore, an example like the September 11 attack on the Twin Towers bears evidence of how psychological effect can change the course of history, causing the declaration of a war on terrorism and national pandemonium. History has also taught us that no matter how good your leaders, training, equipment and firepower are, if the hearts of your soldiers are not in the fight you will have little success. The future relevance of IW and PsyOps is thus beyond dispute.

Research has already been mentioned briefly as a principle for PsyOps, but its importance must be stressed, especially in the African context. The final PsyOps programme/operation is just the tip of the iceberg. Research is represented by the large mountain of ice beneath the surface of the water. It is also important that useful research findings be implemented in a way that benefits the defence force as a whole.

A research study was initiated by the SANDF PsyOps Management Committee and is now being conducted by Major (Dr) Annette Falkson and other members of the SA Military Health Services (SAMHS) at the Military Psychological Institute (MPI). The study investigates psychological stress factors affecting SANDF soldiers in Burundi and mentions the following interesting preliminary findings:

- The good of Africa: SANDF soldiers have a positive attitude toward the development of Africa. They are willing to *suffer* for the good of Africa. This means that they are willing to endure physical hardships and make use of bush craft. Inadequate logistics is therefore not too much of a deterrent.
- Language: The SANDF soldiers understand the local language in Burundi. This has positive and negative implications. Positively, it makes the SANDF soldiers favourable to other countries for deployment, but it has a negative impact with regard to socialisation and the keeping of personal distance between soldiers and locals (fraternisation and maintaining a neutral stance).
- Isolation: Soldiers spend six months or more away from home and miss important events like births, marriages and burials. Psychologists report clinical signs of depression caused by absence from loved ones. Furthermore, absence from partners causes sexual frustration and leads to the forming of new relationships in the deployment area

that may cause problems at home. Being unable to help with other problems at home such as the illness of children, money management, etc., is also a serious stressor, as it makes the soldier feel helpless and isolated.

- Command and control: This was identified as having the biggest negative impact. Soldiers feel very negative about the derogatory way they are handled by their leaders, especially at the tactical levels. Many complaints are also received with regard to the standard of leadership. Soldiers often complain about their leaders being biased or being unable to make decisions.
- Trauma: Some soldiers witness civilians being murdered or find corpses in mass graves. Many of them are witness to motor vehicle accidents in countries such as Burundi. Some are even involved in vehicle accidents or shootings themselves.
- Environmental stressors: It is hot and humid in Central Africa. Mosquitoes and poor living conditions add to physical discomfort.

It is important to note the shift in military outlook from conventional war to peacekeeping. Underestimating the effect of stressors on soldiers in such a different role would be detrimental to the army. The same kinds of stressors are reportedly experienced by UK soldiers when switching from a fighting to a peacekeeping role. This role change from soldier in battle to peacekeeper within a single day creates new challenges for the training and preparation of soldiers. The term 'Peacekeepers' Syndrome' is used to describe a situation where the soldiers sometimes have to fulfil contradictory roles within the same context.

The suffering of the local population in the deployment area, especially owing to poverty, creates a challenge for our soldiers and the commanders who are responsible for their discipline. The deployment allowances (subsistence and travel) that the soldiers earn per day are far more than the average local family earns in a month. The soldiers are thus seen as a source of income and are continually subjected to approaches by beggars, vendors and sex workers. The soldiers also become involved in relationships and get women pregnant – sometimes they marry and the newly attached family wants to come to South Africa. There is also the matter of HIV infections. Our soldiers tend to view the local population as not being the enemy and they want to help them and socialise with them. However, they need to understand that there is a difference between peacekeeping and helping.

It should also be noted that problems at home are exacerbated by negative publicity relating to deployed SANDF soldiers. South African citizens have limited opportunities for communication with soldiers in the deployment area and only receive reports of negative incidents in the South African media (TV, radio and print). Nobody ever hears about the many successes in the deployment area and soldiers should be congratulated and commended for good service more frequently and publicly. The South African population should also be made aware of the difficulty of the peacekeeping tasks in which our soldiers are involved, as well as the positive contributions that they make.

The above creates vulnerabilities that can be exploited by opposing forces or elements. In light of these findings, it is clear that IW and specifically PsyOps have an important role to play in informing the relevant role-players, like the SAMHS, in the countering of stressors and ill-effects of deployments. IW thus aims to co-ordinate the functions of the services and divisions in order to protect, shield and strengthen our soldiers against the PsyOps threat. Offensive PsyOps can also be used as a force multiplier and an important tool in the peace process.

SA ARMY SUPPORT TO INFORMATION WARFARE/PSYOPS IN FUTURE

In an effort to balance the complex requirements of a modern defence force the SANDF, in keeping with international developments, has embarked on a defence management model known as capability management. The goal of the capability management process is to achieve a higher level of integration (enhance effectiveness) and to balance the individual portfolios across the mission concepts and contingencies. Information warfare has been identified as one of the capability portfolios, as reflected in the appointment of capability portfolio managers for operational capability management in the SANDF.

The Directorate of Information Warfare will be responsible for the governance and management of IW capability, but the execution of IW operations and functions will have to come from the different services and divisions, including the SA Army.

Every activity has a psychological effect, whether words or actions. This includes physical operations. The PsyOps campaign in a specific operation may therefore need the SA Army to execute a physical operation in a specific way for maximum psychological effect. SA Army leaders need to be aware of the defensive and offensive aspects of IW

and PsyOps and to include this in their planning from the start to the end of every operation. The psychological effect of one operation can have an effect on all future operations.

The SA Army therefore needs to equip the future SANDF soldier with the necessary knowledge and skills to withstand the IW threat of the future.

There is also a need for specialised PsyOps personnel, as many of the skills needed for successful PsyOps programmes cannot be acquired in a short period. Specialised training and experience will be required. These skills are diverse and include journalism and scriptwriting, communications, language and presentation skills (radio broadcasting, ground-shout, etc.), designing and printing of leaflets and posters and operating and maintaining specialised PsyOps equipment and delivery systems.

The SA Army will also have to be the custodian of some of the specialised PsyOps equipment that needs to be developed and maintained. The current higher level of integration implies the interoperability of all SANDF systems.

The SA Army therefore has to liaise continuously with other services and divisions and to participate actively in the necessary forums for IW and PsyOps. There is also a requirement for the SA Army to establish its own IW and PsyOps committees. The proper functioning of such forums will ensure successful early warning, situational awareness and joint planning.

FORCE PREPARATION TO COUNTER INFORMATION WARFARE/PSYOPS ATTACKS

All services and divisions must accept the responsibility of preparing the soldiers to counter potential PsyOps attacks and to strengthen them against such an onslaught by initiating the following:

- **Awareness:** This is the first and most important aspect of force preparation with regard to IW and PsyOps. SANDF personnel at all levels must be able to identify IW and PsyOps threats or attacks and be able to counter them and bring them to the attention of the higher command and the necessary IW forums. The Directorate of Information Warfare is currently in the process of designing IW awareness programmes and courses to be presented to different levels of SANDF personnel.
- **Good leadership:** The importance of good leadership has been confirmed in the previous discussions of operational stressors on deployed soldiers.

Training and development of leaders at all levels is thus crucial. It must be accepted that if the SANDF is to have a smaller budget and fewer members in future, a higher quality of leadership and soldiers with specialised skills will be required. Leadership training at the tactical level must be enhanced and its execution closely monitored.

- **Discipline:** Discipline and self-discipline have always been crucial attributes of the soldier. In our current complex global environment, good discipline is of utmost importance. Many of the problems experienced in our current deployments can be curbed by discipline. Good discipline also implies adherence to policies/DODIs by leaders at all levels. The setting of a good example rarely fails.
- **Good research capability:** Skilled intelligence officers and members with academic training in various fields are required. We are all living in the information age and need to adapt to and keep up with our changing environment.
- **Language skills:** PsyOps in foreign countries will require fluency in various languages. These language skills need to be of a high level to be effective in PsyOps, in order to gather information that can contribute to identifying IW and PsyOps threats and to the SANDF intelligence capability.
- **Communication skills:** These skills are important for good command and control and for specific IW and PsyOps functions (presenters, scriptwriters, pamphlet designers, etc.). These include written and verbal skills.
- **Specialised training:** PsyOps specialists will need training in different types of specialised skills. This kind of training could include the attendance of courses and conferences abroad and will have budget implications.

The services and divisions need to understand the impact that IW, and in this case PsyOps, can have on structures and force preparation to ensure that the human component in the military machine is well equipped to contribute to successful operations.

CONCLUSION

Recent global developments have underlined that information superiority, in conjunction with other elements of power base, is an additional and important dimension in addressing world affairs. In the present geo-strategic context, characterised by uncertainty, information superiority

is but one tool with which these challenges, threats and opportunities can be addressed. Without adequate preparedness for the challenges of the information age, South Africa and the SANDF would have difficulty in overcoming the security threats associated with information warfare (and asymmetrical warfare).

Information warfare will play a crucial role in the war of the future. IW in the SANDF aims to defend the military's information-based processes, information systems and communications networks and to destroy, neutralise or exploit the enemy's similar capabilities within the physical, information and cognitive domains. PsyOps is a part of IW that deals with the psychological effect involved in warfare

The utilisation of the SANDF in operations other than war and in the African context has brought new challenges to the army. African countries have not been left behind by the information age and the application of IW and PsyOps is just as relevant and perhaps even of greater importance in the African context than in any other context.

The SANDF's capability management model aims to achieve a higher level of integration (with enhanced effectiveness) and to balance the individual portfolios across the mission concepts and contingencies. Information warfare has been identified as one of the capability in the SANDF. The Directorate of Information Warfare will manage the IW capability by providing governance and participating in the campaign planning process. The services and divisions will be required to provide support for the execution of planned IW and PsyOps operations. This includes support from the SA Army.

The support needed from the SA Army will include a high level of IW awareness at all levels, skilled and knowledgeable personnel and a defined career path for specialised PsyOps members. The SA Army will also be required to develop, utilise and maintain certain specialised IW equipment and to ensure that all systems adhere to the interoperability specifications. Furthermore, establishment of and participation in the relevant IW forums are required, as is a positive contribution towards the research effort.

Aspects that need to be included in force preparation to counter IW and PsyOps attacks include leadership skills and good discipline, language skills, specialised communications skills and training in the utilisation and maintenance of IW and PsyOps systems and equipment.

Awareness of and support for IW (including PsyOps) must be maintained throughout, from the planning of operations to the measurement of successes after an operation, and the environment should be scanned

continuously for changes and possible threats in all the battle space domains, not just the physical domain.

RECOMMENDATIONS

First, the SANDF and specifically the SA Army should take stock of what is left of the knowledge base of the PsyOps of the past. This includes all of the integrated forces, as well as lessons learnt from past operations. This knowledge base needs to be applied to our current context and requirements.

Furthermore, the SANDF must learn lessons from the rest of the world. This includes foreign strategies and doctrine, as well as studying the successes and failures of other operations. Thus, once again, research is important. The SANDF should therefore continue to invest in high-quality research partners.

The IW (and PsyOps) capability should be institutionalised at all levels of the Department of Defence. Communications channels should be created upwards and downwards in the department to ensure the success of IW and especially PsyOps. Reporting upwards will make leaders aware of problems and threats, while communication downwards will keep the soldiers informed and diminish the IW threat.

The SANDF must ensure that its forces are prepared mentally for deployment and that all other force preparations take IW into account. Soldiers should be made aware of what they will face and the impact that it may have. Measures should be put in place to determine the psychological effects of operations and the success of new programmes or interventions. Maximum cooperation with the SA Military Health Service will be of utmost importance.

NOTES

1   By definition, own PsyOps is not conducted against one's own forces and population. Actions and communication to counter enemy PsyOps against one's own forces and population is by other means, e.g. actions by commanders and corporate communications, as advised and co-ordinated by PsyOps.
2   Psychological activities are any activities defined in terms of their psychological effect, rather than their inherent nature. These may include propaganda, deception, lies, suggestions, military and other activities aimed primarily at their psychological effect, as well as the use of all other forms of communication, truthful or otherwise.