NATIONAL DEFENCE UNIVERSITY "CAROL I"

REGIONAL DEPARTMENT OF DEFENSE RESOURCES MANAGEMENT STUDIES

DEFENSE RESOURCES MANAGEMENT – ISSUES, CHALLENGES, OPPORTUNITIES AND FUTURE TRENDS

Workshop unfolded during the postgraduate course in Defense Resources Management for Senior Officials

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This volume represents the result of the work, research and exchange of ideas and experiences of the participants to the ***Defense Resources Management for Senior Officials*** postgraduate course. The dynamic economic, military, political and social environment in which the modern military functions generates the need for a flexible, modern and adaptable resource management system. In this context, an indepth understanding of the areas of defense resources management domains is an important step to a more efficient and effective use of the resources allocated for the defense.

In this respect, I would like to express my thanks to the course participants, for their performance during the course, their active involvement in the discussions and case studies and their willingness to share not only their expertise and experience, but also their own opinions regarding the field of defense resources management.

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NAVAL PUMA MULTI-PURPOSE HELICOPTER PROGRAM MANAGEMENT

Commander EDINEL AILIESEI

In 2002 Romania government signed a contract with United Kingdom for the acquisition of two T22 frigates. This contract was a part of a General Agreement which consists in three subsequent contracts not strictly coupled to each others, first contract consist in acquisition of two T22 frigates after regeneration and overhaul carryout by BAE System LTD on behalf of UK MOD, the second one was intended as a Long Term Support Contract and the third one was planned to be phase two of modernization and upgrade of the frigates.

The first contract was accomplished in September 2004 when the former HMS COVENTRY, re-named REGELE FERDINAND was formally commissioned and handed over to the Romanian Navy. The handover, followed successful sea trials designed to demonstrate the operational capability of all REGELE FERDINAND's systems and structures. The contract was close in March 2005 when the second frigate, former HMS LONDON, re-named REGINA MARIA arrived in her homeport Constanta.

The second contract, although Romanian Navy fulfill all its obligation, and put in its PPBS all the figures, was canceled after a very long negotiations with BAE System LTD, due to the fact that the UK company didn't accomplished its part of contractual obligations namely "off-set program" (from first contract) As well the company didn't agreed in the second contract draft anything about "off-set" request by Romanian low.

Looking at PPBS and multi-annual budget prognosis Romanian Navy acknowledged the fact that the third contract for its frigates can be in jeopardy or in the best case to be postpone due to the competition among all major acquisitions programs in Romania MOD and budgets constrains.

For this reason Romanian Navy had to find another solution in order to increase frigates capabilities to fulfill its obligations as a NATO partner. After thoroughly analyses the Romanian Navy specialists came with an optimal and real solution in order to enhance its frigates capabilities. The solution which Navy specialists came up was the acquisition of a multi-role helicopter, for each of the Navy frigates (two T22 class and the third one MARASESTI class). This solution was seem more feasible because was much cheaper than a Modernization Contract for the tow frigates, solve the problem for all tree frigates, and last but not list don't request to put the ships in Fleet Maintenance Schedule (FMS) and make them inoperable for a long period of time. A team comprises form Romanian Navy, Department for Armaments specialists and General Staff representative was set and tasked with acquisition of multipurpose naval helicopter.

MINIMUM MILITARY REQUIREMENTS

Minimum military requirements are the cornerstone document in an acquisition program. If this document is written well, precise but as well (destul) generally not to be denied in any bid for a contract the end-user will receive the best product for the money spend.

Among a pile of other documents this document is crucial to make clear intend and all user requirements for the producers and subsequently can incorporate future user demands, which can not be all comprise in a first contract.

1. General requirements

Navy specialists took in account the frigates helicopter boarding capacity and they narrowed options looking only at a medium or medium-heavy helicopter in order to accomplish following missions:

a) Search and Rescue (SAR)
b) Medevac
c) Transport
d) Maritime surveillance missions

All these missions are designate to enhance frigate capabilities and their range of action in order to meet NATO requirements for different types of naval missions.

Taking in account the operational environment (open sea, takeoff and landing to a deck) the helicopter should have tow engine, large enough to be modular configured for different type of missions, but not too heavy for the ship deck. Furthermore the helicopter frame and all its equipments should be protected against corrosion due to the fact that it will be mostly operated in salty environment. This special requirement is call "marinization".

Multimodal configuration should be easy and timely change according with helicopter's missions, available space on board of the ship and helicopter crew and maintenance team strong.

Helicopter maintenance should be easy, especially operational (flaying) maintenance and be carryout by a small team because of limited numbers of ship crew.

All helicopter avionics equipments and systems should be compatible with ships navigation systems in order not to make major modifications to the ships equipments. Same requirements were made for helicopter refueling system, docking system on the deck and in the hangar.

2. Tactical requirements

After the Navy specialists set their general requirements they start to look at the different helicopter producers in order to set up their tactical requirements. Due to the fact that the contract was set for a limited numbers of helicopters (three with an option for the forth) their first choice was to find on shelf solution.

If the first task was carried out most by Navy Headquarter R&D Office with some support form for the Department for Armaments specialists for the second one was asked help from R&D Centre specialists embedded in Department for Armaments.

After couple of months of studying several types of helicopters already in production which could meet the general requirements the mix team came with following solution for tactical requirements:

MINIMUM MILITARY REQUIREMENTS

General characteristics:
Crew: 2 to 4
Capacity: 700 to 1.000 kg
Length: 10 to 16,00 m
Rotor diameter: 10 to 17 m
Disc area: 120 to 180,00 m^2
Empty weight: 2.300 to 3.800 kg
Max takeoff weight: 4.200 to 7.500 kg
Powerplant: 2 x turoshafts, 600 to 1.100 kW each
*Performance***:**
Maximum speed: 250 to 350 km/h
Range: 500 to 650 km

Service ceiling: 4.000 to 5.000 m

These Minimum military requirements, you will see, are precisely enough on one hand and large enough on other hand to be meet by some of helicopters already in production. Furthermore regarding their "marinization" the helicopters should be already used by other navies, preferable by NATO countries navies for the seek of interoperability.

ACQUISITION

The acquisition process is much more than simply buying something. It includes all activities from planning, preparation and processing of a requisition, solicitation, evaluation, award and contract formation, the receipt and acceptance of delivery, payment, inventory tracking and property disposition.

The acquisition process is quite a complicate one, where you have to trade of your desires or intends against your real capacity to support all of them. You have more options, each one with their pro and cons and to choose one some time it take more then just to look only to obvious facts and data.

In order to carry on this process an Acquisition team led by Navy Chief of Staff Deputy was assembly. Some specialists from the team who set up Minimum military requirements were part of this team, too.

This team had to take in account not only the Minimum military requirements but as well other factors such as helicopter crew and maintenance team recruitment and selection, their training, maintenance concept and maintenance training, among other things which will not be discussed in this paper. The personnel management and maintenance management as a tool for the acquisition process will be described in following chapters.

1. Options.

After studying Minimum military requirements document, market offers and keeping in mind personnel management and maintenance management the Acquisition team pick up three possible options for the Romanian naval helicopter.

These options were: Puma helicopter produce by a local producer IAR SA Brasov under a French license, Dolphin helicopter produce by French company EUROCOPTER which have a subsidiary in Romania, and the third one Lynx helicopter produce by a British company AUGUSTAWESTLAND.

In order to stress the importance of other factors beside Minimum military requirements I will list in this paper the factory specifications for each helicopter. If somebody will compare the general and tactical requirements stated in the first chapter with the specifications described below will see that all options meet the requirements to some degree. That means that Minimum military requirements are mandatory but not decisive in an acquisition process.

a. Puma helicopter

General characteristics:
Crew: 3
Capacity: 1.000 kg
Length: 15,00 m
Rotor diameter: 16,20 m
Disc area: 177,00 m2
Empty weight: 3.615 kg
Max takeoff weight: 7.400 kg
Powerplant: 2 x TURMO IV B turboshafts, 1.044 kW (1.400 hp) each

*Performance***:**
Maximum speed: 263 km/h (142 knots, 164 mph)
Range: 550 km (313 nm, 360 mi)
Service ceiling: 4.800 m (15.750 ft)

b. Dolphin helicopter

General characteristics:
Crew: 2 pilots + 2 crew
Capacity: 700 kg
Length: 11,60 m
Rotor diameter: 11,90 m
Disc area: 125,00 m^2
Empty weight: 2.389 kg
Max takeoff weight: 4.300 kg
Powerplant: 2 x Turbomeca Arriel 2C2-CG turoshafts, 697 kW (934 shp) each

Performance:
Maximum speed: 306 km/h (165 knots, 190 mph)
Range: 659 km (356 nm, 409 mi)
Service ceiling: 4.300 m (15.000 ft)

c. Lynx helicopter

General characteristics:
Crew: 2 or 3
Capacity: 737 kg
Length: 15,25 m
Rotor diameter: 12,80 m
Disc area: 128,71 m^2
Empty takeoff: 3.291 kg
Max takeoff weight: 5.330 kg
Powerplant: 2 x Rolls-Royce Gem turoshafts, 835 kW (1.120 shp) each

Performance:
Maximum speed: 324 km/h (170 knots, 201 mph)
Range: 528 km (313 nm, 328 mi)
Service ceiling: 4.300 m (15.000 ft)

2.First Selection

After putting together Minimum military requirements and offers available the Acquisition team makes its first selection form a series of selections. As I stressed before the comparison between the general and tactical requirements with the factory specifications for each helicopter didn't help too much for a clear selection. All helicopters are in range of minimum military requirements, all helicopters are in service in different navies around the world; Puma is operated by Argentinean and French navies, Dolphin by US Coast Guard, and Lynx by UK and French navies. Despite of all these a decision had to be made.

The Acquisition team decided beside minimum military requirements and price the time length of the Contract should be taken into consideration. The offers of the three companies in this respect are quite differed. IAR Brasov offer Contract for refurbishing three helicopters

which already had the frame owned by factory (two years contract), EUROCOPTER offer a Contract for refurbishing two helicopters from Air Force inventory and one in Ministry of Interior inventory (three years contract after Navy or Romanian MOD will get a transfer), and AUGUSTAWESTLAND with no time line or status of helicopters at this stage of pre-negotiations.

First selection of the Acquisition team went to the IAR Puma helicopter because of following reasons:

Factory specifications are closer to the upper limits of tactical requirements. These will impact the multimodal configuration which can be much simple combining two or three missions together (e.g. SAR/MEDEVAC/Transport). With the other two helicopters for each of these missions will be a different configuration which is time and resource consuming while with Puma you can have in the same configuration 6 passengers sits, a platform for a medical stretch and the external hoist for rescue. This tradeoff could compensate the lower speed of Puma versus others two competitors and yet gain some advantages.

PERSONNEL MANAGEMENT

If we are looking at different theories about personnel management, all of them are related with civil organizations and business. The traditional personnel management focus was on manpower, hiring workers and managing them. This original concept derives from political economy and economics traditionally called labor, one of four factors of production. Over time a second interpretation evolved. This second interpretation is more common within business where personnel management refers to the individuals within the firm and to the position of the firm's organization that deal with hiring, firing, training and other personnel issues.

I prefer other approach for this issue in the military organization. One which is very closer with my personal opinion how should be Personnel Management in a military organization I find in Canadian Force Military Personnel Management Doctrine. According with this publication "Military Personnel management requires authoritative direction and overarching principles to guide action and the defined effects to be achieved to deliver the personnel capability required to meet the defence mission and support operations".

The Acquisition team in cooperation with Navy Human Resources Branch set up some principles, rules and career path for recruiting and training the future naval helicopter pilots and maintenance personnel. All this factors are described in following two sections.

1. Recruitement

The Romanian Navy had tow options for pilot's recruitments and as well for maintenance personnel.

First option was to take these guys from Romanian Air Forces with two alternatives: one was an augmentation subunit steel belong to the Air Forces or other one to transfer these people to the Navy for five to six years.

First alternative was not appeal to the Navy because of uncertainty and lack of cohesion among the whole crew of the ship.

The second alternative concerted the Navy regarding the future career of these people, specialty the pilots. A helicopter pilot can fly four to six years and after that he/she has to be promoted to other ranks. That means he/she should be transferred back to Air Forces.

Both alternatives will drive a lack of motivation; will be a career stopper, and will lead to a very difficult and unpredictably personnel management.

The second option was the pilots and maintenance team should belong to the Navy. There are several reasons for this choice. Just to mention some of them: after a pilot end his/her tour flying helicopters can continue his/her career as a navy officer without any problems, Navy has control and all means for motivation of personnel and as well for their retention. All personnel are already tested for sea conditions (seasick, claustrophobia, agoraphobia). All personnel will stay in the navy which means that navy personnel capability regarding flying helicopters will increase over the time. Couple of the best pilots will be promoted as squadron commander or deputy, others will continue their career in the Navy and with the time they may became a ship commander (CO) or an executive officer (XO) which will understand better pilots needs, can task much knowledgeable them, and so on. Same thing with technical personnel.

The Navy decision was to train their own pilots selected from young Naval Academy graduates. Regarding the technical personal (flying mechanical and maintenance personnel) decision was the same. A selection among young Navy Warrant Officers was conducted.

This solution solved long term problem but not the short term which means that the Navy however needs some specialists right now, even before buying the helicopters. For this issue the solution was to convince some Air Force pilots, with proper training abroad, especially those who were trained in allied navies to fly over the sea and takeoff and land on a ships deck. The motivation for these guys was a squadron commander or a deputy position and furthermore in addition they will be the specialty trainers. Usually the best people accept the challenges and they are eager to be pioneers in something new. The Romania Navy found some very skilled Air Force pilots who join to the Navy.

2. Training.

Based on the decision described in section above, Navy Human Resources Branch negotiated with Air Force Resources Branch a Technical Agreement to get a basic pilots training for their navy pilots at Air Force Training School Boboc. After some negotiation they come to the concussion that both Academies has the same basic curriculum and decided that the basic helicopters pilots course can be accomplished in one year comprising specialty theory and practice in flying to types of helicopters: Alluete and Puma. In total the Navy selected four crews (two pilots and a fly mechanical each) to be trained.

For the technical personnel, the Romanian Air Force and the Navy designed a five months course for two specialties: avionics and mechanics. The Navy selected 12 Warrant Officers to attend this course in order to assembly its maintenance teams on board of frigates. This course took place as well at Air Force Training School.

For specialty training (flying in maritime conditions) the Navy already had his own trainers selected from Air Force pilots who candidate for the squadron commander or a deputy position.

3. The second selection

If the Navy had to chose other type of helicopter rather than Puma that imply an additional training for that specific type of helicopter, most probably somewhere abroad, which will add more costs to the whole acquisition program. Not to mention others additional cost such as costs for simulators, manuals, and training's logistics.

Consequently the second selection went again toward IAR Puma helicopter in respect of saving training costs and sharing the training facilities with Romanian Air Force.

So far IAR Puma helicopter accumulated two points to none against the other two, in respect of military minimum requirements, contract time length and training costs.

MAINTENANCE MANAGEMENT

The maintenance management can be seen as a part of life cycle cost even if this concept is not fully implemented in Romanian Armed Forces acquisition process.

In order to have an efficient maintenance management you must have a Maintenance Concept as a guiding line for all activities related with the maintenance. Maintenance Management supported by the Maintenance Concept is very useful not only in acquisition process bat as well in PPBS domain and annual budgeting matters.

1. Maintenance Concept

The Logistics Department of the Navy was tasked to draw the Maintenance Concept for the Naval Helicopter. In cooperation with Air Forces Logistics Department and some other specialists.

Basic, the Maintenance Concept was developed taking in account the two types of maintenance: preventive respective scheduled maintenance, in conjunction with the three levels of maintenance: operational, intermediate and depot level.

The operational maintenance should take place on board of the ship or ashore before and after every fly. The Navy already took the decision to train its own personnel in order to carry on this mission. As well established all necessary equipments and tools to carry out these activities.

The intermediate maintenance should be performed every some hundreds flaying hours in a specialized facility, usually based in an air base. For this activity regardless of number of helicopters the investments in equipments, special tools, and high skilled people can be very large. The Navy couldn't afford this investment only for three helicopters. The Air Forces Logistics Department lunch a proposal for an Intermediate Maintenance Technical Agreement if the Navy will decide to buy the IAR Puma. They have the capacities and capabilities to perform this level of maintenance on behalf of Romanian Navy. Otherwise the Navy should found other solution, the most probable regarding costs; a contract with a contractor.

The depot maintenance, in aviation, is done in the most of the cases in the producer plant. Looking at all three options only two could be taking in consideration in this respect, the IAR Puma and Dolphin helicopters, because only these two have plant facilities in the country. Just to mention one big disadvantage to plan a maintenance activity done abroad think only to exports-imports matters of military equipments, not to mentions the additional costs such as the transport, insurance, and many others.

For the depot maintenance the Navy established that will be signing a Contract with the producer for the depot level maintenance and for unscheduled maintenance.

2. Maintenance Training

The Maintenance Concept for the Naval Helicopter looked good on paper, incorporating types and levels maintenance, necessary equipments and tools even the initial inventory spare parts list but it had to be put in practice. That means that the Navy had to look for training its maintenance personnel additionally from the basic training course already described in the Personnel Management chapter.

At this point there are left only two options for the Navy: to train furthermore the maintenance personnel in a factory facility or to train the people and use the Romanian Air Forces facilities already in place, using a fund transfer.

These two options can be translated like this: train your people using military educational allocations funds within national military system or ask for supplementary money to sign an additional training contract with the producer.

3. The third selection

The Acquisition Team along with the Navy Logistic Department analyzed all this alternatives and they came to the third selection. Anyway this time they had to decide between two options: IAR Puma and Dolphin helicopter due to the fact only those have factory facilities in the country. The Lynx helicopter was not an option anymore.

The main factors took in account here were: way to pay additional money to a contractor for intermediate maintenance if we have this capacity in our military system, way to train military personnel outside of military if we have a military institution which can do same thing.

Moreover the Depot Maintenance Contract signed with IAR Brasov fallen under national low and regulations since the same contract signed with EUROCOPTER had to fallow the international low.

To this point IAR Puma helicopter accumulated three points to none, in respect of military minimum requirements, contract time length and training costs and maintenance.

ACQUISITION DECISION

As you can see so far the acquisition process and particularly acquisition decision is not as easy as it seen at the first glance. It is a laborious process carries out by a lot of specialists belong to different departments, even different services and organizations, assembled in various teams, which analyzed from many point of view and domains some available options.

Now, let see whole picture pull together on what the Acquisition Team based its decision.

From military minimum requirements and contract time length point of view the option was IAR Puma helicopter with two big pros: its specifications meet the upper limits of requirements, multimodal configuration much simple with an important impact upon operational time and operational maintenance which conduct to lower costs. As well the shorter time till the Navy can commissioned those assets.

Going further, in regards of personnel management the most economical solution was as well the IAR Puma considering that all necessary personnel (pilots, flying mechanics and maintenance teams) can be trained in Romanian Military educational system without supplementary costs.

Last but not list, looking at maintenance portion which has a significant share of over whole costs the best solution, both for training and maintenance itself, was IAR Puma, with a Technical Agreement between The Navy and the Air Force for intermediate maintenance and a Depot Maintenance Contract with IAR Brasov SA Company.

To conclude all these, Acquisition Team final decision was to sign a Contract to buy three IAR Puma Naval helicopters produced by IAR Brasov SA Company with the option for the forth one.

The contract was split in to subsequent contracts in accordance with the development phases of the IAR Naval Puma helicopter. The first phase was design that the helicopter to be "marinizat" in respect of anti-corrosion, floating gear and supplementary fuel tanks, and able to accomplish the first three missions (SAR, MEDECVAC, Transport). The second phase was design for upgrading the helicopter for maritime surveillance mission.

CONCLUSIONS

As I stated before there are other things related with acquisition management which were not discussed in this paper.

The intend of this paper was not to go thoroughly thought all scientist process of acquisition, it is to make everybody aware by complexity of the process by tried to describe a real process with a success end.

All the data necessary to conduct such depth analyses in so many departments can be obtained if the Paperwork Document for the bid is written well. The Paperwork Document should be very detailed and should comprise all aspects of relevant departments involved in acquisition process.

To conclude, the IAR Puma helicopter is the first joint asset in Romanian Armed Forces inventory with IAR Puma variants for Air Forces, IAR Puma SOCAT[1] for Land Forces and IAR Naval Puma for the Romanian Navy. This result couldn't be accomplished without a top leader's vision, a very hard team work and cooperation among services and as well with the producer. In addition the involvement of the producer, which is a national company, to achieve this goal was crucial for the success.

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[1] Antitank Optronic Search and Combat System (SOCAT)

THE INFLUENCE OF CULTURE ON PERFORMANCE OF THE NEW MILITARY ORGANIZATION

Lieutenant Colonel SORIN-COSTEL CHIPER

Organizational culture has assumed considerable importance in the 21st century, because of its impact on personnel performance and job satisfaction. It is the imperative of every organisation to understand its own dynamic culture so that managers can capitalise on the insights generated by the cultural perspective to wield greater control over their organisations.

But what is culture? There is a variety of definitions to help us come to grips with the concept. Culture is the personality of the organization; the glue or invisible mortar that holds the entity together. It is "the way we do things around here" driven by strategic intent. Some of authors that researched and developed new concepts in organizational culture suggest that developing an enduring culture is simple, but none of them say it is easy.

Culture, at the workplace, is a very powerful force, which is consciously and deliberately cultivated and is passed on to the incoming employees. It is the very thread that holds the organization together. The importance of corporate culture is emphasized by Peters and Waterman (1999), who said that without exception, the dominance and coherence of culture proved to be an essential quality of the excellent organizations. Moreover the stronger the culture, the more it was directed to the society (public or private demand, as the case stands), the less need was there for policy manuals, organization charts, detailed procedures or rules. In these companies, people way down the line know what they are supposed to do in most situations because the handful of guiding values is crystal clear.

Major change and intervention programs cannot reinvent or create a culture overnight. Whereas the structure and size of an organization can be altered in a relatively short time, cultural change takes much longer. It is this lag effect that can sabotage plans for lasting change. In last experience, when a new strategic context is introduced, it often takes two or three changes of key staff to move the culture to the next level. So leaders must have a very strong view about what it is they want to create and a medium to long-term plan for getting there.

We have observed that personnel, when faced with change, will form three groups. The first group will resist, digging in their heels and actively working against reform. The second group can be viewed as neutral, waiting to see what will happen, but not necessarily lending their intellectual weight to positive elements of the change process. The third group will embrace the new direction and sign on with enthusiasm.

The culture of an organisation has an important impact on its performance. With the ever - changing technology and fast - paced business arena, the organizations today are grappling to find new and innovative ways of improving performance with the minimal addition of cost. Many organizations have now turned to exploring the sociological aspect of the business in order to improve their goals. Culture is one aspect that is not tangible, yet it plays a very important role to the success of any activity enterprise.

ORGANIZATIONAL CULTURE

Definition

Definitions of organizational culture initially focused on distinguishing levels of organizational culture and strong versus weak cultures. Many definitions of culture give primacy to the cognitive components, such as assumptions, beliefs, and values. Others expand the concept to include behaviours and artefacts, leading to a common distinction between the visible and the hidden levels of organizational culture – a distinction basically corresponding to the climate/culture distinction noted above. In contrast to the distinction between the visible and hidden levels, some theorists distinguished multiple levels. Schein (1985), one of the foremost experts in the area, identifies the following levels, as shown in Figure 1.
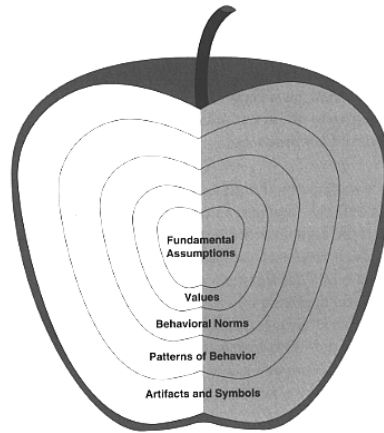
Figure 1. Levels of Organizational Culture

The culture can be analysed at several different levels, with the term level meaning the degree to which the cultural phenomenon is visible to the observer. Some of the confusion surrounding the definition of what culture really is results from not differentiating the levels at which it manifests itself. These levels range from the very tangible overt manifestations that one can see and feel to the deeply embedded, unconscious, basic assumptions that I am defining as the essence of culture. In between these layers are various espoused beliefs, values, norms, and rules of behavior that members of the culture use as a way of depicting the culture to themselves and others. I highlight "*the top of iceberg*", artefacts.

At the surface is the level of artefacts, which includes all the phenomena that one sees, hears, and feels when one encounters a new group with an unfamiliar culture. Artifacts include the visible products of the group, such as the architecture of its physical environment; its language; its technology and products; its artistic creations; its style, as embodied in clothing, manners of address, emotional displays, and myths and stories told about the organization; its published lists of values; its observable rituals and ceremonies; and so on.

TYPES OF CULTURES

The Clan Culture

A very pleasant place to work, where people share a lot of personal information, much like an extended family. The leaders or heads of the organization are seen as mentors and perhaps even parent figures. The organization is held together by loyalty or tradition. Commitment is high. The organization emphasizes the long-term benefit of human resources development and attaches great importance to cohesion and morale. Success is defined in terms of sensitivity to customers and concern for people. The organization places a premium on teamwork, participation, and consensus.

Characteristics:
- Leader Type: facilitator, mentor, team builder.
- Value Drivers: commitment, communication, development.
- Theory for Effectiveness: human development and participation produce effectiveness.
- Quality Strategies: empowerment, team building, employee involvement, Human Resource development, open communication.

The Adhocracy Culture

A dynamic, entrepreneurial, and creative place to work. People stick out their necks and take risks. The leaders are considered innovators and risk takers. The glue that holds the organization together is commitment to experimentation and innovation. The emphasis is on being on the leading edge. The organization's long term emphasis is on growth and acquiring new resources. Success means gaining unique and new products or services. Being a product or service leader is important. The organization encourages individual initiative and freedom.

Characteristics:
- Leader Type: innovator, entrepreneur, visionary.
- Value Drivers: innovative outputs, transformation, agility.
- Theory for Effectiveness: innovativeness, vision and new resources produce effectiveness.
- Quality Strategies: surprise and delight, creating new standards, anticipating needs, continuous improvement, finding creative solutions.

The Market Culture

A result-oriented organization whose major concern is getting the job done. People are competitive and goal-oriented. The leaders are hard drivers, producers, and competitors. They are tough and demanding. The glue that holds the organization together is an emphasis on winning. Reputation and success are common concerns. The long-term focus is on competitive actions and achievement of measurable goals and targets. Success is defined in terms of market share and penetration. Competitive pricing and market leadership are important. The organizational style is hard-driving competitiveness.

Characteristics:
- Leader Type: hard driver, competitor, producer
- Value Drivers: market share, goal achievement, profitability
- Theory for Effectiveness: aggressive competition and customer focus produce effectiveness.
- Quality Strategies: measuring customer preferences, improving productivity, creating external partnerships, enhancing competitiveness, involving beneficiary and suppliers.

The Hierarchy Culture

A very formalized and structured place to work. Procedures govern what people do. The leaders pride themselves on being good coordinators and organizers who are efficiencyminded. Maintaining a smooth-running organization is most critical. Formal rules and policies hold the organization together. The long-term concern is stability and performance with efficient, smooth operations. Success is defined in terms of dependable delivery, smooth scheduling and low cost. The management of personnel is concerned with secure employment and predictability.

Characteristics:
- Leader Type: coordinator, monitor, organizer.
- Value Drivers: efficiency, punctuality, consistency and uniformity.
- Theory for Effectiveness: control and efficiency with appropriate processes produce effectiveness.
- Quality Strategies: error detection, measurement, process control, systematic problem solving, quality tools.

Culture and military organization

The literature on organizational culture is as relevant to public science management as it is to the management of private sector business organizations. Given a rapidly changing environment and continuing insights into organizational effectiveness, science organizations, as most other organizations, are seriously rethinking what they do and how they can best define and accomplish their goals and objectives. Once goals are defined, it is necessary to address the type of culture that is necessary to advance these goals and objectives and ensure the successful implementation of the necessary changes. In addition, the organizational effectiveness literature has been increasingly emphasizing the importance of culture in motivating and maximizing the value of its intellectual assets, particularly its human capital. This is particularly important in knowledge intensive organizations. This review of the organizational culture literature makes it clear that (1) culture is essential for both successful organizational change and maximizing the value of human capital (2) culture management should become a critical management competency, and (3) while the right culture may be a necessary condition for organizational success, it is by no means a sufficient condition. An important challenge for managers/leaders is to determine what the most effective culture is for their organization and, when necessary, how to change the organizational culture effectively.

The concept of organizational culture also appealed to organizational scientists and practitioners who had grown disillusioned with the prevailing formalistic, quantitative organizational research. The emphasis on organizational culture shifted attention away from the functional and technical aspects (called hard side) of management that could be more readily quantified and empirically analyzed to the interpersonal and symbolic aspects (the soft side) of management that required in-depth, qualitative studies of organizational life.

This focus on the qualitative, symbolic aspects of organizations and management stimulated a large literature on leadership. In addition, specialized literatures emerged around particular variants of organizational culture considered increasingly important for success in the modern business world, such as change oriented culture, learning culture, innovating culture, team and project-oriented cultures.

More recently, attention has turned to identifying and creating an organizational culture that facilitates agility; promotes alliances, partnerships and networks; encourages knowledge management; fosters corporate responsibility and/or moral integrity; and embraces diversity. The concept of organizational culture has generated a massive literature with enormous popularity. It is an extremely important literature because the concept of organizational culture has been central too much of the subsequent work on organizational effectiveness.

This renewed interest in organizational culture represented a return to the early organizational literature but it went far beyond this literature in contributing important new insights and ways of thinking about the role, importance, and characteristics of organizational culture. Also, research on the effect of culture on organizational performance and investigations into how organizational cultures are created, maintained, and changed received greater attention.

In this context, it had been a transfer of concepts, procedures, values between military organizations and civilian organizations, especially after the Second World War, which led to the takeover by military organizations of the new concepts of human resource management, especially in Western armies. The military establishment and the war were the subject of studies over time. The most important contribution to the analysis of military institutions has brought sociology. The first research has focused on attitudinal and behavioral specific military side, alone and less on the organizational side of the military system, considered as a whole. In the late 50's, through the works of Samuel P. Huntington - *The Soldier and the State* - and especially Morris Janowitz - *The Professional Soldier*, studies have been carried over to the military organization. What is important is that the organizational analysis mentioned followed characteristics and generally accepted pattern of military organization, regardless of country or army.

In terms of research orientation in the early years the emphasis is on the study of the attitude and behavior of the military in peacetime and war, as it studies the troops' morale. Conclusions showed the importance of the primary group in obtaining military effectiveness. In full time very large organization, the consequence was that much more relevant for the effectiveness of an army became the methods of management and interpersonal relations, rather than mass indoctrination. The soldiers fought not on the superiority of moral conviction that the mission had to be met which, moreover, had a very vague idea but, primarily, because the leadership of the officers, especially that one of those officers who have been successful in developing a high level of solidarity of the military primary group.

The new approach was the direction of larger or smaller groups. The army itself is in transition from mass army to professionalized army. Morale became a notion that military commanders were operating more and less scientists, emphasizing the constraints that the military organization exerts on the individual. Organization came into the spotlight and has developed a new concept - Organizational Effectiveness - which replaced the concept of moral that became irrelevant. Janowitz makes a very clear distinction: the limits of moral background studies "*lies in the fact that military tactics and strategy can not be based on preference soldiers (...). Morale is far too limited a concept to be enough in our understanding coercive force of bureaucratic organization ...*". However, the concept of morality, even if it is a concept used in systemic analysis, does not mean that is not found in the values of an organization.

The new theory of organizational behaviour and professional incorporates a relatively large number of concepts were considered as more relevant by Janowitz: authority, communication, sanction hierarchy, status, social role and socialization. An army is not effective if it has a good moral, but the organizational structure, the practice of authority, the pyramid of hierarchy, management, social status and control civil society are consistent with the needs of military and military missions.

In the military organization, the issue of authority is central. No act has no legitimacy in the absence of military authority, hierarchy and discipline. Amid the tensions caused by organizational change, military organization should be to undertake a radical change of bases the exercise of authority and the imposition of discipline, a change from the model of domination and authoritarian practices to „the management authority" and „the competent authority" in which the emphasis is placed on the explanatory techniques, persuasion and expertise, which involves assumption of new concepts, values and regulations by military organization that will be further developed.

THE INFLUENCE OF CULTURE ON PERFORMANCE

New feature of military profession

Changing military missions is one of the most important of those which went through military organization in the past 50 years. Military function is a social function of every society. All societies have institutionalized instruments created for developing and maintaining capacity to respond adequately to deter and absorb physical violence, when this becomes necessary and beneficial. In other words, the military serves the function of violence in society managers. One of the directions of approach was the military functions that analyze a company task of controlling violence and not to eliminate it.

Thus, management of violence in modern society is the commission of military manager and military occupation is precisely defined in these terms: managers of the instruments of violence. A long period of time, warfare was essential to military mission. Military job has always been to draw the necessary lessons from the last war and prepare the next issue as well. Huntington shows that the soldier believes in violent side of human nature and is convinced of the inevitability of war.

Some analysts estimate that the technological revolution has meant that military mission to deter violence tends to be predominant in comparison with the mission to trigger and to use violence. In traditional military thinking this was difficult to perceive and accept. But nuclear weapons created a situation in which military victory is no longer relevant terms and not use anyone. The whole matter is reduced, ultimately, to maintain control of violence, regardless of its intensity. From this perspective, military strategies and doctrines identify several types of conflicts in the military and military leaders decide how to deal with the situations and more complex. In this sense, if such military missions be ordered according to their importance, it is possible to obtain the following hierarchy: the primary mission-to prevent war through deterrence, keeping mission-secondary internal social stability and international tertiary-care military mission, reconstruction and interventions in emergency situations.

Today's armies are facing a crisis is not due to socio-political context, a specific country or another, but a structural crisis, a crisis of the profession. Years 70's marks the beginning of this crisis. Social processes and national political events have highlighted the crisis, the diagnosis remained the same: something no good in trade merge weapons.

You can highlight at least three cases that require rethinking of the military profession and, consequently, the military organization: in terms of functions, the military has to adapt to new mission structure, i.e. not to wear both and win the war, especially as to discourage any kind of conflict it may be, in terms of organizational, the military establishment has remained out of phase from technological changes and social advances very fast, in terms of concept, strategies, doctrines and precepts of military training not "cover" the entire scope of military activities.

Crisis military profession is not so much a question of budget or equipment with modern equipment, as a matter of "operating" within the organization. To identify the problems were military profession units proposed three models of analysis: structuralist, procedural and pluralistic. The structuralist approach in general and the military profession in particular. From the perspective of organizational culture can identify some features of the military profession and military: body spirit, group identity and professional ethics.

Procedural model takes into account the developmental process of the military approach, which focuses on developments in society professionalize and legitimize the military profession. Pluralistic model, called sequence, is a product of post-Vietnam era and, subsequently, the post-Afghanistan and emphasizes the professional duties of "the new military".

The issue of professional military tradition of sociological thinking has remained consistent structuralist model. "The body of officers is a modern professional body is an individual and modern professional officer ...", a modern army's fundamental thesis, according to Huntington (1957). He also appreciates, unlike other authors, that the military bureaucracy is secondary compared to the professional. In this regard, it highlights the spirit of the military body, which represents "an organic unity and consciousness of members of professional groups that are different from any other group."

Another approach concerns the military organization that is Janowitz important. When questioned bureaucratic aspect (degrees, positions, etc..) Of the military profession, Janowitz consider the emergence of a "fraternal authority" which she calls "gender inequality recognized." Control is exercised professional peer and organizational control is exercised by superiors. Professional This authority can be characterized by two elements: first, the super-and subordinate roles, with very low temptation to circumvent the authority and power factor - a hierarchical system characterized by free flow from the bottom up; second, the highest levels to the lowest competent work decreases and increases interpersonal technical competence.

For example, restructuring of forces is a bureaucratic organizational problem and then the responsibility lies with the political factor, but is also a professional issue and where responsibility lies and all officers. Therefore it is said that the army is not an amorphous body, which can work with scissors, careless of consequences, but a professional body to be organically integrated in any transformation process. Thus, the issue of professional values have

been told that "the institutionalization of certain key values is to concentrate power in the hands of those who believe in these values."

After another author cited in the book "Army and Society", the fact that individuals, separately and together, possess a high level of theoretical knowledge and practical possibilities of application in everyday life such knowledge (expertise), and the contribution of all ethical rules are developed, which promotes and respects them judiciously (responsibility) are joined by a tall body and spirit of collective attachment to certain doctrines and methods (professional ethos), the military together and give each and individualized expression of own way of thinking and being which has been called "military mind."

The influence of culture on behaviour

From this perspective, not just move to professionalize the army of volunteers, but the transformation of the officer corps into a modern professional body. This transformation process involves conceptual, managerial and professional in the military organization's adaptation to the demands of social and political change. Professionalization of the army and sought individualized adoption of new concepts, new vision and mission organization, but has distanced the military from society but an appropriate way to another company affiliation, by professional, corporate way (Huntington, 1971). Society has become the unique stakeholder of a unique profession.

It seems that the momentum for corporate vocational orientation came from civil society, being about neocorporatist option, the managerial and professional bodies specific Western postindustrial society.

But we can say that this unique profession has a unique culture in these circumstances? The military interaction with people inside and outside their organizations and this supposes that they are permanently influenced by different organizational culture. As it read about the cultures below, it was considered how difficult each would be to implement in any organization, here is including the military organization. Consider what we have in place already that will facilitate the process, and which culture will contribute the most to the success of our strategy. In the past, the human resources section of an organization was often given responsibility for dealing with the "issue" of culture. This is possibly why there seems to be a belief within the military community that culture is the 'soft and fuzzy stuff' that we do in addition to running the real military affairs. Wrong!

The organization's culture is involved every time to make a decision. It is an organization's culture that causes:
- the projects to run over budget,
- the strategy never to be implemented,
- the beneficiary to get frustrated and walk away, and
- the activity to fail to see a major threat until it knocks you over.

Culture is our business, not something we have on the side. Culture influences what we value and what we believe is important in new military organization. It influences how we feel, and our motivation - it is either motivating or demotivating, depending on whether it galvanizes or saps energy. Culture guides our behaviors, symbols and systems, which in turn produce outcomes that contribute to or detract from the organization's performance. It strongly influences the decisions your people make, how they spend their time, and the nature of their interactions with people inside and outside your organization. Figure 2 illustrates how this occurs.
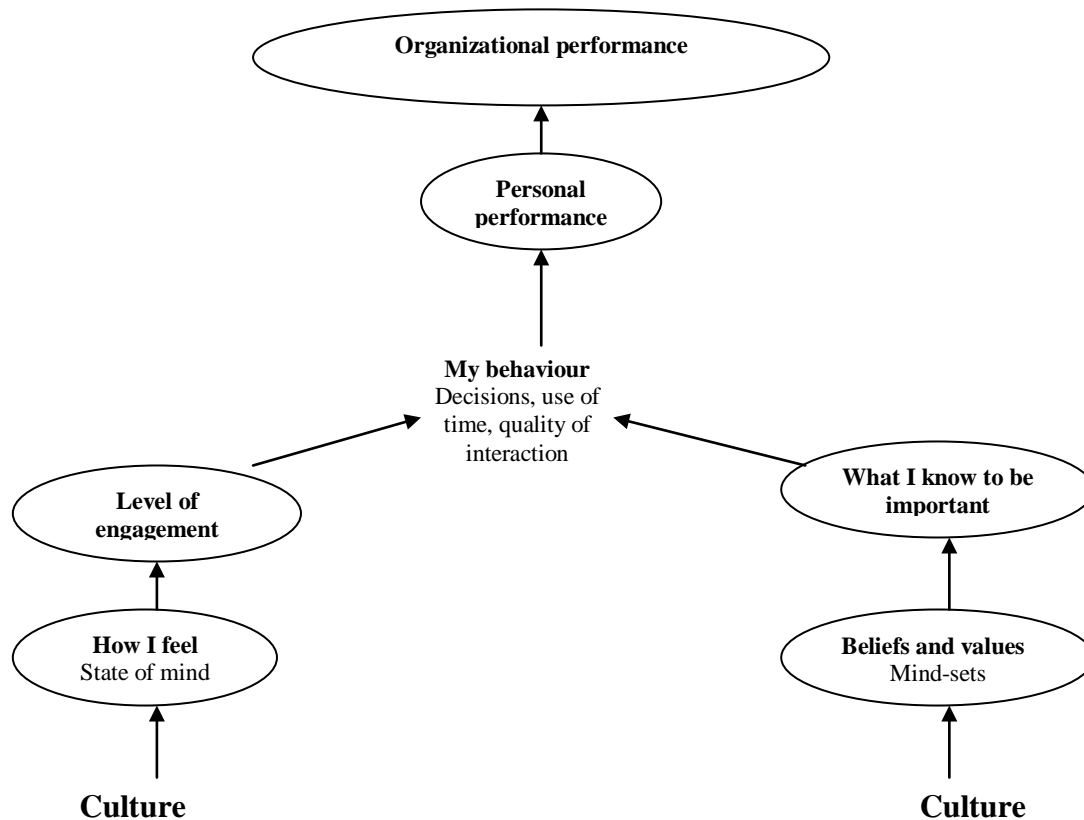
Figure 2. The influence of culture on performance

There are opinions that all factual approaches in cultural change is based on the fact that a positive culture can improve such performance-enhancing behaviors (summarized in the next table) as:

- *Speed*. Decision making and execution that is 'on time, on budget' are strongly influenced by culture. In high-performance cultures people make rigorous decisions, with high buy-in, and stick with them through implementation.
- *Accountability*. Culture determines how seriously accountability is taken. It can establish an expectation of delivering what was promised . . . or an environment of justification, blaming and avoidance.
- *Rigour*. High-quality decisions require high-quality input, and this requires a culture where people feel free to challenge, listen to others, learn from mistakes and have transparent, fact-based information. In many organizations these qualities are not embedded, and decision making suffers.
- *Simplicity*. Much organizational effort is channeled into people blowing their own trumpets, playing political games, burying facts and focusing on looking good rather than delivering an outcome. Simplicity occurs in cultures where these behaviors have been virtually eliminated.
- *Collaboration*. Collaboration between individuals and teams is essential to successfully service customers across complex organizational processes, and to avoid duplication of effort or 'silo-ed' businesses. Strong cultural norms are required to instill expectations of collaboration and thus achieve these organizational benefits.

- *Attractiveness*. Great cultures are contagious. People feel good working in organizations that have them and they want to stay; others want to join and customers can feel the vibes.
-

Behavior	Outcomes
Speed	responsiveness to demand changes decision making implementation
Accountability	consistency of delivery w what gets promised gets done strategy linked to action linked to individuals
Rigour	lack of group think management of risk willingness to challenge
Simplicity	lack of waffle lack of padding
Collaboration	lack of duplication group benefits override individual seamless delivery to the beneficiary
Attractiveness	keeping the people you want strong personnel brand having beneficiary feel your people care

CONCLUSIONS

In spite that I tried to show to the advantage to positive culture that can improve such performance-enhancing behaviour, I know there is much potential to analyse the performance. For every organization it is important how strong or weak is his own culture. Is military organization characterized by a strong culture or weak? The answers can be finding out in his regulation, symbols, kind of organization, external and internal assumption, the paradigm of military profession and so on.

Organizational culture is a key to organizational performance and could be managed to improve a high level of military organization. Also, seeing the outcome below like the effect of culture on organizational performance it could say that the culture has an all-important influence within organization. All the same the main difference was that organizational culture was now viewed less as a natural, organically emergent phenomenon and more as a manipulable and manageable competitive asset.

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CIVIL-MILITARY CO-ORDINATION IN AIR TRAFFIC MANAGEMENT

Captain commander ION CHIREA

Attempts to produce people-carrying flying machines have been recorded since round 850 BC. Unfortunately, attempts to emulate birds focused on flapping wings rather than producing lift. Many cultures have built devices that travel through the air, from the earliest projectiles such as stones and spears [1][2], the boomerang in Australia, the hot air Kongming lantern, and kites. There are early legends of human flight such as the story of Icarus, and Jamshid in Persian myth, and later, somewhat more credible claims of short-distance human flights appear, such as the flying automaton of Architas of Tarentum (428–347 BC), [3] the winged flights of Abbas Ibn Firnas (810–887), Eilmer of Malmesbury (11th century), and the hot-air Passarola of Bartolomeu Lourenco de Gusmao (1685–1724).

Flying has been part of our reality since man first saw birds soar into the skies. People have dreams of flying where they are free from the physical grid and travel to places of endless wonders and possibilities. Wings made of feathers or light weight woods have been attached to arms to test their ability to fly. The results were often disastrous as the muscles of the human arms are not like a bird and cannot move with the strength of a bird.

Humankind understood flight was possible from observing birds, but it took hundreds of years to achieve and cost many lives. Consequently, we have a rich legacy of stories of the many attempts to fly. The intrinsic sense of wonder about flight can be utilized for starting points in developing an understanding of basic principles of how things fly; birds and aircraft utilize the same principles.

As your aircraft may not always fly successfully, you will be asked to help solve the problem of "why doesn't it work?" which re-quires that you understand basic principles of flight.

THE NEED FOR CIVIL-MILITARY COORDINATION IN AIR TRAFFIC MANAGEMENT

The world is not the peaceful, safe haven we all would like it to be.

The Gulf wars, the Balkan crisis, terrorist attacks, Afghanistan, Iraq are just some events in recent history proving the point.

Despite best intentions, times of tension and crisis do happen, and contingency arrangements must be put in place beforehand.

Defence and **security** are the military's raison d'être. As an integral part of the defence forces, military aviation is an important element in contingency planning.

It therefore remains an important and **essential user of European airspace**; and consequently a stakeholder to be considered in European Air Traffic Management.

The military is **one of the biggest 'airlines' in Europe**. The ECAC-wide State Aircraft Fleet amounts to:

- over 1,100 large aircraft (transport, cargo, tankers, maritime patrol aircraft)
- over 3,300 combat aircraft
- almost 2,300 light aircraft (training, reconnaissance, utility)
- around 4,500 helicopters

- some 400 paramilitary aircraft

Additionally, several hundreds of US aircraft stationed in or detached to Europe plus inbound military traffic also have to be handled by the ATM infrastructure. Military operations in Europe are conducted from 150 main military airfields.

The security ensured by a viable deterrent and committed fighting force **provides the backdrop for civil aviation to thrive**. Air Traffic Management therefore needs to serve both civil and military aviation.

Fig 1

WHAT THE MILITARY NEEDS FROM AIR TRAFFIC MANAGEMENT (ATM)

Fig 2

In order to **properly train and operate**, military aviation needs:
- easy **access** to airspace and the freedom to operate at any given time
- **special handling** by controlling agencies for priority flights (e.g. Air Defence intercept flights), time-critical missions (e.g. humanitarian relief flights) and aircraft which cannot comply with equipment mandates for civil aviation
- to be able to **operate without (ground) control** for certain missions
- **portions of airspace reserved** for special manoeuvres and exercises

The challenge: increasing demand for airspace

The airspace over Europe is a **finite resource** for use by **all** airspace users, both civil and military. However, as a finite resource, there must be **some measure of agreement** concerning its use if that use is to be economical and effective. This need became particularly relevant following the massive increase recorded in commercial air traffic in the 1980s and 1990s.

Although military activity has reduced considerably all over Europe during the last decade, due to emerging threats and the need to retain a viable deterrent as well as a committed fighting force, **the overall requirement for airspace remains justified, although the nature of the requirement will inevitably change**. Today, there is a growing need for larger temporarily reserved areas to accommodate a new generation of aircraft, beyond visual range weapons systems, new tactics and the need to conduct multinational exercises.

Moreover, the volatility of military operations and associated traffic has increased due to the need to deploy large forces at short notice, as periods of tension and crisis are often neither planned nor foreseeable.

The military authorities have progressively modified the location of military units in Europe in line with current military strategies, but decisions are often limited by other considerations:

• The military units are very well integrated in the social and economic life of the local community and the closure of a base can be detrimental for the local economy.

• The installation of military sites in new locations may raise environmental concerns.

In addition, each European State uses many different types of weapons systems and therefore must plan a broad range of military training activities, irrespective of the State's geographical size and location. This generates a high demand due to the diversity of the areas (in size, in altitude, in location) that may be requested by each State.

While military demand can be satisfied within national airspace with some cross-border arrangements, civil traffic demand cannot be satisfied unless planning the European airspace as a network. These two different perspectives could lead to different views on airspace design.

Except for the fact that aerial vehicles are used, civil and military aviation do not have much in common, which mainly results from their different operational requirements. However, both need to share the finite resource airspace to accommodate their requirements. To do this in a most beneficial way for all actors involved, effective civil-military ATM coordination and cooperation need to be in place at national and international levels.

Fig 3

The institutions at European level are working to facilitate this coordination and cooperation at the European scale for all relevant civil and military stakeholders and State authorities. To appropriately accommodate military needs and to apply effective civil-military coordination and cooperation, it is of utmost importance to have a clear understanding of the developments in ATM, resulting from SES and SESAR for European aviation.

The legislation concerns everyone: governments need to coordinate beyond national borders, industry needs to develop interoperable systems (air/ground and air/air), staff need to be trained on new regulations and procedures, and regulators must ensure that safety and security will not be jeopardized.

The idea is to have an ATM System providing a European sky without national borders that will deliver higher levels of safety, more capacity for all airspace user needs, better environmental sustainability and economic affordability.

INSTITUTIONAL SET-UP CLARIFIED

EUROCONTROL is an inter-governmental civil-military organization dedicated to the efficient and safe management of airspace for both civil and military users. Ensuring successful coordination and co-operation between the civil and military aviation partners is therefore an important element of EUROCONTROL's work. Moreover, the Single European

Sky regulations have reinforced the need for such a coordinator.At the highest institutional level, the **General Assembly** is responsible for the formulation and approval of the Organization's general policy. It is composed of the Ministers of Transport and the Ministers of Defense. The **Council**, implementing the General Assembly's decisions and supervising the Agency's work, is composed of representatives at the level of Directors General of Civil Aviation. States may appoint several representatives in order to allow the interests of both civil aviation and national defense to be represented, but shall have only a single voting right.

Fig 4

The Revised Convention created the *Civil/Military Interface Standing Committee* (CMIC) as an advisory body to the EUROCONTROL Council to gain early benefits from the enhanced level of civil/military collaboration. CMIC is composed of civil and military representatives at senior executive level.

In 2007, EUROCONTROL established the *Military ATM Board* (MAB) in response to the need to effectively involve military stakeholders in the decision-making process. It is a body where the military community coordinates its views and reaches consensus on ATM issues thus facilitating the decision-making process at European level. The MAB is composed of senior military officers who exercise responsibilities as national heads of military ATM or its equivalent, and the Director of DCMAC. The MAB concentrates on strategic and policy issues. Its main role is to provide advice to the DG and the PC to ensure consistency of the EUROCONTROL Program of Work with military strategies and plans.

The Military Harmonization Group (MilHaG) was originally created by CMIC as its military support group before the establishment of the MAB and is composed of military State representatives. Its mission is to define, develop and promote harmonized European military positions on CNS/ATM matters at strategic and political level in order to improve co-ordination within the military community for the benefit of the entire ATM community. By decision of CMIC/33 and MAB/05, the MilHaG now reports to the MAB.

The *Military Team* (MILT) is in dormant status since CMIC, at its 28th meeting, decided upon advice from the MilHaG that the Task Force and Focus Group levels were the most important levels to invite expert advice for DCMAC and that the team level should be discontinued in order to spare scarce resources, notably scarce human resources.

The EUROCONTROL *Directorate of Civil-Military ATM Co-ordination* (DCMAC) was established within the Agency to provide current military knowledge and expertise across the full range of EUROCONTROL Agency activities, to act as the focal point for military issues within the Agency and to be an interface between the Agency and the military community on ATM/CNS matters.

Within EUROCONTROL, DCMAC is responsible for supporting successful civil-military and military-military coordination in Air Traffic Management (ATM). Currently, about 2/3 of its staff have a recent military background (pilots, navigators, controllers, engineers,

procurement experts, experts in regulation) which is why DCMAC is EUROCONTROL's source of knowledge regarding civil-military ATM issues and the requirements of EUROCONTROL's military stakeholder. As DCMAC is part of the EUROCONTROL Cooperative Network Design Directorate (CND), it also contributes expertise to programmes and activities of other CND Pillars in regard to Support to States, Network Development and with a major emphasis to SESAR.

THE ANSWER: FLEXIBLE USE OF AIRSPACE

Clearly, there is a need for the safe co-existence of civil and military operations in a common airspace. But how do we satisfy this need when the airspace and the Air Traffic Management System must **accommodate an ever-increasing demand** from the commercial aviation community as well as the military requirements of today and the future?

There's only one answer to it: by enhancing Civil/Military co-operation and co-ordination across all ATM related activities, at institutional and operational level.

The EUROCONTROL Flexible Use of Airspace concept reflects this. **Airspace should no longer be designated either military or civil, but should be considered as one continuum and used flexibly on a day-to-day basis**. Consequently, any necessary segregation of airspace and air traffic should only be of a temporary nature. The full application of the concept is without any doubt the key to success and the answer to the increasing demands of both partners for more airspace capacity in terms of volume and time.

Since its inception in 1996 the Flexible Use of Airspace (FUA) concept has been introduced in most ECAC Member States.
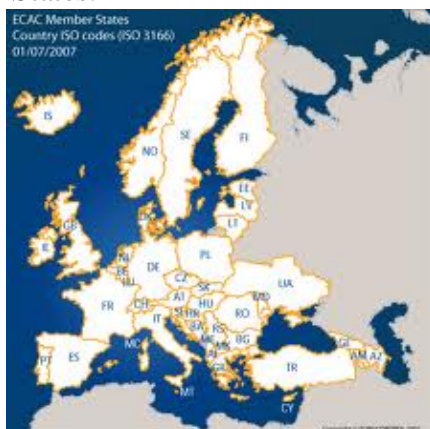
Fig 5

As a basic FUA principle, airspace should no longer be designated as military or civil airspace but should be considered as one continuum and used flexibly on a day-to-day basis.

All users may have access and, based on actual needs, their **requests should be managed to achieve the most efficient use of the airspace.** Wherever possible, permanent airspace segregation should be avoided.

As part of the SES Regulatory Framework, **European Commission Regulation No. 2150/2005** of 23 December 2005 laid down common rules for the flexible use of airspace (**FUA Regulation**). Enhanced cooperation and real-time coordination between civil and military units shall contribute to the economic use of shared airspace resources. To further support the **implementation of the FUA concept**, the European Commission (EC) requested the Agency to assist in the development of an **FUA Community Specification**. This request was dealt with at Agency level by the Airspace Network Planning and Navigation Unit in close coordination with DCMAC.

Since the **FUA Specification of EUROCONTROL** will not only address interoperability standards presumed for systems or constituents, but progressively facilitate

implementation matters of operational coordination between civil and military ATM partners, comprehensive cooperation and consultation processes with all relevant national authorities is crucial. DCMAC ATM experts contribute to the Agency work and will assist stakeholders to achieve a harmonised application of the FUA within the Single European Sky.

With the application of the Flexible Use of Airspace Concept (FUA), airspace is no longer designated as "civil" or "military" airspace, but considered as one continuum and allocated according to user requirements.

The FUA Concept provides the Air Traffic Management (ATM) system with the potential to increase capacity. The FUA Concept allows the maximum shared use of airspace through enhanced civil/military co-ordination. The application of the FUA Concept ensures that any airspace segregation is temporary and based on real use for a specified time period.

Flexible airspace structures have been established that are suited to temporary use:

- **Conditionnel Routes** (CDRs) – non-permanent Air Trafic Services (ATS) routes or route-portions;

- **Temporary Segregated Areas** (TSAs) and **Temporary Reserved Areas** (TRAs) – areas temporarily reserved for the exclusive use of specific users,

- **Cross-Border Areas** (CBAs) – TSAs or TRAs established over international boundaries

- **Reduced Co-ordination Airspace** (RCA) and **Prior Co-ordination Airspace** (PCA) – procedures enabling General Air Traffic (GAT) to operate outside the ATS route structure.

Fig.......

1. The Flexible Use of Airspace (FUA) Concept has been developed at the three Levels of Airspace Management that correspond to Civil/Military co-ordination tasks. Each Airspace Management (ASM) level has an impact on the others:

➢ **Strategic Level 1** – definition of the national airspace policy and establishment of pre-determined airspace structures;

➢ **Pre-tactical Level 2** – day-to-day allocation of airspace according to user requirements;

➢ **Tactical Level 3** – real-time use of airspace allowing safe Operational Air Traffic & General Air Traffic (OAT & GAT) operations.

In force in Europe since March 1996, the EUROCONTROL Concept of Flexible Use of Airspace needs to be enhanced within the next five years to exploit the airspace in a more dynamic manner by enabling late airspace (re-)allocation as close as practical to the time of operations in order to accommodate short-term changes in traffic situation and/or users requirements (FUA 2008/2012 Scenario).

CONCLUSIONS

All of the aforementioned international organizations (ICAO, NATO, European Union, ECAC and EUROCONTROL) have responsibilities that may affect the civil aviation/defense interface and air traffic management. However, EUROCONTROL, due to its status as a civil-military organization, is uniquely placed to play a pre-eminent role in the field of civil-military co-ordination.

However an effective network of co-operation between international institutions (ICAO, ECAC, NATO, EU and EUROCONTROL) is not yet in place. Whenever an international co-ordination would be necessary, the role of international organizations is still weak.

Flexible Use Airspace concept will change management and use of the skies over Europe and will impact both, civil and military actors and their current modus of operation.

Nevertheless, these changes have strong potentials to provide substantial benefits for the civil air transport system and military aviation alike, if the requirements of both are integrated into one ATM system through appropriate civil-military coordination and cooperation processes.

Flexible Use Airspace concept brings some benefits, as follows:
- Increased flight economy through reduction in distance flown, time and fuel consumed;
- Reduction in airspace segregation;
- Increased ATC capacity, reduced ATS workload;
- Enhanced real time civil/military co-ordination;
- Reduction in delays to General Air Traffic;
- More efficient ways to separate Operational and General Air Traffic;
- Reduction in airspace segregation needs;
- The definition and use of Temporary Segregated Areas that are more closely in line with military operational requirements and more generally that better respond to specific military requirements in tactical phase.

Co-ordination civil/military can identify which principles, rules and procedures for the conduct of military (OAT) operations and for OAT/GAT compatibility need to be commonly applied within EUROCONTROL* Member States.

ABBREVIATIONS
AA - Approved Agencies
ACC - Area Control Centre
AFTN - Aeronautical Fixed Telecommunications Network
AIP - Aeronautical Information Publication
AMC - Airspace Management Cell
ASM - Airspace Management
ATC - Air Traffic Control
ATFM - Air Traffic Flow Management
ATM - Air Traffic Management (ATS+ASM+ATFM)
ATS - Air Traffic Services
AUP - Airspace Use Plan
CBA - Cross-Border Area
CBO - Cross-Border Operations
CDR - Conditional Route
CFMU - Central Flow Management Unit
EATM - European Air Traffic Management
ECAC - European Civil Aviation Conference
FIR - Flight Information Region
FUA - Flexible Use of Airspace

GAT - General Air Traffic
ICAO - International Civil Aviation Organisation
IFR - Instrument Flight Rules
OAT - Operational Air Traffic
RCA - Reduced Co-ordination Airspace
SAR - Search and Rescue
SSR - Surveillance Radar
TRA - Temporary Reserved Area
TSA - Temporary Segregated Area
UTC Co-ordinated Universal Time
VFR - Visual Flight Rules

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MANPOWER IN CRISIS RESPONSE OPERATIONS

Lieutenant Colonel CONSTANTIN CIUBOTARIU

A Crisis Establishment (CE) is a table setting out the authorized posts for a Crisis Response Operation (CRO) unit, formation or headquarters. The full CE consists of the establishment table itself, the organization chart and also the Job Descriptions (JDs) that support the authorized posts. The CE is the mechanism for the provision and sustainment of qualified manpower to the HQ. Efficient maintenance of the CE enables Human resources Management (HRM) Authority to identify timely replacements from the source prior to every End of Tour (EOT) and allows proactive identification of problems before they arise.

PRINCIPLES, POLICIES AND PROCEDURES

Key Principle

National manpower is deployed to a Crisis Establishment (CE) on the basis that it will be employed to an agreed post and for an agreed period of time. As a rule, all deviations from this principle should be agreed with the local Senior National Representatives (SNRs), prior to the change; SHAPE HRM is to be informed about the changes in post-allocation in a timely manner.

Responsibilities

a. **SHAPE**. SHAPE HRM will provide guidance on HQ organization, policy support for personnel management, coordination of the provision of manpower for operations, and its sustainment, as necessary, through the NATO Command Structure (NCS) and/or the nations[2]. SHAPE HRM is responsible to the SACEUR for the maintenance of the CEs. SHAPE HRM key tasks are detailed below:
   1) The development and promulgation of SHAPE HRM policies and procedures for CROs;
   2) A continuous review of CROs structures, through the Periodic Mission Review (PMR) process, to ensure they remain consistent with the mission;
   3) To direct CRO Manpower Organisational Review (MORs) which will ensure, inter alia, that all manpower is used efficiently;
   4) To staff CRO HQs Flag Plots for DSACEUR approval and TCNs agreement;
   5) To efficiently maintain the master CEs for each HQs using a proactive management a with subordinate HQs and National Military Representatives (NMRs)[3];
   6) To constantly provide updated information through SHAPE HRM WEB PAGE;

b. **Joint Force Command HQs.** At the Operational level of command, the Joint Force Commands (JFCs) will provide the policy guidance and technical support for personnel management, accountability and reporting, and administrative services support to NATO and Non—NATO personnel, if any, deployed in support of operation in accordance with NATO regulations and ACO procedures. JFC HRM main operational tasks are, as follows:

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[2] Nations include both NATO and Non-NATO Troop Contributing Nations (TCNs)
[3] NMRs refers to both NATO and Non-NATO representatives at SHAPE

      1) Providing support to SHAPE Force Generation (former J5) who have the lead of the PMR initial review and execution report for SHAPE endorsement;

      2) Execution of MORs in accordance with SHAPE guidance;

      3) Identification of personnel from within its elements of the NCS to backfill mission-critical gaps. An estimate of personnel likely to be required should be passed to the relevant NMRs in advance;

      4) Coordination of pre-deployment training and deployment of personnel;

      5) Consolidation for reporting purposes of personnel information related to ongoing operations.

c. **Theatre HQs.** CRO HQs in theatre will implement the direction received in terms of established personnel policies and procedures, as follows:

      1) Development of HRM SOPs;

      2) Development of CEs including JDs;

      3) Maintenance of Manning Rosters;

      4) Submission of 60 Day Loss Reports;

      5) Submission of PERSREPs including casualty information;

      6) Submission of Medal eligibility and requirements.

d. **CE Authority (CEA).** SACEUR is the authority for all CRO CEs with responsibility delegated to DSACEUR. Chief HRM has responsibility for the day to day maintenance of the CEs.

e. **Relationship with Peacetime Establishments (PEs).** CEs and PEs are separate personnel establishments that are developed to meet separate requirements. CE posts will not be added to the PE of a unit, formation or headquarters. The CEA will activate a CE within the framework of the OPLAN.

Force Generation.

a. **Relationship to CJSOR**. Following the NAC Force Activation Directive, a force generation process is triggered by SHAPE releasing the Activation Warning (ACTWARN) . A Combined Joint Statement of Requirements (CJSOR) is drawn up by SHAPE Force Generation and generally includes the HQs CE as the first line serial. Initially in theatre command will be the responsibility of an High Readiness Force (HRF) HQ or NCS HQ, providing a model core HQ. It will be necessary to build a HQ CE for the control of every operation so that effective management of the manpower committed to CRO HQs can be undertaken. The posts on the HQ CE are usually distributed to nations based on force distribution to the CJSOR. This relationship between numbers of troops deployed and the number of HQ CE posts allocated is an apportionment based on the "vertical slice[4]" methodology.

b. **Augmentation**. The requirement for augmentation, parallel to the planning and force generation process, must be specified as soon as possible. Only two ways exist to select manpower, both of them time consuming, so the quicker the process starts the better:

      1) Directly from the nations, which requires identification, selection and preparation of individuals;

      2) From within the NCS, which potentially requires clearance by SHPE HRM for individual deployments from nations through NMRs.

c. **Allocation of CE Military Posts**.

      1) After each MOR, a new CE and Vertical Slice Liabilities (VSL)[5] are presented to TCNs to enable them to bid for posts. Nations offers are to be provided to HRM,

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[4] The "vertical slice" calculation is a means by which national contributions (sum of national troops an capabilities within a defined operational area under NATO command) to a CRO HQ are directly apportioned in numbers of military staff posts within the HQ CE that should be allocated to a particular nation

[5] VSL is calculated based on the (weighted) CJSOR contributions where applicable.

and are finalised or de-conflicted[6] during a Manpower Coordination Conference (MCC).

    2) Military posts should be filled by military personnel meeting the JD requirements. In filling posts at and below OF-4, an individual ranking one above or below the required grade may be accepted. Prior approval from Director HRM SHAPE is required for all posts where the incumbent is not the same rank as that stated in the CE.

d. **Flag to post**. The allocation of flag posts (OF-5 and above) are governed by AAP 16 (D) (CHANGE 2) Manpower, Policy and Procedures dated 19 Feb 08. HRM staff proposals to DSACEUR for his approval after which he releases the proposal to nations for their agreement. DSACEUR is required to notify the Military Committee (MC) of agreement made with Chief of Defence (CHOD) over the allocation of flag posts. New flag posts should be advertised to all TCNs for bids, after which DSACEUR will make a selection based on suitability and national CJSOR contributions.

CE Management

a. **Change proposals**. SHAPE HRM maintains the master CE for each HQ which can be viewed on the SHAPE WISE Portal. SHAPE HRM is the sole authority for alteration to the CE. Any proposed amendments to the CE by the theatre HQ must be provided to SHAPE HRM through the chain of command, and staffing by SHAPE Divisions will take place as appropriate when functional advice is required. Subsequently, any endorsed alterations to the CE will be communicated to the requesting HQ.

b. **Non CE posts**. There are some posts such as higher level advisors (e.g.: POLADS) not commonly funded but included in the CE matrix to provide a complete picture of the whole CE structure.

c. **Standby Posts**. Some posts may be deactivated by putting them under the standby status for a specific period. During this time, if a need for activating these posts is forthcoming, then they will be opened. The posts not needed to be opened again will be deleted normally after the successive MOR.

Civilian Personnel

a. **NATO International Civilian (NIC).** NICs are employed by NATO command or agency and are normally sent to CRO on order from their parent organisation and their status is governed by the SOFA. Deployment of NICs will be executed in accordance with NATO Civilian Personnel Regulations and ACO Directive 50-11, Deployment of NATO Civilians dated 14 May 07.

b. **International Civilian Consultant (ICC).** When functions within a Theatre HQ are civilianised, and require international experience, ICCs will be selected to fill specific requirements. Normally they can be recruited from TCNs to the mission. ICCs will comply with the relevant Civilian Personnel Policy (CPP). ACO regulations do not apply to ICCs.

c. **Local Civilian Hire (LCH).** Functions within a Theatre HQ which require locally employed civilians will be filled by LCHs who are selected to fill specific to theatre requirements. LCHs will comply with the relevant Civilian Personnel Policy (CPP). ACO regulations do not apply to LCHs.

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[6] National offers are expected to reflect a similar percentage to their contributions to the Theatre CJSOR in line with the vertical slice calculation. In case of conflicts between two or more nations, solutions should be found through bi-lateral agreements, with SHAPE HRM acting as a facilitator. Should agreement not be reached, DSACEUR advised by SHAPE HRM will determine the outcome

MANPOWER PLANNING

Concept. At the military strategic level of command, SHAPE HRM is responsible for manpower and organisation of CEs being, in the same time, the formal points of contact with the nations, through communication with the NMRs based at SHAPE and any NCS HQ HR Department. In practice for national personnel issues, a National Contingent Command (NCC HQ) or a National Support Element (NSE) is established at theatre level[7].

Operational Phases. Operations take place in the following generic phases:

a. **Preparation or Pre-Deployment.** As an operation emerges, the NATO Response Force (NRF) is likely to be deployed at the first stage and command and control (C2) assets will be provided from within its composition. The Deployable Joint Staff Elements (DJSE) have been established as one of the potential first elements to be deployed for any future operation. The need for national augmentation for this CE will result in the creation of a new CE.

b. **Deployment and Establishment of the Force**. Upon NAC approval of the OPLAN and Activation Order (ACTORD), TCNs will deploy their nominees to fill their allocated positions in the CE. Without the necessary augmentation the HQs may not reach Full Operational Capability (FOC). Preparation of the OPLAN will have included and Appendix 2 to Annex R – Organisations, Manpower and Personnel Administration, which will give guidance to their subordinate HQs on specific responsibilities.

c. **The Operation and Sustainment.**

   1) The receiving HQ should review the CE in order to identify areas where there are shortfalls and area where there are surplus personnel who can be released or reassigned.

   2) Should the mission look set for more than 6 months, planning for reinforcement will be required, which can take the following forms:
      i. Replacement of the in theatre HQ by another "Core"[8] model HQ;
      ii. When and if situation permits, replace the in theatre HQ by a "Composite"[9] model HQ.
      Whichever model is chosen, national terms and conditions of service will generally mean that a majority of individuals (normally OF-4 and below) will have to be replaced at the 6 months point, although occupying key leader positions (normally OF-5 and above) are to remain in post for 12 months in order to generate continuity to their campaign.

   3) Throughout the development of the operation there will be a requirement to review the HQ structure, activity which be led by the PMR process. A re-assignment of posts will be required every time the mission or the tasks are changed in order to ensure that the manpower committed to the HQ is correct, and/or in line with any change in the CJSOR.

   4) MORs will be periodically directed by SHAPE to ensure that manpower, both civilian and military is used efficiently. If a revision is made, it has to be synchronised closely with the flag to post process as the CE provides the OF-5 and above requirement.

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[7] In order to provide administrative support to their deployed personnel, smaller TCNs which are not able to establish their own NSEs, should seek bi-lateral agreements with larger TCNs so that adequate support is provided through them.

[8] A "Core" HQ is provided by either a HRF HQ within the NCS, which normally need to be augmented by a certain number of experts or onto which the specialists modules can be bolted.

[9] The term "Composite" is used every time a CE is filled primarily by augmentees from different NATO and Non-NATO TCNs

d. **Redeployment.** If not separately covered in the OPLAN, on completion of the mission TCNs personnel will re-deploy from theatre to parent unit under national guidance. NICs, not being part of a national contingent, will need support from the Civilian Human Resources Manager (CHRM) in theatre to arrange their redeployment to their parent HQ or capitals either through military or civilian means.

MANNING ISSUES

Manning of CE Appointments. All positions on the CE should be manned with personnel who meet the specific requirements of the JD of the post. Dependent upon the needs of the post as articulated in the JD, a stated level of English and basic Automated Data Processing (ADP) skills are essential. Detailed JDs for all HQ posts are to be prepared by the theatre HQ in accordance with the "Instructions for completion of standard International Job Descriptions" and passed up the functional chain of command to SHAPE HRM for further review and approval. The JDs will be screened by the JFC HQ and validated by SHAPE HRM before being made available to nations. During the deployment and sustainment phases of the operation changes may be made to JDs normally as part of the MOR process. All validated JDs for CRO HQs will be available on the SHAPE HRM WISE page.

Training Requirements.
a. **Pre-deployment Training Requirements.** Any requirement for national mandatory pre-deployment training is the responsibility of each TCN or NATO for deployed NICs. NATO requirements are specified on the JD.
b. **Pre-employment Training Requirements.** Personnel assigned to appointments within the HQ may be required to attend pre-employment training on arrival, subject to guidelines established by the operational commander. For some specialised posts, NATO will provide training in order that the individual can carry out his role in accordance with NATO procedures.

Tour Length and Rotation Policy. Personnel rotation policy is a national responsibility. The OPLAN will specify the recommended tour length and a minimum tour length of 6 months is the norm. It is important that the senior leadership should provide continuity to the direction of the campaign and therefore the tour length policy for OF-5 and above is 12 months. It is possible that a number of other specified posts at OF-4 and below will have extended tour lengths. The recommended tour length is shown on the CE.

Temporary Reassignment within CEs. In exceptional circumstances operational events may require prioritisation of activities within CEs, which may necessitate a temporary reassignment of staff in an expeditious manner. To meet these requirements, the senior NATO Commander in theatre may authorise reassignments[10] of CVE staff in extremis and in support of pressing operational requirements[11]. The local SNR shall be informed in advance of any changes in post allocation. Any permanent reassignments require prior approval by the local SNR. SHAPE HRM is to be informed about changes in post allocation in a timely manner.

Security Clearance
a. **NATO personnel.** All NATO personnel deploying to a HQ appointment are to arrive in theatre with a certified hard copy of their national Personnel Security Clearance Certificate (PSCC) appropriate to their appointment.
b. **Non-NATO Troops Contributing Nations (NNTCN) Personnel.** When it is decided to open a mission to NNTCNs, and after the nation has been formally recognised by NATO HQ as a TCN, their personnel deploying to fill posts that are annotated on the CE "Open" to NNTCNs are to arrive in theatre with a valid hard copy of their national PSCC as requested by the JD. This will allow them to take their place and operate on the MISSION SECRET network. A non-NATO SECRET clearance does not allow the

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[10] If the reassignment is not law national caveats then approval is required by the local SNR.
[11] If the reassignment is to a different geographical area the SNR's approval is required.

holder to fill a post requiring a NATO SECRET clearance. These posts are annotated "Closed" on the CE.

c. **Additional Security Restrictions**. It is possible that the needs of the mission will require certain posts to have access to national systems, typically in the J2 arena. In these cases posts will be annotated on the CE accordingly (e.g. 4 "Eyes Only")[12].

Handovers/Takeovers. The minimum recommended period for staff handovers is 5 working days, however some OR appointments may require no formal handover, whilst some key appointments may require a longer period.

Lack of Suitability due to Language Inadequacy. Due note is to be taken of the CRO Language Policy sponsored by SHAPE HRM and personnel arriving in theatre with inadequate English language skills against the JD requirement shall be reported to the NCC/NSE and to the chain of command, with the aim to replace the individual as soon as possible. The concerned SNR is to take any necessary actions to solve this issue to the benefit of all parties involved, whilst SHAPE HRM will inform the concerned NMR of the situation.

Voluntary National Contributions (VNCs). VNCs are the military or civilian personnel voluntarily appointed by TCNs either to temporarily meet a request for additional manpower, or to meet a national requirement. VNCs are not normally part of the CE but are to be recorded on the manning roster for tracking purposes. Nations should seek SHAPE HRM approval before deploying VNCs in order that the requirement can be coordinated with the theatre HQ. Civilian VNCs are not subject to NATO regulations, directives, policies, in-theatre SOPs applicable to the NATO civilian workforce; they are subject to regulations of their respective country.

Civilian Personnel. During preparation and deployment phases of an operation there is likely to be a requirement to use civilian personnel as linguists/translators/interpreters. During the sustainment phase civilian personnel will be employed in other areas if the situation warrants. Whether the civilians utilised are ICCs or LCHs, they will comply with the relevant ACO Civilian Policy regulations[13]. Justifications to the various boards for civilianisation should be made using the chain of command. ICC and LCH posts should be classified and JDs endorsed by the respective theatre Civilian Human Resources Manager (CHRM) in accordance with the NATO Civilian Personnel Regulations. CHRM should coordinate the hiring of civilians (less LCH) with the controlling JFC.

a. **NATO International Civilians (NICs)**. NICS can be assigned to CE posts of a NAC approved operation in accordance with NATO Civilian Personnel Regulations. If there is a requirement to deploy NICs to an operational theatre, the justification is submitted to SHAPE HRM on a case-by-case basis. As for military personnel deployed by their own nations, a pre-deployment training is required, also for NICs, in line with NAC guidance as it is a NATO responsibility. As NIC regulations are somewhat different from military ones, specific guidance will be included in the OPLAN and must be applied to deployed NICs.

b. **ICCs and LCHs.** ICCs are employed by the theatre HQ is support of the mission requirements. Their status is governed by the SOFA. LCHs are host national hired under special provisions in the SOFA or other recognised agreement. LCHs will be employed if the situation warrants and if agreement is reached with the local government.

POLAD / Deputy POLAD Manning. The tour length in these posts are usually 12 months and the selection process is handled by NATO HQ. National Permanent Representatives will offer nominations and the selection of these candidates is undertaken on the NATO Secretary General's behalf. SHAPE HRM is kept informed of the designated personnel through the SHAPE POLAD Staff.

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[12] The 4 Eyes Only refers to personnel belonging to AUS, CAN, USA, and GBR.
[13] ACO Regulations do not apply to civilian staff provided through contractorisation.

Approval of Senior Officer Appointments. Unless stated in the OPLAN there is no requirements for those nominated for Senior Appointments to be approved by the Chairman of the Military Committee (CMC).

Casualty Reporting. Casualty reporting is a national responsibility but for the majority of operations in addition to their own reporting systems, national contingents are to report casualty information in accordance with theatre SOPs. Casualty Reporting Databases are to be maintained by theatre HQs. KIA personnel will be reported through PERSREP weekly and monthly. Further details regarding types of casualties will be included in the theqatre Medical Situation Report (MEDSITREP).

Religious Services. Religious support is a national responsibility and NICs and smaller TCNs will need to make use of bilateral agreements to gain access to religious services. At all levels of command the chaplain or equivalent should be the principal advisor to the commander on matters of religion and morale within the command.

Morale and Welfare Activity (MWA). Commanders are responsible for the set up of MWA in their area of responsibility, without jeopardising the operational integrity of the mission. Financing of welfare tends to be self-sustainable and has to be agreed among TCNs. For multinational HQs with a framework nation, bi-lateral or multi-national agreements need to be negotiated with all participants. For a composite model HQ which needs funding for special cases, a full ad-hoc justification is to be forwarded to SHAPE through the chain of command, following the Crisis Management Resources Board (CMRB) process for consideration.

Role of Resource / Requirement Review Board. There is a need for boards at various levels in the chain of command to introduce / screen / validate resource requirements (including civilian manpower). Therefore, in order to be able to treat any request related to resources, a Resource of Requirements Review Board will be established at each level the chain of command. The Board is to ensure full co-ordination, review and approval of all requests concerning NATO resources.. All amendments to the number of civilian posts on a CE and to the grade of ICC / LCH are subject to review and approval by these boards.

Awards and Decorations.
a. **National Awards.** National awards and decorations for CROs remain national responsibility.
b. **NATO medals.** A specific NATO medal will be awarded, if appropriate, in accordance with the policy and procedures that are defined in ACO Directive 40-8, NATO Medals, dated 15 May 07. Any decision to award a medal for a NATO operation will be taken by the NAC. SHAPE HRM will submit the qualifying conditions for any award to get NAC's approval for a medal related to an emerging operation / mission. It is important theatre J1 maintain a database listing the names, rank, nationality, areas of deployment and SOT / EOT dates for individuals who were part of the operation, or who contributed to the operation in the Joint Operation Area (JOA). LCHs and contractorised personnel are not entitled to receive NATO medals for CROs.
c. **NATO Meritorious Service Medal (MSM)**. SECGEN has established the MSM for "exceptional and remarkable service". The recommendation process follows a bi-annual cycle (Spring and Autumn) for which SHAPE HRM issue specific instructions based on NATO HQ guidance.
d. **NATO Pennannts.** SACEUR has established an ACO Campaign Pennant to be awarded to HQs, formations and units under NATO Command and Control that are, or have been engaged in CROs. The decision to award an ACO Campaign Pennant lies with SACEUR and is not delegated. Policy and procedures are defined in ACO Directive 40-9 Allied Command Operation Campaign Pennant dated 17 Jan 07.

Postal Services. Postal service is a national responsibility but the sharing of resources is to be encouraged. TCNs without postal support should be advised to request assistance through bi-lateral negotiations with those nations who can offer such services.

Discipline. Discipline is a national responsibility. However, any serious outbreaks of ill discipline, which are likely to attract unfavourable media attention, should be forwarded via the chain of command.

International Evaluation Reports. Should a participating nation request an IER for any personnel assigned to a CRO HQ, theatre J1 will process the IER in accordance with ACO Directive 45-1, ACO Personnel Management and Administration dated 04 Jul 02. The chain of command is responsible for ensuring that the signed report is correctly filed and that the original is handed over to the NCC/NSE for filling in the individual's personal file in his parent unit.

Identification (ID) Cards. All personnel deployed on an operation must be in the possession of a valid national military ID card or equivalent. Services/nations whose military ID cards do not contain Geneva Convention information (Number, Rank, Surname, Forenames, Date of Birth) are to issue Geneva Convention cards to their personnel. NCS employing NICs or consultants that are earmarked to deploy shall provide them with Geneva Convention cards. Theatre ID cards may be required under the Memorandum of Understanding (MoU) or Status of Forces Agreement (SOFA), for both military and civilian personnel. They will only be issued in theatre through designated Centralised Management Points (CMPs), Sub-CMPs, or elsewhere if necessary, under arrangements to be co-ordinated by the theatre HQ.

Leave Policy. Leave policy is a national responsibility that cannot be dictated by NATO. SHAPE guidance is that individuals should be entitled to 2,5 days leave per month for a 6 months tour and two 96-hour passes. If the SNRs in theatre all agree to a unified policy, then the operational commander can impose a single coordinated policy based on national guidelines, which will avoid a single nation being advantaged or disadvantaged. It is the prerogative of the operational commander to set the key post manning policy within the HQ, which can be used to regulate manning levels.

REFERENCES:

1. ACO Directive (AD) 45-3, Allied Command Operations Crisis Establishment Management, dated 17 Dec 07;
2. NATO Civilian Personnel Regulations;
3. AAP 16 (D) (CHANGE 2) Manpower, Policy and Procedures, dated 19 Feb 08;
4. MC-M (2005) 0041 dated 28 Apr 05;
5. ACO Directive (AD) 50-11, Deployment of NATO Civilian Personnel, dated 14 May 07;
6. MCM-0001-2008, Military Concept for NATO's Deployable Joint Staff Elements, dated 15 Mar 08;
7. ACO Directive (AD) 5-1, dated 03 Oct 97;
8. ACO Directive (AD) 40-8, NATO Medals, dated 15 May 07;
9. ACO Directive (AD) 40-9, Allied Command Operations Campaign Pennant, dated 17 Jan 07;
10. ACO Directive (AD) 45-1, ACO Personnel Management and Administration, dated 04 Jul 02;

NONVERBAL COMMUNICATION IN THE MILITARY

Commisioner BOGDAN COMAN

Anyone planning a career faces three realities. First, organizations permeate almost all aspects of our adult lives from providing careers to controlling our choices in goods and services. Even the smallest independent group of highly creative individuals must have some form of organization. We must interact with all sizes of organizations, ranging from Microsoft with its predominance in the electronic world to the local coffee, pizza, bagel or grocery store. This omnipresence in our postbaccalaureate careers means understanding organizations is synonymous with the pursuit of rewarding employment and achieving our goals. Except for the unusual and most likely unemployable individual, the need to operate effectively with and within organizations is as real a skill and an occupational necessity as knowing how to find a job or learn a vocation. How we interact leads to the second reality where communication is both a primary perspective for understanding how organizations function and a guide for how we should behave in organizations if we are to advance and enjoy our careers. Changing organizations are the third reality but this will not be the topic of this paper.

În the army, when talking about communication, a new domain is entered.That human behavior forms the nucleus of military effectiveness is unquestioned. Regardless of technological advances, the military is and always will be a complex system composed of human and technical elements that must work together effectively in a wide variety of contexts over time. History bears witness to a host of military leaders who succeeded in leading their men through the most difficult situations by their personal charisma. While emerging technologies may have made the battlefield more impersonal, the changing social structure in the Armed Forces has made it necessary for leaders to reach out to their subordinates as they no longer can be expected to follow orders blindly as may have been the case in yesteryears. To be a leader one has to project an image that is worthy of the confidence of those who are expected to follow. An effective leader should be able to gauge the unspoken words of his subordinates in order to get the correct feedback and make the right decisions in time. The study will examine the relevance of non-verbal communication in today's Armed Forces with special reference to its importance for military leadership. Therefore, the topics to be covered are: the concept of nonverbal communication and the relevance of current theories with the prospects of future research and in the second chapter the non-verbal behaviour in the military.

THE CONCEPT OF NONVERBAL COMMUNICATION - RELEVANCE OF CURRENT THEORY AND PROSPECTS OF FUTURE RESEARCH

Some conceptual delineations

There are factors causing communication problems like communication style, nonverbal communication, trust, accents, regional jargon, etc. However, out of the plethora of potential triggers of communication breakdown, nonverbal communication plays a major role. In this respect, it is worth emphasizing that effective communication involves more than just words. Emotions such as friendliness, respect, acceptance, rejection, dominance, submissiveness, anger, fear and humour are conveyed primarily by signals that fall within the domain of non-verbal communication. When verbal and non verbal messages disagree, the receiver is likely to discount the verbal message and believe the non-verbal signal. Hence, it is imperative that a good communicator must master the art of non-verbal communication.

Nonverbal communication can be broadly defined as the total sum of our body's communication, namely how our body communicates or sends a message. Nonverbal

communication has different meanings for different people or groups. Almost 50 percent of a message's impact comes from body movements or nonverbal communication. For example, crossing your arms may indicate defiance. Putting your hand on your chin may show thought. Leaders need to understand the importance of checking nonverbals when communicating. This might give them a clearer picture of how the soldier is reacting to the discussion. This is one face of the coin.

The second face of the coin is the fact that life-or-death decisions sometimes depend on subtle nonverbal signals: facial expressions, tone of voice, even the distance people maintain among themselves. According to Carnevale and Choi[1], the first Gulf War could have been avoided if not for a misinterpretation of nonverbal cues. Here is what happened:

In January, 1991, James Baker, then the United States Secretary of State, met with Tariq Aziz, the foreign minister of Iraq. They met in an effort to reach an agreement that would prevent a war. Also present in the room was the half-brother of Saddam Hussein, whose role included frequent calls to Hussein with updates on the talks. Baker stated, in his standard calm manner, that the U.S. would attack if Iraq did not move out of Kuwait. Hussein's half brother heard these words and reported that "the Americans will not attack. They are weak. They are calm. They are not angry. They are only talking." Six days later Iraq saw Desert Storm and the loss of about 175,000 of their citizens. Triandis argued that Iraqis attend to how something is said more than what is said. He further suggests that if Baker had pounded the table, yelled, and shown outward signs of anger, the outcome may have been entirely different.

Other examples abound. In a recent California murder case, for example, jurors pointed to the defendant's physical demeanor when justifying their death penalty recommendation: "No emotion, no anything. That spoke a thousand words"[2].

When misunderstood, nonverbal signals escalate conflicts, deepen intercultural misunderstandings, and undermine leadership and team cohesion. By laying the theoretical foundation for more effective communication, classroom instruction, and organizational processes, nonverbal research ultimately will enhance soldiers' ability to communicate, persuade, and avoid misunderstandings before they escalate.

Nonverbal communication is defined as "the way in which people communicate, intentionally or unintentionally, without words; nonverbal cues include facial expressions, tone of voice, gestures, body position and movement, the use of touch, and gaze".[3]

Nonverbal behaviors (e.g. gestures or facial expressions) are different from language because they rarely carry specific intrinsic meanings. Although nonverbal behavior can act as words—for example, the "thumbs up" gesture has a specific, though culturally varying meaning—most nonverbal communication is contextual, less conscious, and it performs a variety of nonlinguistic functions. Nonverbal signals change depending on the social context; indeed, it is often through observing someone's behavior that people become aware of the contexts: Is this person a leader? A follower? Surrounded by friends or enemies? Through nonverbal signals, people convey emotion , project power, manage interpersonal distance, modulate the flow of conversation, and construct ideas about how another person's mind works. These processes largely proceed outside of conscious awareness, thus explaining the perniciousness of social biases that arise from subtle cues, such as a person's appearance or accent.

The automatic and contextual nature of nonverbal communication has been a thorny problem for study and analysis. Researchers have often failed to properly distinguish between the production ("encoding") and interpretation ("decoding") of nonverbal signals. For example, early research by Paul Ekman[4] argued for the existence of discrete emotional states on the basis of the finding that widely disparate cultures could correctly identify an expression portrayed by an actor. However, subsequent findings showed that such experiments only assess people's ability to recognize (*i.e.* decode) facial expressions, but provide little information about people's behavior during actual emotional episodes. Indeed, there are some well-known differences between the behaviors of actors and people in naturalistic settings. Actors use

stylized or exaggerated displays in an attempt to make their behavior easier to decode. Naturalistic behavior is far more complex and dynamic, and it often involves strategic attempts to mask or modulate nonverbal displays. Furthermore, even when there are reliable cues that encode a cognitive act, such as deception, observers often attend to irrelevant cues.

In the discussion below, it is important to keep in mind the distinction between three aspects of nonverbal communication: (1) how nonverbal messages are truly encoded, which is important for detecting deception or a person's true emotional state; (2) how such messages are decoded, which is important for promoting efficient and persuasive communication; and (3) the relationship between these processes, which is important for understanding the source of biases and cultural misunderstandings. Nonverbal behavior plays an important role in almost any face-to-face encounter whereas its absence in telecommunications can contribute to errors and misunderstandings. Not surprisingly, nonverbal communication research directly affects several areas that are important to the military, as discussed below.

Nonverbal Behaviour In Training And Learning – Some Theoretical Insights

There has been relatively little research on the role of nonverbal communication in education settings, and even less is known about how to teach nonverbal skills. Perhaps the clearest effects of nonverbal behavior on learning have been demonstrated by research on interpersonal expectations, known as "self-fulfilling prophecies." This research shows that teacher biases can be clearly communicated to students through nonverbal behavior and eventually affect learning outcomes. For example, in Rosenthal and Jacobson's (1992) classic experiment, teachers were misled to believe that certain students had higher aptitudes than others[5]. Teachers used different nonverbal cues, as well as different overt behavior towards those students, creating a warmer socioemotional climate and providing them more feedback and more time to respond. Perhaps not surprisingly, these students learned better, though subsequent research has questioned the generality of this effect. More recently and conclusively, Singer and Goldin-Meadow[6] have shown that judicious use of gestures by teachers improved their students' math scores.

Despite the power of such communicated expectations, it seems difficult for teachers to mask their biases. For example, it was found that teachers actually compensated for their biases through their speech and facial expressions, but still "leaked" their biases through their expressive body behavior. These observations have provided some encouragement to those who would like to teach others how to decode important nonverbal signals, like those associated with deception. Indeed, some progress has been shown in training people to do just that, and there have been some demonstrations that such decoding skill can smooth cross-cultural encounters. How nonverbal communication skills can be most effectively taught, particularly in a military context, remains a fundamental question for research.

For example, it is possible to teach soldiers to replicate accurately the gestures of another culture, but it is not known if this ability leads to operational benefits. There is the possibility that such attempts may be perceived by others as disingenuous or as mocking the other culture. Furthermore, it is unclear if one should focus on specific knowledge (what a particular gesture means in a given culture), or teach a general awareness that people may have different beliefs and goals (i.e., teach people to be open minded, ask questions, etc.). Recently, there has been considerable interest in the potential of new media and computer technology to overcome many of the challenges in teaching such skills but the effectiveness of such techniques is yet to be determined. This can be addressed by research carried out in the next 5-10 years. Addressing these fundamental questions would go a long way towards the translation of research findings into tangible results for soldiers in the field.

Cultural Fluency

Although some nonverbal signals seem universal, others differ dramatically across cultures, and these differences can contribute to cross-cultural misunderstandings. Nonverbal behaviors associated with language (e.g., gestures) can differ considerably, and in some cases the same gesture can have very different meanings. Even something as basic as a smile can be misinterpreted: in Japan a smile is a common indicator of discomfort or embarrassment. Other subtle cues, such as the use of personal space or gaze, can be misconstrued. For example, the more direct body language of Arabs may be interpreted as aggressive by Western observers.

People can learn to recognize and compensate for these differences, and it is easy to approximate that explicit nonverbal training can facilitate the effectiveness of cross-cultural interactions when participants come from different cultures (as in the previous example, concerning Arabic customs). Yet basic questions about the best ways to train remain unanswered. Moreover, the research has not been focused on issues that are necessarily relevant for the military. For example, the extensive research on cultural differences in nonverbal behavior has emphasized business negotiations, typically between Western and East Asian participants. However, it is important to note that there is no research on using nonverbal behavioral cues to identify someone intending to carry out a suicide bombing or other attack, especially someone of another culture. Research on situations other than business and among many more cultural groups would be an important military investment for the long term.

Technological Opportunities And Challenges

Recent technological developments hold promise for transforming research on nonverbal behavior and providing new vehicles to translate this research into practice. For example, research advances in artificial intelligence, computer animation, and computational linguistics have enabled the creation of realistic "virtual humans" that can approximate human verbal and nonverbal interaction. Virtual human technology creates the opportunity to transform both the study of nonverbal behavior and the teaching of nonverbal skills.

Virtual humans can address one of the many methodological challenges in nonverbal research: demonstrating a causal as opposed to correlational relationship between nonverbal behavior and its presumed social effects. Due to the rapid and automatic nature of nonverbal communication, it is difficult to experimentally manipulate people's nonverbal behaviors, something that is necessary to show a causal relationship. Rather than using human confederates who attempt to change their nonverbal behavior and are then quickly perceived as unnatural, virtual humans can precisely and consistently modulate the nonverbal behavior they present to interaction partners. In one study, Gratch et al.[7] showed that a "listening agent" that gives rapid nonverbal feedback to speakers dramatically increases speaker fluency and engagement in comparison with a less responsive virtual character. Such techniques have already proven successful in testing theories of communicative efficiency, learning, trust, mood, impression formation, and social influence.

But more than testing theory, virtual humans have the potential to teach nonverbal competencies. A number of systems, some with branching video but increasingly using advanced character animation and game technology, have been developed primarily to teach decoding skills and cultural fluency. For teaching decoding skills, several systems have been developed to teach "shoot/no-shoot" decision making to law enforcement officers, and a number of systems attempt to train interrogators on how to recognize deception. For cultural awareness, the Tactical Language System attempts to teach culturally specific gestures in the context of an Arabic language training system.

The promise and rapid advancement of this technology can be a two-edged sword. Lush virtual environments and the present hype surrounding "edutainment" have created enormous interest in rapidly moving the technology to training applications. The danger is that the

advances in the underlying technology may outstrip the science of how to use the technology effectively. Furthermore, the primary driver of this technology, the game industry, is working at cross-purposes to the goal of effective training. By focusing on the goal of entertainment, game characters, much like good actors, emphasize engaging and easily decoded behaviors that are quite different from the way people act in real situations. Using such technology without care might easily result in "negative training," in which one performs worse after training than before. It remains unclear how to mimic the rapid, subtle, and interactive nature of human nonverbal behavior and exactly what level of detail is needed to provide effective skills training.

Motion Analysis And Multimodal Databases

A major impediment to research on nonverbal behavior is its reliance on coded data. Participants in a study are video recorded, and the resulting data are laboriously hand-coded for their nonverbal content. Methods for coding nonverbal behavior, such as the Facial Action Coding System or Laban motion analysis[7] require extensive training and multiple coders to achieve reliability. Yet when data are collected, they are rarely shared among research groups—because there are insufficient incentives to do so–and so the research is time-consuming and expensive.

Research is needed in order to create tools that rapidly construct multimodal databases and to create mechanisms for collecting and distributing multimodal databases, particularly ones that emphasize military-relevant data, to the research community. Research on sensing technology that can automatically detect and characterize nonverbal communication would also mitigate the data collection bottleneck and promote rapid advancement in the fields. Such methods must be sensitive to the rapid and dynamic nature of nonverbal communication, since it is often changes in behavior rather than static poses that convey information. Distributing such databases, whether manually or automatically created, would facilitate rapid advances in nonverbal research.

Other fields, such as verbal communication and machine translation, have seen dramatic progress as a result of the wide availability of machine-readable data, which can be analyzed by computational methods. For example, The Linguistic Data Consortium, which grew out of a project funded by DARPA (the Defense Advanced Research Projects Agency), supports language-related education and research and technology development by creating and sharing linguistic data, tools, and standards. Funding the development of such tools and shared databases, particularly ones that emphasize military-relevant data, presents an opportunity to expand the utility of nonverbal research and to direct it to military applications within the next 5-15 years.

NON-VERBAL BEHAVIOUR IN THE MILITARY: AN OVERVIEW

Leadership And Persuasion

Nonverbal behavior plays an important role in the exercise of social power. Whether it is in formal leadership settings, as when a lieutenant commands a platoon, or less formal settings, as when a physician attempts to change the behavior of a patient, nonverbal signals vary dramatically with social role. Nonverbal cues may be valuable in predicting the effectiveness of attempts to exercise social power and influence. More generally, dominant partners in two-person interactions show distinctive patterns of facial expression, posture, and eye gaze. For example, dominant partners tend to use more relaxed facial expressions and more directed gazes.

Outside formal leadership settings, research has extensively documented the effects of nonverbal behavior on persuasive relationships, particularly the role of rapport and its nonverbal

correlates. It has been stated that rapport is *"one of the central, if not the central, construct necessary in understanding successful helping relationships and to explain the development of personal relationships."* Rapport is correlated with characteristic nonverbal behaviours. Rapport can be equated with behaviours indicating mutual attentiveness (e.g., mutual gaze), positivity (e.g., head nods or smiles), and coordination (e.g. postural mimicry or synchronized movements). Rapport can be experimentally induced or disrupted by altering these nonverbal signals, suggesting a causal relationship between such behavior and social effects. The benefits of rapport are widespread, influencing esprit de corps, success in negotiations.

There are significant research opportunities for the military at the intersection of leadership and nonverbal behavior. The rise of network-centric operations has placed increased emphasis on the exercise of leadership "at a distance," and research on nonverbal behavior has implications for the use of communication technology and could inform the design of more efficient command and control systems. Different communication settings (*e.g.* telephone, email, video link, or face to face) create different styles of interaction and influence the content of communications. For example, a reduction of nonverbal cues in email can reduce participants' feelings of connection with their conversation partners, with the consequence that they show less concern for the emotional consequences of their communication.

People tend to be more honest in emails, which can be an advantage in certain settings, but they often use intemperate language (*e.g.* "flaming") with negative interpersonal consequences. By understanding the relationship between nonverbal cues and communication style, one could potentially design communication technology that is best suited to particular operational environments.

Research on rapport can inform military training and operations, although current findings have to be further translated to the military context of formalized leadership structures, joint teams, and cross-cultural meetings. Understanding how leadership and rapport are nonverbally expressed (*i.e.* encoded) in such contexts could allow trained observers or even the use of automated techniques to better decode and identify tactically relevant information (*e.g.* the dominant partner in an interaction). Training individuals to produce nonverbal indicators of effective leadership and rapport may have value as well, though basic questions remain about such learning.

APPLICATION OF NON-VERBAL COMMUNICATION TO MILITARY LEADERSHIP

Good communication is the corner stone to success of military leadership. While information technology may have revolutionised the battle field, the aspect of man management remains an art that requires a scientific approach to be fully understood. If the members of an organization show true awareness of non-verbal cues, the organization will have a better chance of success since it will be open, honest, and live to the situation. Knowledge of non-verbal communication is important for military leadership for two main reasons:

(a) To function effectively senior members must interact with their subordinates successfully. Non-verbal cues of the leadership, when interpreted correctly, provide the correct organizational atmosphere.

(b) Junior members project attitudes and feelings through non-verbal communication which otherwise may not come to light. Some personal needs require immediate attention. The extent to which these needs are met is closely related to how perceptive the leaders and subordinate members are to non-verbal communication within the organization.

An effective leader has to establish his credibility in order to gain the confidence of his subordinates. This will come about by his professional competence and the way he carries himself in the organization. His actions are likely to speak much more than his words in the long run. Some aspects of non- verbal communication that require attention are given below:

(a) Bearing. It is important that a military leader should project a good military bearing. He should be smartly turned out both on and off duty hours. He should be in the correct attire wherever dress is specified. Uniforms should be so designed that they distinguish rank. Leaders must be physically fit and not obese.

(b) Warmth. One characteristic of a leader that goes a long way in improving the working environment and reducing stress within the organization is warmth. A firm and friendly handshake, nod in agreement and occasional smile are indicators of warmth.

(c) Encouragement. Encouragement has to be provided with a balance of appreciation and criticism. A pat on the back as a sign of appreciation conveys more than words.

(d) Approachability. It is as important for a leader to be available to his subordinates as it is for him to be available to his seniors. A little time and patience gives assurance that is much more explicit than words. An appointment must be honoured without making the other person unnecessarily wait. Management of time is very important in order to be able to implement this aspect.

(e) Confidence. A leader must project an image that will gain the confidence of his subordinates. He should maintain eye contact while communicating and avoid mannerisms such as scratching and fidgeting, which display nervousness. Confidence is conveyed by his paralinguistics. He must not fumble in his speech.

(f) Calmness. No matter what the situation be, a military leader should have the capability of maintaining his calm. He should be able to control his facial expressions so as to avoid sending alarm signals. He must also maintain his normal pitch and volume while speaking.

(g) Genuineness. A military leader must be perceived to believe in what he says. His actions must match his words in every aspect. Eye contact is important to convey genuineness.

h) Sternness. At times certain harsh decisions have to be taken and implemented in organizational interests. A leader should be able to convey the seriousness and gravity of a point when required to do so, leaving no doubt about the requirement of compliance. Facial expressions and paralinguistics while conveying such points require attention.

(j) Killer Instinct. Victory in a close match goes to the side with the killer instinct. A certain amount of aggressiveness is required in a military leader. When the chips are down he should be able to motivate his men by his actions.

CONCLUSIONS

More than what is said, it is how the message is put across, that makes communication effective. Non-verbal signals are an essential component of communication that play a major role in day to day formal and informal interactions. Non-verbal behavior is important for the following reasons:

(a) An awareness of non-verbal behavior enables an individual to see the true meaning of a message that may or may not be transmitted verbally.

(b) Non-verbal communication reinforces verbal communication by emphasizing what is of importance in the message.

(c) This mode of communication increases the degree of perceived psychological closeness in an organization.

It is imperative that military leaders should be trained to display positive non-verbal signals during their day to day functioning. They should also be able to 'read' non-verbal communication in the environment to be live to the situation around them. Besides human behaviour attention should also be given to non-verbal signals that are emanated from the atmosphere at the work place and places of informal interaction.

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DECISION MAKING PROCESS

Colonel ADRIANA VIOLETA CONSTANTIN

Satisfying the needs of citizens of any given political unit depend a lot on acts and actions, which in return depend on decision. Those who are responsible for decision-making make decisions and these in their turn, affect the people, who may or may not have the right to elect them. So "decision" is the outcome of an interaction between those who rule and those who are ruled. However, decision-making is a process in mind and results from the values and what the ruling elite considers as good for the people. Yet, their considerations are very much influenced by their authority and tasks given to them according to a legal -or perceived legal-way. In fact decision-makers act within the authority given to them to act on behalf of a given society.

Decision-making is a choice between different alternatives having some percentage of probability to achieve the goals. Policy makers should evaluate all possible alternatives to reach to their preferred policy --the one that can maximize their national interest and security. Therefore the selecting process is very complicated and should go through two different phases: Identification of alternatives, and selection of the best possible means.
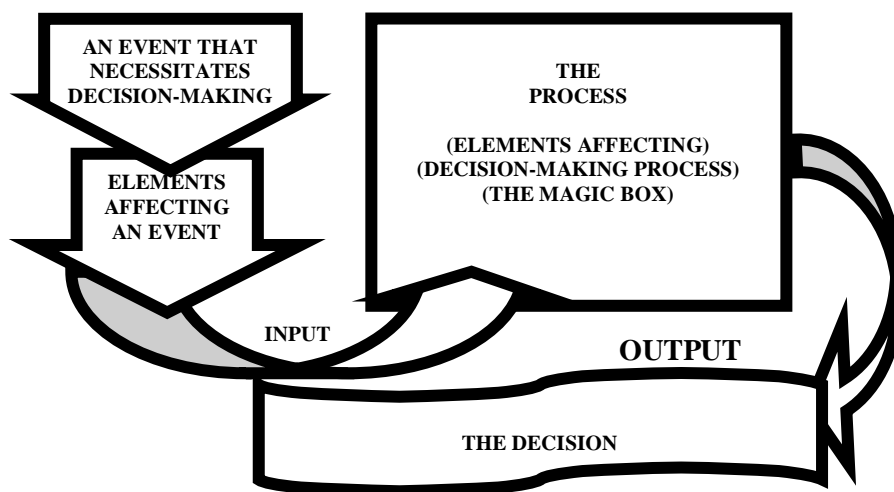
Diagram No. 1: DECISION-MAKING

WHAT IS DECISION MAKING?

Some Definitions and Concepts

We all make decisions of varying importance every day, so the idea that decision making can be a rather sophisticated art may at first seem strange. However, studies have shown that most people are much poorer at decision making than they think. An understanding of what decision making involves, together with a few effective techniques, will help produce better decisions.

A good place to start is with some standard definitions of decision making.

1. Decision making is the study of identifying and choosing alternatives based on the values and preferences of the decision maker.[1] Making a decision implies that there are alternative choices to be considered, and in such a case we want not only to identify as many of

these alternatives as possible but to choose the one that best fits with our goals, desires, lifestyle, values, and so on.

2. Decision making is the process of sufficiently reducing uncertainty and doubt about alternatives to allow a reasonable choice to be made from among them. This definition stresses the information gathering function of decision making. It should be noted here that uncertainty is *reduced* rather than eliminated. Very few decisions are made with absolute certainty because complete knowledge about all the alternatives is seldom possible. Thus, every decision involves a certain amount of risk.

About Concepts and Definitions

One moment of intuition can worth of ten analyses, because decision making is a key management responsibility and don't forget that management is the art of achieving results through people.

1. Information. This is knowledge about the decision, the effects of its alternatives, the probability of each alternative, and so forth. A major point to make here is that while substantial information is desirable, the statement that "the more information, the better" is not true. Too much information can actually reduce the quality of a decision.

2. Alternatives. These are the possibilities one has to choose from. Alternatives can be identified (that is, searched for and located) or even developed (created where they did not previously exist). Merely searching for preexisting alternatives will result in less effective decision making.

3. Criteria. These are the characteristics or requirements that each alternative must possess to a greater or lesser extent. Usually the alternatives are rated on how well they possess each criterion.

4. Goals. What is it you want to accomplish? Strangely enough, many decision makers collect a bunch of alternatives (say cars to buy or people to marry) and then ask, "Which should I choose?" without thinking first of what their goals are, what overall objective they want to achieve. Next time you find yourself asking, "What should I do? What should I choose?" ask yourself first, "What are my goals?"
A component of goal identification should be included in every instance of decision analysis.

5. Value. Value refers to how desirable a particular outcome is, the value of the alternative, whether in dollars (lei), satisfaction, or other benefit.

6. Preferences. These reflect the philosophy and moral hierarchy of the decision maker. We could say that they are the decision maker's "values," but that might be confusing with the other use of the word, above. If we could use that word here, we would say that personal values dictate preferences. Some people prefer excitement to calmness, certainty to risk, efficiency to esthetics, quality to quantity, and so on.

7. Decision Quality refers to the extent to which decisions under consideration are important for facilitating group performance [2].This is a rating of whether a decision is good or bad. A good decision is a logical one based on the available information and reflecting the preferences of the decision maker.

The important concept to grasp here is that the quality of a decision is not related to its outcome: a good decision can have either a good or a bad outcome. Similarly, a bad decision (one not based on adequate information or not reflecting the decision maker's preferences) can still have a good outcome.

8. Acceptance. Those who must implement the decision or who will be affected by it must accept it both intellectually and emotionally.

Acceptance is a critical factor because it occasionally conflicts with one of the quality criteria. In such cases, the best thing to do may be to choose a lesser quality solution that has greater acceptance.

9. Timeliness .Time required to reach a decision is another factor. Decisions must be made in timely fashion. Some decisions can be made slowly (choice of color when repainting an office), whereas others may require immediate action (whether or not to invest in a particular stock).

Decision Making or problem solving?

Managing and leading people mean solve problems in everyday activity, make decisions on how the resources of the organization will be used in attaining its goals.

Decision making is a managerial function: managers set up priorities, plan, organize, and control their own and others behavior. Leading people means that managers also delegate day by day tasks to others, in order to be available to devote their time and effort to mapping strategic plans.

Each situation requiring decision is a problem-situation, and the process of decision making is a problem solving process.

Thomas Kayser suggests six steps for achieving problem solving success.[2]   The methodologies we present here will help you implement parts or all of these steps:

Step 1) Defining and selecting the problem View the problem as a *GAP* or difference between the current condition (as is) and some future condition (what should be)..

Have the group brainstorm for `as is' conditions that might be viewed as problems. Brainstorming and simple voting tools can be helpful here. More elaborate methodologies such as control, importance, difficulty, time, return on investment, resources can be useful to prioritize the as is conditions.

Step 2) Analyzing the problem Identify, collect, and analyze data to confirm the problem is real. Identify and prioritize possible causes for what exists.

Step 3) Generating potential solutions. This can be done many ways, including brainstorming, research (secondary and/or primary), and design activities. What "should be", expressed as objectives, should guide the generation of potential solutions. Creativity is important in this step. Never stop with only one solution two or hopefully more potential solutions should be generated.

Step 4) Selecting and planning the solution. Deciding which solution to select should be based on the achievement of objectives.

Step 5) Implementing the solution. This step often leads to an embedded decision process-generating potential ways to implement the solution and selecting an implementation alternative based on the achievement of objectives.

Step 6) Evaluating the solution. Was the problem `solved'? If so, was the problem solving process effective? If the problem was not solved, was it due to a deficiency in the problem solving process or to the occurrence of an unforeseen event? In retrospect, was the unforeseen event unlikely to have happened or should it have been considered in the problem solving process?

There are several basic kinds of decisions.

1. Decisions whether This is the yes/no, either/or decision that must be made before we proceed with the selection of an alternative. Should I buy a new TV? Should I travel this summer? Decisions whether are made by weighing reasons pro and con.

It is important to be aware of having made a decision whether, since too often we assume that decision making begins with the identification of alternatives, *assuming that the decision to choose one has already been made.*

2. Decisions which These decisions involve a choice of one or more alternatives from among a set of possibilities, the choice being based on how well each alternative measures up to a set of predefined criteria.

3. Contingent decisions These are decisions that have been made but put on hold until some condition is met.

Most people carry around a set of already made, contingent decisions, just waiting for the right conditions or opportunity to arise. Time, energy, price, availability, opportunity, encouragement--all these factors can figure into the necessary conditions that need to be met before we can act on our decision.

A circle to follow

- **Observe and reflect** – the manager becomes aware that something doesn't go well and some change must be done- it may be a clear idea based on hard evidence, or simply a "fuzzy" felling, an intuition.
- **Recognize the problem-** the need for a decision becomes clear because of accumulating evidence (e.g. the number of disciplinary events: delays, insubordination, mistakes).
- **Set objectives** - each decision is made in the frame of the general objectives / goals of the organization.
  Considering the differences between the present situation and the desired state (with respect to the frame mentioned above), the manager formulates objectives.
- **Understand the problem** – interpreting facts of the present state must lead to diagnose the true nature of the problem. People have different views on facts, so reaching agreement over the nature of problem can be a separate decision process
- **Determine the options** - the problem solving may be achieved in several steps.
- **Evaluate options** - comparing alternatives, the decident may evaluate each of them in terms of the extent of match with the decision objectives.
- **Choice** – depends on the size of the decision-making body:
  - if the decident is an individual, he will decide consistently with his values and interests
  - if the decident is a group, the choice will be made after debates and agreement over the meaning of choice for the majority of the group (if implemented, to prove satisfactory for everybody).
- **Implement** – sometimes implementing the decision means a long series of changes required by the selected option.
- **Monitor** - after implementation, the effects of change(s) must be monitored, in order to see if the desired state (objective) is reached.

FACTORS INFLUENCING DECISION MAKING

The individual

Theoretical assumptions about the human behavior in single decision making[4]:
- In a business context or at work, individuals behave rationally and in a logical manner.
- The aim of the decision is to maximize satisfaction by choosing the alternative with the greatest value.
In reality, we can't make perfect judgments because of limited knowledge, selective perception, personal motives and values that may affect our evaluations.
Personality plays an important role to: emotional reaction to stress, the propensity to risk and risk-handling strategies influence the decision-making process towards "good enough" solutions, so that we can talk only about a *limited rationality*.
Personality traits and features influence general behavior and decision making, too:
- *Intelligence* is a general ability related to the information processing: the more intelligent an individual is, the more complex and fast judgments he is able to make, comparatively to others, less intelligent
- *Dominance* is a personality trait responsible for the attitude towards others: a dominant

person is more self-confident, active and shows more initiative, tends to lead others, either in individual decision or in group decision situations. Furthermore, in group situations this trait influences the behavior of others to a large extent:: these individuals have the intimate feeling that they know better what to do than others.

- Extraversion / Introversion is a personality trait responsible for the general orientation of individual's mind: Extravert people are oriented towards the external world, they are more sociable and field-dependent, so they are more motivated by the others' approval and can be easily influenced. Introvert people tend to be more independent in judgment, but their social skills are sometimes poor. In decision situations when the independent judgment is very important and the social pressure is high, introverts make better decisions than extraverts, but they can have difficulties in making the others (subordinates) accept and implement the decision. In group decision making, especially when negotiation is required, extravert people are more able to reach an agreement in a "smooth" manner.

- Stability / Anxiety is a personality trait related to emotional response to unusual stimuli and stress: Stable people don't lose their temper when confronted with difficult situations and keep their "cool-blood" in decision making, while anxious peole tend to panic and have difficulties in coping with uncertainty and risk, so they will tend to avoid risk by considering only liable and well known solutions and to reduce the range of options. Generally speaking, the anxious are good only in operational, structured, routine and low risk decision making, while stable people are good in any type of decision making.

- Experience is not a personality trait, but it can be considered as an individual feature: the more accustomed an individual is to a certain type of decision situation, the easier it will be for him to decide. Experience means not only knowledge, know-how, but also reduced emotional response to the threat of risk.

The social context

The social influence and pressure on individual decision maker manifest in two ways[5]:: - *Normative social influence* – when the pressure is to conform to the expectations of others, even against individuals' conceptions

- Informational social influence – when the decision maker feels uncertain, he is pressed to accept information from others as evidence, without having the possibility to control it. Even in the case of a single decision maker, the judgment is influenced by the social environment: there are always "significant others" in the organization, whose approval does matter, especially authoritarian figures, and the decision maker has sometimes to make compromises.

When the decision body is a group, the stage in its evolution influences the decision making: the forming and norming stages are difficult for decision because of the lack of trust and tense or conflictual interactions between the group members. Only in the performance stage, the group is able to make decisions on a consensual basis and is focused on the task, not on fighting and disruptive behavior.

Group decision making is slower than individual decision making, but, because of having a consensual basis, the first one is more easily accepted and implemented. The group pressure towards conformity may lead to over-conformity and sometimes to *groupthink*.

The interactions between group members under high uncertainty may influence de decision making so that the group decision is riskier than the individual decision. [6]:

The phenomenon is known as "*risky shift*" and has several explanations:
- in group decision making there is a diffusion of responsibility and a share of blame in case of failure;
- leadership of the group by high risk takers – the individuals who are able to cope with and to accept risk, are generally dominant and have an important influence on other members;
- exposure to a wider range of views makes the individual re-evaluate his options and modify the perception of risk;

- expressions of high risk (to be a hero figure) are more socially accepted than those of low risk (to be a coward); the phenomenon is frequent in prison riots and street gang blows.

The groupthink and the risky shift are often related.

The organizational framework

Organizational climate is characterized by the nature of people-organization relationship and the superior-subordinate relationship. [7] These relationships are determined by interactions among goals and objectives, formal structure, styles of leadership, the process of management and the behavior of people.

What makes group decision making different is the social interaction patterns implicit in the decision process. A new social dimension has been added, thereby complicating decision dynamics. The major difference her is with respect the role played by group participation in the decision making process. There are situations where group decision making can be asset and other times when it can be a liability, and the trick for the manager is to discover how and when to allow participation.

In **establishing objectives**, groups are typically superior to individuals in that they possess greater cumulative knowledge to bring to bear on problems.

In **identifying alternatives**, individual efforts are important to ensure that different and perhaps unique solutions are identified from various functional areas that later can be considered by the group.

In **evaluating alternatives**, group judgment is often superior to individual judgment, because it brings into play a wider range of viewpoints.

In **choosing alternatives**, involving group members often lead to greater acceptance of the final outcome.

In **implementing the choice**, individual responsibility is generally superior to group responsibility. Regardless of whether decisions are made individually or collectively, individuals perform better in carrying out the decision than groups do.

The environment

The environment of a decision can be seen as:
- general environment – the whole society
- specific environment – the organization and its direct links and different interactions with other social agents.

The perceived degree of uncertainty depends on two main dimensions of the environment: the complexity and the change: we obtain thus four categories of situations:
- perceived uncertainty low
- perceived uncertainty moderately low
- perceived uncertainty high
- perceived uncertainty moderately high.

If the decision doesn't have a deadline, if there is no time pressure, we talk about a ***decision at will,*** the decision maker feels free to decide whenever he wants. [5]
But, if the time pressure is important, we talk about crisis and opportunity decisions. Sometimes, the time pressure creates emotional reactions that can affect the clear judgment.

In each situation, the decision maker has an amount of information about facts, trends of the environment, conditions and so on. The larger is the extent of the available information, mainly in static and simple environment; the lowest is the degree of perceived uncertainty. In dynamic and complex environment, the decision maker can encompass neither all the information, nor the optimum extent of information, thus the perceived uncertainty is high. In this case there is a risky decision, mainly if there is no time to collect all the useful information.

TYPES OF MANAGEMENT IN DECISION MAKING

Some Decision Making Strategies

As you know, there are often many solutions to a given problem, and the decision maker's task is to choose one of them. The task of choosing can be as simple or as complex as the importance of the decision warrants, and the number and quality of alternatives can also be adjusted according to importance, time, resources and so on. There are several strategies used for choosing. Among them are the following:

1. Optimizing. This is the strategy of choosing the best possible solution to the problem, discovering as many alternatives as possible and choosing the very best. How thoroughly optimizing can be done is dependent on

A. importance of the problem
B. time available for solving it
C. cost involved with alternative solutions
D. availability of resources, knowledge
E. personal psychology, values

Note that the collection of complete information and the consideration of all alternatives is seldom possible for most major decisions, so that limitations must be placed on alternatives.

2. Satisficing. In this strategy, the first satisfactory alternative is chosen rather than the best alternative. If you are very hungry, you might choose to stop at the first decent looking restaurant in the next town rather than attempting to choose the best restaurant from among all (the optimizing strategy). The word *satisficing* was coined by combining *satisfactory* and *sufficient*. For many small decisions, such as where to park, what to drink, which pen to use, which tie to wear, and so on, the satisficing strategy is perfect.

3. Maximax. This stands for "maximize the maximums." This strategy focuses on evaluating and then choosing the alternatives based on their maximum possible payoff. This is sometimes described as the strategy of the optimist, because favorable outcomes and high potentials are the areas of concern. It is a good strategy for use when risk taking is most acceptable, when the go-for-broke philosophy is reigning freely.

4. Maximin. This stands for "maximize the minimums." In this strategy, that of the pessimist, the worst possible outcome of each decision is considered and the decision with the highest minimum is chosen. The Maximin orientation is good when the consequences of a failed decision are particularly harmful or undesirable. Maximin concentrates on the salvage value of a decision, or of the guaranteed return of the decision. It's the philosophy behind the saying, "A bird in the hand is worth two in the bush."

Quiz shows exploit the uncertainty many people feel when they are not quite sure whether to go with a maximax strategy or a maximin one: "Okay, Mrs. Freen, you can now choose to take what you've already won and go home, or risk losing it all and find out what's behind door number three."

Risking

Because making decisions involves a degree of risk, it would be helpful to examine risk and risk analysis in this chapter in order to gain an understanding of what is involved. Risk and uncertainty create anxiety, yet they are necessary components of an active life. I will make now few general comments on risk taking to sustain this affirmation.

1. Only the risk takers are truly free. All decisions of consequence involve risk. Without taking risks, you cannot grow or improve or even live.

2. There is really no such thing as permanent security in anything on earth. Not taking risks is really not more secure than taking them, for your present state can always be

changed without action on your part. If you don't take the risk of dying by driving to the store, your house could collapse on you and kill you anyway.

3. You are supposed to be afraid when you risk. Admit your fears--of loss, of rejection, of failure.

4. Risking normally involves a degree of separation anxiety--the anxiety you feel whenever you are removed from something that makes you feel secure. Many children feel this when they first leave their parents for school. Some college students feel this when they go off to college. Travelers sometimes feel it when they get homesick. The way to overcome separation anxiety is to build a bridge between the familiar and secure and the new. Find out what the new place--school or country--is like and how its elements compare to familiar and secure things at home. Take familiar things with you--books, teddy bear, popcorn popper, whatever.

The same is true of all risks. Make the opportunity as familiar as possible and learn as much about it as you can before you release the security of the old. Find out about the new job, its location, the lifestyle of those who live there, and so on.

As decision makers ponder the possible outcomes of their decisions they often think about **risk**, which is the possibility of an undesirable result.

Advice on Risking

1. Decide whether the risk is necessary or desirable. Spend some careful thought before acting, so that you will not end up taking unnecessary risks.

2. Risk for the right reasons and when you are calm and thoughtful. Don't take a risk because you are angry, hurt, depressed, desperate, or frightened. Don't take risks just to get revenge or to harm someone else. Don't risk when you are incapable of rational thought.

3. Have a goal. When you take a risk, have a clear purpose in mind so that you will know, after the fact, whether you succeeded or not. What will taking the risk accomplish?

4. Determine the possible loss as well as the gain. That is, know exactly what the consequences of failure will be. Unless you know pretty accurately what both loss and gain will be, you do not understand the risk. There is a tendency either to underestimate or to overestimate the consequences of risk. Underestimation can result in surprising damage, cost, setbacks, pain, whatever. But overestimation is just as problematic, because it can keep us from taking the risks we should be taking.

5. Try to make an accurate estimate about the probability of each case. Is the probability of success one in two, one in ten, one in a hundred, one in a million? This can be sometimes difficult to do, but usually you can guess the probability within an order of magnitude.

6. When possible, take one risk at a time. Divide your actions or goals wherever possible so that you are not combining risks unless absolutely necessary. Simultaneous risking increases anxiety, creates confusion, and makes failure analysis very difficult.

7. Use imaging or role playing to work through the various possibilities, successes and failures, so that you will be mentally prepared for any outcome. Think about what can go right and what can go wrong and how you will respond to or adjust to each possibility.

8. Use a plan. Set up a timetable with a list of steps to take. Use the plan as a guideline, but be flexible.

9. Act decisively. When you have evaluated the risk and decided that it's worth it, act. Go for it. Don't hesitate at the threshold or halfway through. Once you get going, be courageous. Grit your teeth and move forward. Don't procrastinate and don't act half heartedly.

10. Don't expect complete success. You may get it, of course, but chances are the result of your risk will not be exactly what you had imagined and there will be more a degree of success than absolute success or failure.

Types of decisions

The decision making process is affected to a large extent by whether the decision is programmed or nonprogrammer. **A programmed decision** represents a standardized response to a simple or routine problem. The nature of the problem is well defined and clearly understood by the decision maker, as is the array of possible solutions. The programmed decision process is characterized by high level of certainty for both the problem formulation and the problem solution phases, and rule and procedure typically spell out exactly how one is to respond.

On the other hand, **nonprogrammer decisions** occur in response to problems that are either poorly defined or novel. For example, should a university president with limited funds expand the size of the business school to meet growing student demand, or should the university's science facilities be expanded in order to bring in more research contracts? No alternative is clearly correct. [2]

A **simple decision** is one in which there is only one decision to be made, even though there might be many alternatives.

If at the same time we attempt to add another decision, we have created a problem of **strategy**, which is a situation in which several decisions are to be made at the same time. Each of the decisions in the strategy will have different alternatives, and the decision maker will attempt to choose a coherent combination of alternatives.

Key distinction: strategy vs. goal

Example: Launching two new products a year is a goal. Investing in additional personnel, while at the same time stopping the funding of some stalled projects, is a strategy intended to lead to that goal.

Why it's important: Strategy describes a collection of actions that the decision maker takes. The outcome of the actions is uncertain, but one of the possible outcomes is attainment of that goal.

An important special case of a strategy problem is the **portfolio** problem, in which the various decisions faced in the strategy are of a similar nature, and the decision maker does not have sufficient resources for funding all combinations of alternatives. An example is an investment portfolio, in which the decision maker is aware of a good number of investments he would like to make, but is unable to afford all of them.

Especially in situations like this example, people sometimes address the problem as one of performing a **prioritization** of the various opportunities. If one opportunity is prioritized higher than another, then, in the case of limited resources, the decision maker would prefer to invest in the former than in the latter.

Key distinction: decision vs. prioritization

Why it's important: A prioritization might be an intermediate step en route to a decision, and one might even use a prioritization as a tool to aid in a decision.

Some decisions offer the opportunity to adopt a particular type of alternative called an **option**. An option is an alternative that permits a future decision following revelation of information. All options are alternatives, but not all alternatives are options.

Key distinction: alternative vs. option

Why it's important: Options, as an important type of alternatives, have the potential of adding value to a decision situation. A wise decision maker is alert to that possibility, and actively searches for valuable options.

Three dimensions of the decision situation operate in establishing the types of decision:
1. How much of the organization the decision encompasses (whether the decision is strategic or operational)
2. How well defined the decision is (whether it is structured or unstructured)
3. How connected the decision is with others (whether it is dependent or independent)

- *Strategic / operational decision:* if a decision is related to the environment or it encompasses a large part of the organization, it is a strategic decision: operational decisions are related only to divisions of the organization or to a low level of complexity.
- *Unstructured / structured decision*

Some decisions are clear, unambiguous, well defined, "programmable". In the case of unstructured decisions, the options to be considered are not immediately apparent because of the complex environment or the lack of similarity with other situations

- *Dependent / independent decision*

The dependence on other decisions is related to the history and prospective of decisions in organization: some decisions can be related to past and future decisions, some cannot. [8] The extent of the relations between the decision to take and other decisions in different parts of the organization is another factor that affects the degree of independence.

CONCLUSIONS

Hundreds of decisions, large and small, are made by people throughout their companies every day. Many are "good" decisions — they support your company's strategy effectively. Yet many do not take into account all available information or downstream implications. The objective of Decision Making Process is to substantially increase the proportion of good decisions made, thus improving overall performance.

Why do you need a process? Some people know instinctively how to make decisions. But even the best decision-makers are increasingly challenged by these factors:
- The growing onslaught of information on which to base decisions
- The increasing number of decisions
- The emergence of decisions made by "teams"
- The decreasing time to make them

All of this points to the need for a visible, rational, and repeatable approach to solving problems and making decisions.

The underlying objective of decision-making processes is to first reach a common understanding of the issues, then to develop options that attempt to satisfy the needs of all parties. It is important at the outset, and throughout the entire process, to evaluate the intensity of the disagreement, and if necessary to contact a third party who can manage the process.

We think that we make rational decisions, independent of the physical, emotional, psychological and spiritual state in which we happen to find ourselves. Not true. We weigh different attributes of the problem depending on their relative importance at the moment. You broke the rules, but today I am in a good mood, the weekend is coming and I like you – well maybe we'll let it go this one time.

The point is that there are many traps that we humans fall into when making decisions, so we have invented many techniques to help bootstrap our ability to make decisions. These tools strengthen that which humans do well, connecting concepts to develop new ideas, by adding abilities that we lack in, such as computing accuracy and speed, as well as systematic decision making approaches.

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MILITARY ORGANIZATION CHARACTERISTICS

Lieutenant Colonel DAN LAURENTIU CONSTANTIN

Every nation in the history of humanity had different needs for military forces. How these needs are determined forms the basis of their composition, equipment and use of facilities. It also determines what military does in terms of peacetime and wartime activities.

Most modern military forces tend to have organizational and structural similarities, reflecting not only common origins but also the practical span of command and the nature of the bonding process. There is usually a difference between the organization and strength of an army in peace (peace footing or peace establishment) and in war (war footing or war establishment), and history suggests that armies which adapt most successfully to the demands of war are those in which the war establishment is a logical reflection of the peacetime structure.

Militaries are not usually mobs of men and as technology has more impact on the way wars are fought more detailed organization is required. A lot of different things affect organization, tactics, training, weapon availability and deployment to name a few. A military organization must have some degree of flexibility in the way it is structured. It's hard to say whether an organization is structured from the top down or vice versa, in reality it usually ends up somewhere in between.

Militaries often function as societies within societies, by having their own military communities, economies, education, medicine and other aspects of a functioning civilian society.

The profession of soldiering as part of a military group is older than recorded history itself. Some of the most enduring images of the classical antiquity portray the power and feats of its military leaders. The Battle of Kadesh in 1274 BC was one of the defining points of Pharaoh Ramesses II's reign and is celebrated in bas-relief on his monuments. A thousand years later the first emperor of unified China, Qin Shi Huang, was so determined to impress the gods with his military might that he was buried with an army of terracotta soldiers. The Romans were dedicated to military matters, leaving to posterity many treatises and writings as well as a large number of lavishly carved triumphal arches and victory columns.

In the modern era, world wars and countless other major conflicts have changed the employment of the militaries beyond recognition to their ancient participants. Empires have come and gone; states have grown and declined (such as the fall of the Roman Empire).

MILITARY ORGANIZATION

Etymology and definitions

Often, in the everyday language, we use the word "organization". So for that, is normal to ask ourselves what is an organization, how we define it.

According to the Oxford dictionary, organization is an organized group of people. In accordance with the The Century Dictionary, The Century Co., New York, 1911, organization is a group of people or other legal entities with an explicit purpose and written rules. In Webster's Revised Unabridged Dictionary (1913), organization is that which is organized; an organized existence; an organism; specif. (Biol.), an arrangement of parts for the performance of the functions necessary to life. Wikipedia – The Free Encyclopaedia (the page updated on 1st of December 2010) define organization as a social arrangement which pursues collective goals, controls its own performance, and has a boundary separating it from its environment. Gary John's consider organizations as "social inventions designed to achieve common goals through

group effort", and Erhard Friedberg define them as „ formalized and hierarchical human assemblies to ensure cooperation and coordination of their members to achieve given ends".

The word itself is derived from the Greek word organon (meaning "tool"), itself derived from the better-known word ergon (a concept from Aristotle's Nicomachean Ethics that is most often translated as function, task, or work). There are a variety of legal types of organizations, including: corporations, governments, non-governmental organizations, international organizations, armed forces or military organizations, charities, not-for-profit corporations, partnerships, cooperatives, and universities.

One of the types is the "military organization". Military organization, known as military, is an organization authorized by its greater society to use lethal force, usually including use of weapons, in defending its country by combating actual or perceived threats. Military organizations often function as societies within societies, by having their own military communities, economics, education, medicine, and other aspects of a functioning civilian society. Military it comes from the Latin militaris (from Latin miles meaning "soldier") but is of uncertain etymology, one suggestion being derived from *mil-it- - going in a body or mass [3]. In English, the first recorded use of military, spelled militarie, was in 1585[4]. Today, the word is identified as denoting someone that is skilled in use of weapons, or engaged in military service or in warfare [1] [2].

History

Every nation in the history of humanity had different needs for military forces. How these needs are determined forms the basis of their composition, equipment and use of facilities. It also determines what military does in terms of peacetime and wartime activities.

The development of new weapons led to the creation of other structures in the military organizations. Some of the military unit types and technologies which were developed in the ancient world are: slinger, hoplite, auxiliaries, infantry, crossbowmen, chariots, and cavalry.

There were also organizational changes, made possible by better training and intercommunication. "Combined arms" was the concept of using infantry, cavalry, and artillery in a coordinated way.

In the 10th century, the invention of gunpowder led to many new weapons that were improved over time. As a consequence of this invention was the appearance of the riflemen structures or field artillery structures.

Since the ancient times the structure of the military organization had suffered several transformations. If we make a comparison between the Roman structures and the present army structures we will observe some significant differences. A Contubernium had 8 legionnaires and an infantry squad can have today between 8 and 10 soldiers. A Centuria had 10 Contubernium that means 80 legionnaires and an infantry company can have 3 or 4 platoons, which means between 100 and 130 soldiers. It is visible that they do not have other structures between Contubernium and Centuria. The Cohort had 6 Centuria and about 480, people almost the equivalent of a battalion. A Legion had 10 Cohorts and many auxiliaries. An auxiliary often consisted of horsemen, archers and slingers. Auxiliaries were used for 2 things: helping legions and, most of all, defending the frontiers. With the auxiliaries a Legion could have around 5500 – 6000 people, the equivalent of a division. So, we notice again the lack of different large structures like regiments and brigades. In time when new weapons were invented, we observe immediately a change in the structure of the military organization because of the implementation of the new discoveries in the defense concept.

What distinguishes modern military organizations from the previous ones is not their willingness to prevail in conflict by any method, but rather the technological variety of tools and methods available to modern battlefield commanders, from knives to nuclear warheads.

In the end we can make the statement that the structure of the military organization was, is and will be influenced by the appearance of new weapons, new training methods or better intercommunication.

MILITARY ORGANIZATION CHARACTERISTICS

Military organization a bureaucratic complex organization

Superficially, military forces are a prime root of war. They are responsible for fighting, the organised use of force against human and technological opposition. Modern military forces are mobilised by the state, as a defence of the interests of state elites against external and internal enemies. But although military forces do indeed serve the interests of the state, the military is not purely a tool. Military personnel and especially military elites (the officer corps) have their own special interests. Military elites will not sit by idly while state power is dissolved or transferred to interests seen as hostile to military interests.

Bureaucracy can be seen as a root of war because it facilitates the maintenance of elite power and smashes or pre-empts non-hierarchical and self-reliant forms of human interaction.

The military is bureaucratic in form, and is a pioneer and model bureaucracy. Thus the military is closely intertwined with the state and bureaucracy. Also, the military is strongly interconnected with patriarchy and with science and technology. The function of military forces is to be able to use organised violence against opponents, usually seen as similarly organised. Military forces use violence as the ultimate defence of state interests, and not surprisingly the ultimate sanction against internal resistance in armed forces is also violent: imprisonment or even execution. Military forces even more than other bureaucracies are similar to authoritarian states in their denial of the right or opportunity to dissent, in their demand for obedience and in their use of reprisals against recalcitrant subjects.

Because of the military's rigid bureaucratic structure and because of its relative isolation from other social forces, the military is an intensely conservative structure. This is well illustrated by its reluctance to adopt technological innovations of demonstrated effectiveness. For example, European armies were very slow to adopt the machine gun in spite of its years of proven effectiveness in colonial wars. The reason for this conservatism is that introducing weapons systems also requires internal social change in areas such as corps organization, training, battlefield tactics and command structures. Changes that adversely affect particular bureaucratic empires in the military are resisted most of all. Fundamental changes in military organization or doctrine often require outside intervention, for example by civilian political elites. Another reason for the conservatism of military forces is that most of them are at war only a small fraction of time, and in between wars there is no 'marketplace' test of the current doctrines. Internal conservatism is one reason why militaries are notorious for being prepared to fight the previous war.

Military organization characteristics

All militaries, whether large or small, are military organizations that must perform certain functions and fulfil certain roles to qualify for being designated as such. If they fail to do so, they may become known as paramilitary, civil defence, militia or other which are not military. These commonalities of the state's military define them. Internally, military forces are bureaucratic in form, with a strict hierarchy and division of labour, rigid rules and duties.

The characteristics of a complex military organization are its boundaries:
- its large size (huge number of members);
- its high degree of structural differentiation (hierarchy);
- its high degree of functional differentiation (division of labour);
- the existence of a system of co-ordinating activities;

- the existence of rules and procedures which prescribe the responsibilities of all members of the organization (internal rules, regulations, procedures) ;
- the existence of a network of complex communication;
- the fact of being an 'open' organization;
- the existence of coalitions as constituent elements of the complex organization.[5]

The first seven traits are descriptive and do not need further explanation. The last two characteristics are rather interpretations of how organizations function.

The Complex Organization as an Open Organization. The assumption of an 'open' organization and the coalition hypothesis link the concepts of the 'complex organization' and the 'rational actor'. The open organization hypothesis postulates that there is an interdependence and exchange between the organization and its environment. As a result, boundaries are flexible and permeable.[6] This interpretation, especially as studied in 'contingency theory', emphasizes that an organization's successful adaptation to the environment is dependent on the ability of the top leadership to interpret the conditions confronting them appropriately and to adopt solutions.[7] The degree to which the organization is effective depends on achieving either a balance or compatibility between strategy, structure, technology, the commitments and needs of people, and the external environment. As noted above, this ability must be related to an actor's strategy. The concept of the 'open organization' contrasts with that of the 'closed organization'.

In his inaugural speech on the Dutch Royal Military Academy paid attention to this subject. J. Soeters, Verschuivende en Vergruizende Grenzen, Over de doordringbaarheid van organisaties (met toepassing op dekrijgsmacht) [Moving and Pounding boundaries, On the Permeability of Organizations (applied to the Armed Forces)], Breda: Koninklijke Militaire Academie, 1994. In the context of this study, however, the organization in general and the military organization can be distinguished from its environment.

Complex Organizations as Coalitions. The role that the rational actor plays in an attempt to fit into the rationally acting organization is another dimension of this type of organization.

Indeed, complex organizations are not only considered as fundamentally open organizations, but also as collections of coalitions. Downs proposed that the idea of 'coalitions' differs from the concept of the 'teams'. A team is a group of people working together who have identical goals. A coalition is a group of people or a collective actor working together who have some common goals, but not all of their goals are common ones.

The individual does not need to give his/her common goals the same relative weight in this individual preference structure. In this sense, organizational goals are the result of a compromise between the individual actors, and their individual calculations, bargaining skills, power relationships between individuals and the influence(s) of key persons in the organization. Thus, when all these factors are taken into account the organization is steered rationally through the calculated activity of the rational actor.

The internal characteristics of the military have implications beyond the life of soldiers. The very way the military is organised has a major impact on the nature of the society in which it exists.

CONCLUSIONS

Considering the key role of the military in potentially blocking fundamental social transformation, it is disappointing that there have been few organized efforts to confront military structures, or even theoretical perspectives on how to abolish the military. Most social movements simply accept the military as part of the nature of things. They may assume that the military is kept under control by political elites. State socialists, for example, do not aim to abolish military forces, but rather prefer to retain them, but under the control of a state apparatus run by the communist party. Social activists also commonly assume that military forces are essential for defense against external threats, which in turn is based on the assumption of the persistence of the state system.

Military forces are not socially indivisible or ideologically coherent. There is diversity, especially between ranks. The officer corps is usually aligned with more conservative social groups. For a government to maintain its control, it must maintain the good will of the officer corps. Enormous social changes have been wrought, and military power continues to dominate international relations.

The role of the military today is as central to global societies as it ever was. Military revolutions always lead to profound differences between the armed forces that undertake them and those which cannot or do not. Today some militaries are embracing new technology and developing doctrine, organizations, and methods to utilize it. The U.S. military in particular is integrating a wide range of digital technology and exploring the use of robotics and new synthetic materials. At the same time, many states realize they cannot afford or fully use cutting edge technology and thus continue to rely on older military structures and methods.

The result is a growing gap between the unit-for-unit capability of advanced and less advanced militaries. The actual future security system will undoubtedly include all types of conflict, and thus be a blend of systems. This does not mean that all forms of conflict will be of equal importance.

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LEADER VERSUS COMMANDER

Lieutenant Colonel MARIUS DOROBANTU

In an age of quick fixes, fads, and techniques, leaders need a strong understanding of the basies of leadership techniques.

No leader is immune to the information revolution and the subsequent demands from organizations and employees.

DEFINITION OF A LEADER

A leader is "a person who in:fluences a group of people towards the achievement of a goal". [1]

Person

Is leadership a position of office or authority? Or, is leadership an ability in the sense that he is a leader because he leads? We all may know or hear of people who are in positions of leadership but who are not providing leadership. A position of oftice is no guarantee of leadership but it helps in the sense that a leadership position usually commands a listening ear from its people and that is a good starting point for anyone who desires to be a leader.

A leader by its meaning is one who goes first and leads by example, so that others are motivated to follow him. This is a basic requirement. To be a leader, a person must have a deep-rooted commitment to the goal that he will strive to achieve it even if nobody follows him!

Purpose

A requirement for leadership is personal vision - the ability to visualize your goal as an accomplished fact; a thing already achieved.

People

To be a leader, one must have followers. To have followers, one must have their trust. How do you win their trust? Why would others trust you? Most important, are you worthy of their trust?

Why are some individuals more effective than others at influencing people?

Effectiveness in leadership has been attributed to (1) persuasion skllis, (2) leadership styles and (3) personal attributes of the leader. We wili explore these further in another article or two. Now, we will consider one critica!element of leadership (influence) - love for people.

Other definitions of a leader:
- One who, or that which, leads or conducts; a guide; a conductor.
- One who goes first.
- One having authority to direct; a chief; a commander.

TRAITS OF A GOOD LEADER

The following traits have been compiled by the Santa Clara University and the Tom Peters Group:
- Honest-Display sincerity, integrity, and candor in all your actions. Deceptive behavior will not inspire trust.
- Competent-Base your actions on reason and moral principles. Do not make decisions based on childlike emotional desires or feelings.

- Forward-looking — Set goals and have a vision of the future. The vision must be owned throughout the organization. Effective leaders envision what they want and how to get it. They habitually pick priorities stemming from their basic values.
- Inspiring-Display confidence in ali that you do. By showing endurance in mental, physical, and spiritual stamina, you will inspire others to reach for new heights. Take charge when necessary.
- Intelligent — Read, study, and seek challenging assignments.
- Fair-minded — Show fair treatment to all people. Prejudice is the enemy of justice. Display empathy by being sensitive to the feelings, values, interests, and well-being of others.
- Broad-minded-Seek out diversity.
- Insurmountable obstacles. Display a confident calmness when under stress. Straightforward-Use sound judgment to make a good decisions at the right time.
- Imaginative — Make timely and appropriate changes in your thinking, plans, and methods. Show creativity by thinking of new and better goals, ideas, and solutions to problems. Be innovative!
- Courageous - Have the perseverance to accomplish a goal, regardless of the seemingly

DEFINITION OF A COMMANDER

A person who commands, especially a commanding officer.

A chief; one who has supreme authority; a leader; the chief officer of an army, or of any division of it.

An officer who ranks next below a captain, -- ranking with a lieutenant colonel in the army.

The chief officer of a commandment.

A heavy beetle or wooden mallet, used in paving, in saillofts, etc.

Someone in an official position of authority who can command or control others.

TOWARD A THEORY OF MILITARY LEADERSHIP

There are some leaders that have to lead there team into situations where they can be killed. Yet, their team follows them without question. Who are these people? Army officers - If ever their were people who need to show the best in leadership skills its them, as it really is a question of life or death.

Let's see what are the main leadership skills taught and which apply to civilian leadership.[2]

Command total respect:

You don't need to like someone you need to respect them. In the army officers don't have favorites, everyone is treated the same, there all part of the same team.

In civilian life one of the leadership skills that is lacking is leaders who have favorites on a personal level and give them preferential treatment. This can cause huge resentment. Nothing undermines a leader more than oftice politics and back biting. Treat everyone with the same respect and ethics. Your staff will appreciate it and it will foster a better work ethic.

In the army the officers men know that there commanding officer can either do all the tasks they can do, or at least will be very familiar with them. Army officers are people who are seen by their men as people who are able to get their hands dirty in a team.

Many civilian leaders fail to get to grips with this concept and are seen as aloof or detached from their team. A good leader wili muck in and be seen as one of the workers at times and be seen as in the team rather than aloof from it.

Planning & team spirit

An army officer makes sure his men understand the mission at hand. He knows there life depends on it. He makes sure that everyone understands the expectations, goals and objectives. The whole team knows exactly what's expected of them and they will ali be together and depend on each other.

A good civilian leader wili have a plan in place with clear objectives where everyone knows their place in the plan and their exact role.

You need a clear plan, workable goals and a good time spirit

Theory development

What is theory? Theory is the symbolic dimension of experience. It mediates between experience and thought. In the words of philosopher George Santayana, "The whole achinery of our intelligence, our general ideas and laws, fixed and extemal objects, principles, persons, and gods, are so many symbolic, algebraic expressions. They stand for experience; experience which we are capable ofretaining and surveying in its multitudinous immediacy. We should flounder hopelessly, like the animals, did we not keep ourselves afloat and direct our own course by these inteliectual devices. Theory helps us to bear our ignorance of fact."[3]

Military leadership

Leadership has been described simply as "the process of influencing others". It is probably correct to say that leadership has been a feature of ali cultures throughout history. It has certainly been an indispensable quality in ali cultures that have survived and flourished. Despite its ubiquitous nature, however, a fuli understanding ofleadership remains elusive.

Definition of military leadership

Military leadership is defined as "the art of direct and indirect influence and the skill of creating the conditions for organizational success to accomplish missions effectively." [4]

In general, junior leaders exercise their influence directly, while senior leaders must employ both direct and indirect influencing methods. Although this definition is an abstraction, closer exarnination helps discover some important aspects of military leadership. Influence can be direct (i.e., personal contact) or indirect (i.e., sending orders down the chain of cornrnand, regulations, standing operating procedures). Leadership must focus onan object, or mission. The process of leading relies on creating conditions so that an organization may function. With the exception of the term "mission," which has military connotations, the definition of leadership could apply equally to business and industrial leadership and to politicalleadership.

COMMAND AND LEADERSIDP

Military leadership and cornrnand are two closely linked elements. It is difficult, if not impossible, to consider one without considering the other. Cornrnand and leadership are

almost the same, but not quite. For a theory of military conflict to be coherent, supporting theories of cornrnand and leadership must integrate into a coherent whole.

Part of the problem of considering cornrnand and leadership is that there exist a lot of contemporary and official accounts of what each is, and isn't. Some of these are good descriptions, but most aren't.

All members of a military organization have this responsibility to activate combat potential and create combat power to accomplish a mission, therefore, all members, from private to flag rank, are cornrnanders in a sense. Leadership, which is "the primary way that a cornrnander expresses his will to accomplish the mission," is a vector of cornrnand.[5]

This is a powerful construct. Will, or will power, is a critical element in overall combat dynarnics. When a cornrnander expresses his will to succeed, he is demonstrating leadership. How, then, should leadership and cornrnand be differentiated?

One way, admittedly simplistic, is by relative position on the battlefield. Leaders are at the front, commanders are somewhere to the rear. Thus, when a commander goes to the front he demonstrates leadership. But cornrnanders can demonstrate their will to succeed in rear areas also, and this is no less leadership.

A better way might be to return to the definitions of command and leadership. Both influence others, directly and indirectly, to accomplish the mission. But the commander's job is to "activate combat potential to create combat power," whereas the leader's job is to "apply combat power to succeed in the mission." Therefore, the essence of leadership is action, combined with the will power to continue to act to achieve mission success.[6]

Another way to split the distinction is by metaphor. When someone says, "We will do this," or "You and I will attack that hill," that speaker is a leader. But when the speaker says, "You will do such and so," he is talking as a commander.

This means that leaders are at the front, at least the conceptual front, of the action they are performing. For infantry squad leaders the conceptual front is the front line. For a supply sergeant, the front where his action takes place may be more commonly in a rear area, but it is his front nonetheless and he is measured by his will power to perform successfully.

Command is a full- time responsibility that subsumes leader duties. Leadership is a fulltime duty that is influenced by command directives. The commander has to know when to command and when to lead. In this regard, historian John Keegan's perceptive analysis in *The Mask of Command* is worth consideration.

Keegan looks at four commander- in-chiefs, Alexander, Wellington, Grant and Hitler. He asks the question: At the front: Always? Sometimes? Never? Alexander was always at the front. Macedonian culture demanded such heroic leadership of a commander. Demanding and unassuming, Wellington frequently was in the line-of-fire of the enemy to influence critical phases of battle. Keegan called his leadership "anti-heroic." Grant, whose armies were dispersed over greater distances, was less often in dangerous front line positions. He influenced actions indirectly rather than directly when it carne to fighting. Without slight, Keegan dubs this "unheroic." Hitler was the "false heroic," who never led from the front as commander-in-chief, although he frequently reminded subordinates of his front line duty in the First World War to maintain a heroic image.

Theories of command and leadership must at least account for these styles and behaviors.

CONCLUSIONS

Commanders are people who do things right and leaders are people who do the right thing. The difference may be summarized as activities of vision and judgment — effectiveness -versus activities of mastering routines — efficiency. The chart below indicates key words that further make the distinction between the two functions:

• The commander administers; the leader innovates.

• The commander is a copy; the leader is an original.

• The commander maintains; the leader develops.

• The commander focuses on systems and structure; the leader focuses on people

• The commander relies on control; the leader inspires trust.

• The commander has a short-range view; the leader has a long-range perspective.

• The commander has his or her eye always on the bottom line; the leader has his or her eye on the horizon.

• The commander imitates; the leader originates.

• The commander accepts the status quo; the leader challenges it.

• The commander does things right; the leader does the right thing.

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RECRUITMENT- COMPONENT OF HUMAN RESOURCES MANAGEMENT PROCESS

Lieutenant Colonel FLORIN GHIRIŞAN

We are all aware of the expression 'the right man in the right place', which is a common ideal of both employers and employees. This expression is also the goal of the Military Human Resources Management System.

People have always had careers, but only recently the human resources management focused on the necessary type of planning, on the methods and means of career development.

To fulfill their missions and tasks, military units must be manned with properly qualified and trained personnel. In that context, the role of the Military Human Resources Management System is to ensure that the military organization is properly manned.

In order to ensure these expectations, Human Resources Management Process is composed of:

1. Human Resources Planning: the process that ensures the right number of people, in the right places with the necessary skills/knowledge to fulfill the job tasks

Three steps: - assessment of current resources;
- assessment of future needs;
- develop a program to meet future needs.

2. Recruitment: the process of locating, identifying and attracting suitable applicants to the organization

Four steps: - attraction;
- processmg;
- selection;
- enrollment.

4. Development: the process of introducing new members to the organization and providing them with the proper skills/knowledge to meet current and future job functions.

Three steps: - Orientation Training - Recruit Training
- Basic Occupation Training
- Advanced Training

5. Employment: the process of moving members through progressive positions to gain experience and competence to prepare them to for more senior or technically demanding employment.

Linked to:- Development
- Career Management
 - Assignment
- Selection
- Promotion

6. Transition: the process of moving members from full time military service to either the reserve force or to retirement to the civil sector of society

Recruitment is also defined as the process of searching, locating, identifying and attracting potential candidates from which to be able to elect candidates, eventually, professional characteristics necessary or best match the requirements of current and future vacancies.

NECESSITY FOR RECRUITMENT ACTIVITY OF HUMAN RESOURCES

In the Human Resources domain to be successful and especially to survive, organizations in general and firms in particular have to address these issues:
- identification of qualifications or skills and selection of candidates who best match the requirements of new or vacant positions;
- identify and attract competitive candidates using the most appropriate
methods, sources and medium recruitment;
- compliance with legislation in the field on equal employment opportunities and correction of existing discriminatory practices and imbalances.

Solving these problems favorably means the success of the entire process
to ensure staff, a very important process in the economy of a firm considering the effects of possible mistakes or errors of employment.

Thus, before deciding to employment of new applicants it is necessary to verify the reality and the need for recruitment and to consider other possibilities for alternatives. More specifically, if a position does not exist and that there should be, if the position remains vacant, there is the possibility of dissolve. It may decide to transfer tasks to another job or vacancy can be maintained when certain circumstances change. Therefore, human resource recruitment refers to confirming the need to hire staff, some staff changes in employment status, and actions taken to locate and identify potential candidates and to attract the most competitive, better able to meet job requirements.

From this perspective, strategic recruitment needs can be as responsive to
long-term needs, can respond to urgent requests for temporary or cyclical movements may be related to internal staff (promotion, transfer, development).

Recruitment can be permanent and systematic and can only be achieved
when there is a particular need. If human resources recruitment takes place continuously and systematically, the organization has the advantage of maintaining a permanent contact with the labor market. Also, recruiting human resources can be spontaneous or induced, when the organization wants to occupy a certain position.

Recruiting human resources management is the process of maintaining and developing the most appropriate internal and external sources necessary to ensure competitive personnel in order to achieve organizational objectives. Thus, recruitment may be an active process, especially when the organization aims to maintain and preserve ties or contacts with external sources of recruitment.

Recruitment activities can become an extremely complex and expensive activity that requires special attention in terms of internal organizational and external consequences, and needs of existing and future human resources. Therefore, on the operation of human resources recruitment tends to be a stand- alone activity.

Staff recruitment is considered by many specialists as the entire process to
ensure staff from outside the organization, using as many methods or possible sources of recruitment.

RECRUITING - BASIC ACTIVITY IN THE PROCESS OF STAFF ASSURANCE

Providing staff of an organization, called employment includes several basic activities, namely: human resource planning, recruitment and selection of staff. Assurance process with personnel from outside the organization include recruitment, selection and orientation, and integration personnel, while ensuring staff within the organization requires some transfers, promotions, retraining, redeployment, development, and potential retirees, resignation, dismissal or death.

In a wider process to ensure staff and other activities in the field include human resources, for example job analysis and work design. Recruitment is the first step in personal

insurance, as well as the first step in its selection process. The target in recruitment activities is to identify a sufficient number of candidates so that those who meet the conditions may be selected. Thus, the most effective methods or procedures for selection of personnel are limited by its efficient recruitment process.

Recruiting human resources has to also analyze and design work stations, because the results of these activities are essential in the recruitment process. This implies that the person who recruits or hires must have the necessary information about job characteristics, and the quality of its future owner. Knowing in advance its anticipated staffing needs or due to human resource planning process, allow the proper functioning and more likely successful recruitment process.

Human Resource recruitment process is closely linked to many personal activities such as performance appraisal, rewards employees, training or staff development and relationships with employees. Thus, candidates with appropriate training generally have better performance and existence in the organization of ongoing concern to the line performance involves identifying and attracting candidates as competitive.

In essence, the process to ensure staff is a screening process, passing through a series of filters after which applicants are selected from specific activities human resources are developed sequentially.

EXTERNAL AND INTERNAL FACTORS OF RECRUITMENT

Recruitment is the first contact between employer and the one seeking employment, and also a public activity. In these conditions, recruitment is hardly a simple task, because recruitment policies and management practices in this field are affected by a number of constraints and numerous interna!and externa! factors such as:
- labor market conditions and changes, because events and its changes over time have a great influence on recruitment. Thus, recruitment policies are affected by some relevant changes in the labor market situation as demographic trends, entry of female employment or old age in the labor market;
- the capacity of training systems and human resources development, and educational models that have impact on recruitment;
- attraction area, and additional benefits or local facilities;
- legislative and legal framework to prevent illegal employment decisions or practices, as well as discrimination of any kind;
- image or reputation of the organization, which may attract or reject
potential candidates;
- preferences of potential candidates for certain industries, for certain organizations or jobs;
- organizational objectives;
- organizational culture the relevant values promoted by the influence of the desire of recruitment and employment;
- policies and practices ofhuman resource management;
- politica} criteria, ethnic or otherwise;
- mandatory requirements that the organization believes that applicants for the vacancies must meet;
- economic and financial situation of the organization;
- other factors that may make the recruitment process or to protect some difficulties that increase the duration for such personal activities.
In conclusion, you need a complete and comprehensive analysis of ali factors that may cause or, instead, remove the competitive potential candidates.

RECRUITMENT PROCESS FEATURES

Commitment is a two way process, the candidate must be satisfied with the employer that offers job and associated rewards and employer must be satisfied with the candidate. Therefore, recruitment is a two-way communication process between the organization and candidates, within which both organizations or their representatives and candidates transmit signals relating to employment relationship to make the necessary comparison between the two sides interests.

Decision to accept a job is influenced by three main factors:
- objective factors: salary, work nature, location, opportunities for advancement;
- subjective factors, that people are attracted to organizations whose
image and organizational climate match their personality;
- recruitment factors, candidates tend to leave the attitude influence specialist recruitment and organizational climate to assimilate its behavior.

Of particular importance is realistic data and information which must be based on both views its employees as well as conditions specific to the organization compare with those offered by competing organizations in order to determine the factors of attraction for potential candidates. If the candidate understands wrong the nature of work or organization, the effects will be as serious as if the employer has to offer wrong candidate. There has always been a clash of expectations with reality. For this it is desirable that in the recruitment process to adopt a position of partnership between professionals who recruit and potential candidate for the benefit of both parties.

RECRUITMENT STRATEGIES AND POLICIES

A very important stage of the process of recruitment is the recruitment strategies and policies that establish or designate concepts objectives, code of conduct of the organization in recruiting staff and specific behaviors that work, and overall attitudes, intent and guidelines for staff recruitment.

Also, recruitment strategies and policies define how an organization meets its responsibilities in recruiting staff, and organizational philosophy and values relating to achievement of the recruitment process.

Organizational policies have an impact on the effectiveness of recruitment process, being necessary for their proper understanding and interpretation of an argument as to achieve more efficient recruitment process.

In practice management strategies and recruitment policies vary from one organization to another, especially is they must meet several objectives, often contradictory.

Thus, the managerial decisions and strategies that govern recruitment policies have considered the following issues:
- identifying and attracting a larger number of candidates to ensure the
necessary number and quality of candidates;
- choice of recruitment sources (internal, external or a combination of the two sources) is one of the main problems of philosophy of recruiting;
- ensure consistency between the organization's recruitment activities and
strategies and values;
- extent that the organization prefers to attract candidates to pursue a long-term career and can provide a human resources performance management;
- concern of the organization to identify and attract a variety of categories
of candidates;
- consideration of the objectives envisaged by employing staff, including the effects of post-recruitment

- attitude towards the candidates: they are regarded as a commodity tobe bought oras individuals tobe identified or drawn (marketing approach);
- achievement of staff recruitment in a short time and with the lowest costs possible, for this purpose, recruiting momentum after the establishment of a recruitment plan and sharing equally the costs of employment for the period envisaged to not affect the organization;
- recruitment efforts will lead to expected effects including improved picture of the organization.

For successful recruitment process is necessary to develop an integrated strategy, and an appropriate policy to meet expectations and future development projects ofthe organization.

THE CONTEXT IN WHICH RECRUITMENT IS APPLIED

- competition for military career decreased constantly
- there is a fierce competition for winning the human resources
- economic development decreases the military profession attractiveness
- the Armed Forces downsizing measures makes jobs insecure
- military career means risk
- the new generation has changed
- natural process of population aging and decreasing.

RECRUITMENT PROCEDURE CONSISTS OF:

- career opportunities and admitance criteria brief
- filling in the Initial Contact Form
- checking eligibility
- counselling
- infonning (briefs, brochres, video etc.)
- time for making up hislher mind (from minutes to months)
- counseling again (at request)
- medical assessment (civilian and military medical institutions)
- completing candidate's file
- interview filling in the Application Form
- reviewing suitability
- recruiter's decision/recommendation
- selection planning (if admited) Next time (if rejected).

CONCLUSIONS

a) Threats that recruitment faces:
- downsizing the military and its consequence - fewer personnel;
- diversified civilians jobs and education hinder recruitment; the transfonnations on the economy makes recruitment more difficult;
- the recent world conflicts that have been brought to public's attention highlights the risk factors;
- a slower adaptability of military organization to change, compared to civilian organization;
- low recruitment funds.
b) There are some advantages that the Romanian military bas in the labor market competition
- triple offer: education, job and career development;
- the anned forces offer, means in the public eye, the offer of the
   Government that inspires confidence - it is a guarantee;

- the confidence level engendered by military institution is about 70 - 80% - that means high prestige;
- the recruitment and selection structures have gained credibility among population 1 target audience.

c) Important challenges on the short, medium and long term:

- to adapt the system in order to face the volunteer military service requirements;

- to keep the place we have gained on the labour market, in the circumstances of higher competition and more developed economy;

- to raise (or at least maintain) a certain quality level of the attracted human resource, especially regarding officers;

- to increase the extent the reality inside the organization confinns the expectations ofthose we persuaded to choose a military career.

 d) Finally:

- the recruiting system must be structured and operated in a manner that meets the organizations need for volunteer military personnel in an

efficient and timely manner.

- it must produce volunteer recruits in not only guantity but also guality to man the force structure.

- it must be capable of reacting rapidly to changing intemal requirements and competing in a dynamic extemal   employment environment.

INFORMATION MANAGEMENT STRATEGIC APPROACH IN ROMANIAN MINISTRY OF DEFENSE

Commander RAZVAN GLODARENCO

Information is a significant source of power. Ensuring timely and trusted information is available where it is needed, when it is needed, and to those who need it most is essential to achieving an information advantage. Sharing information greatly enhances joint situational awareness. All data assets, services and applications, to include enterprise resource planning solutions, will be visible, accessible, understandable and trusted by all authorized users, both known and unanticipated, except where limited by law, policy or security classification.

The aim of this document is to highlight the importance of information, as a significant resource of the organization, and the need to perform information management (IM), especially in highly challenging environments, then to place the information management into the NATO framework. Finally, the document proposes an approach for establishing the vision, goals and objectives of information management in Romanian Armed Forces, at the strategic level.

MANAGING INFORMATION AS A CRITICAL RESOURCE

Effective information management is not easy. There are many systems to integrate, a huge range of business needs to meet, and complex organizational (and cultural) issues to address.

Exploring Information Management

"Information management" is an umbrella term that encompasses all the systems and processes within an organization for the creation and use of corporate information.
In terms of technology, information management encompasses systems such as:
    (a)   web content management
    (b)   document management
    (c)   records management
    (d)   digital asset management
    (e)   enterprise search
    (f)   collaboration
    (g)   learning management systems
    (h)   learning content management Information management is, however, much more than just technology. Equally importantly, it is about the business processes and practices that underpin the creation and use of information. It is also about the information itself, including the structure of information ("information architecture"), metadata, content quality, and more.
Information management therefore encompasses:
 (a)   people
    (b)   process
    (c)   technology
    (d)   information content

Each of these must be addressed if information management projects are to succeed.

Information Management Challenges

Organizations are confronted with many information management problems and issues. In many ways, the growth of electronic information (rather than paper) has only worsened these issues over the last decade or two.

Common information management problems include:

(a)   large number of disparate information management systems;

(b)   little integration or coordination between information systems;

(c)   range of legacy systems requiring upgrading or replacement;

(d)   direct competition between information management systems;

(e)   no clear strategic direction for the overall technology environment;

(f)   limited and patchy adoption of existing information systems by staff;

(g)   poor quality of information, including lack of consistency, duplication, and out-of-date information;

(h)   little recognition and support of information management by senior management;

(i)   limited resources for deploying, managing or improving information systems;

(j)   lack of enterprise-wide definitions for information types and values (no corporate-wide taxonomy);

(k)   large number of diverse business needs and issues to be addressed;

(l)   lack of clarity around broader organizational strategies and directions;

(m)   difficulties in changing working practices and processes of staff;

(n)   internal politics impacting on the ability to coordinate activities organization-wide.

While this can be an overwhelming list, there are practical ways of delivering solutions that work within these limitations and issues.

INFORMATION MANAGEMENT IN SERVICE-ORIENTED ARCHITECTURES

Service orientation, according to NATO Network Enabled Capabilities (NEC) concept, is the integration of applications and information sources through the exchange of information based on common semantics or a vocabulary used to define the structure of information exchange. Service orientation enables loose coupling of service providers and service consumers, as there is no information to be shared initially between the two parties. Service-oriented architecture (SOA) is an architectural style, design style, and a design principle for application development and integration. SOA promotes business process orchestration of the enterprise-level business services using a distributed model consisting of disparate organizational, customer, supplier, and partner systems.

Figure 1 shows a logical view categorizing services that information management offers based on their following value propositions:

    (a)   Security
    (b)   Collaboration
    (c)   Availability
    (d)   Quality of Services (QoS)
    (e)   Manageability
    (f)   Information consumption

While no single product offers all of these services, taken together these services create a complete information management framework under SOA.
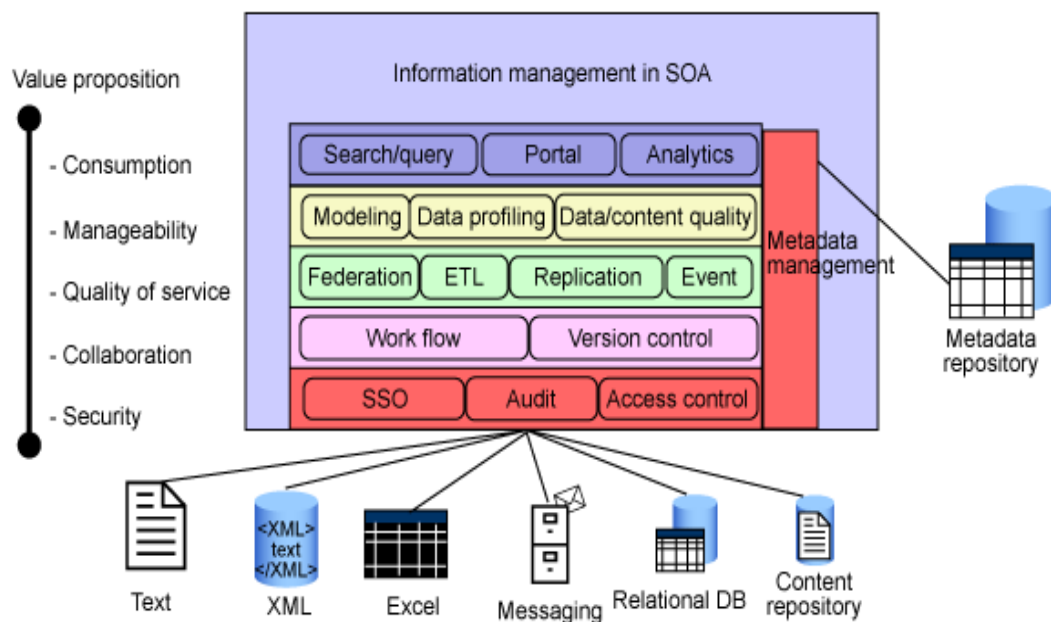
Figure 1:
Information management in SOA

INFORMATION MANAGEMENT STRATEGIC APPROACH IN ROMANIAN MINISTRY OF NATIONAL DEFENSE

Vision
Deliver the power of information: an agile enterprise by access to and sharing of timely and trusted information.

Mission
Enable NEC operations: lead the information age transformation to enhance the MoND's effectiveness and efficiency.

Governing principles
(a)   Ensure mission effectiveness through the transformation to NEC information sharing
(b)   Ensure IM/ IT investments and mandates meet mission needs
(c)   Identify, leverage and share best practices from industry, government and academia.

Goals and objectives

The following goals and objectives should be considered in achieving a modern and efficient information management in Romanian Ministry of National Defense (MoND).

Network-enabled capabilities (NEC) transformation (Accelerate MoND's NEC transformation to facilitate effective and efficient warfighting, intelligence, business processes, and other national security activities)

Military commanders must understand the potential of sharing information to enable battlefield decision-making superiority.

The effort to accelerate MoND's NEC information sharing transformation is dependent upon adoption of technologies that support the overarching NEC concepts: SOA, Web etc. MoND's knowledge sharing capabilities must be implemented using service-oriented development and operational approaches.

Additionally, successful transformation will require commanders to understand and effectively employ defensive elements of information operations (IO) to ensure mission effectiveness. Managing the life-cycle aspects of IO will increase our ability to perform threat detection, prevention and response to ensure that we maintain the information advantage.

OBJECTIVES:

(a) Incorporate collaboratively developed NEC information sharing methodologies (e.g., SOA, WebSphere) into the warfighting, intelligence and business processes supported by MoND acquisition programs.

(b) Incorporate NEC cross-component information sharing into mission planning aspects of major training exercises.

(c) Partner with commercial and educational communities to develop, prototype and implement innovative NEC capabilities that improve effectiveness and efficiency of MoND processes.

(d) Incorporate emerging commercial technologies that improve mission effectiveness and efficiency and enable use of common services.

Information as a strategic asset (Use information sharing to enable effective and agile decision making through visible, accessible, understandable and trusted data and services – when and where needed)

Knowledge Management (KM), the systematic process of discovering, selecting, organizing, distilling, sharing, developing and using information, will provide the basis from which decisions are made and actions are taken.

OBJECTIVES:

(a) Timely access to authoritative, relevant, trusted and actionable information is provided to all authorized users.

(b) Ensure data, information and capabilities are visible and accessible to all users except where limited by law, policy or security classification.

(c) Ensure enterprise resource planning solutions make their data and services available to unanticipated users throughout the MoND.

(d) Apply knowledge sharing (e.g., lessons learned) during the planning of joint experiments, operational concept development, combat operations and other missions.

(e) Leverage key information sharing enablers developed through partnerships.

Interoperable infrastructure (Ensure robust and reliable World-Wide connectivity and infrastructure within MoND and with external mission partners)

Today's missions are increasingly joint and combined, requiring a dynamic infrastructure that provides world-wide connectivity and enables more effective information sharing among MoND entities and between MoND and its external partners.

J6/ General Staff establishes the capabilities, services, standards, implementing guidance and best practices that enable IT operations across all missions. Using a federated enterprise

architecture development approach, MoND will identify and incrementally deliver Information Enterprise capabilities that address the information sharing needs of all missions. To achieve the goals of net-centric operations, all MoND IT solutions must adhere to the NATO NEC rules and principles.

OBJECTIVES:

(a)   Develop a common infrastructure components needed to deliver NEC capability (e.g., data and services deployment, secured availability/ information assurance, computing infrastructure, NetOps and Communications).

(b)   Ensure the NEC Portfolio and associated methodology supports accomplishment of the MoND objectives and meets the needs of the warfighters and other MoND decision makers.

(c)   Implement configuration management policies.

(d)   Align architectures with the specific needs of the portfolio managers, delivering infrastructure details germane to infrastructure decision making.

Assured information access (Protect and defend MoND systems, networks and information to maximize mission assurance)

Critical systems, networks, platforms and sensors must be developed and deployed with the necessary security and interoperability capabilities. The essential tenets of mission assurance include protecting all information, defending and keeping networks operational, identifying and differentiating between friendly and hostile forces in a cyber environment, partnering with other members of the security community (i.e., physical security, personnel security, and critical infrastructure protection), providing trusted software, providing access to integrated situational awareness, innovating and enabling Information Assurance (IA) capabilities, and creating an IA-empowered workforce.

OBJECTIVES:

(a)   Implement mechanisms to improve ability to discover and retrieve information based on access rights, metadata standards (e.g., classification, marking and labeling), cataloguing techniques and standardized cross domain solutions.

(b)   Leverage the evolution and convergence of robust capabilities associated with biometrics, smart card, Public Key Infrastructure (PKI) and other next generation identity-based technologies to provide attribute-based identification and authentication.

(c)   Promulgate enterprise capabilities such as de-militarized zones and host based security systems to prevent unauthorized access to networks at enclave boundaries or hosts.

(d)   Deploy automated monitoring, detection and forensic tools, and forge external partnerships to enhance situational awareness and diagnosis of suspicious activity as an attack/ event.

Workforce development (Maintain an agile IT workforce with the skills to build, extend, exploit and defend the MoND NEC environment)

A corps of highly skilled, trained and experienced IT professionals is critical to ensuring information dominance across the range of military operations. The IT workforce architects, designs and operates the infrastructure supporting the collection, processing and dissemination of an uninterrupted flow of information while protecting the infrastructure and information against modern day cyber attacks.

Workforce challenges include the evolution of career fields to meet new demands; attracting, training and retaining innovative personnel; and managing the intertwined performance of highly skilled military.

The MoND IT human capital objectives provide the direction to identify and capture the skill sets of the IT/ IM/ IA workforce; to leverage workforce information for better human resources management; to promote continuous skill development and lifelong learning; and to recruit, reward and retain a quality, diverse and multi-generational workforce.

OBJECTIVES:

(a) Recruitment and retention of a dynamic, diverse and highly skilled IT workforce through flexible workforce life-cycle management.

(b) Provide targeted professional development opportunities to meet individual career and organizational mission requirements.

(c) Implement IT/ IM/ IA workforce training, education and certification initiatives to provide continuous professional development to the workforce.

(d) Comprehensive workforce identification, assessment and reporting capabilities support and improve strategic human capital management.

Strong leadership

Successful information management is about organizational and cultural change, and this can only be achieved through strong leadership.

The starting point is to create a clear vision of the desired outcomes of the information management strategy. This will describe how the organization will operate, more than just describing how the information systems themselves will work.

Effort must then be put into generating a sufficient sense of urgency to drive the deployment and adoption of new systems and processes.

The MoND Chief Information Officer (CIO) should have the necessary vision and power in order to lead the implementation of strategic plans through both formal governance and by leveraging collaborative relationships with stakeholders across the MoND.

The governance structure, capped by the MoND "CIO Executive Board", should provide forums to monitor progress in achieving the plan and allows stakeholders to discuss and resolve the many issues related to guiding, building, populating, operating, and protecting the resources that comprise the MoND Information Enterprise.

Risk mitigation

Due to the inherent complexity of the environment within organizations, there are many risks in implementing information management solutions. These risks include:

(a) selecting an inappropriate technology solution;
(b) time and budget overruns;
(c) changing business requirements;
(d) technical issues, particularly relating to integrating systems;
(e) failure to gain adoption by staff.

At the outset of planning an information management strategy, the risks should be clearly identified.

Risk management approaches should then be used to plan all aspects of the projects, including the activities conducted and the budget spent.

CONCLUSIONS
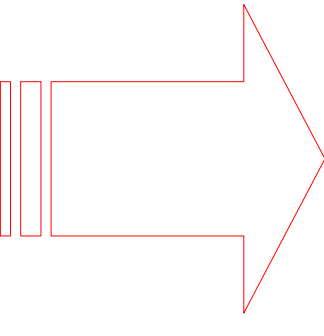
Data governance is an important component within the IM initiative. IM is about developing a strategy to leverage data and strategic assets.

In order to do that people, processes, and technology are required to develop the closed-loop processes to have the right stakeholders to develop guidelines and policies and carry them out.

Managing these processes by using a data governance strategy can help our organization maintain levels of collaboration and cohesion among various units.

Taking into account all the above statements, it can be easily discovered that there is a strong need to have (to appoint) formal and effective CIOs at all levels (starting with the strategic level) and to develop valuable Concept of Operations and IM Strategy in order to be able to move from:

The Current View	towards	The Future View
(a) Stove-Piped Information (b) Centralized Control (c) Unique Software Solutions (d) Data not Shared (e) Inefficiency		(a) NEC (b) Decentralized Control (c) Enterprise Services (SOA) (d) Shared Data (e) Enterprise Resource Planning (ERP) Architecture

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PARADIGM SHIFTING

Lieutenant Colonel SORIN HAZU

CONSIDERATIONS

In more than 20 years of working with people in the military, educational institutions and family settings, 1 have come in contact with many individuals who have achieved an incredible degree of outward success, but have found themselves struggling with an inner hunger, a deep need for personal congruency and effectiveness and for healthy, growing relationships with other people. 1 suspect some ofthe problems they have may be familiar.

You might hear quite often people saying:

I've set and met my career goals and I'm having a professional success. Nevertheless, this cost me part of my personal and family life. I'm not even sure 1 know myself and what's really important to me. I've had to ask myself- is it worth it? I've started a new diet - for the second time this year. 1 know I'm overweight, and 1 really want to change. 1 read all the new information, 1 set goals, 1 get myself ali psyched up with a positive mental attitude and teli myself 1 can do it. But 1 don't. After a few weeks, 1 quit. 1 just can't seem to keep a promise 1 make to myself.

I've taken a course on management training. 1 expect a lot out of my subordinates and 1 work hard to be friendly toward them and to treat them right. But 1 don't feei any loyalty from them. 1 think if 1 were home sick for a day, they would spend most of their time chatting on economy's problems. Why can't 1 train them to be independent and responsible - or find subordinates who can be?

My teenage son is rebellious. No matter what 1 try, he won't listen to me. What can 1 do? There's so much to do. And there's never enough time. 1 feel pressured and hassled all day, every day, seven days a week. I've tried half a dozen different planning systems. They've helped some, but 1 stiU don't feel I'm living the happy, productive, peacefullife 1 want to live.

I want to teach my children the value of work. But to get them to do anything, 1 have to supervise every move; and put up with complaining every step ofthe way. It's so much easier to do it myself. Why can't children do their work cheerfully and without being reminded? I'm busy-really busy. But sometimes 1 wonder if what I'm doing will make a difference in the long run. I'd really like to think there was meaning in my life, that somehow things were different because 1 was here. 1 see my friends or relatives achieve some degree of success or receive some recognition, and 1 smile and congratulate them enthusiastically. But inside, I'm eating my heart out. Why do 1 feel this way? 1 have a forceful personality. 1 know, in almost any interaction, 1 can control the outcome. Most of the time, 1 can even do it by influencing others to come up with the solution 1 want. 1 think through each situation and 1 really feel the ideas 1 come up with are usually the best for everyone. But 1 feel uneasy. 1 always wonder what other people really think of me and my ideas.

My marriage has gone flat. We don't fight or anything; we just don't love each other anymore. We've tried a number of things, but we just can't seem to rekindle the feeling we used to have.

These are deep problems, painful problems- problems that quick fix approaches can't solve. A while ago, my wife and 1 were struggling with this kind of concern. Our daughter had a difficult time in socializing in the kindergarten. She was doing poorly this; she didn't even know how to follow the way to introduce herself. Even though athletically she was not small and skinny she was not aware of the way could get in contact with fellows same age with her.

My wife and 1 were consumed with a desire to help her. We felt that if "success" were important in any area of life, it was supremely important in our role as parents. So we worked on

our attitudes and behavior toward her and we tried to work on her too. We attempted to psyche her up using positive mental attitude techniques. "Come on! You can do it! We know you can. Put a bit more confidence on your behavior. Don't be shy!" And if she did a little better, we would go to great lengths to reinforce her. "That's good, keep it up." When others did not react in the expected way, we even reprimanded them.   "Encourage her. She's just learning." And our daughter would cry and insist that she'd never succeed. Nothing we did seem to help, and we were really worried. We could see the effect this was having on her self-esteem. We tried to be encouraging and helpful and positive, but after repeated failure, we fmally drew back and tried to look at the situation on a different level.

I was paying more attention on this and I became particularly interested in how perceptions are formed, how they behave. This led me to a study of expectancy theory and self-fulfilling prophecies or the "Pygmalion effect," and to a realization of how deeply imbedded our perceptions are. It taught me that we must look at the lens through which we see the world, as well as at the world we see, and that the lens itself shapes how we interpret the world.

We began to realize that what we were doing to help our daughter was not in harmony with the way we really saw her. When we honestly examined our deepest feelings, we realized that our perception was that she was somehow inadequate. No matter how much we worked on our attitude and behavior, our efforts were ineffective because, despite our actions and our words, what we really communicated to her was, "You aren't capable. You have to be protected." We began to realize that if we wanted to change the situation, we first had to change ourselves. And to change ourselves effectively, we first had to change our perceptions.

THE PERSONALITY AND CHARACTER ETHICS

The existing literature on this is filled with social image consciousness, techniques and quick fixes - with social band-aids and aspirin that addressed acute problems and sometimes even appeared to solve them temporarily - but left the underlying chronic problems untouched to fester and resurface time and again.

Success became more a function of personality, of public image, of attitudes and behaviors, skills and techniques that lubricate the processes of human interaction. Philosophy is expressed in inspiring and sometimes valid maxims such as "Your attitude determines your altitude," "Smiling wins more friends than being serious," and "Whatever the mind of man can conceive and believe it can achieve".

Parts of the personality approach are clearly manipulative, even deceptive, encouraging people to use techniques to get other people to like them, or to fake interest in the hobbies of others to get out of them what they wanted, or to use the "power look," or to intimidate their way through life. Some of this literature acknowledged character as an ingredient of success, but tended to compartmentalize it rather than recognize it as foundational and catalytic. Reference to the character ethic became mostly lip service; the basic thrust was quick-fix influence techniques, power strategies, communication skills, and positive attitudes. This personality ethic, was the subconscious source of the solutions my wife and 1 were attempting to use with our daughter. As I thought more deeply about the difference between the personality and character ethics, I realized that we had been getting social mileage out of our children's good behavior, and, in our eyes, this daughter simply didn't measure up. Our image of ourselves, and our role as good, caring parents was even deeper than our image of our daughter and perhaps influenced it.

There was a lot more wrapped up in the way we were seeing and handling the problem than our concern for her welfare. We knew that social comparison motives were out of harmony with our deeper values and could lead to conditionallove and eventually to our daghter's lessened sense of self-worth. lnstead of trying to change her, we tried to stand apart- to separate us from her - and to sense her identity, individuality, separateness, and worth. Through deep thought and the exercise of faith and prayer, we began to see our daughter in terms of her own uniqueness.

We saw within her layers and layers of potential that would be realized at her own pace and speed. We decided to relax and get out of her way and let her own personality emerge. We saw our natural role as being to affirm, enjoy, and value her. We also conscientiously worked on our motives and cultivated intemal sources of security so that our own feelings of worth were not dependent on our children's "acceptable" behavior.

As we loosened up our old perception of our daughter and developed value-based motives, new feelings began to emerge. We found ourselves enjoying her instead of comparing or judging her. We stopped trying to clone her in our own image or measure her against social expectations. She had been nurtured on this protection, so she went through some withdrawal pains, which she expressed and which we accepted, but did not necessarily respond to. "We don't need to protect you," was the unspoken message. "You're fundamentally okay." As the weeks and months passed, she began to feel a quiet confidence and affrrmed herself. She began to blossom, at her own pace and speed. She became outstanding - at a rapid clip, far beyond the so-called natural developmental process. She developed an engaging personality that has enabled her to relate in nonthreatening ways to all kinds of people. This was an amazing experience for us and a very instructional one in dealing with our other children and in other roles as well. It brought to our awareness on a very personal level the vital difference between the personality ethic and the character ethic of success.

THE POWER OF A PARADIGM

For our purposes, a simple way to understand paradigms is to see them as maps. We all know that" the map is not the territory." A map is simply an explanation of certain aspects of the territory. That's exactly what a paradigm is. It is a theory, an explanation, or model of something else. Suppose you wanted to arrive at a specific location in central Bucharest. A street map of the city would be a great help to you in reaching your destination. But suppose you were given the wrong map. Through a printing error, the map labeled "Bucharest" was actually a map of Budapest. Can you imagine the frustration, the ineffectiveness of trying to reach your destination? You might work on your behavior - you could try harder, be more diligent, double your speed. But your efforts would only succeed in getting you to the wrong place faster. You might work on your attitude - you could think more positively. You still wouldn't get to the right place, but perhaps you wouldn't care. Your attitude would be so positive, you'd be happy wherever you were. The point is, you'd still be lost. The fundamental problem has nothing to do with your behavior or your attitude. It has everything to do with having a wrong map. If you have the right map of Bucharest, then diligence becomes important, and when you encounter frustrating obstacles along the way, then attitude can make a real difference.

But the first and most important requirement is the accuracy of the map. Each of us has many, many maps in our head, which can be divided into two main categories: maps of the way things are, or realities, and maps of the way things should be, or values. We interpret everything we experience through these mental maps. We seldom question their accuracy; we're usually even unaware that we have them. We simply assume that the way we see things is the way they really are or the way they should be. And our attitudes and behaviors grow out of those assumptions. The way we see things is the source of the way we think and the waywe act.

THE POWER OF A PARADIGM SHIFT

Perhaps the most important insight to be gained from the perception demonstration is in the area of paradigm shifting, what we might call the "Aha!" experience when someone finally "sees" the composite picture in another way. The more bound a person is by the initial perception, the more powerful the "Aha!" experience is. It's as though a light were suddenly tumed on inside. The term Paradigm Shift was introduced by Thomas Kuhn in his highly influentiallandmark book, The Structure of Scientific Revolutions. Kuhn shows how almost

every significant breakthrough in the field of scientific endeavor is first a break with tradition, with old ways of thinking, with old paradigms.

For Ptolemy, the great Egyptian astronomer, the earth was the center of the universe. But Copernicus created a Paradigm Shift and a great deal of resistance and persecution as well, by placing the sun at the center. Suddenly, everything took on a different interpretation. The Newtonian model of physics was a clockwork paradigm and is still the hasis of modem engineering. But it was partial, incomplete. The scientific world was revolutionized by the Einsteinian paradigm, the relativity paradigm, which had much higher predictive and explanatory value.

Until the germ theory was developed, a high percentage of women and children died during childbirth, and no one could understand why. In military conflicts, more men were dying from small wounds and diseases than from the major traumas on the front lines. But as soon as the germ theory was developed, a whole new paradigm, a better, improved way of understanding what was happening made dramatic, significant medical improvement possible.

Not ali Paradigm Shifts are in positive directions. The shift from the character ethic to the personality ethic has drawn us away from the very roots that nourish true success and happiness. But whether they shift us in positive or negative directions, whether they are instantaneous or developmental, Paradigm Shifts move us from one way of seeing the world to another. And those shifts create powerful change. Our paradigms, correct or incorrect, are the sources of our attitudes and behaviors, and ultimately our relationships with others.

SEEING AND BEING

Not all Paradigm Shifts are instantaneous. Let's take an example with a young officer. The approach we had first taken with him was the outgrowth of years of conditioning and experience in the personality ethic. It was the result of deeper paradigms we held about our own success as seniors as well as the measure of success. And it was not until we changed those basic paradigms, quantum change in ourselves and in the situation. In order to see the guy differently, we had to be differently. Our new paradigm was created as we invested in the growth and development of our own character. Our Paradigms are the way we "see" the world or circumstances - not in terms of our visual sense of sight, but in terms of perceiving, understanding, and interpreting. Paradigms are inseparable from character. Being is seeing in the human dimension. And what we see is highly interrelated to what we are. We can't go very far to change our seeing without simultaneously changing our being, and vice versa. Paradigms are powerful because they create the lens through which we see the world. The power of a Paradigm Shift is the essential power of quantum change, whether that shift is an instantaneous or a slow and deliberate process.

THE PRINCIPLE-CENTERED PARADIGM

The character ethic is based on the fundamental idea that there are principles that govem human effectiveness - naturallaws in the human dimension that are just as real, just as unchanging and unarguably "there" as laws such as gravity are in the physical dimension. An idea of the reality - and the impact - of these principles can be captured in another paradigm-shifting experience as told by Frank Kock in Proceedings, the magazine of the Naval Institute. "Two battleships assigned to the training squadron had been at sea on maneuvers in heavy weather for several days. I was serving on the lead battleship and was on watch on the bridge as night fell. The visibility was poor with patchy fog, so the captain remained on the bridge keeping an eye on all activities. Shortly after dark, the lookout on the wing of the bridge reported, "Light, bearing on the starboard bow." "Is it steady or moving astern?" the captain called out. Lookout replied, "Steady, captain," which meant we were on a dangerous collision course with that ship. The captain then called to the signal man, "Signal that ship: We are on a collision course, advise

you change course 20 degrees." Back carne a signal, "Advisable for you to change course 20 degrees." The captain said, "Send, I'm a captain, change course 20 degrees." "I'm a seaman second class," carne the reply. "You had better change course 20 degrees." By that time, the captain was furious. He spat out, "Send, I'm a battleship. Change course 20 degrees." Back carne the flashing light, "I'm a lighthouse." We changed course."

The Paradigm Shift is the "aha" experience associated with finally perceiving or understanding some aspect of the world (or a circumstance) in a different way. Paradigm Shift experienced by the captain - and by us as we read this account - puts the situation in a totally different light. We can see a reality that is superseded by his limited perceptions - a reality that is as critical for us to understand in our daily lives as it was for the captain in the fog. Principles are like lighthouses. They are natural laws that cannot be broken. It is impossible for us to break the law. We can only break ourselves against the law.

While individuals may look at their own lives and interactions in terms of paradigms or maps emerging out of their experience and conditioning, these maps are not the territory. They are a "subjective reality," only an attempt to describe the territory. The "objective reality," or the territory itself, is composed of "lighthouse" principles that govem human growth and happiness - naturallaws that are woven into the fabric of every civilized society throughout history and comprise the roots of every family and institution that has endured and prospered. The degree to which our mental maps accurately describe the territory does not alter its existence. The reality of such principles or natural laws becomes obvious to anyone who thinks deeply and examines the cycles of social history. These principles surface time and time again, and the degree to which people in society recognize and live in harmony with them moves them toward either survival and stability or disintegration and destruction.

The principles I am referring to are not esoteric, mysterious, or "religious" ideas. There is no one principle taught in this book that is unique to any specific faith or religion. These principles are a part of every major enduring religion, as well as enduring social philosophies and ethical systems. They are self-evident and can easily be validated by any individual. It's almost as if these principles or natural laws are part of the human condition, part of the human consciousness. They seem to exist in all human beings, regardless of social conditioning, even though they might be submerged or numbed by conditions or disloyalty.

As an example we can take the principle of faimess, out of which our whole concept of equity and justice is developed. Little children seem to have an innate sense of the idea of faimess even apart from opposite conditioning experiences. There are vast differences in how faimess is defined and achieved, but there is almost universal awareness of the idea. Other examples would include integrity and honesty. They create the foundation of trust which is essential to cooperation and long- term personal and interpersonal growth. Another principle is human dignity. Another principle is service, or the idea of making a contribution. Another is quality or excellence. There is the principle of potential, the idea that we are embryonic and can grow and develop and release more and more potential, develop more and more talents.
Highly related to potential is the principle of growth - the process of releasing potential and developing talents, with the accompanying need for principles such as patience, nurturance, and encouragement. Principles are not practices. A practice is a specific activity or action. A practice that works in one circumstance will not necessarily work in another, as parents who have tried to raise a second child exactly like they did the first one can readily attest. While practices are situationally specific, principles are deep, fundamental truths that have universal application. They apply to individuals, to marriages, to families, to private and public organizations of every kind. When these truths are intemalized into habits, they empower people to create a wide variety of practices to deal with different situations.

Principles are not values. A gang of thieves can share values, but they are in violation of the fundamental principles we're talking about. Principles are the territory. Values are maps. When we value correct principles, we have truth - knowledge of things as they are. Although people may argue about how these principles are defined or manifested or achieved, there seems

to be an innate consciousness and awareness that they exist. The more closely our maps or paradigms are aligned with these principles or natural laws, the more accurate and functional they will be. Correct maps will infinitely impact our personal and interpersonal effectiveness far more than any amount of effort expended on changing our attitudes and behaviors.

PRINCIPLES OF GROWTH AND CHANGE

The glitter of the personality ethic, the massive appeal, is that there is some quick and easy way to achieve quality of life - personal effectiveness and rich, deep relationships with other people - without going through the natural process of work and growth that makes it possible. It's symbol without substance. It's the "get rich quick" scheme promising "wealth without work." And it might even appear to succeed - but the schemer remains. The personality ethic is illusory and deceptive. And trying to get high-quality results with its techniques and quick fixes is just about as effective as trying to get to some place in Bucharest using a map of Budapest.

Today we come across an individual who behaves like an automation, who does not know or understand himself, and the only person that he knows is the person that he is supposed to be, whose meaningless chatter has replaced communicative speech, whose synthetic smile has replaced genuine laughter, and whose sense of dull despair has taken the place of genuine pain. Two statements may be said concerning this individual. One is that he suffers from defects of spontaneity and individuality which may seem to be incurable. At the same time it may be said of him he does not differ essentially from the millions of the rest of us who walk upon this earth. In all of life, there are sequential stages of growth and development. A child learns to turn over, to sit up, to crawl, and then to walk and run. Each step is important and each one takes time. No step can be skipped. This is true in all phases of life, in all areas of development, whether it be learning to play the piano or communicate effectively with a working associate. It is true with individuals, with marriages, with families, and with organizations. We know and accept this fact or principle of process in the area of physical things, but to understand it in emotional areas, in human relations, and even in the area of personal character is less common and more difficult.

And even if we understand it, to accept it and to live in harmony with it are even less common and more difficult. Consequently, we sometimes look for a shortcut, expecting to be able to skip some of these vital steps in order to save time and effort and stiU reap the desired result. But what happens when we attempt to shortcut a natural process in our growth and development? If you are only an average tennis player but decide to play at a higher level in order to make a better impression, what will result? Would positive thinking alone enable you to compete effectively against a professional? What if you were to lead your friends to believe you could play the piano at concert halllevel while your actual present skill was that of a beginner? The answers are obvious. It is simply impossible to violate, ignore, or shortcut this development process. It is contrary to nature, and attempting to seek such a shortcut only results in disappointment and frustration.

On a 10-point scale, if I am at level two in any field, and desire to move to level five, I must first take the step toward level three. "A thousand-mile journey begins with the first step" and can only be taken one step ata time. Ifyou don't let a teacher know what level you are - by asking a question or revealing your ignorance - you will not learn or grow. You cannot pretend for long, for you will eventually be found out. Admission of ignorance is often the first step in our education. Somebody said, "How can we remember our ignorance, which our growth requires, when we are using our knowledge all of the time?" I recall one occasion when two young women, daughters of a friend of mine, carne to me tearfully, complaining about their father's harshness and lack of understanding. They were afraid to open up with their parents for fear of the consequences. And yet they desperately needed their parents' love, understanding, and guidance.

I talked with the father and found that he was intellectually aware of what was happening. But while he admitted he had a temper problem, he refused to take responsibility for it and to honestly accept the fact that his emotional development level was low. It was more than his pride could swallow to take the first step toward change. To relate effectively with a wife, a husband, children, friends, or colleagues, we must learn to listen. And this requires emotional strength. Listening involves patience, openness, and the desire to understand - highly developed qualities of character. It's so much easier to operate from a low emotionallevel and to give high-level advice. Our level of development is fairly obvious with tennis or piano playing, where it is impossible to pretend. But it is not so obvious in the areas of character and emotional development. We can pretend. And for a while we can get by with it - at least in public. We might even deceive ourselves. Yet I believe that most of us know the truth of what we really are inside; and I think many of those we live with and work with do as well. We have all seen the consequences of attempting to shortcut this natural process of growth often in the military environment, where leadership attempt to "force" a new culture of quality and morale with strong speeches and smile training. But they ignore the low-trust climate produced by such manipulations. When these methods don't work, they look for other personality ethic techniques that will - all the time ignoring and violating the natural principles and processes on which high-trust culture is based.

I will give you another example when violating this principle as a father. One day I returned home to my little girl's third-year birthday party to find her in the comer of her room, keeping tight all of her presents, unwilling to let the other children play with them. The first thing I noticed was two relatives in the room witnessing this selfish display. I was embarrassed and I knew, or at least felt, the expectation ofthese relatives. The atmosphere in the room was really charged - the children were crowding around my little daughter with their hands out, asking to play with the presents they had just given, and my daughter was refusing. I said to myself, "

Certainly I should teach my daughter to share. The value of sharing is one of the most basic things we believe in." SoI first tried a simple request. "Honey, would you please share with your friends the toys they've given you? No," she replied flatly. My second method was to use a little reasoning. "Honey, if you leam to share your toys with them when they are at your home, then when you go to their homes they will share their toys with you." Again, the immediate reply was "No!" I was becoming a little more embarrassed; for it was evident I was having no influence. The third method was bribery. Very softly I said, "Honey, if you share, I've got special surprise for you. I'll give you a piece of candy." "I don't want any candy!" she exploded. Now I was becoming exasperated. For my fourth attempt, I resorted to fear and threat. "Unless you share, you will be in real trouble!" "I don't care!" she cried. "These are my things. I don't have to share!" Finally, I resorted to force. I merely took some of the toys and gave them to the other kids. "Here, kids, play with these."

At that moment, I valued the opinion those relatives had of me more than the growth and development of my child and our relationship together. I simply made an initial judgment that I was right; she should share, and she was wrong in not doing so.

Perhaps I superimposed a higher-level expectation on her simply because on my own scale I was at a lower level. I was unable or unwilling to give patience or understanding, so I expected her to give things. In an attempt to compensate for my deficiency, I borrowed strength from my position and authority and forced her to do what I wanted her to do. But borrowing strength builds weakness. It builds weakness in the borrower because it reinforces dependence on extemal factors to get things done. It builds weakness in the person forced to acquiesce, stunting the development of independent reasoning, growth, and internal discipline. And finally, it builds weakness in the relationship. Fear replaces cooperation, and both people involved become more arbitrary and defensive. And what happens when the source of borrowed strength - be it superior size or physical strength, position, authority, credentials, status symbols, appearance, or past achievements - changes or is no longer there?

Had I been more mature, I could have relied on my own intrinsic strength - my understanding of sharing and of growth and my capacity to love and nurture - and allowed my daughter to make a free choice as to whether she wanted to share or not to share. Perhaps after attempting to reason with her, I could have turned the attention of the children to an interesting game, taking all that emotional pressure off my child. I've learned that once children gain a sense of real possession, they share very naturally, freely, and spontaneously. My experience has been that there are times to teach and times not to teach.

When relationships are strained and the air charged with emotion, an attempt to teach is often perceived as a form of judgment and rejection. But to take the child alone, quietly, when the relationship is good and to discuss the teaching or the value seems to have much greater impact. It may have been that the emotional maturity to do that was beyond my level of patience and internal control at the time.

Perhaps a sense of possessing needs to come before a sense of genuine sharing. Many people who give mechanically or refuse to give and share in their marriages and families may never have experienced what it means to possess themselves, their own sense of identity and self-worth. Really helping our children grow may involve being patient enough to allow them the sense of possession as well as being wise enough to teach them the value of giving and providing the example ourselves.

THE WAY WE SEE THE PROBLEM IS THE PROBLEM

People are intrigued when they see good things happening in the lives of individuals, families, and organizations that are based on solid principles. They admire such personal strength and maturity, such family unity and teamwork, such adaptive synergistic organizational culture. And their immediate request is very revealing of their basic paradigm. "How do you do it? Teach me the techniques." What they're really saying is, "Give me some quick fix advice or solution that will relieve the pain in my own situation." They will find people who will meet their wants and teach these things; and for a short time, skills and techniques may appear to work. They may eliminate some of the cosmetic or acute problems through social aspirin and band-aids. But the underlying chronic condition remains, and eventually new acute symptoms will appear. The more people are into quick fix and focus on the acute problems and pain, the more that very approach contributes to the underlying chronic condition.

The way we see the problem is the problem. Look again at some of the concerns and at the impact of personality ethic thinking. I've taken course on effective management training. I expect a lot out of my subordinates and I work hard to be friendly toward them and to treat them right. But I don't feel any loyalty from them. I think ifl were home sick for a day, they'd spend most of their time chatting on the political evolution. Why can't I train them to be independent and responsible - or fmd subordinates who can be? The personality ethic tells me I could take some kind of dramatic action - shake things up, make heads roll - that would make my subordinates shape up and appreciate what they have. Or that I could find some motivational training program that would get them committed. Or even that I could get new people that would do a better job. But is it possible that under that apparently disloyal behavior, these subordinates question whether I really act in their best interest? Do they feel like I'm treating them as mechanical objects? Is there some truth to that? Deep inside, is that really the way I see them? Is there a chance the way I look at the people who work forme is part of the problem? There's so much to do. And there's never enough time. I feel pressured and hassled all day, every day, seven days a week. Is there a chance that efficiency is not the answer? Is getting more things done in less time going to make a difference - or will it just increase the pace at which I react to the people and circumstances that seem to control my life? Could there be something I need to see in a deeper, more fundamental way - some paradigm within myself that affects the way I see my time, my life, and my own nature? Can you see how fundamentally the paradigms of the personality ethic affect the very way we see our problems as well as the way we attempt to solve

them? Whether people see it or not, many are becoming disillusioned with the empty promises of the personality ethic. As I travel around the country, I find that long-term thinking leaders are simply turned off by "motivational" speakers who have nothing more to share than entertaining stories mingled with platitudes. They want substance; they want process. They want more than aspirin and band-aids. They want to solve the chronic underlying problems and focus on the principles that bring long-term results.

A NEW LEVEL OF THINKING

Albert Einstein observed, "The significant problems we face cannot be solved at the same level of thinking we were at when we created them. As we look around us and within us and recognize the problems created as we live and interact within the personality ethic, we begin to realize that these are deep, fundamental problems that cannot be solved on the superficial level on which they were created. We need a new level, a deeper level of thinking
- a paradigrn based on the principles that accurately describe the territory of effective human being and interacting - to solve these deep concems. This new level of thinking is what this paper is about. lt's a principle-centered, character-based, "Inside-Out" approach to personal and interpersonal effectiveness. "Inside-Out" means to start first with self; even more fundarnentally, to start with the most inside part of self- with your paradigms, your character, and your motives. It says if you want to have a happy marriage, be the kind of person who generates positive energy and sidesteps negative energy rather than empowering it.

If you want to have a more pleasant, cooperative teenager, be a more understanding, empathic, consistent, loving parent. If you want to have more freedom, more latitude in your job, be a more responsible, a more helpful, a more contributing employee. If you want to be trusted, be trustworthy. If you want the secondary greatness of recognized talent, focus first on prirnary greatness of character.

The Inside-Out approach says that private victories precede public victories, that making and keeping promises to ourselves precedes making and keeping promises to others. It says it is futile to put personality ahead of character, to try to improve relationships with others before improving ourselves.

Inside-Out is a process - a continuing process of renewal based on the natural laws that govem hurnan growth and progress. It's an upward spiral of growth that leads to progressively higher forms of responsible independence and effective interdependence. I have had the opportunity to work with many people - wonderful people, talented people; people who deeply want to achieve happiness and success, people who are searching, people who are hurting. In ali my experience, I have never seen lasting solutions to problems, lasting happiness and success, that carne from the outside in. What I have seen result from the outside-in paradigm is unhappy people who feei victirnized and irnrnobilized, who focus on the weaknesses of other people and the circurnstances they feei are responsible for their own stagnant situation. I've seen unhappy marriages where each spouse wants the other to change, where each is confessing the other's "sins," where each is trying to shape up the other. I've seen disputes where people spend tremendous arnounts of time and energy trying to create regulations that would force people to act as though the foundation of trust were really there.

Inside-Out is a dramatic Paradigm Shift for most people, largely because of the powerful impact of conditioning and the current social paradigm of the personality ethic. 1 am persuaded that many of the principles embodied in this paper are already deep within us, in our conscience and our common sense. To recognize and develop them and to use them in meeting our deepest concems, we need to think differently, to shift our paradigms to a new, deeper, "Inside-Out" level.

„HABITS" DEFINED

A habit is the intersection of knowledge, skill, and desire. Knowledge is the theoretical paradigm, the what to do and the why. Skill is the how to do. And desire is the motivation, the want to do. In order to make something a habit in our lives, we have to have all three. 1 may be ineffective in my interactions with my work associates, my spouse, or my children because 1 constantly tell them what 1 think, but 1 never really listen to them. Unless 1 search out correct principles of human interaction, 1 may not even know 1 need to listen. Even if 1 do know that in order to interact effectively with others 1 really need to listen to them, 1 may not have the skill. 1 may not know how to really listen deeply to another human being. But knowing 1 need to listen and knowing how to listen is not enough. Unless 1 want to listen, unless 1 have the desire, it won't be a habit in my life. Creating a habit requires work in all three dimensions. The being/seeing change is an upward process - being changing, seeing, which in turn changes being, and so forth, as we move in an upward spiral of growth. By working on knowledge, skill, and desire, we can break through to new levels of personal and interpersonal effectiveness as we break with old paradigms that may have been a source of pseudo-security for years. It's sometimes a painful process. lt's a change that has to be motivated by a higher purpose, by the willingness to subordinate what you think you want now for what you want later. But this process produces happiness, "the object and design of our existence." Happiness can be defined, in part at least, as the fruit of the desire and ability to sacrifice what we want now for what we want eventually.

THE MATURITY CONTINUUM

In harmony with the natural laws of growth, habits provide an incremental, sequential, highly integrated approach to the development of personal and interpersonal effectiveness. They move us progressively on a Maturity Continuum from dependence to interdependence. We each begin life as an infant, totally dependent on others. We are directed, nurtured, and sustained by others. Without this nurturing, we would only live for a few hours or a few days at the most Then gradually, over the ensuing months and years, we become more and more independent - physically, mentally, emotionally, and financially - until eventually we can essentially take care of ourselves, becoming inner-directed and self-reliant. As we continue to grow and mature, we become increasingly aware that all of nature is interdependent, that there is an ecologica!system that govems nature, including society. We further discover that the higher reaches of our nature have to do with our relationships with others - that human life also is interdependent. Our growth from infancy to adulthood is in accordance with naturallaw. And there are many dimensions to growth. Reaching our full physical maturity, for example, does not necessarily assure us of simultaneous emotional or mental maturity. On the other hand, a person's physical dependence does not mean that he or she is mentally or emotionally immature. On the maturity continuum, dependence is the paradigm of you - you take care of me; you come through for me; you didn't come through; I blame you for the results.

Independence is the paradigm of I - I can do it; I am responsible; I am self-reliant; I can choose. Interdependence is the paradigm of we - we can do it: we can cooperate; we can combine our talents and abilities and create something greater together. Dependent people need others to get what they want. Independent people can get what they want through their own effort. Interdependent people combine their own efforts with the efforts of others to achieve their greatest success. If I were physically dependent - paralyzed or disabled or limited in some physical way - I would need you to help me. If I were emotionally dependent, my sense of worth

and security would come from your opinion of me. If you didn't like me, it could be devastating. If I were intellectually dependent, I would count on you to do my thinking for me, to think through the issues and problems of my life. If I were independent, physically, I could pretty well make it on my own. Mentally, I could think my own thoughts, I could move from one level of abstraction to another. I could think creatively and analytically and organize and express my thoughts in understandable ways. Emotionally, I would be validated from within. I would be inner directed. My sense of worth would not be a function of being liked or treated well.

It's easy to see that independence is much more mature than dependence. Independence is a major achievement in and of itself. But independence is not supreme. Nevertheless, the current social paradigm enthrones independence. It is the avowed goal of many individuals and social movements. Most of the self-improvement material puts independence on a pedestal, as though communication, teamwork, and cooperation were lesser values. Nevertheless, the current social paradigm enthrones independence. It is the avowed goal of many individuals and social movements. Most of the self-improvement material puts independence on a pedestal, as though communication, teamwork, and cooperation were lesser values. But much of our current emphasis on independence is a reaction to dependence to having others control us, detine us, use us, and manipulate us. The little understood concept of interdependence appears to many to smack of dependence, and therefore, we find people often for selfish reasons, leaving their marriages, abandoning their children, and forsaking all kinds of social responsibility - all in the name of independence. The kind of reaction that results in people "throwing offtheir shackles," becoming "liberated," "asserting themselves," and "doing their own thing" often reveals more fundamental dependencies that cannot be run away from because they are intemal rather than extemal - dependencies such as letting the weaknesses of other people ruin our emotional lives or feeling victimized by people and events out of our control. We may need to change our circumstances. But the dependence problem is a personal maturity issue that has little to do with circumstances. Even with better circumstances, immaturity and dependence often persist. True independence of character empowers us to act rather than be acted upon. It frees us from our dependence on circumstances and other people and is a worthy, liberating goal. But it is not the ultimate goal in effective living. Independent thinking alone is not suited to interdependent reality. Independent people who do not have the maturity to think and act interdependently may be good individual producers, but they won't be good leaders or team players. They're not coming from the paradigm of interdependence necessary to succeed in marriage, family, or organizational reality. Life is, by nature, highly interdependent. To try to achieve maximum effectiveness through independence is like trying to play tennis with a golf club - the tool is not suited to the reality. Interdependence is a far more mature, more advanced concept. If I am physically interdependent, I am self-reliant and capable, but I also realize that you and I working together can accomplish far more than, even at my best, I could accomplish alone. If
I am emotionally interdependent, I derive agreat sense of worth within myself, but I also recognize the need for love, for giving, and for receiving love from others. If I am intellectually interdependent, I realize that I need the best thinking of other people to join with my own. As an interdependent person, I have the opportunity to share myself deeply, meaningfully, with others, and I have access to the vast resources and potential of other human beings. Interdependence is a choice only independent people can make. Dependent people cannot choose to become interdependent. They don't have the character to do it; they don't own enough of themselves.

EFFECTIVENESS DEFINED

They are also habits of effectiveness because they are based on a paradigm of effectiveness that is in harmony with a natural law which many people break themselves against. This principle can be easily understood by remembering Aesop's fable of the Goose and the Golden Egg. This fable is the story of a poor farmer who one day discovers in the nest of his pet

goose a glittering golden egg. At first, he thinks it must be some kind of trick. But as he starts to throw the egg aside, he has second thoughts and takes it in to be appraised instead. The egg is pure gold! The farmer can't believe his good fortune. He becomes even more incredulous the following day when the experience is repeated. Day after day, he awakens to rush to the nest and find another golden egg. He becomes fabulously wealthy; it all seems too good to be true. But with his increasing wealth comes greed and impatience. Unable to wait day after day for the golden eggs, the farmer decides he will kill the goose and get them all at once. But when he opens the goose, he fmds it empty. There are no golden eggs- and now there is no way to get any more. The farmer has destroyed the goose that produced them.

As the story shows, true effectiveness is a function oftwo things: what is produced (the golden eggs) and the capacity to produce (the goose). If you adopt a pattern of life that focuses on golden eggs and neglects the goose, you will soon be without the asset that produces golden eggs. On the other hand, if you only take care of the goose with no aim toward the golden eggs, you soon won't have the wherewithal to feed yourself or the goose. Effectiveness lies in the balance.

THREE KINDS OF ASSETS

Basically, there are three kinds of assets: physical, financial, and human. Let's look at each one in turn. Few years ago, my father in law purchased a physical asset- an wood manufacturing device. He used it over and over again without doing anything to maintain it. The device worked well for three years, but then it began to break down. When he tried to revive it with service, he discovered the engine had lost over half its original power capacity. It was essentially worthless. Had he invested in the device - in preserving and maintaining the asset - he would still be enjoying it. As it was, he had to spend far more time and money replacing the device than he ever would have spent on maintenance. It simply wasn't effective. In our quest for short-term retums, or results, we often ruina prized physical asset- a car, a computer, a washer or dryer, even our body or our environment. Keeping these in balance makes a tremendous difference in the effective use of physical assets. It also powerfully impacts the effective use of fmancial assets. How often do people confuse principal with interest? Have you ever invaded principal to increase your standard of living, to get more golden eggs? The decreasing principal has decreasing power to produce interest or income. And the dwindling capital becomes smaller and smaller until it no longer supplies even our basic needs. Our most important financial asset is our own capacity to earn. If we don't continually invest in improving our own capacity, we severely limit our options. We're locked into our present situation, running scared of our corporation or our boss's opinion of us, economically dependent and defensive. Again, it simply isn't effective. In the human area, the capacity-product balance is equally fundamental, but even more important, because people control physical and financial assets.

When two people in a marriage are more concemed about getting the golden eggs, the benefits, than they are in preserving the relationship that makes them possible, they often become insensitive and inconsiderate, neglecting the little kindnesses and courtesies so important to a deep relationship. They begin to use controllevers to manipulate each other, to focus on their own needs, to justify their own position and look for evidence to show the wrongness of the other person. The love, the richness, the softness, and spontaneity begin to deteriorate. The goose gets sicker day by day. And what about a parent's relationship with a child? When children are little, they are very dependent, very vulnerable. It becomes so easy to neglect the capacity work - the training, the communicating, the relating, the listening. It's easy to take advantage, to manipulate, to get what you want the way you want it - right now! You're bigger, you're smarter, and you're right! So why not just tell them what to do? If necessary, yell at them, intimidate them, insist on your way. Or you can indulge them. You can go for the golden egg of popularity, of pleasing them, giving them their way ali the time. Then they grow up without a personal commitment to being disciplined or responsible.

Either way- authoritarian or permissive- you have the golden egg mentality. You want to have your way or you want to be liked. But what happens, meantime, to the goose? What sense of responsibility, of self-discipline, of confidence in the ability to make good choices or achieve important goals is a child going to have a few years down the road? And what about your relationship? When he reaches those critica!teenage years, the identity crises, will he know from his experience with you that you will listen without judging, that you really, deeply care about him as a person, that you can be trusted, no matter what? Will the relationship be strong enough for you to reach him, to communicate with him, to influence him?

Suppose you want your daughter to have a clean room - that's the production, the golden egg. And suppose you want her to clean it - that's production capability. Your daughter is the goose, the asset, that produces the golden egg. If you have production and capability in balance, she cleans the room cheerfully, without being reminded, because she is committed and has the discipline to stay with the commitment. She is a valuable asset, a goose that can produce golden eggs. But if your paradigm is focused on production, on getting the room clean, you might find yourself nagging her to do it. You might even escalate your efforts to threatening or yelling, and in your desire to get the golden egg, you undermine the health and welfare of the goose.

ORGANIZATIONAL PRODUCTION CAPABILITY

One of the immensely valuable aspects of any correct principle is that it is valid and applicable in a wide variety of circumstances. When people fail to respect the balance in their use of physical assets in organizations, they decrease organizational effectiveness and often leave others with dying geese.

For example, a person in charge of a physical asset, such as a database, may be eager to make a good impression on his superiors. Perhaps the structure is within a continuous restructuring and promotions are coming fast. So he introduces data at optimum levels - no downtime, no maintenance. He runs the database 24/7. The production is phenomenal, costs are insignificant, and profits unexpected. Within a short time, he's promoted. Golden eggs. But suppose you are his successor on the job. You inherit a very sick goose, a machine that, by this time, is rusted and starts to break down. You have to invest heavily in downtime and maintenance. Costs go high; profits nose-dive. Who gets blamed for the loss of golden eggs? You do. Your predecessor finished with the asset, but and the structure reported only unit production, costs, and benefits.

The balance is particularly important as it applies to the human assets of an organization - the leadership and the subordinates. 1 know of a restaurant that served a fantastic shaorma and was packed with customers every day at lunchtime. Then the business was sold, and the new owner focused on golden eggs - he decided to put less ingredients inside. For about a month, with costs down and revenues constant, profits zoomed. But little by little, the customers began to disappear. Trust was gone, and business dwindled to almost nothing. The new owner tried desperately to reclaim it, but he had neglected the customers, violated their trust, and lost the asset of customer loyalty. There was no more goose to produce the golden egg.

That focus on golden eggs - that attitude, that paradigm - is totally inadequate to tap into the powerful energies of the mind and heart of another person. A short-term bottom line is important, but it isn't aH-important. Effectiveness lies in the balance. Excessive focus on production results in ruined health, wom-out machines, depleted bank accounts, and broken relationships. Too much focus on production capability is like a person who runs for three or four hours a day, bragging about the extra 10 years of life it creates, unaware he's spending them running. Or a person endlessly going to school, never producing, living on other people's golden eggs - the etemal student syndrome. To maintain the balance, the balance between the golden egg and the health and welfare of the goose is often a difficult judgment call.

This it is the very essence of effectiveness. It balances short term with long term. It balances going for the grade and paying the price to get an education. It balances the desire to have a room clean and the building of a relationship in which the child is intemally committed to do it - cheerfully, willingly, without extemal supervision. It's a principle you can see validated in your own life when you bum the candle at both ends to get more golden eggs and wind up sick or exhausted, unable to produce any at all; or when you get a good night's sleep and wake up ready to produce throughout the day. You can see it when you press to get your own way with someone and somehow feel an emptiness in the relationship; or when you really take time to invest in a relationship and you find the desire and ability to work together, to communicate, takes a quantum leap. The balance is the very essence of effectiveness. It's validated in every arena of life. We can work with it or against it, but it's there. It's a lighthouse. It's the definition and paradigm of effectiveness.

CONCLUSIONS

This material is designed to be a companion in the continuai process of change and growth. It is organized incrementally and with suggestions for application at the end of each habit so that you can study and focus on any particular habit as you are ready. As you progress to deeper levels of understanding and implementation, you can go back time and again to the principles and work to expand your knowledge, skill, and desire. Take an Inside- Out approach, and read with the purpose in mind of sharing or discussing this. In addition, as you openly, honestly share what you're learning with others, you may be surprised to find that negative labels or perceptions others may have of you tend to disappear.

Those you teach will see you as a changing, growing person, and will be more inclined to be helpful and supportive as you work, perhaps together, to integrate the concept into your lives. Marilyn Ferguson observed, "No one can persuade another to change. Each of us guards agate of change that can only be opened from the inside. We cannot open the gate of another, either by argument or by emotional appeal. If you decide to open your "gate of change" to really understand and live the principles, its a great benefit. The growth will be evolutionary, but the net effect will be revolutionary. The net effect of opening the "gate of change" will be significantly increased self-confidence. As you live your values, your sense of identity, integrity, control, and inner-directedness will infuse you with peace.

You will detine yourself from within, rather than by people's opinions or by comparisons to others. "Wrong" and "right" will have little to do with being found out. Ironically, you'll tind that as you care less about what others think of you; you will care more about what others think of themselves and their worlds, including their relationship with you. You'll no longer build your emotional life on other people's weaknesses. In addition, you'll tind it easier and more desirable to change because there is something - some core deep within - that is essentially changeless. Good relationships will improve - become deeper, more solid, more creative, and more adventuresome.

Be patient with yourself. Self-growth is tender; it's holy ground. There's no greater investment than this one. It's obviously not a quick fix, but you will feel benefits and see immediate payoffs that will be encouraging. In the words of Thomas Paine, "That which we obtain too easily, we esteem too lightly.

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EFFICIENT EXPLOITATION OF THE INTERNET IN NATO OPERATIONS

Major CONSTANTIN ILINCA

Crisis management, including non-Article 5 crisis response operations, has been a major theme in the continuing adaptation of the Alliance to the post-Cold War security environment. The new Strategic Concept adopted in Rome on November 8, 1991 emphasized the importance of crisis management, stating: "The success of Alliance policy will require a coherent approach determined by the Alliance's political authorities choosing and coordinating appropriate crisis management measures as required from a range of political and other measures, including those in the military field."[1]

The Strategic Concept adopted in Washington on 24 April 1999 went even further, listing crisis management under the rubric "fundamental security tasks" of the Alliance. It stated: "… To stand ready, case-by-case and by consensus, in conformity with Article 7 of the Washington Treaty, to contribute to effective conflict prevention and to engage actively in crisis management, including crisis response operations." [2]

The Strategic Concept also recognized the need for "military capabilities effective under the full range of foreseeable circumstances" as "the basis of the Alliance's ability to contribute to conflict prevention and crisis management through non-Article 5 crisis response operations." [3]

The NATO Crisis Response System (NCRS), the NATO Intelligence and Warning System (NIWS), NATO's Operational Planning System and NATO Civil Emergency Planning Crisis Management Arrangements are designed to underpin the Alliance's crisis management role and response capability in a complementary and synergistic fashion, as part of an overall NATO Crisis Management Process.

However, for accomplish and implement all the Strategic Concept but specially for know when, where, who, and why is possible to appear a new crisis for NATO or a member NATO country, a good way to accomplish this objectives is to use the opened source (as a primary source of information and not only).

If you want, first time when open source are use in the war is it in World War I. German artillery try to strike Paris town with the "Big Bertha" [4] howitzer at a 75 miles (115 km). Because they don't have any special forces in the Paris, they use the French news paper from previous day, find the story about artillery strike and make the necessary correction (adjustments) for next strike.

In the last time, especially after the 2001 September 11, military organizations has reconsidering this point of view and access to a robust collection of open sources enables NIWS to gather and process relevant information to supplement the more expensive intelligence product. The easy way to accomplish this goal is to use the Internet because into Internet we can find any type of the open sources: traditional source (news paper, radio-TV), online sources (billions of users), online commercial sources (is mandatory to pay for access), online private sources (NGO's, governmental agencies, file for internal use, manuscripts, drafts, dissertations, pictures, satellite images), or other sources (experts, observers, witnesses).

All efforts to effectively exploit any open sources of information must be guided by the mission requirement, derived from Primary Intelligence Requirements (PIRs).

MISSION ANALYSIS

Mission analysis is a part of the problem solving technique that military staff use to study a mission and to identify all tasks necessary to accomplish the mission. The process is as

applicable to developing PIRs in advance of a military operation or crisis situation as it is in developing an intelligence production plan to support situational awareness. Mission analysis produces an understanding of the commander's information requirement based on appreciation of the commander's responsibilities and those of his superior commander. Mission analysis is the primary factor in the development of an estimate. It is also the initial step in understanding the relevance of an issue to a particular decision maker and those component elements of the issue that affect his mission (e.g. The threat a new war of a South Asian to a NATO commander, danger of escalation or impact on allied operations in theatre of operations).

1. Steps in mission analysis

When a commander receives a mission, normally as a Warning Order, analysis begins with the following questions:

- What tasks must my command do for the mission to be accomplished?
- What is the purpose of the mission received?
- What limitations have been placed on my own forces actions?

Once these questions have been answered, the commander can understand the mission.

When a commander want to use the open sources for support of situational awareness, is necessary to put a similar set of questions:

- How is the event relevant to may commander?
- What impact does this event have on assigned forces or potential operations?
- Will this event shift the operating environment within his Area of Operations?

Mission analysis steps relevant to the development of PIRs normally are as follows:

Determinate the sources of the mission

One's own mission is typically a sub-set of the superior's mission. It is normally contained in the superior's directive either outlined specifically for a particular operation or more generally in guidance issued to subordinate commands. The staff supporting situational awareness within a Strategic Command can derive mission sources from the NATO Strategic Concept, Command Strategic Guidance documents, Political Guidance issued from the North Atlantic Council (NAC) and Military Guidance issued from the Military Committee (MC).

State superior's mission and intent

The initial concern during mission analysis is to study the superior's mission and intent. The latter is a concise expression of the purpose of the force's activities, the desired results, and how actions will progress toward that end. Normally the content of tactical, operational, and strategic commander's intents statements will be different, but the purpose will be the same: to provide guidance concerning the military / strategic landscape or the situation the commander wants to exist after the assigned military mission is accomplished. An effective technique to evaluate the superior's intent is to practice the analytical technique of "*problem restatement*" [5]. Steps in problem restatement is: paraphrase (restate the problem using different words without losing the original meaning. Try to say the same thing with the different words), 180 degree (turn the problem on its head. Taking the opposite view not only challenge the problem's underlying premises but also directly identifies what is causing the problem), broaden the focus (restate the problem in a larger context. Look at the implications of the initial problem beyond the confines of your own organization.), redirect the focus (boldly, consciously change the focus. Using creative thinking, look at the problem from an entirely different perspective (e.g. Replace the questions "How do we defeat the insurgents?" with "How to we eliminate the conditions contributing to the insurgency?"), and ask "why" (ask "why" of the initial problem statement. Then formulate a new problem based on the answer. This is an iterative process and the stop conditions (criteria) are when essence of the real problems emerged.).

Derive elements of own mission

Any mission consists of two elements: the tasks to be done by one's own forces and their purpose. There might be situations in which a commander has been given such broad guidance that all or part of the mission will need to be deduced. This is a particularly true at a Strategic Command level. Deduction should be based on an appreciation of the general situations and

understanding the situations. A task is the job or functions assigned to a subordinate unit or command by higher authority. A mission can contain single or multiple tasks based on the complexity of the activity. There are two types of tasks:

Specified tasks: tasks listed in the mission received from higher headquarters which are what the commander wants accomplished;

Implied tasks: additional major tasks necessary to accomplish the mission. These tasks are deduced from detailed analysis of the order of the higher commander and an understanding of his intent, knowledge of the operations environment, or other factors that affect the mission.

Identify (planning) assumptions

An assumption is a suppositions on the current situation or a presuppositions on the future course of events, either or both assumed to be true without positive proof, and necessary to enable the commander to complete an estimate of the situations and decide the course of action. Assumptions can be related as a friendly as well as hostile forces.

Assumptions are necessary in preparing a mission analysis. Within NATO, the political dimension of military operations is often a larger component of the planning process than in national capitals. This is a function of the decision-making structure within the Alliance. Assumptions concerning the degree of potential Alliance involvement or interest in an international event are crucial to effective intelligence preparation.

Identify objectives

Objectives are those elements that provide the link between the strategic goals to the tactical levels of operations. A prerequisite for a good estimate of the situation is the identification of specific, realistic, and clearly defined objectives. The scope of NATO activities has changed considerably in the last decade. While NATO are active in operations more during this time than ever before, considerable effort has been directed at non-traditional security activities. When assessing NATO objectives, it is important to understand the soft security concerns that affect the NATO Alliance. These include humanitarian, diplomatic, economic, and general stability concerns (see annex A).

2. PIRs development

Mission analysis produces the Commander's Critical Information Requirement (CCIRs) about friendly forces, enemy forces, and operating environment. The PIRs is a sub-set of CCIRs. Using PIRs at the basis, the staff is able then to develop the command's information requirement (those items of information that must be collected and processed to develop the needs of the commander's). In this moment the responsible structures must initiate the development of a collection plan.

At this step, it might to clearly answer a few questions: what is the mission, what is the source of mission, what is the commander intent, what tasks must the command do for the mission to be accomplished, what are the objectives (political, military, economic, social, religious, racial, psychological, environmental), and what is the PIRs.

COLLECTION

The collection process consists of Information Requirement Management (IRM), Collection Planning, and Collection Coordination and Executions. The complexity of each is dependent on the capability and size of the organization.

1. Making a collection plan

Collection Management usually begins with determining and sorting Information Requirement (IR), as a previous chapter. The collection manager decides on the best means to satisfy IR and he will repeat the process if the requirement is still outstanding or if the collection was unsuccessful. To make a collections plan (see annex B) means to built many collection options which is, in fact, an answer for tree questions: what, where, and when collect (Information Requirement = What to Collect + What Collector + Where to Collect + When to

Collect). Collection Plans are typically a matrix or spreadsheet with the key pieces of information arranged in some graphic format. In many of cases, because it use the Internet for accomplish the mission, is mandatory to make an Internet Collection Plan following next steps:

Determine searchable information requirement

Often, the Information Requirement as stated as the commander may not be in a form suitable for Internet searching. Sometimes the wording is too broad, too narrow, too vague, or consists of uncommon jargon. Is necessary to broken down PIRs into smaller, more specific information. This process gives as the Essential Elements of Information (EEIs)(example: if PIRs are "indications of hostile intent", then EEIs should be indication that an interest country is preparing for war, on heightened alert, or has improved their air defense readiness.)

Determine best sites or search

In many cases there will be one or more known reliable news specialized web sites that you frequently refer to for similar information to what you are seeking. This stage is influenced decisively by the experience, ability, and knowledge manager's designed with collection of information.

Identify the details to access or find specific information

Determine search time constraints.

After building the collection plan should be established a Search Strategies (Search Strategies: Identify key concepts, identify possible search terms, decide which method to use to search, construct your search, limit your search, and refine your search.) to resolve PIRs. Search Strategy must to include the searchable tools: search engine or meta-search engine. As we know, the usual search engine can return the result from the visible web (surface web) where the web pages must be static and linked to other pages (The search engine crawl or spider following one hypertext link to another. In this manner search engine spider are able to extend their indexes further and further from their starting points). Each one of the search engine creates its own database and search result is relating only this database. If we use the meta search engine, we can see in the deep web (the Deep-Web is dynamic content served up in real time from a database in response to a direct query. Public information available in the surface web represents less of 0.25 % than deep web.) (invisible web).

2. Invisible web

Almost all the type of sources aforementioned is part of the deep web so, the relevant information for solving PIRs is there. It is mandatory to search the information in the right place. For resolving this issue will be use the meta-search engine: a tool who use many usual search engines. The deep web is composed of web pages that can be accessed via Internet, but are not found by search engine. These are pages that are either located too deep in a web site for a usual search engine spiders to locate, are pages that a search engine cannot index because it technically can't do so, or are pages witch the search engine cannot access because they lack the proper password[6]. Traditional search engine cannot see or retrieve content on the deep web, witch by definition is dynamic content served up in the real time from a database in response to a direct query.

Until now, many of the usual search engine cannot identify on the web the pages in non-html format (Pdf, Power point, now converted in html format), script based-pages (whose URLs contain script coding), and pages generated dynamically by other types of databases software. Now, the next types of information cannot return the result using an usual search engine:

The content of searchable database – When you search in an article database, the result are generated "on the fly" in answer on your search. Because the crawler cannot type or think, they cannot enter passwords on a login screen or keywords in a search box. This databases must be searched separately.

Excluded pages – Search engine companies exclude same type of pages by policy, to avoid cluttering their databases with unwanted content.

Dynamically generated pages of little value beyond single use – It is a billions of possible databases created by the Internet users Each of these is created as a response to a specific need. This type of pages cannot be indexed by the usual spiders.

Pages deliberately excluded by their owners – a pages creator who does not want his/her page showing up in search engine.

So, is recommended to follow the next rules when we navigate on the Internet:

- It is better to be discrete when searching on the Internet rather than employ deception;
- When searching discretely you are hiding your intentions;
- Practical measures should by applied sparingly and only with good reason;
- Remember that the Invisible web exist.

PROCESSING

1.   Source evaluation

We can begin evaluating a physical information source even before we have the physical item in hand. Appraise a source by first examining the reference description or the bibliographic citation. After that, we can evaluate the next main components (see annex D):

- **author**: What are the author's credentials, institutional   affiliation, educational background, past writings, or experience? Have you seen the author's name cited in other source? Is the author's associated with a reputable institution or organization? What are the author's intentions?

- **date of publication**: When are the source published? Is the source current or out-of-date for our topic?

- **generally about source**: Is this a scholarly or a popular source? This distinction is important because it indicate different levels of complexity in conveying ideas.

- **content analysis**: Having made an initial appraisal, we should now examine the body of the source (preface, table of contents, index, bibliographies included);

- **intended audience**: What type of audience is the author's addressed? Is this source too elementary, too technical, too advanced, or just right for your needs?

- **objective reasoning**: Is the information covered fact, opinion, propaganda, or another?

- **writing style**: Is the publications organized logically? Are the main points clearly presented?

- **evaluations reviews**: Do the various reviewers on the value or attributes of the source or has it aroused controversy among the critics?

2. Determining the source of the pages web

Before opened the source validate in the previous chapter is mandatory to studies the URL. Uniform Resource Locator is the address witch determine in a unique modality the source validated. The URLs may be able to help you judge the value of the information.

URL typically have the following format protocol://computer.domain.name/pathname/filename.ext.

- **protocol**: define what Internet protocol is required to reach the online resource (http, ftp, telnet, news, mailto)
- **computer**.**domain.name**: the name of the server where the information is located (can also be the server's IP number). If is hardly to establish "the real" domain.name, then is possible to use another tools for find where is located the server (trace route – give as the possibility to find the location for the server using URL or IP address).
- **pathname**: the name a directory or subdirectory, this define where is the information on the server's hard disk;
- **filename.ext**: the name of the file and the type of extension file.

3. Validated source lists

Considerable effort is required to validate an Internet source. Many Internet user's either fail to make the effort to validate the information source prior to using information that they provide, or do not take steps to capture the source validation data that the evaluation process produces. Capturing this information allows the analyst to refer back to the source evaluation prior to returning to that source.

4. Analysis

While open source can contribute to satisfying an information requirement in a timely fashion, the resulting information must be structured so as to be relevant to the analyst and easy to use and understand for other who receive it. Effective summary or analysis is an important step, yet elementary to shape large quantities if information into a manageable form or format.

Analysis method which can use in the process should be the SWOT analysis. For each one of the Essential Elements of Information (EEI) we can establish:

Strengths – the main characteristics that give advantage over other in the same field;

Weaknesses – the characteristic that place at a disadvantage the EEI relative to others;

Opportunities – favorable external factor that might influence the EEI;

Threats – external elements that could cause the trouble.

DISSEMINATION

The essential fundamentals of effective disseminations are four-fold: *the right person must receive the right product at the right time and in the right format*.

Information provided must not only be accurate and relevant, but it must be structured and presented in such a way that the final user (the recipient) can use it easily, assimilate quickly, and understand its significance in time to act on it easily. Since each level of command both within and outside an organization have differing information detailed time management requirements, information support products must be structured, presented, and disseminating in ways that fit these varying requirements. In the final product, an approach in structuring information is to consider how those who receive it use information. A safe rules is the following:

- executives (decisions-makers) require executive summaries;
- staff officers require relatively complete summaries focused on their assigned areas with enough background for them to understand the big picture;
- analysts often need a detailed treatment of the subject within their assigned area of interest in order to make their own assessment of information reliability.

CONCLUSIONS

Quantity of information on the Internet is huge, but their value for a great product of intelligence is minimal without a careful analysis of sources;

Method of analysis of information must take into consideration the purpose, the beneficiaries information, and level of dissemination of products;

On the Internet is possible to place disinformation operation so, be alert;

There was many sophisticated tools for searching on the Internet;

There was almost all the information which we are need, but we must to know where seek, when seek, and what it is important or real;

As a generally principle: a commercial source (for witch we pay) is better than a free source (e.g. if we use the Google Earth for see same places on the world, is better to use the Commercial Satellite, and more efficient is to use the Military Satellite, even the price is increased);

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MILITARY ACTIONS SUPPORT INFORMATION SYSTEM (SISAM) TOP FIFTEEN MISTAKES IN PLANNING AND IMPLEMENTING APPROACH

Lieutenant Colonel GHEORGHE IORDACHE

In Romanian Armed Forces the most important data about the main defence resources are stored in many different structures. Each structure uses various systems and techniques to manage that information:

- All the records related to personnel are kept and used only by HR structures. They are using different software applications for processing this kind of information (RESMIL, SIPER) and are not concerned with data standardization or data redundancy.
- Logistic structures manage all the specific records of this functional area using some applications developed inside military or provided by NATO (ADAMS, LOGFAS). These applications are not integrated with financial-accounting systems.
- Financial records are stored and processed by financial-accounting structures using their own applications; many of them are very old and are not working anymore on the modern computers having installed new versions of operating system.
- Medical structures store and utilize all the records about military patients using software applications varying from one hospital to another. They do not have implemented the patient's electronic file.
- And the list goes on.

Information about defence resources is also duplicated many times within the organization without necessarily being identical or similarly up to date. Part of this information is only on paper, making it difficult to access across the military.

Due to this situation, Communication and Information Directorate initiated few years ago a project named SISAM. The purpose of this system was to provide an integrated management of the main defence resources (HR, financial, logistics, medical); to deliver a near real time and true picture about the state of these resources; and to support decision-makers and military actions.

It was supposed that system to consist of five components:

- SIMRU (Human Resource Management Information System) dealing with everything belongs to the HR area.
- SIFCON (Financial-Accounting Information System) dealing with financial resources.
- SIL (Logistic Information System) dealing with all logistics resources.
- SIMED (Medical Information System) dealing with military medical resources.
- SIAD (Decision Support Information System) providing business intelligence tools to decision-makers as functions on the Business Intelligence portal (ad-hoc reports, online analytical processing, analytics, data mining, business performance management, and predictive analytics).

Oracle ERP (Enterprise Resource Planning) solution has been selected during acquisition procedure and the results of the first phase of the project consisted of many flow analyses, an important number of licenses acquired and few prototypes for some of the components. Unfortunately, nothing became operational at that time and the years after.

Why integrated system approach?

SISAM was designed to integrate the main defence resources management subsystems due to the benefits an integrated system offers:

- Share the information by using software applications that work together.
- Improve efficiency and eliminate errors.
- Better access to information for decision makers.
- Costs reducing. Improve service to personnel and reduce enrollment costs with Web-based self-service functionality.
- Working from a single source of truth. The information is introduced in system only one time from one single place. That increase accuracy and timeliness by providing both decision-makers/commanders and personnel with a single point of entry to all defense resource information and processes.
- Eliminate stovepipes in defense resources management.
- Deliver workforce intelligence to those who need it: commanders, decision makers, and executives.
- Easily transmit and share data with all Communities of Interests (CoI).
- Establish a collaborative work environment.
- Contribute to data standardization.
- Eliminate data redundancy and out-of-date information.
- Increase consistency of decisions on benefit issues at all levels across military organization.
- Provide efficient tools to make better, more-strategic decisions; perform comprehensive analysis and budget reports; view personnel development and performance reports; analyze salary, recruitment, vacancy, and termination trends. The results: making better decisions at all levels and aligning with organization's objectives.
- Gain daily business intelligence. Leverage predefined KPIs (key performance indicators) on a single homepage, with one-click access to automated out-of-tolerance notifications, reports, and more.
- Measure and monitor organization's performance and strategic objectives.

The aim of this paper is to highlight the most important mistakes made during planning and implementation processes of SISAM.

DEFENSE PLANNING ISSUE

SISAM addresses many defence planning domains: logistics, force planning, resources, military medical, and C3 (command, control and communications). It puts under the same umbrella the management of the most important defence resources.

The biggest mistakes made in the planning area are:

Mistake #1: The scope of the project not well-defined

The planning team started the project defining goals for every component. They didn't see the project as a whole from the beginning. They changed their vision during the first phase and the right scope of the project was defined later on. Consequently, there was a lack of a clear defined direction needed to complete the first phase of the project on time and on budget and to meet the decision-makers expectations.

Mistake #2: Solution suggested too early in the process

When the idea of developing SISAM was launched in MoD a new logistic information system implementation was in progress. That system was realized using foreign military funds

and was based on Oracle solution. Because it was supposed to become part of SISAM, the planning team suggested adopting the same solution just for interoperability purpose. Nobody bothered to analyse the consequences of this early choice.

Mistake #3: Lack of backup plans for change requests during the project development

The operational requirements defined during planning process were changed as the project progressed. This occurred because as prototypes were developed, the users were able to see more clearly problems with the original plan and asked for necessary course corrections. Also, the changes in the external environment (financial-accounting laws and policies) required reshaping of the original solution. The management team didn't have backup plans in place to deal with these changes and a clearly defined process for receiving, analysing and incorporating change proposals.

Mistake #4: Lack of a coherent funding policy

The current configuration of the defence planning system does not encourage the projects that meet joint requirements. None of the acquisition programs deals with this kind of projects in Romanian MoD. Therefore, many programs should contribute with funds to implement SISAM (land forces, navy, air forces, logistics, central administration and pensions, strategic command). In order to have a successful implementation a very good coordination and a serious commitment from all program managers are needed. The history of the first phase of the project reveals that only two programs have succeeded in funding SISAM even the flow analysis process was developed for all the services and functional areas. As a result the objectives of that phase have not been accomplished.

Mistake #5: Not considering the dependencies between projects

A project like SISAM could not happen in isolation. Its implementation is based on an appropriate communication infrastructure which should allow the system to be fed with basic data from different places. The planning team failed to correlate these two projects. Consequently, the second phase of SISAM was postponed because the infrastructure needed to connect all the important sites to local intranet was not in place.

Mistake #6: Poor life-cycle cost analysis

During planning process the management team didn't pay too much attention to system lifecycle cost estimation and analysis. Therefore, at the end of first phase, they realized that military can't afford such an expensive system. The maintenance costs of all software licences are huge due to the provider maintenance policy. There are also costs which have not been estimated at the very beginning related to security solution and hardware infrastructure.

Mistake #7: Lack of risk management

Due to the inherent complexity of the environment within military organization, there are many risks in implementing SISAM. These risks include (but are not limited to): selecting an inappropriate technology solution, time and budget overruns, changing operational requirements, inadequate infrastructure, lack of agreed security solutions, technical issues, particularly relating to integrating systems and failure to gain adoption by decision-makers and military personnel. The planning team failed to clearly identify the risks of this project during planning process and no approaches have been established for avoiding or mitigating each risk.

INFORMATION RESOURCE MANAGEMENT ISSUE

Mistake #8: Lack of right human resources with the right skills

When Oracle Applications was selected for implementing SISAM nobody asked if that technology is the right one for the military organization. As easy as the selection process seems,

many important issues should be addressed before making a final decision. One of them is referring to the skilled people needed for implementing and maintaining the system. Unfortunately, our military specialists are not familiar with the Oracle technology. They can be trained but our past experience tells that very soon after training they will leave the organization for more well-paid positions and opportunities. The outsourcing can be considered in this situation if we can afford that and some security issues should be taken in consideration too.

Mistake #9: Viewing SISAM like a simple IT project

That was one of the most costly mistakes the management team made. The complexity of the project requests proper inputs military-wide in order to align it to military business processes and personnel needs. To realize the full potential of SISAM, every future user should be engaged in the transformation. The system implementation should become a major initiative in every military service. In this way everybody will be interested in providing inputs for implementing a system which meets all the requirements. The project management team tried to convert a complex set of needs and problems into simple (even simplistic) solutions hoping that complexity can be limited or avoided within military. Their approach failed.

Mistake #10: Not addressing organizational culture change

The military is one of the most conservative organizations. For SISAM to become a success story a cultural change is needed. Changing the accepted military organizational culture can feel like rolling rocks uphill. People working inside military are comfortable to obey orders and to act in a very restrictive environment. It is very difficult to convince them to change their way of thinking first of all. Being too attached to day to day routine sometimes they have only a vague idea of what they need for making easier their work and improving it. For these people to consider culture change, usually a significant event must occur. The project management team had the opportunity to use SISAM as a trigger for initiating a cultural change but they ignored it.

Mistake #11: The development team didn't understand the policies of military organization

SISAM is a large and complex project which should be implemented in a large and special organization like military. The provider's development team didn't realize that inside military the information flows are based on a hierarchical structure where information is often fragmented and requirements analysis is influenced by problems of trust, security and sometimes internal conflicts of interest. They didn't see the military organization as a "contested arena" and that's why they minimized the importance of power, conflict, negotiation and coalitions. They failed in cultivating allies, building relationships and persuading the opponents within military.

Mistake #12: Ignoring the lack of a military information management authority

Every organization should be able to manage information as a valuable resource regardless of source or format (data, paper documents, electronic documents, audio and video). In military environment an effective management of this information can help to increase commanders' and military personnel's situational awareness, enabling them to make better decisions with a greater understanding of a particular context. Information management is seen as an enabler for projects like SISAM. Even NATO requested to all members to implement information management and to create national authorities similar to NIMA (NATO Information Management Authority) we didn't succeed yet to align to Alliance demand. Consequently, there is no structure or authority within Romanian MoD which provides advice and expertise in the area of information and knowledge management. The project management team didn't understand the impact of this situation on project implementation and ignored it.

COMMUNICATION ISSUE

Mistake #13: Poor communication with decision-makers and stakeholders

Extensive communication from the project management team (and project sponsors) is critical for a successful implementation. Poor communication can cause many problems and aggravate others. A good communication ensures that decision-makers have a clear understanding of the project, and the benefits it will deliver. This is a pre-requisite for achieving the required level of adoption. Stakeholders must also be engaged and involved in the project; they must be kept informed of project progress to ensure that there is support at all levels in the organization. Taking in consideration the complexity of the project a clear communications 'message' should be developed and supported by a communication plan describing target audiences, and methods of communication. Nobody has developed a communication plan for SISAM.

Mistake #14: Communication gaps between provider, management team and users

Coming from different worlds they failed to communicate clearly with each other because they didn't understand the technical terms in the same way. This situation led to confusion and severe miscommunication, and a common and precise understanding of the deliverables and the tasks needed to achieve them was missing.

Mistake #15: Lack of advertising

Even SISAM was not developed in isolation not many people heard about it. This situation appears because project management team was not concerned with gaining all military staff adoption. They didn't consider establishing a 'project site' on the intranet as the outset, to provide a location for planning documents, news releases, information about the project, and other updates.

CONCLUSIONS

Implementing an integrated defence resource management information system like SISAM in a complex and ever-changing organisational environment is not easy because of the massive re-engineering process that involves security, quality assurance, and training for military staff. In addition, to maximize the operational effectiveness of such a system, IT managers, system security officers, and system administrators will find themselves challenged on security and control issues.

The current defence planning system (PPBES) generates a lot of problems for projects like SISAM. Being service – oriented it is not prioritizing those projects that meet joint requirements like SISAM does. Moreover, it is quite difficult to budget a project like this because the acquisition program managers will never put it on the top of their priority list. A solution could be the migration to a new defence planning system – capability based planning (CBP). CBP provides a more rational basis for making decisions on future military acquisitions, and makes defence planning more responsive to uncertainty, resources constraints and risks. It eliminates the redundancies in military capabilities, meets the combined needs of all military services, effectively prioritizes joint services requirements, and creates capabilities within available resources. Focused on joint the CBP encourages acquisition programs managers to make decision in the context of broad defence force goals rather than considering their own service. Also, it attempts to move away from suggesting solutions too early in the process. In a CPB environment SISAM could have good chances to become a success.

Information systems are only successful if they are actually used by military staff, and it is not sufficient to simply focus on installing the software centrally. Systems like SISAM must always be designed so that they deliver tangible and visible benefits. Delivering tangible benefits involves identifying concrete operational requirements that must be met. This allows meaningful measurement of the impact of the projects on the operation of the military organization. Instead of a technology-driven approach, the planning process should be turned around entirely, to drive projects based on their ability to address military needs.

This kind of projects should also target issues or needs that are very visible within the military organization. When solutions are delivered, the improvement should be obvious, and widely promoted throughout military.

Romanian MoD is still struggling to deliver an integrated information management environment within military as NATO requested. For achieving that a new military authority must be created which should deals with information management issues. An effective information management combined with a cultural change will create an enabling environment for SISAM and other similar projects.

One of the most important factors that influence the success of a project is communication. A constant and good communication will eliminate the confusion; people will be very clear about what they are talking about. Communication will eliminate or at least will diminish the staff resistance to change, will make known the benefits of the project and will obtain the needed support at all levels in the organization.

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PHYSICAL FITNESS- A NEW CHALLENGE IN DEFENSE RESOURCES MANAGEMENT

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The defense of each nation requires a force that is physically ready to conduct military operations and this is becoming a new challenge in defense resources management. Due to the nature of the job, being in the military implies that it is highly likely when deployed, to be embedded within a Joint Task Force. Hence, the modern militaries have to make sure that their personnel is physically fit to work side by side in operational environments with their comrades from allied or partner countries.

Considering the dramatic change in the modern warfare, service members have an obligation tobe fit warriors committed to their country, their mission and their colleagues. In this perspective, this study paper will focus on fitness expectations in Moldovan National Army versus what people are actually doing in terms of obeying fitness requirements, tips on how to become a fit warrior as well as the benefits ofbeing in shape.

WHAT THE MILITARY SAYS WE SHOULD DO VS. WHAT PEOPLE ACTUALLY DO

Some say the Moldovan National Army is lacking a comprehensive fitness training program that will ensure mission accomplishment in real operations. On the contrary, since 2009, the National Army has implemented a comprehensive fitness program inspired from western militaries. There are instructions that specifically govern the standards for the level of fitness Moldovan military service members are required to maintain. The instructions also provide guidance on procedures for conducting this mandatory program. The instructions specifically state that all members of the National Army must be physically fit to support the mission. [1]

The new program replaced the National Army's outdated soviet-type fitness training. The goal of the fitness program is to motivate ali members to participate in a year-round physical conditioning program that emphasizes total fitness, to include proper aerobic conditioning, strength training, and healthy eating. According to the new fitness program cornrnanders must incorporate fitness into the National Arrny culture to establish an environrnent for members to maintain physical fitness and health. Also, unit cornrnanders are required to provide an overall work environrnent that is supportive of optimal fitness by providing access to exercise during duty hours. They are to offer a unit-based programat least three times per week specifying frequency of required individual participation. Therefore, the National Arrny made a passing physical fitness test score a requirement for promotion. The Arrny not only requires passing test scores for promotion, but individuals are awarded promotion points for higher scores, according to the new regulations.

Although it's in writing, there are people that believe it to be open to their own interpretation. Recently, Oastea Moldovei newsletter [2], edited by the MOD, published a story regarding an audit conducted on the program. According to the story, it is clear cornrnanders don't take the policy seriously. Auditors found that service members who failed the PT test two or more times faced no administrative action. The reality was that many service members simply weren't keeping themselves fit.

FITNESS REQUIREMENTS AND TIPS ON HOW TO BECOME A FIT WARRIOR

Critics say that, facing recruitment issues, Moldovan National Arrny has eased fitness requirements. Although National Arrny does need personnel, it doesn't compromise quality for quantity.

One ofthe requirements for being in the National Arrny is that every once in a while, you have to pass a physical fitness test. While it can be true that the standards on these tests are lower for women than they are for men, an applicant will not be accepted into the military if he or she could not pass the standard requirement.

The standards applied for men and women are different because physically they are not equal. When the original requirements were made, women were not allowed to serve. These requirements were made by men for men to reflect the abilities of males. Nowadays, the requirements should reflect both the abilities of physically fit men and women and those who are not meeting the standards.

It is worth mentioning that each individual is required to perform the fitness assessment quarterly. This assessment is comprised of an abdominal circumference taping, strength assessment in the form of push-ups and crunches, as well as a 3-kilometer run which gauges the member's cardiovascular fitness. The newly implemented fitness program also stipulates that service members have to do some form of cardiovascular training at least three times per week for 25 to 45 minutes. In the National Army a male service member age 18- 27 has two minutes to do a minimum of 45 pushups. A female service member age 18 - 27 must do 20. A male soldier age 18 - 27 must be able to run three kilometers in 14 minutes. A female soldier age 18- 27 must do it in 17.

The research reveals this to be a very obtainable goal. It simply takes effort to train regularly and be ready at any moment to test. The real problem is that there are a lot of people who begin working out and training just a few weeks out of their actual test date. While this may work for some, it is contradictory to National Army instructions and does not increase a persons' total cardiovascular fitness level. While people's fitness levels of abilities are all different, one thing remains the same. In order to progress with crunches, push-ups and running, you have to do more than just what is expected on the test.

When conditioning for push-ups, it is important to have people perform them in different ways. In addition to simply pushing to the numbers, the service members should be advised to hold for periods of time in the upward leaning rest position then hold at half the distance from full extension. Also, it is important to do upper body strength exercises such as pull-ups; triceps dips and weight training on the various back muscles as well as the biceps.

Being able to perform a proper crunch comes from more than just doing endless crunches. You will gain more benefits from performing them slowly than just ripping them out as fast as you can. According to Fitness for One and All Magazine [3], it is common to see people performing 50 - 100 reps as fast as they can; however, performing that many repetitions makes the action more of a cardiovascular work out than a true strength training movement. It is advisable that people use multiple types of crunches to improve form and gain the needed muscular endurance in both the rectus abdominals muscles as well as the externa!oblique's. Some good types would be twisting reverse crunches, leg raises as well as "bicycles." Equally important is to mix up the training for running, preferably three days per week, and different distances and speeds each time. Those three days would include one long run, speed work or hills work and one easy run day. For non-runners, the long run day would simply start off as any distance longer than 1.5 miles. The speed of this would be approximately one minute slower than your race pace. The second run of speed work or hills work would aid in increasing the body's ability to adapt to the lactated acid build up as well as increase the fast twitch muscles ability to fire.

Tempo running and speed work improves a crucial physiological variable for running success: our metabolic fitness. The third run day would consist of a nice steady run at a pace that

is easily maintained even while talking. These three things are key to success. By increasing your lactate threshold (LT), or the point at which the body fatigues at a certain pace. According to "Runners World" magazine [4] , during tempo runs, lactate and hydrogen ions--by-products of metabolism--are released into the muscles; the ions make the muscles acidic, eventually leading to fatigue.

The better trained you become; the higher you push your "threshold," meaning your muscles become better at using these byproducts. The result is less-acidic muscles (that is, muscles that haven't reached their new "threshold"), so they keep on contracting, letting you run farther and faster. That's all pretty technical, but it boils down to the body being able to handle the load you are putting it through more easily.

By incorporating all of these types of workouts, people will feel less fatigued and be able to become more efficient runners. While doing more push ups, crunches and running faster is great, there is an even better benefit.

BENEFITS OF BEING FIT

Some others say that most of the National Army service members are ignoring fitness training because they aren't aware of its benefits. In this respect, all service members should be educated that health benefits from an active lifestyle will improve their lives.

According to 24 Hr Fitness.co.uk Web site [5], health benefits from an active lifestyle will increase productivity, optimize health, and decrease absenteeism while maintaining a higher level of readiness. There are both short term and long-term benefits and the Web site lists some short term benefits such as a healthier heart, healthy muscles, bones, and joints, increased buming of calories, better ability to cope with stress, improved ability to fall asleep and sleep well, reduced feelings of depression and anxiety increased energy, increased mental acuity and sharper and faster thinking.

On the other hand, some long term benefits would be the reduced risks of coronary artery disease, dying after a heart attack, developing high blood pressure, developing colon and breast cancer, and becoming obese. In order to illustrate all these benefits, "Men's Health" magazine6 lists the following statistics:
- Heart disease affects over 13 million people
- More than 1.5 million people are victims ofheart attacks each year
- Colon cancer is diagnosed in over ninety-thousand people yearly
- More than one point five bone fractures happen each year.

Moreover, research has proven that a healthy diet and exercise reduces the risk of those health related diseases. Exercise adds longevity and health to your life. Even small improvements in your physical fitness lower the risk of disease. Furthermore, new research shows that there are possible links between breast cancer and stomach fat. Moderate workouts are proven to have significant benefits for people suffering from diabetes by improving their insulin sensitivity.

Over the years, it has been also demonstrated that exercise helps reduce pain and stiffness while increasing flexibility. Flexibility in the joints and tendons make it easier for people to get around.   It also slows the growth of osteoporosis. Exercise also drastically improves our mental vitality. It helps reduce stress and emotional strain. We will have a better ability to make rational decisions quickly, and be consistently ready for duty.

And last, but not least, part of being fit is also controlling what you eat. People don't like to hear this, but when broken down the key to achieving and maintaining a weight which is recommended for your body type is eight percent diet and twenty percent exercise. Exercising burns calories but if you keep a consistent caloric intake in conjunction with a good work out routine you will be on your way to creating a positive lifestyle change.

CONCLUSIONS

In this paper I focused on National Army fitness expectations versus what people are actually doing, tips on how to become a fit warrior as well as the benefits of being in shape.

National Army sets high standards for its people, because the quality of personnel is a top priority in defense resources management. Being fit in the military is no mere abstraction, and it's not just about presenting a good military bearing by looking trim. In real operational environments, jobs involve long hours, and people in poor physical shape in such environments fatigue more easily than those who are fit, and fatigue leads to mistakes. Mistakes in operations are costly, and the military wants to avoid them.

The bottom line is that we need to ensure our service members are fit so that they are nota liability to their colleagues in daily activities and combat operations. We need to work on establishing better and more effective programs and follow through with disciplining those who don't participate as mandated. The sooner the National Army starts taking fitness seriously, the stronger our military family will be.

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MANAGEMENT OF NATIONAL AIR C2 SYSTEM AND INTEGRATION INTO NATO ACCS

Lieutenant Colonel PETRU MIHAILCIUC

The modern war, indifferently of his dimension can't be conceived without active presence of air forces as aviation, artillery, antiaircraft missiles and surveillance which are capable to execute rapid and suddenly strokes with strong effects against to any potential aggressor actions. It becomes an important objective for the air defence military strategy obtaining the air supremacy and to control the interest air space

I consider the vulnerability and threats result that the air forces will display battle actions into the military complex space, suiting a short time of evaluation, analyze and decision making process.

National Air Command and Control System – NACCS has to offer a quick reaction capacity which could synchronies all air forces actions in whole air Romanian space with NATO air forces operations.

NACCS is designated to meet the national requirements acting in the same time as a complementary system for NATO Air Command and Control System – ACCS.

In those conditions, re-evaluation and redefine the contribution of the Romania Air Force to air security is become a major necessity. In this respect, I was put in balance our national interests, with reference of sovereignty and integrity national air space, the changes producing in the Romanian Army on the process of reforms and modernization as well as the extending of Alliance Air Defence System.

Air Forces projection and reshaping are based on risks and threats factors, evolution of military phenomena and all are influencing the specific management air national space.

Actual geopolitics and geostrategic context has modified the nature of air threats against Romania by following aspects:

- the priority of strategic air directions has been changed due to NATO integration;
- the risk of the air threats became unique direction;
- time arriving of aggressor aircrafts is very short now;
- late discover of the eventual hostile/delinquent aircraft;
- dependency of supplying spare parts needed to air defence assets.

Air security of Romania is a component of air sovereignty and is connected with air power.

I emphasise the most efficient modality for assuring the united effort in air security and air defence of Romania is to realize the command and control concentration of all specific operations for unique commander who has the authority of those elements in the legal, definitively and delimited frame and still exist during the peace time.

THE INTEGRATED COMMAND AND CONTROL SYSTEM FOR AIR SPACE SURVEILLANCE AND CONTROL

Main purpose of NACCS

The radar surveillance system of the Romanian air space is representing the main information source, both for national air defence system and NATO in this area.

Air space radar surveillance represents all actions and measures organized, taken by forces and assets unified into specialized system for detecting and identification of the air national or enemy assets.

The main purpose of air space surveillance is to prevent the surprise aggression from air for assuring the air sovereignty as well as to transmit the necessary information to earlier warning system and NATO integrated Air Defence System (NATINADS)

The dimensions of actions are related with:
- number of directions for surveillance;
- the depth of research according to flight level and radars performance;
- the air situation importance ;
- number and level of users;
- quantity of forces and assets utilized;
- permanent character of surveillance actions.

The air space surveillance cover the most dynamic part of informational components on the vertical dimension and also cover whole zone of national territory with extension depending of technical equipment possibilities.

Reconnaissance and identification as a positive control is executed in real time for discovering the nature of aircraft if it is Friend or Foe.

Air superiority

Air superiority has to make inefficient the adversary's air defense and limit the risks of its air attacks. To this end, there are requested not only capabilities to annihilate the adversary's air defense to ensure the freedom of action of own forces but also the efficiency and persistence of air operations beyond the spatial possibilities of the adversary's air defense in difficult weather conditions.

Through the direct and indirect effects of the air operations, the possibility of *joint employment of the armed forces* is created. The indirect effects of the air operations determine the isolation and preparation of the battle space where surface forces will conduct operations while the direct ones enhance their combat capabilities.

OPERATIONAL STRUCTURE FOR AIR SPACE SURVEILLANCE AND CONTROL

NACCS definition

National Air Command and Control System integrate the personnel, equipments, communications, facilities, and procedures need for planning, elaborating and transmitting the orders, monitoring, coordinating and controlling forces actions for obtaining the success in air operations.

National air command and control system will be the core of Air Operation Centre, total automation with the responsibilities in centralized command of national air defence forces. This system operates on base principle centralized control and decentralized execution.

National Air Command and Control System is structured at operational and tactic levels with principle and responsibilities according to each level.

NACCS functions

Surveillance and reconnaissance functions[1] of National Air Command and Control System have to provide:
- Maintain a 24/7 capability for airspace management and tactical control of Air Defence assets;
- Integration of data from military and civilian digital radars;
- Conducting Air Policing missions;
- Recognized Air Picture-RAP and distribution to users;
- Remote command and control of radars;
- NAEW interface through Link 11;
- Evaluations of air threats and establish the level of warning.

In order to achieve Battlespace Awareness and Dynamic Decision Making, the Air Operational Centre - AOC integrates horizontally and vertically within the AOC (Control and Reporting Center, Recognized Air Picture Production Center, Sensor Fusion Post) as well as with other elements/agencies external to the AOC. These agencies include, but are not limited to: elements of the Romanian National Air Command and Control System (Airbase Operation Centers - ABOC, Surface-to Air Missile Operations Centers - SAMOC), elements of the Civilian ATM, and others who, eventually, monitor air and ground and control air assets. Other elements are included such as Intelligence, Surveillance, and Reconnaissance (ISR) exploitation and analysis nodes which push information on emerging threats or targets, any changes to enemy force tactics, disposition, and projected COAs. It also includes subordinate Airbase Operations Centers (ABOCs) which provide information about status of friendly air forces/airfields; as well as special functions of weather, electronic combat, information warfare, communications, and logistics. Liaison functions that also require horizontal integration include airspace management coordination, offensive and defensive operations, information operations, as well as special operations, and coalition forces in the near future.

From my point of view is necessary to have all aircrafts with capabilities to operate in condition of minimum engage risk for air defence and operational commander must apply an effective control system of air defence forces.

EFFECTIVENESS OF USING COMMAND AND CONTROL SYSTEM FOR SURVEILLANCE AND CONTROL THE AIR SPACE

Main advantages of the system

I consider that command and control system are based on informational system. During the time, the military specialists have used some concepts as optimized actions, cycle of command, automatic system, reaching finally to the highest concept Command, Control, Communications, Computers, Information Surveillance and Reconnaissance-C4ISR as integrated and specialized system.

The mains advantages using C4ISR[2] are:
- Reducing the number of personnel in operational command centre by automats work and equipment;
- Increasing the disposal time for preparing military actions against any aggression;
- Improving command efficiency action by reducing the time of processing data;
- Realizing the multiply military power which depends of the concordance between number of combatants and command and control system (for one modern capable system is necessary double combatants)

Endow new technologies afford the proper working in the net by increasing the performance and determinate the growing survival time in operational theatre. A critical requirement for any regional commander is to obtain the information necessary to fight and win the conflict. Getting this information to war fighter, where and when needed, and in time for optimal use is a core for understanding the C4ISR. To conduct successful military air operations includes necessary information, but is not limited to, services requirements from all sensors deployed in national interest area.

Analyze the actual concepts of doing combined air operations the new concept of leadership is related with the National Air Command and Control System as a technical support.

In order to conduct effective dynamic operations, superior connectivity between sensors, C2 nodes, and shooters is required to produce a Common Operational Picture – COP, among all joint C2 nodes and provide relevant shared information. The strength and basis for successful use of information technology lies in its integration. It includes the means to collect, process,

store, distribute, and display information *horizontally and vertically* throughout organizational structures across the battlespace.

During execution each functional area continuously monitors changes to the plan. This information provides a comprehensive picture of current and projected capability. This information needs to be tailored to meet the needs of the decision makers. In addition to speeding up the decision making process, this "quick look" picture facilitates proactive command of air operations. Developing this level of situational awareness should not inundate decision makers, but rather give them information needed to command/control the fight, and answer the AOC question, "what's the enemy doing and what options/capability do we have at this point?" Collaboration among AOC functions and between the AOC and external agencies is essential for proactive execution, and enables combat operations to best assess and deal with dynamic situations.

NACCS in support to decision making process

Dynamic decision making is the most challenging process in the AOC. During the normal course of execution, events follow the "plan". When a dynamic event occurs, this cycle becomes time-compressed.
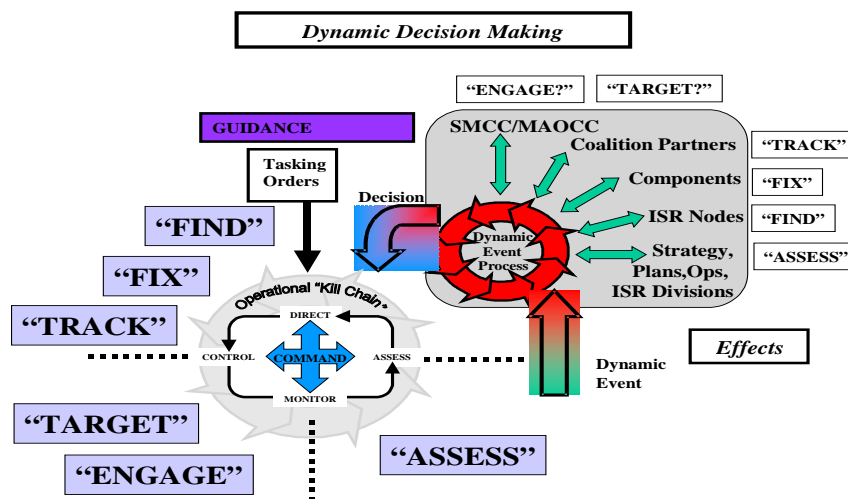
Theater and national assets/resources detect objectives of potential significance

These systems identify and determine the location of a target (fix). From the location tracking systems acquire and monitor the object (track). Dynamic decision-making then directs resources (target), and applies capabilities (engage) in a timely and decisive manner. To assure the desired effect, an assessment (assess) occurs during or after engagement to determine whether the target should be reattached.

THE STAGE OF IMPLEMENTATION OF NATIONAL AIR COMMAND AND CONTROL SYSTEM

Interoperability requirements for the NACCS

Romania Air Force has to participate during the peace time, crisis situation and war to the air defence integrate operation under NATO Integrated Air Defence System (NATINADS) command for maintaining the control of national air space as a part of NATO air space.

Also, RoAF has to assure deployable units in theatre under NATO command by achieving the responsibilities for logistic sustain of owner forces. In consequence, National Air Command and Control System is compulsory according to role and mission of air forces at national level and NATO level.

For the joint air operation, National Air Command and Control System has to permit integration of surveillance, air defence Land Forces and Naval Forces elements.

There are numerous potential scenarios where Romanian forces would combine with other multinational forces to form a single operating center such as an AOC. There must be doctrine, procedures, and policies established along with equipment interoperability to ensure seamless command, control and communications among the allied force. Within the AOC, this requires complete interoperability horizontally and vertically throughout the entire organization. The ideal environment of a multinational AOC has recently been defined using the analogy of an "open floor" where the operating center is an open environment with seamless communication architectures and the automatic, uninterrupted flow of information between the coalition partners.

It is widely recognized there is no single solution that will solve all the challenges of interoperability. Instead, it is more likely that several methods will need to be employed by all those involved in providing, managing, and disseminating information. Numerous aspects of multination C4I must be improved or developed to include such things as manageable security policies, integrated technologies, common operational concepts, common infrastructure, common system interfaces, "plug and fight" systems, and interoperability compliance standards.

Although these technologies will go a long way in supporting information sharing in an ad hoc arrangement, we must pay equal attention to interoperability with our NATO allies. We must ensure that our systems, procedures, and policies are fully integrated with our alliance partners. One proposal for these environments is for information sharing to occur at the highest operational level possible. Once information is shared at this level in a controlled environment, it can then be disseminated downward, laterally, and back up the chain within each countries unique information and communication system. This proposal recommends a single-point interface as the focal point for combined force interoperability and connectivity. As is the case for the Combined Air Operations Center (CAOC) supporting Operation Allied Force, the AOC is directly support by different National Intelligence Cells (NICs). Each national cell receives, sanitizes and subsequently shares its national intelligence information directly to the "open floor" of the CAOC. Once on the floor of the CAOC information is then releasable to all participating nationalities.

Limitation of the system

The limitations of the system are emphasized as being:
- Difficulties in providing recognized air picture for 3000 m below;
- Scarcity early air warning;
- Scarcity continuity conduct;
- Reduce low level echelon C2 interoperability;
- Technical difference between neighbours countries.

For those reasons mentioned above, RoAF start to upgrade the command and control system.

National Air Command and Control System assure:
- Commanding by CAOC/NATO through CRC control and reporting centre of all forces and assets which air doing Air Policing service during the peace time, crises and war;
- Planning and centralized conducting of air space missions;
- Control of air missions;
- Decentralized execution for specific air space missions of the fighter units;
- Cooperation with neighbour CRC ;
- Flexibility of elements components according to mission;
- CRC/SAM interface – CSI;
- Interface with naval assets – SSSB;
- NAEW interface through Link 16;

- Viability;
- Equilibrium between centralized and decentralized actions.

In fact, National Air Command and Control System consists of extension of actual programs as Integrate Command and Control ICC, Automated Meteorological Information System, Flight Data exchange system.

NACCS capabilities

The final configuration of National Air Command and Control System will perform the follow functions:

- Recognised Air Picture – RAP dissemination to higher echelons, other NATO C2A structures and National Air Defence Authorities;
- Surveillance and reconnaissance (SR)- the capabilities to produce and distribute recognized air picture to users, management of sensors and exchanging information with others national system;
- Management of forces- planning and disseminate the missions, coordination of resources at operational and tactical level;
- Air mission control at tactical level;
- Air space management- planning and control the national air space;
- Air traffic control- aeronautical information services, search and rescue;
- Command and control resources management.

The actual command and control system of Romania Air Force is composing by:
- Air Operation Centre ;
- Operation Centre of air bases and surface air missiles;
- Fusion post sensors;
- Operation centre of electronic warfare unit.

Interoperability (Capabilities Required). Planning for interoperability will ultimately require multiple sources to plug into the command and control structure and for the command and control structure to mesh together with that of the other parties. Some planning considerations are as follows:

- Identify data and data fusion requirements (data, voice, video, computer network support, and anti-jam requirements
- Identify intelligence interfaces, communications, and data base support pertaining to target and mission planning activities, threat data, etc.
- Describe considerations for Joint / multinational use;
- Identify procedural and technical interfaces and communication protocols;
- Address information assurance requirements

POST WARRANTY LOGISTIC INTEGRATED SUPPORT FOR NACCS AND ADJACENT PROGRAMMES

Current action in Air Force

Currently, in order to enable the Air Force to play its role and prove its competencies, an extensive complex and integrated reform process has been initiated as part of the Armed Forces reform covering all fields of activity. This process has been based on the Air Force assessment from the perspective of its future role, effectiveness and interoperability requirements, as well as efficiency and capability criteria, closely connected to the resources available. The assessment has enabled the identification of restructuring and modernization courses of action, the realistic distribution of resources and appropriate corrections during the process of reform. Ways ahead for ongoing and near future acquisition programs aim at completing or improving the operational capabilities in areas such as: air surveillance, ground-based air defense, tactical airlift, support capabilities and infrastructure.

All these programmes are closely connected to the Air Force goals and tasks within the transformation process undertaken by the Alliance to improve interoperability with forces from allied nations. Programmes are also prioritized by end-of-life cycles for various equipment categories.

Acquisition plans that encompass the air surveillance are correlated with air command and control system and aim at providing continuous contribution to *NATINADS*.

Future plans to increase the NACCS capabilities

At present, upgrading programmes are in progress for FPS-117 radars and the National Air Command and Control System. Near future plans include acquisition of low and medium-altitude surveillance radars.

Air defense capabilities will be significantly improved once the acquisition programmes of multirol aircraft, high-range surface-to-air missile *(HSAM)* and *SHORAD/VSHORAD* systems are finalised. Moreover, an upgrading programme of the existing *HAWK* missile systems has been initiated.

The multirol aircraft programme is vital for the Romanian Air Force. It is the one that will change our entire *"philosophy"*, will definitely release us from our *"Eastern inheritance"* and will launch the Romanian Air Force on new evolution coordinates, totally different from the past. This step is planned as a long-term strategy, up to the horizon of 2040-2050. Purchasing solutions have to be redesigned according to the new time horizon, taking firstly into account the required national defence capabilities. The crucial factors for decision-making will be: the gradual approach (with an interim solution for 2012-2025), capabilities, efficiency, benefit-cost ratio and the financial sustainability of the programme for which we have the full support of the leadership of the Ministry of National Defence and the General Staff.

The effort to improve the tactical airlift capability, both fixed-, and rotary-wing, will become visible once the *C-27J SPARTAN* aircraft acquisition and the *IAR-330* helicopters upgrading are completed. Both the air and the ground crews have started the training programme in order to be certified and able to use the airplane.

This aircraft, together with *C-130* and *C-17*, commonly tasked within the *SAC (Strategic Airlift Capability)* program, will provide Romania with modern airlift capability, sufficient for the operational requirements of the Armed Forces.

Operating and maintenance of NACCS

Last but not least, in order to provide adequate operating and maintenance conditions for all of these systems, plans have been developed to achieve appropriate support capabilities and infrastructure. We take into consideration the establishment of a Logistic Base at the Air Force level. An important component aims at increasing personnel and equipment safety by implementing NATO standards of fire fighting measures and storage areas protection. These are to be achieved by both national and NATO/NSIP funds for the airbases where the multirol aircraft will be bedded down.

As a conclusion, in its almost ten decades of activity, the Romanian Air Force has been undergoing essential and inherent changes, which will create the conditions to turn the existing forces into more flexible and agile ones, able to face the challenging security environment.

IMPLICATION OF IMPLEMENTING NATIONAL AIR COMMAND AND CONTROL SYSTEM INTO THE PROCESS OF TRANSFORMATION AND MODERNIZATION OF ROMANIA AIR SECURITY

NACCS in transition to ACCS

Romania as NATO member and EU has to consolidate the response capabilities against new threats addressed to security of all membership and to reshape the air forces which offer

more flexibility in achieving new types of operations deployed at long distance during the peace time, crisis or war according to regional and global environment.

The concept of integrated Air Defence of Romania present solutions for efficiency of the efforts of defending Romania in unitary way, focused on structural organizational measures for developing modular entities and complementary specialized forces integrated in National Air Command and Control System.

National Air Command and Control System has to include all air surveillance identification and control subsystems from all categories, to beneficiate the real, opportune, data regarding to dynamic air situation.

Such kind of system has to respect strictly the weapons rules of engagement fact what eliminate the fratricide.

The dynamic collective security at NATO level imposes for Romania responsibilities and actions to NATO Integrated Air Defence System - NATINADS.

I consider the problematic of air security as a component of national security in consensus with predicted evolution of regional and global security environment, as well as the pregnant role of air forces on the modern battle air space or field is a desiderate to revaluate the long term objective, strategies, concepts, programs for adapting to new conditions of XXI century.

National Air Command and Control System is designed to meet national requirements and in the same time facilitate the transition to NATO Air Command and Control System – ACCS.

NACCS architecture, capabilities and infrastructure will facilitate an easier connection of ACCS entities.

ACCS capabilities

ACCS will provide the Bi-SC Commanders with a capability to exercise Command and Control over their assigned forces
- ✓ Defensive, Offensive and Air Support Operations

Missions that can be supported include:
- ✓ Air Defence - cooperation with Naval & Land forces;
- ✓ Offensive Air Operations;
- ✓ Tactical Support to Maritime Operation (TASMO);
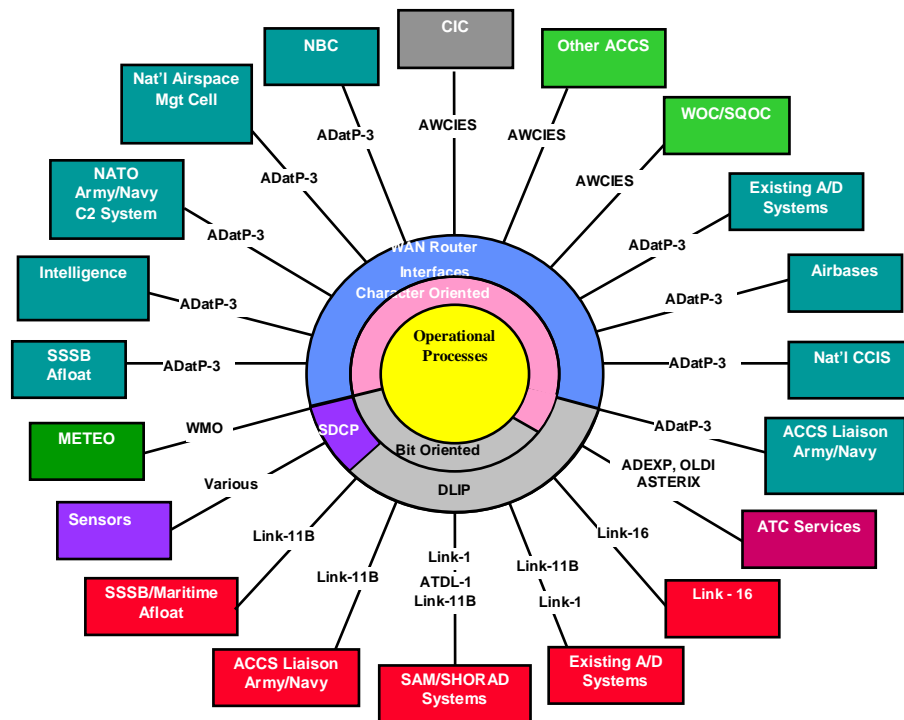- ✓ Naval contribution to air campaign;
- ✓ Air surveillance and RAP distribution for CJTF Operations;
- ✓ TBMD - Active, passive, counterforce;
- ✓ Combat Search and Rescue (CSAR).

ACCS interfaces

The diagram shows a central radial structure with concentric circles labeled "WAN Router Interfaces Character Oriented", "Operational Processes", "Bit Oriented", "DLIP", and "SDCP", connected to surrounding boxes:

- NBC — ADatP-3
- CIC — AWCIES
- Other ACCS — AWCIES
- Nat'l Airspace Mgt Cell — ADatP-3
- WOC/SQOC — AWCIES
- NATO Army/Navy C2 System — ADatP-3
- Existing A/D Systems — ADatP-3
- Intelligence — ADatP-3
- Airbases — ADatP-3
- SSSB Afloat — ADatP-3
- Nat'l CCIS — ADatP-3
- METEO — WMO
- ACCS Liaison Army/Navy — ADatP-3
- Sensors — Various
- ATC Services — ADEXP, OLDI ASTERIX
- SSSB/Maritime Afloat — Link-11B
- Link - 16 — Link-16
- ACCS Liaison Army/Navy — Link-11B
- Existing A/D Systems — Link-11B, Link-1
- SAM/SHORAD Systems — Link-1, ATDL-1, Link-11B

CONCLUSIONS

The vertical component of the war as a predominant factor is expressed by two separate systems respectively air and anti air component which means operational planning to annihilate those systems of enemy, in joint integrated actions using all specialized forces.

The quantitative and qualitative anti aircraft assets are not limited by the international treat and are exclusive determinate by financial, technological resources and have to be in accordance with the level of air threat and engagement in alliance.

As a consequence, is necessary for Air Force to have active elements as integrated air base and surface air missiles unit.

The process for organizing air riposte system take into consideration the main guidance:

- Structure of Air Force has to be consider on real needs of Air Defence not on existing resources;
- Allocation of financial resources as much as possible to keep a professional military level ;
- Systematic modernization of military assets to fulfil finally a complex integrate system of armaments or aircrafts;

After the analysis of air security system and corroborate with implementation impact of National Air Command and Control System are drawing some arguments for assuring a maximum efficiency of future air security which impose for Romania:

- Analyze permanent the security environment to come away with appropriate conclusions and prognosis the transformation directions for the short and long term;
- Augmentation of budget sustainability of air forces components;
- Convince the politico-military decision makers that the missions impose structural organizational;
- Regular re-evaluation of existing concepts, plans, programs to diminish the unsatisfactory results or efficiency;

- Reconsider the Research and Developing in the sphere of military assets especially for air force;
- Dynamic correlation between objectives and resources in accordance with plans and programs which are going on;
- Optimize the national infrastructure with specific elements from air force by deploying force, assets, services facilities;
- Increase the navigation air safety;
- Adapt the legislation regarding air force in accordance to NATO and EU regulations and missions.

In my opinion, the Air Forces will continue to play an important role in managing the crises at any level of the conflict through gaining temporary air superiority and control over the airspace of strategic interest, causing significant damages to key elements of the enemy military potential and combat zone, and providing the proper condition for the other military services to be able to accomplish their missions.

The various possibilities of employing air assets allow for the national or multinational military leadership to deter and prevent aggression, to properly adjust the scope and intensity of the air operations conducted so as to solve crisis and conflict according to the political requirements.

Air superiority, precision engagement, information superiority, effects based operations and mobility are critical elements of the strategic perspective on the Air Force employment in any type of armed conflict, whether it is traditional, asymmetric or irregular.

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THE EDUCATIONAL MANAGEMENT IN THE MILITARY TRAINING

Captain Commander PhD Marius-Adrian NICOARĂ

Education is as old as the human being is. The historical analysis of a array of facts dealing with the process of building up a human being in various time and place related conditions, has allowed the possibility of seizing upon the essential and necessary relationships between different aspects of the educational phenomenon.

The social responsibility belonging to instructors, military instructors in our case , is to accomplish the established goals, to provide the armed forces skilled military personnel according to the national curriculum , as the objectives to be achieved are key points in the process of military educational system transformation.

Having in mind the major implications pertaining to the concept of military training management one can remark that on this particular subject little has been published. Undeniably, the theoretical aspects included in this papers do not have entirely novelty written all over them, but the way in which these considerations are quantified and applied by means of the author's perspective of the issue being dealt with, constitutes a new approach on the military educational management , especially when it comes to training schools. of each armed force.

This paper discloses the actuality and acuity of the issue related to the military training management for the current military theory and practice in the national context of educational reform.

The authors intention was to elucidate a problem less dealt with in textbooks related to the modern applied military training.

Military training has as a general goal the accomplishment, together with other military activities, of the operational capacity needed by the armed forces to perform in national and international missions. *Force training* has four basic components, the military learning process, the instruction process, the drilling and the exercises, and the general objective is to reach the a level of capability required for operating on the surface or air, using efficiently the resources available.

The adherence to the North Atlantic Organization is a call to arms especially for the Romanian military educational system which has to improve the training logistic and its infrastructure as well as to support a continuous process of documentation .The educational curricula and instruction plans have been given a new architecture according to western philosophy of training , reaching details as time management or elements of long life learning.

The work load is immense but the ground is settled. The training management has to be position in the right spot as part of the perfect scenario designed for teaching –learning process. It is the establishment of a definite future for the training of Romanian military personnel and right form the start it is a must to have the training bases well and accurately underlain.

THE EDUCATIONAL MANAGEMENT RELATED ACTIVITY IN THE PROCESS OF MILITARY TRAINING.

Theoretical traits.

The goals accomplishment for an educational system (in the case of an institutionalized system) is provided by schools of different types, levels or profiles employing dynamic and

complex activities also known as the training process. This process is a set of organized and managed activities which take place in several stages, in specialized institutions, under the supervision of qualified and certified personnel for the achievement of some training objectives.

In the training process the following types of activities may occur:

a)   managerial activities.

b)   teaching, learning, assessment activities.

c)   economical and financial activities

d)   administrative activities

e)   outside the classroom/school activities.

Each of these activities has a certain specificity according to its nature, type of school and educational level. Some are brought under regulation while others are subject to pedagogical norms. In the works of the researchers who explored the field of educational management there are mentioned more management strategies and managerial styles and are provided certain methods of analysis. Hence, it is good to know that the educational management is a complex and dynamic activity which managers have the obligation to master and perfect.

The training activity which has the greatest frequency is the teaching, learning, assessment one because it constitutes the essence o f the training process. The teaching-learning-assessment activity, although it has three constituents it is perceived as a hole didactic process, because the elements interact during the common activities performed by teachers and students, and the final results are in fact a resultant of the three .

Drilling has as a general goal the making up, the development and the conservation of individual and collective skills, skills military personnel need to accomplish missions in peace time, war time or crisis situations. Drilling has an essential role in establishing the operational capacity required for mission accomplishment as part of the North Atlantic Organization or not.. During peace time, it includes the totality of performed actions, the purpose of which being the making up the development and the conservation of individual and collective skills required for mission accomplishment.

It should not be overlooked the fact that , from the perspective of an efficient training management the form taken by the training and drilling process is a subsystem which influences and is influenced by all the others educational subsystems which concur towards an efficient didactic process: curriculum related elements- curriculum , syllabus , textbooks- in other words the objectives, contents, resources, teaching strategies and styles meant to lead towards adequate methodologies needed for objective accomplishment , assessment and feed-back.

If not long ago the main activity was the attribute of the school, mass education, in which all students had to execute simultaneously, in an medium level imposed rhythm, the training tasks, nowadays, when all efforts are focusing on modern didactic technologies, the augmentation of the student participation/involvement, the conformation to a self-paced learning rhythm and to particular interests the student shows in that field , require a reassessment of group/microgrup , individual/differential activities, having as a main purpose competence and professionalism , elite propagation and fosterage. This may be considered as being a paradox, if one takes into account one of the fundamental objectives of the military educational system, which regards the socialization of the future officers, NCOs and warrant officers.

Modern society- implicitly the armed forces- is interested more and more in making up professionals/ elites starting from the solution to the problems related to long life learning: from skills and abilities development in a tutorial system, to the established ones, individual study , as accomplishment and continuous updating of the instrumental basis which is acquired in military schools.

Terminology: the pedagogical educational management and the management of the institution

When studying the organizations, including school organization, one of the most important aspects was the efficient management. Starting from antiquity until the beginning of the 20th century, the term 'to conduct' was used.

To conduct represents 'a dynamic process consisting in organising and coordinating, in a certain period of time and within a specific organizational context, in order to accomplish specific tasks or objectives.'

The authors of the 'management' concept are F. Taylor, *'The Principles of Scientific Management' (*1911), and H. Fayol, *'Industrial and General Administration. Forecasting, Organizing, Commanding, coordinating and controlling'* (1916). Both of them defined the management specific features and functional content, the economical development criteria and the efficiency of management. Firstly, the management concept was used in the anglo-saxon countries and, after that, it became notorious all over the world. Ethimologically, it comes from the latin word *'manus'* (hand) and it means *'handling'*, *'leading'*, and the person who performs both the handling the *'handling'/'leading'* is the manager. From the Latin word *'manus'*, the word *'mannegio'* (work done by hand) was formed in Italian, and via the French word *'manege'*, it was assimilated into Romanian, denoting 'the place where horses are trained'.

In English, the French word became the verb *'to manage'*, meaning to administer, to lead. By suffixation, the English formed the words *'manager'* and *'management'*, representing *'leader'* and *'leadership'*.

In common language, *'management'* is used to refer to the running of an enterprise, institution, field of an organized activity. Other fields (economical, industrial, military etc.) have reached high development standards, both theoretically and practically, whereas education is still in the incipient phase. There are a series of concepts in use: educational management, school management, classroom management, university management.

In order to define the educational management, a selection of the definitions was necessary:

a. The educational management is a 'complex process of leading the educational activity within the educational system, at hollistic or structural level… and it consists in leading the educational activity, be it informal or non-formal';

b. The educational management is represented by 'the study of the processes and relations manifested within the educational institutions during the educational process, in order to discover its governing rules and, consequently, draw up leading methods and techniques, whose task is to ensure the growth of the process efficiency'.

By management relations one may understand the interactions between the elements of a system and the elements of other systems during planning, organizing, coordinating, motivating, training and assessing the educational institution.

a. the educational management 'refers to the leading of the conception, accomplishment and assessment of the entire educational activity.'

b. The educational management may be considered 'the science and art of training human resources, of forming characters, in accordance with certain objectives accepted by the individual and the society (or by a certain group). It comprises a sum of skills and functions, leading rules and methods, which enhance the accomplishment of the educational system objectives (wholly and structurally considered), at high quality and efficiency standards'. We may notice that education is analyzed on a broad scale, including all the elements of the continuous education system, that society has at a certain moment (different types of schools, cultural institutions, mass-media etc.)

c. The educational management regards 'the theory and the practice of the general management, as applied to the educational process and system, to school organizations and to groups of students'. Depending on the above-mentioned definition, the educational management is used for three levels of analysis:

-        the management of the educational system and process, on three categories: European, national, local.

-        the management of the school organizations, concerning the analysis of the institutionla structures and their coordination by top-level education managers, from the minister to the school principle.

The structures analyzed by the management of the school organizations refers not only to schools but also to associated or complementary school structures (unions, different committees of teachers or of students and parents, relationships with other educational structures): classroom management analyzes the way in which lessons and student groups are organized by the education operational managers (teachers).

d.   The pedagogical education management represents 'on one hand a global -proper – strategical method of approaching the educational activity.

As a consequence, the educational management should be considered rather art than science, because it is not only something offered to people (as external beneficiary of this process) but it also shapes their personality, encouraging a change of their psychological and intellectual self.

Educational management operates at different levels: the macro level, overall management of a country's education system, intermediary – management of an educational institution – and micro level – classroom management.

The military education management is based on the regulations established by the National Defence Ministry in accordance with the Education and Research Ministry, which no managercan disobey. Thus, new compulsory objectives and restrictions must be taken into account.

In the military system, there appeared structures to coordinate the activities within the military institutions. That is a brand new concept and it requires efficient communication with the managers and the teachers belonging to the civilian educational system.

Education culture in military training institutions

The organizations have certain cultures "just as people have their personality." Culture is the core of all organizational networks. It influences and it is influenced by strategy, structure, systems, personnel and skills. It is the identifier of an organization.

All organizations have their own individualized culture. Organizational culture includes its collection of almost instinctive belief and organic reactions, of heroes and negative characters, of achievements, prohibitions and commandments. Some of these, like people neurosis, are so deeply rooted that their origin is lost in the mists of past events, while others have real visible cases.

The important aspect about the culture of an organization is that people can better familiarize themselves with the organization or even to anticipate the behavior and if they try to understand the "chemistry" of its composition. Each organization is "impregnated with the values behind technical rules, producing a distinct identity of each organization." This culture is an attempt to enter the living, meaning, atmosphere, character or image of an organization shows S. Selznick.

Applying the concept of culture in organizations, we refer to ideas, beliefs, traditions and values, which find their expression, for example, in the dominant management style, how their members are motivated in the public image, etc.. They differ in terms of atmosphere, the way people work, at the energy level, the individual horizon - all being influenced by history and traditions, current situation, technology, etc..

There are different approaches to organizational culture; it formed numerous definitions of organizational culture period, each highlighting some of its components. Thus, organizational culture means: symbols, ceremonies and myths that express specific values and beliefs of organization members (Anchor), "shared beliefs of an organization managers about how they organize their business together with their employees (Lorek);" traditions and beliefs of an organization which it distinguishes from other organizations and which instills safety and durability in an organization "(Mintzberg)," what people think about what it deserves to be done and what not "(K . Putterson), "intimate expression of human necessity, an expression of equipping their experience of life with meaning" (Joan Martin); "model beliefs and expectations

shared by members of an organization to produce a set of rules that describes the conduct of an organization members and of the group "(Schwartz Davies).

Organizational culture is seen as an expression of norms and values that it represents the "pattern" of values and norms that distinguishes one from another, tracking what is important for that organization. As M. Vlăsceanu shows that organizational culture identifies the rules or system of beliefs of the organization members.

Models, patterns are reflected in the knowledge system of ideological values, the rules (laws) and the daily ritual in society.

Don Hellriegel, John W. Slocum Jr. and Richard W. Woodman in "Organization Behavior" published in 1992 in Los Angeles, examine the characteristics and dynamics of an organizational culture. According to these authors organizational culture is a complex pattern of belief and shared aspirations of its members. More specifically, organizational culture is defined as a philosophy, ideology, values, beliefs, responsibilities, expectations, attitudes and norms (accepted shared).

Organizational culture includes, according to these authors, the following components:

- Regular behavior actions that appear in the interaction between people, such as organizational rituals and ceremonies and frequently used languages;

- Rules that are shared / accepted by the working groups from all over the organization as "a good salary for a day of good work;

- Dominant values imposed in an organization, such as "product quality";

- Philosophy that guides organizational policy on employees and customers;

- Rules for integration organization that a newcomer has to learn to become an accepted member;

- Feeling or climate that transpires in an organization by physical appearance and the way he interacts with his 'customers' or other outsiders.

None of these components, taken individually, represents the culture of the organization. However, taken together, they reflect and give a meaning to the concept of organizational culture.

Organizational culture exists on some levels. External level of the culture consists of symbols. Cultural symbols or words (jargon and dialect), gestures, figures and other individuals have a particular meaning in a culture.

At the next level there are cultural heroes, people (alive or dead - real or imaginary) that have characteristics more appreciated and so they serve as models for culture. Organizational rituals and ceremonies are planned and organized rituals activities that have important cultural meanings.

Finally, the deepest level, or the "heart" of the culture are cultural values. These accepted/ shared values and beliefs are collective responsibility and feelings according to which things are good, normal, rational, and valuable and so on.

James M. Higgins, in his book "The Management Challenge", published in Toronto, said the components of organizational culture are:

- Myths and faith;
- Symbols, ceremonies and rituals;
- The system of metaphors and specific language;
- Infallible system of values and norms guiding their behavior.

Knowledge of organizational culture is necessary and useful, as it is probably the single most useful long term element prediction of an organization. It can be difficult for someone both inside and outside, to enter the culture of the organization, which it is often considered as a universe of beliefs, values and concepts offered once for all and it is rarely stated under questioning, more of those who have limited experience on other organizations or cultures. However, such an understanding of collective behavior is essential in situations where the organization needs to adapt to changing conditions, including the aspirations and expectations of its members.

MILITARY TRAINING MANAGEMENT

Methods, techniques, instruments and procedures related to military training management.

The systemic approach is important not only to the holistic accomplishment but also to the readjustment of the educational management in order to fulfil the objectives of educational structures.

Within educational management, the training management, using specific and particular training and educational methods, brings effects in military training institutions. It contributes to the graduates' professional and social integration in accordance with the individual capacities and social needs in the army.

Practically, there are five qualities, important to nowadays society which are to be achieved by militaries: be a good citizen, leader, educator, combatant and expert.

The Application Schools and training units play a major role in achieving specialization and being combatant as qualities for the military personnel. Military Training Management aims the accomplishment of the above mentioned qualities, the training standards of the NATO army and its readjustment in order to help military personnel with their professional reorientation.

The doctrine accepts a variety of definitions for an effective management: a set of theoretical knowledge, concepts, principles, methods and techniques within an organization, relevant in decision-making process.

Military management is a branch, structured in response to Henry Fayol's principles, as follows: authority, monitoring, task delegation, clarity of organization's objectives and goals, correlation between objectives and existing or possible resources, effective planning of activities, correlation between individual and organizational interests, a proper informational system.

Within this framework, the Military Educational Management appears as a sub-branch of the military management. It has two major directions: military training management and military learning management in which pedagogy meets management. Their objectives are:

- designing the purpose of military education
- planning the educational process
- organizing the learning and training activity
- optimizing the structures which are in charge of military training
- leading, controlling and guiding the activities within the military educational system.
- assessing graduates' and educational institutions' performance
- motivating teachers, trainers and students
- providing the necessary educational climate

Consequently, military training management has as its primary goal the continuous development, specialization and improvement of military personnel and, moreover , of the professional military personnel.

It's highly important to mention within this context that running a military training school is influenced by the general objectives clearly established, by time, by how complex these objectives are and by the individual's or group's expectations. The interest in the existing context, the indulgence to ambiguity and professional experience of the training personnel are also decisive in running a military school.

The specific of military training is given by Romanian educational system, influenced by European Bolognese Educational System and by continuous individual and group training at work, included in job description file which includes both rights and obligations.

Therefore, the training management is developed within two types of social organizations, educational institutions and military units. The above mentioned institutions form an educational organization which may request cooperation with other educational institutions.

Taking Fayol's management theory as starting point and continuing with our educational experience, we have identified the following qualities that the training manager must have :

- intelligence over the average;

- initiative;
- self-confidence;
- open-minded, analytical;
- good leadership skills;
- good team worker;
- risk taking ;
- responsible.

On the other hand, Mintzberg's pattern of educational manager should be taken into consideration. According to him, the educational manager plays three roles: interpersonal (as representative having professional authority; leader and interface with other institutions); informative (provides and bears information; spokesman) and decisive (initiates activities, mediates conflicts, gathers resources and negotiates). Hence, after all the above classifications, it might be quite interesting to point out what a military training manager should do.

1-reprojecting the content of learning, unilateral, proficient

2-introducing the educational technologies on staff categories and training sequences as interactive technologies, virtual, practical of specific technique.

3-improving the assessment systems through optimizing and checking the theory into practical applications.

4-readjusting permanently the educational logistics, methods, techniques, instruments and procedures of military training/learning management

We define as management methods the set of principles, rules, techniques and procedures, instruments that show the way in which the functions of management are being performed reassuring the practical handling of the problems that appear from these functions in order to establish and accomplish the system's objectives.

The management method of military training is the way of action of the military learning system as a ruler/leader of the leaded system, based on rules and accompanied by techniques through which we aim to improve the learning process within the learning systems and military training.

The management technique comprises the specific rules' assembly, procedures and instruments through which the problems that appear within the process of management are being solved.

The management techniques of the military training appeared for the sake of improving the decisions and refer to the development of the training process efficiency.

With their help the education manager does his job within the learning/training system or subsystem (operational research, mathematical programming, shaping techniques, a.s.o.)

The manager's instruments are means that help intrinsically to put into practice a certain technique, a procedure or a method.

The instruments of the military training manager designates the mean that the military manager uses in order to accomplish his duties and we include here the methodological and technological means based on information, necessary for conceiving, developing and improving the management process or of some structural parts of it.

Within the military training management the most efficient tools are the specific documents, approval, decision, order, notification, leading, consideration, assessment, sanction, direction, plan, syllabus, income and cost budget, balance, report of activities, self-assessment, and the report that offers a realistic view of the institutional state and helps to correct the non functional or defective elements.

The use of the specific military terms such as techniques, tactics, procedures have produced educational fundamentals in our Armed Forces.

Therefore the approach of the term procedure within the military learning system may restrict the concept of effective military procedure.

The managerial procedure of the military training represents a rule/prescription with respect to the order of the gradual operations of approaching the processes and phenomena in the formal establishment of the data and activities.

The content of the learning/training management is a set of combined and precise actions, solutions for the favorable or unfavorable circumstances of the activities that the manager conceives.

Therefore we go back to the methods of the military educational manager. The methods of the military training management are different in terms of their content, implementation, practice, aim. With the help of these methods the military educational manager accomplishes/achieves the management process by transforming the information into action with the help of decision by harmonizing the resources with the requirements and searches for best results.

I consider that the most useful methods for the military training manager may be as follows:

- active/efficient-participatory and 'through objectives'

For the educational manager the most common methods are as follows:

-management through objectives

-management through delegation

-management through cooperation and collaboration/contribution

-management through meeting/briefings

-progressive/gradual group discussions

-case study method

-role play method

The first two methods represent the analyses for the present study.

Management through motivation represents the method that is able to direct the military training management into the future/in the years to follow since today is more and more used.

This method represents an action over the subordinates so that we can put into motion the positive interpersonal relationships that prove themselves exciting in obtaining the results projected through social command.

That is why the professional motivation takes into account the perspective of discovering, of having a diverse activity. Therefore the manager must know the main categories of motivation and incentives that can be provided so that they could be used for an efficient activity.

Management through objectives is the method that can be applied at any managerial level, extremely relevant in the military educational management for the reason that it is planned hierarchically, based on achievable objectives on which attributions are being performed; powers are being performed by the leading system over the leaded system. Taking into account the following steps:

- establishing the fundamental(main) objective
- establishing the derived (specific) objective
- constructing the management elements through objectives
- controlling the accomplishments of the objectives
- assessing the accomplishment of the objectives

The issue that makes him extremely efficient in the military training field is precisely the strict identification of the objectives to the level of their execution/enforcement(teachers and military trainers/instructors) who participate directly to their establishment and strictly correlates these pre established objectives with the training/learning content. Moreover, the fundamental objective of the training comprises synthetically the theoretical and programmatic values of each category of graduate status expressed by the attainment of the five skills that are to be accomplished by the military personnel. It is also important that this method refers to the materialization of the fundamental objective in specific ones. The skills/competences are being elaborated and the skills into conducts easily observable and measurable into actions, movements, skills and abilities that can ensure the concreteness of the learning process(learning and training)

This method creates the necessary tool for the educational process through normative documents starting from the ministry level up to the syllabus on disciplines of study and even to the class projects, assuring that budget, logistics, technologies, a.s.o. are taken into account.

The management through objectives brings a solution for the educational management not only for the control problem, because the military training managers hold information on account of the detailed information,   periodical/seasonal or final, but also for the assessment one throughout the training process in order to adjust the learning/training activity.

Specific elements of the informational system as part of the military training management

The informational system used for the management of the education has its own specific elements. the information necessary for the educational and training process is used especially for the assessment. The latter influences and encourages feed-back and its correction. For this, an organized sector is necessary, which must have direct activity. The informational system of the military education management is the sum of data, information, transmission ways and methods for the collection, processing and preservation of the information needed to properly perform the education and training process within the training institution to meet their educational objectives. The structure of the informational system is determined by the organizational structure of the training institutions.

The elements of the informational system are, mainly, the data and the information. The data are the basic element of each informational system and, as a rule, some of its characteristics are measured: structure, age, academic record, documents that rule the educational process, virtual libraries etc. The information represents the basis for the data or for the amount of data that provide new knowledge to the interested ones. The features of useful information are: true, valid, up-to-date, meaningful, accurate, precise, useful, checked, complete.

The information specific to the military education management can be: depending on the way of transmitting it: oral, written, audio-video, depending on the direction of its transmission: ascending, descending, horizontal depending on the source: external, internal depending on the efficiency: imperative, non-imperative depending on the processing: primary, intermediate, final depending on the way of organizing their collection and processing: technical, for financial records, statistic ,depending on the destination: external, internal depending on the role inside the organization: entry, static, cooperation, execution, sortie depending on the usefulness regarding the managerial functions. The informational flow is given by the information trajectory, within the military institution, in this case. This flow can be open or close.

In the educational field, informational data bases follow the same steps collection – recording – transmission – perseverance. Data collection can be done by direct observance (memorizing, writing down, reliable support, electronic devices). Transmission is performed using different ways, oral communication, radio, television, internet etc. the informational flow is determined by the quantity of information that is transmitted at a certain moment, between the sender and the receiver and is characterized by: volume, content, frequency, shape.

A classification of the informational flow can be done taking into consideration the frequency (permanent, temporary, occasional) or the direction of the flow (ascending, descending, horizontal). The informational network is the totality of the elements of an institution, that exchange information, Within the military training, the informational network may be centralized or de-centralized. The functions of the informational flow are: collecting, conversing, transmitting, memorizing, presenting, decision-making, operational, documentative. In fact, a single function provides a data base with information for the educational management system, for the managers that have different roles, which they use to carry out their tasks. The steps to be followed when building an informational system for the educational process, are: opportunity study, logical design, physical design, building, testing and implementing, exploiting. It is worth mentioning that, within the informational system for military education, there are specific elements, like: the payment plan, dynamics, roll, the required number of

graduates, logistics, necessary and available financial resources, resource concerns, the curriculum, the syllabus, organizing (daily, monthly, trimestrial, semestrial), the academic record of the students, the teachers'/military instructors' training). That is why the system is perfectible, offering support for the analyses of development, logistics, human resource evidence, relationships with other military and civil institutions.

The leadership within the educational process at strategic level, is the attribute of the chiefs of education and training sections, at tactical level, of the chiefs of departments, at tactical level, and, at operational level, of the teachers or instructors and of the student group leaders. The informational system enhances the command level with information about control and about command operability. On the whole, the informational system is a part of the organizational sub-system of the management structure. The educational management process uses the information and the informational flow, supporting the manager during the decision-making process, decision that must be accurate and close to reality.

The military educational system covers two of the basic elements of the military activity: education and training. This is especially the role of the educational institutions, which, more or less directly or explicitly, have pedagogical functions, like the activation and modeling of the training process, the development and qualification of the personality. This system necessitates the possible institutional interventions by individual, moral, technological, esthetical methods during the formal – non-formal – informal education, activated intentionally by specific and complementary actions or influences. The training schools must coordinate and assimilate the pedagogical actions and influences designed and performed at institutional level. A special aspect is the fact that the non-formal training is complementary as compared to this type of institutions and even the emphasis on certain educational means, that make use of different means of communication (family, mass-media, non-governmental organizations).

The military training process also represents the level of involvement at pedagogical and juridical level because it is organized for the personnel of a public service, open, perfectible, or, better, self-perfectible. The functional and the structural aspect is important, too, because it determines the general and particular directions, concerning the structure, content and materiel features of the teaching and assessment activities, established and carried out at educational level.

The structural and functional characteristics of the educational system sets the values of an efficient teaching activity, designed and accomplished during the educational process. As a system, the education has methodological consequences which are important for:

a) The relations between the variants that do not depend on the educational environment (the functions and the structure of the system) and the variants that depend only on the educational environment (the quality of planning, methods etc.)

b) The general pedagogical principles that influence the planning and the performance of the teaching activity

c) The general pedagogical structures used to plan and teach (objectives, content, methodology, assessment

The relationship between military training institutions and their outside environment.

Like any other human organization, the military training institutions, too, are organized and managed mainly by rules accepted by humanity. Leadership, in itself, is based on two dimensions: actions oriented towards human relationships, actions oriented towards tasks (focused on initiative on behalf of people to accomplish assignments or objectives).

The manager and the educational management are affected by various dominant tendencies during the training processes of shaping the management profession, of taking into account the limit between the organization and the environment. It is more and more obvious that for the educational management the main problem of the modern military educational organization is that of adapting to external changes. It is clear that a good educational organization is able to face the changes. That is why the health of an organization is determined by flexibility,

adaptability and freedom to learn from own lessons and from others' lessons. Also important is the ability to change as an individual at the same time with the external and internal circumstances and to transform, by own sensitive contributions the activity of the organization.

The essence of a normal educational organization is given by the flexibility which characterizes all the directions of the training process. It must meet the requirements of change and adaptability to external factors. The manager must: be, know, do, to be able to accomplish two requirements: 1. For the organization to exist and act as an institution in itself; 2. For the organization to complete itself with the external factors, accepting influences from outside and having as a result offspring (graduates) with heightened value.

The concept of surrounding environment concerns the people, resources, organizations or factors that influence in a way or another the main organization. By analyzing the relations between the external factors and the organizational structures, it can be observed that there are activities and tasks and a way of structural interaction. The relations between external factors and organization are analyzed taking into consideration the influences and the impact of the organization and the external factors and of the external factors and the organization.

In a nutshell, the external factors are anything else other than the organization. It is important and useful to make the difference between the relevant external factors and the irrelevant ones. After that, we must identify the relation between the organization management and the factors or forces specific to the external environment. All these are necessary to establish the correctness of the assessment meant to check whether the dynamic feature of the external environment can be predicted or appreciated by the educational manager. The latter's attention is focused both on the influence of the external factors (economy, population, technology, politics) and on specific factors that determine the organizational assignments.

Within the military training institution an important role is held by the interaction between the components of the organization. Like any other organization, the military educational one represents a complex potential of constraints within which the managerial process unfolds, with the internal factors as a source.

The conclusion is an essential one for the educational manager, concerning the external environment. The manager must supervise the exchanges between the external factors and the institution that is managed. That is why a permanent analysis is necessary to monitor the objectives of the educational organization and the requests of the external factors.

To obtain efficiency, depending on the interaction with different types of external media (a) stable, b) relatively stable and homogenous, c) very stable, d) disorderly, e) tumultuous) and the military training institution, two structures, specific to the identification method, are important: 1. The mechanical way, 2. The organic type (specific to the unstable structures).

Of great importance for this study is the mechanical type of organization, which is the correspondent of the relatively stable relations, characterized by an obvious difference between the assignments, and also by very clear responsibility. Very important is the vertical communication between superiors and subordinates.

As a conclusion, there are important characteristics of the mechanical organizations: - High functional difference between the assignments -   Focusing the subordinates on a strict fulfillment of individual tasks - A rigid command chain -   Detailed description of the tasks that must be accomplished - General perspectives relevant for the command - Interaction along the vertical lines - The behavior of the subordinates is determined by the superiors - Focus on specific circumstances

All in all, the functioning of the military training institutions will be a proper one when it is managed like a mechanical system, associated to a stable environment. The best educational qualification is obtained when the degree of adapting the organizational structure and the requirements of the environment is properly and thoroughly performed.

THE MILITARY EDUCATIONAL MANAGEMENT. COMPETENCES, RESPONSIBILITIES AND ASSESSMENTS

The bases of military training

We believe that military training bases are established in class or on the field training under the guidance of teachers and trainers, because they know the mechanisms and they can help students learn effectively. To elucidate and emphasize the importance of the interest in ensuring school success of this concept we mention that according to the dictionary of psychology, learning is a *"work of fundamental importance to adapt to the environment and development of psycho behavior', which essentially consists of" active gathering of information accompanied by the acquisition of new operations and skills."* Most experts consider learning as a process that causes a change in the behavior of a learner, how to think, feel and act. At the end of learning activities the subject will have expert knowledge, abilities, skills, abilities, interests, attitudes, beliefs, etc. that did not have before learning or performance at a lower level. Human learning seems to us, such as a complex phenomenon that aims at developing overall personality. School learning is a particular form of human learning, realizing itself in an institutional setting (school) under the guidance of professionals (teachers, professors). Its success depends on both internal factors, such as learning ability and motivation level of students and external factors, the most important being the quality of teaching, class climate and logistics staff. Learning will be effective when, making best use of these factors will undergo a series of specific *"events"*, namely: perception, understanding, storing, maintaining and updating.

Such military training institutions are known as training schools.. They have been, and will be the strength of the Romanian Army laboratories military categories, the outpost similar integration in Euro-Atlantic structures. In this context, school has an education sequential and sequential post graduate character, of specialization and training of military personnel as a practical-theoretical education.

The teaching process performed in this institution is called to respond to the social order of the military personnel Forces for the development of leadership competencies, wrestler, professional, citizen and educator, respecting the specific objectives of the courses undertaken in graduate school.

School has the following objectives:
- Initial field specializing and preparing for the first function of the officers at work.
- Further training and specialization of officers, WOs, NCOs and soldiers employed with a contract.
- Training of reserves officers and NCOs.
- Applied scientific research and performing of regulations and field works.
- Protection and preservation of cultural heritage - Air Force history.

Improvement and professional training of military personnel in the Air Force school is based on the following principles:
- Unified leadership and decentralized execution.
- Modular development and integration.
- Efficient use of resources.
- Individualization and specialization.
- Selection of all time in career development.
- Flexibility, competitiveness, stages and continuity.
- Focus on the ultimate goal of Forces training, to provide security.
- Encourage analytical and imaginative thinking.
- Full use of acquired knowledge and skills formats.
- Motivation.
- Mainly the practical- application.

Military education courses are conducted by school, as day education, divided into categories of personnel, for each position, field, military specialties and echelons, the direct pathway and indirect pathway.

Preparing military personnel direct or indirect pathway is designed according to the methodological requirements of professional development for the whole evolution upward spiral in his career (long or short duration) and shall follow the full curriculum, phased and differentiated by types and levels of education.

The teaching process is conducted in accordance with general and specific standards of academic evaluation and accreditation, curriculum being centered on educational skills and abilities and not on the content itself. The construction is based on socio-professional curriculum model of an officer and non-commissioned officer, developed by the Headquarter to meet the conditions of integration into the North – Atlantic alliance, targeting the interoperability and standardization of NATO and to meet the provisions of the Military Career Guide.

The training career courses ensure improvement and development skills of capabilities for performing functional military career in high gear, and the level courses have as objective building skills, of military operation and maintenance equipment.

Military employees on contract basis will select and specialize on a contract basis, based on plans and programs developed by the Application School. Specialization courses for soldiers employed on contract basis lasted between two and four weeks and ends with a certificate.

Train volunteers train themselves in the military training base, in the demanding conditions under the guidance of professional master of the Application School.

Following the merger of restructuring, curricula and syllabuses will be restored, eliminating redundant and overlapping themes, giving up subjects for staff training.

More closely, that training linked with NATO integration requirements will enjoy itself. It is about a new organization and school operation philosophy with an education curriculum of Western NATO-type.

The innovations do not sit on dry land, but it will make actuality the Western modern curricula, with syllabi, textbooks and courses used by allies, with due regard to interoperability and standardization, time zone management, recovery and improving the material in steps determined by burning intermediate stages curriculum, for IT and current use of English and French, procedures and educational NATO methods type.

The process of teaching-learning-assessment will provide students knowledge and necessary skills to fulfill for the functional parts for which they train. The educational process will take place in accordance with the requirements of the modern training, educating the military personnel and training of the military forces, following the perseverance of the interoperability and standardization requirements.

It will be sought the systematization and correlation of the acquired knowledge from multiple disciplines or of previous training stages and it will be also developed an interdisciplinary system. Shapes and teaching methods will exist by developing and upgrading technical-material education base. It is intended to support some training disciplines and preparation of new courses with the assistance of experienced officers who were participants in different NATO courses and missions, in order to teach them from their own experience. These can aim certain military international missions, where they have participated side by side with NATO allies.

The military education manager – competences, responsibilities and assessments.

The military education manager becomes aware, from the beginning of his activity, of: 1. The rules of the institution, 2. The group requests, 3. Individual requirements, 4. The development context of the institution, 5. The presence and the influence of the external factors.

The objectives of the institution that is managed lead to the selection of an educational and managerial style determined by the nature of this organization. Because the military education has a permanent role, with many new difficulties, it is better to use the participatory managerial style. The deadlines are usually short, the decision gaining, thus, authority. Even when the

deadline is longer, and there is time for assessment and questionnaires, it is still the education manager's responsibility to make a decision.

Depending on the complexity of the educational decisions to be taken, the manager must permanently question the subordinates. An impersonal decision reduces the possibility to be wrong, by discussing with the education command teams. The group requirements and the individual ones show their expectances from the educational institution, their interest toward the training, leniency regarding ambiguity and professional expertise.

The context of the educational institution development concerns mainly the organizational technology and is important for the control system before or at the end of the educational and training activities. The culture of the organization is extremely important, the older the educational institution, the more traditions are needed, and the more serious, the more traditional its importance and quality. The external environment must be favorable. The manager's personal model and the command educational team are important (constancy, attitude, behavior, value).

On the other hand, the military education manager also has administrative responsibilities and takes into account the following characteristics of the education military institutions: - Performs organized, pre-established, ordered activities -   Has specific regulations for the instruction -   Controls a social field and has the necessary resources for that field -   Has own rules (values, standards, sanctions).

We must add the institutions and organizations that have command responsibilities interacting with other military or civil institutions. Also, the education manager uses the basic principle of the Romanian military education: centralized conception and decentralized execution.

The wide experience demanded a compulsory assessment of all military instructors within the Training School. Unfortunately the Romanian pedagogical literature has not approached their assessment issue enough. Consequently, a new question has been *arisen "How can these military instructors be assessed ? "*

Epistemologically speaking, estimation and evaluation are major steps when a job classification is needed, referring either to self-assessment or in comparison to some other instructors. The experience also proves that a military instructor in the Romanian military school develops a 30-year career consisting of a period between 5 and 10 years to improve his knowledge and 15 up to 20 years to teach the students properly. The military instructor has to take into account the most recent information when teaching the students as well, so that his trainees will be able to use it immediately and accurately, even if the changes in the aviation field request a longer period of time. That is why the selection of the military instructors in the Armed Forces is an important part of the general reorganization in the military educational system.

The results based on analysis do not need to be considered as fixed conclusions, but hypotheses that have to be explained and correlated with the results accomplished by different means (observations, investigations, discussions, questionnaires, surveys etc). This kind of internal assessment is correlated with the external for the appointees not only in their fighting units but also in their social life.

According to Lashere's point of view, which we agree with as well, the instructor is not absolutely good, but depending on some factors that have a strong influence on his activity – the students, the subject that is to be taught, the teaching methods, the operating conditions. Therefore, the instructor is perceived differently either by his students or by his colleagues or by the proctors, and these appreciations rarely concur. However, the practice proves that some of the instructors have got better results than others in the same circumstances, a fact that pleads for a continuous assessment of the educators in order to improve and optimize their activity.

The internal assessment within the learning system of the institution generates certain pieces of information that have a self-adjustment function in order to get a more effective training. Therefore, two levels in planning the assessment process have an important role when speaking about feedback:

a)   the economical assessment regarding the institution efficiency in terms of the relation between the material and financial endowment and the training results.

b)   The pedagogical assessment in which the training process efficiency emerges in terms of the relation between the estimated aims and the students' results at the end of the learning process.

When the analysis of the instructors' assessment is done, the educational system committee will identify all the deficiencies within the school training process, based on the approved standards. The future assessment will be used when a preliminary evaluation of a project or of a military institution states a question.

The assessment of the intellectual characteristics of the military instructors is based on the knowledge, skills, attitudes and professional abilities dimension, regarding the evaluation of the professional and pedagogical qualities (appreciating personal, social, emotional and moral qualities associated with the training process), the assessment of steadiness (based on the observation of the trainer's behaviour and the instructive-educative procedures used in the classroom), students' assessment (by evaluating the changes that were produced in their development).

The professional pedagogical literature states two types of assessment:

a)   forming assessment (the progress obtained by the instructors);

b)   normative assessment (an important role when selection and promotion are needed).

The forming assessment considers in what way the aeronautical instructor has created proper learning conditions to his students (for instance, if the trainer states the most adequate objectives according to the general training aims; if the instructor provides the scientific content and the educative orientation in accordance with the lessons that are to be taught or if the students are motivated enough in their self-training process).

The normative assessment has to take into account not only the conditions in which the activity of the trainer-assessor is developed but also has to distinguish from the multidimensional point of view when evaluating, and all these in order not to mechanical situate the instructor in the following categories: good-bad, efficient-inefficient, good-average-poor, etc.

The assessment methods and techniques are various but the most frequently used are: the direct observation of the military instructors and students' behaviour; the interview; the study of the personal documents; the questionnaire; the opinion survey; the analysis of the test education and the students' grades.

The assessor will make appreciations by analyzing the activity of the teachers and the specific responsibilities from the point of view of the intensity of the status from the exceptional level to the unsatisfactory level.

Consequently, the assessment of the educators points professionalism, calling, attitudes, opinions, social, cultural and moral conduct at school, in the classroom and in society. It is also important the role of both educators and students when changing mentalities, the relation between trainers, between instructors and the institution they work for, between the institution and those who are taught. Therefore, the analysis of the organization, formal working manner based on the flowchart, selection of the military instructors, noticing ordinary bahaviour errors and the result referring to the positive or negative picture of the organization seem to become mandatory. The instructor is then assessed by superiors, colleagues, partners regarding the entire activity .

CONCLUSIONS

The Romanian Armed Forces operate based on the decisions made by the National Command Authorities, for the defense and promotion of national security interests of our country, which are stipulated in the state official documents. The human and material resources of Romania and the importance of its geographic position mean that our national interests can best be met by contributing to regional security. Militarily, an agile force, able to carry out adequate actions, is best fitted to this end.

Such a force may make its contribution to the security operations under the aegis of UN, OSCE or other international organizations, due to the fact that its units are deployable, mobile and capable to be integrated rapidly in multinational structures. This force contributes to regional security, while representing the basis of partnership activities with our neighbors and with other states in the region and also being a real model for the training of professional military. It can act rapidly and efficiently both in conflict prevention and crisis management before the crisis turns into conflict, and to repel an aggression (if it occurs) and gain victory.

The resources of the armed defense, including educational, personnel, financial, technological, scientific, material and other means, allocated by the state, determine quantitatively and qualitatively the composition of forces and their supply with combat equipment necessary for the defense of our country. The Romanian Armed Forces will further be able to deter and, if necessary, to defeat a possible armed aggression against our country. They are ready to defend our nation's interests when ordered by the political leadership and according to the Constitution. Our armed forces are not meant to become a source of concern to other states. The Romanian Armed Forces represent and will continue to represent

Because the military field is an hierarchical structure the educational management is the main activity of commanders on the all lever The commander have to menageries the resources the processes and the outcomes in order to increase the performances Regarding to the ability of the students/soldiers the commander obligation is to train and to involve they skills and finally to developed the new fitter

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HUMAN RESOURCES MANAGEMENT RECRUITMENT

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Human resources recruitment represents the process of pursuit, localization, identification and attraction of potential candidates, out of which we are going to select the capable candidates, who, finally, have the necessary professional characteristics or the ones that suit best current and future vacant positions.

Every organization has to perform a variety of functions in order to attain its objectives. To perform those functions the organization needs to recruit and select employees with varied skills and quantities. In spite of the modem highly developed technology, people still remain the most important factor in modem organizations.

In fact, it is the human factor that keeps the organization in constant motion. Without the support of the people, mashines remain idle, raw materials lie stacked, money tied up and above all, objectives of the organization cannot be achieved.

RECRUITMENT PROCESS

Recruiting is the process of generating a pool of qualified applicants for organizational jobs. If the number of available candidates only equals the number of people to be hired, there is no real selection-the choice has already been made. The organization must either leave some openings unfilled or take all the candidates. Many employers currently are facing shortages of workers with the appropriate knowledge, skills, and abilities in tight labour markets, as the opening part indicates.

The aim of recruitment is to attract qualified job candidates. We stress the word qualified because attracting applicants who are unqualified for the job is a costly waste of time. Unqualified applicants need to be processed and perhaps even tested or interviewed before it can be determined that they are not qualified. To avoid these costs, the recruiting effort should be targeted solely at applicants who have the basic qualifications for the job.

Recruiting is the process of generating a pool of qualified applicants for organizational jobs through a series of activities:

- Recruiting must be viewed strategically, and discussions should be held about the relevant labour markets in which to recruit.
- The applicant population is affected by recruiting method, recruiting message, applicant qualifications required, and administrative procedures.
- A growing number of employers are tuming to flexible staffing, which makes use of recruiting sources and workers who are not employees. Using temporary employees and employee leasing are two common approaches to flexible staffing.
 - Two general groups of recruiting sources exist: intemal sources and extemal sources. An organization must decide whether it willlook primarily within the organization or outside for new employees, or use some combination of these sources.
- The decision to use intemal or extemal sources should be based on the advantages and disadvantages associated with each.
- The recruiting process begins with human resource planning and concludes with evaluation of recruiting efforts. Both HR staff and operating managers have responsibilities in the process.
- Recruiting efforts should be evaluated to assess how effectively they are being performed.
- Recruiting evaluation typically includes examining applicant quality and quantity, the time necessary to fill openings, and the costs and benefits of various recruiting sources.

RECRUITMENT OBJECTIVES

Recruitment objectives include a variety of components related to finding, hiring and retaining qualified employees. Clear definitions of the job qualifications allow easier identification of potential candidates. Recruitment consists of attracting capable individuals using methods such as outsourcing and the internet. Selection objectives consist of evaluation techniques such as interviews, background checks and competence tests.

1. Qualification

An understandable and clearly defined list of required qualifications aids the recruitment process by eliminating unqualified potential candidates. A straightforward list of necessary skills and achievements simplifies the process and is the first objective for recruitment. The most important qualifications belong in the body of the job description.

2. Identification

Identification of competent applicants remams a main recruitment objective for businesses seeking reliable employees. An applicant who appears qualified on paper may wind up unhappy and unmotivated in the job if the fit is wrong. Identification of applicants who are both qualified and motivated comprises a large portion of the recruitment objective for businesses desiring long-term employees.

3. Attraction

Recruitment objectives include maintenance of a diverse set of attraction methods. Businesses must draw in applicants by actively recruiting qualified people, especially if the field is competitive. The internet offers a place to post jobs in online classifieds as well as company websites.

4. Evaluation

Solid evaluation practices ensure the recruitment process results in competent and motivated workers. A varied   and extensive evaluation method helps achieve   the objective.

RECRUITMENT METHODS

Internal method

The objective of the intemal recruitment process is to identify applicants from among individuals already holding jobs with the organization.

The first step in this process is recruitment planning which are both organizational and administrative issues.

The second step in the intemal recruitment process is strategy develop. Attention is directed here to where, when, and how to look for qualified applicants. Knowing where to look requires an understanding of open, close targeted internal recruitment systems. Knowing how to look requires standing of job postings, skills inventories, nominations, employees' references in-house temporary pools. Knowing when to look requires an understanding lead time and time sequence concems.

The third step in the process is searching for internal candidates, consists of the communication message and medium for notification or vacancy. The message can be realistic, attractive, or targeted.

The fourth step in the process is developing a system to make the transition selection for job applicants. Making a transition requires a well-develop posting system and providing applicants with an understanding of the process and how to best prepare for it.

The fifth step in the process is the consideration of legal issues. All three of these issues deal with mechanisms for enhance identification and attraction of minorities and women for higher-level to the organization.

External method

If internal sources do not produce sufficient acceptable candidates for jobs, many external sources are available. These sources include schools, colleges and universities, employment agencies, labour unions, media sources, and trade and competitive sources.

The objective of the external recruitment process is to identify and attract job applicants from the outside the organization. It is from among these applicants that hiring decisions are to be made. The recruitment process begins with a planning phase where both organization and administrative issues regarding the identification and attraction of applicants are addressed.

Organizational issues include in-house versus external recruitment locations, individual versus cooperative recruitment alliances, and centralized versus decentralized recruitment functions. Administrative issues include requisitions number and types of contracts, the recruitment budget; development of a recruitment guide, and the selection, training, and rewarding of recruiters. Next, a recruitment strategy is formed in order to know where, how, and when to look for qualified applicants. Knowing where to look requires an understanding of open and targeted recruitment strategies. Knowing how to look requires understanding of recruitment sources. Knowing when to look requires an understanding of lead time concems and time sequence concems. Following the formation of strategy, the message to be communicated to applicants is established and it is decided which communication medium should be used to communicate the message. The message may be traditional, realistic, attractive, or targeted.

There is no one best message; it depends upon the characteristics of the labour market, the job, and the applicants. The message should, however, be based on the job requirements matrix and the job rewards matrix. The message can be communicated through brochures, videos, advertisements, voice messages, video conferencing, or on-line services, each of which has different strengths and weaknesses. Applicants are definitely influenced by characteristics of recruiters and of the recruitment process. Through proper attention to these characteristics, the organization can help provide applicants a favourable recruitment experience. That experience can be continued by preparing applicants carefully for the selection process. Recruitment activities are highly visible and sensitive for employees. They raise a host of legal issues regarding potential exclusion of minority and female applicants, and truthful communication with job applicants. The organization should carefully detine what it considers tobe job applicants. For enhanced representation of minorities and women in the applicant pool, targeted recruitment and possible changes in use of conventional recruitment sources should be undertaken. Consistent with this, job advertisements should not openly or implicitly express preferences for or against protected demographic characteristics of applicants.

Recruiting externally can infuse the organization with new ideas. Also, it may be cheaper to recruit professionals such as accountants or computer prograrnmers from outside than to develop less-skilled people within the organization. But recruiting from outside the organization for any but entry-level positions presents the problem of adjustment time for the new employees. Another drawback to externa! recruiting is the negative impact on current employees that often results from selecting an outsider instead of promoting a current employee. Most organizations combine the use of interna! and externa! methods. Organizations that operate in a rapidly changing environment and competitive conditions may need to place a heavier emphasis on externa! sources in addition to developing interna! sources. However, for those organizations existing m environments that change slowly, promotion from within may be more suitable.

SOURCES OF RECRUITMENT

Internal sources

Job Posting and Bidding

The major means for recruiting employees for other jobs within the organization is a job posting system. Job posting and bidding is a system in which the employer provides notices of job openings and employees respond by applying for specific openings. The organization can notify employees of all job vacancies by posting notices, circulating publications, or in some other way inviting employees to apply for jobs. In a unionized organization, job posting and bidding can be quite formal. The procedure often is spelled out in the labour agreement. Seniority lists may be used by organizations that make promotions based strictly on seniority, so candidates are considered for promotions in the order of seniority.

A job posting system gives each employee an opportunity to move to a better job within the organization. Without some sort of job posting and bidding, it is difficult to find out what jobs are open elsewhere in the organization. The most common method employers use to notify current employees of openings is to post notices on bulletin boards in locations such as employee lounges, cafeterias, and near elevators. Jobs generally are posted before any externa! recruiting is done. The organization must allow a reasonable period of time for present employees to check notices of available jobs before it considers externa!applicants.

Promotion and Transfer

Many organizations choose to fill vacancies through promotions or transfers from within whenever possible. Although most often successful, promotions from within have some drawbacks as well. The person's performance on one job may not bea good predictor of performance on another, because different skills may be required on the new job.

For example, a not every good worker makes a good supervisor. In most supervisory jobs, an ability to accomplish the work through others requires skills in influencing and dealing with people that may not have been a factor in non supervisory jobs. It is clear that people in organizations with fewer levels may have less frequent chances for promotion. Also, in most organizations, promotions may not be an effective way to speed the movement of protected-class individuals up through the organization if that is an organizational concern.

Current Employee Referrals

A reliable source of people to fill vacancies is composed of friends or family members of current employees. Employees can acquaint potential applicants with the advantages of a job with the company, fumish letters of introduction, and encourage them to apply. These are extemal applicants recruited using an intemal information source.

Utilizing this source is usually one of the most effective methods of recruiting because many qualified people can be reached at a low cost. In an organization with numerous employees, this approach can develop quite a large pool of potential employees. Some research studies have found that new workers recruited through current employee referral had longer tenure with organizations than those from other recruiting sources. Some employers pay employees incentives for referring individuals with specialized skills that are difficult to recruit through normal means.

Recruiting Former Employees and Applicants

Former employees and former applicants are also good intemal sources for recruitment. In both cases, there is a time-saving advantage, because something is already known about the potential employee. Former employees are considered an intemal source in the sense that they have ties to the company. Some retired employees may be willing to come back to work on a part-time hasis or may recommend someone who would be interested in working for the company. Sometimes people who have left the company to raise a family or complete a college education are willing to come back to work after accomplishing those personal goals. Individuals who left for other jobs might be willing to retum for a higher rate of pay. Job sharing and flexi-time programs may be useful in luring back retirees or others who previously worked

for the organization. The main advantage in hiring former employees is that their performance is known. Some managers are not willing to take back a former employee. However, these managers may change their attitudes toward high-performing former employees as the employment market becomes more competitive. In any case, the decision should depend on the reasons the employee left in the first place. If there were problems with the supervisor or company, it is unlikely that matters have improved in the employee's absence. Concems that employers have in rehiring former employees include vindictiveness or fear of morale problems among those who stayed.

External sources

School Recruiting

High schools or vocational-technical schools may be a good source of new employees for many organizations. A successful recruiting program with these institutions is the result of careful analysis and continuous contact with the individual schools. Major considerations for such a recruiting program include the following:

- School counsellors and other faculty members concemed with job opportunities and business careers for their students should be contacted regularly.
- Good relations should be maintained with faculty and officials at all times, even when there is little or no need for new employees.
- Recruiting programs can serve these schools in ways other than the placement of students.

For instance, the organization might supply educational films, provide speakers, or arrange for demonstrations and exhibits. Many schools have a centralized guidance or placement office. Contact can be established and maintained with the supervisors of these offices. Promotional brochures that acquaint students with starting jobs and career opportunities can be distributed to counsellors, librarians, or others. Participating in career days and giving tours of the company to school groups are other ways of maintaining good contact with school sources. Cooperative programs in which students work part time and receive some school credits also may be useful in generating qualified applicants for full-time positions.

College Recruiting

At the college or university level, the recruitment of graduating students is a large-scale operation for many organizations. Most colleges and universities maintain placement offices in which employers and applicants can meet. However, college recruiting presents some interesting and unique problems. College recruiting can be expensive, therefore, an organization should determine if the positions it is trying to fill really require persons with college degrees. The result may be employees who must be paid more and who are likely to leave if the jobs are not sufficiently challenging. To reduce some of the costs associated with college recruiting, some employers and college or university placement services are developing programs using video interviews. With these systems, students can be interviewed by interviewers hundreds of miles away. There are advantages for both the companies and students. The firms save travel costs and still get the value of seeing and hearing students. For students, the system provides a means of discussing their credentials and job openings without having to miss classes. There is a great deal of competition for the top students in many

college and university programs. However, there is much less competition for those students with less impressive records.

Labour Unions

Labour unions are a source of certain types of workers. In some industries, such as construction, unions have traditionally supplied workers to employers. A labour pool is generally available through a union, and workers can be dispatched to particular jobs to meet the needs of the employers.

In some instances, the union can control or influence recruiting and staffing needs. An organization with a strong union may have less flexibility than a non-union company in deciding

who will be hired and where that person will be placed. Unions also can work to an employer's advantage through cooperative staffing programs, as they do in the building and printing industries.

Media Sources

Media sources such as newspapers, magazines, television, radio, and billboards are widely used. Newspapers are convenient because there is a short lead time for placing an ad, usually two or three days at most. For positions that must be filled quickly, newspapers may be a good source. These sources are usually not suitable for frequent use but may be used for one-time campaigns aimed at quickly finding specially skilled workers.

Internet Recruiting

Organizations first started using computers as a recruiting tool by advertising jobs on a "bulletin board service" from which prospective applicants would contact the company. Then some companies began to take e-mail applications. Now some employers are not only posting jobs and accepting resumes and cover letters on-line but also are conducting employment interviews on-line. In terms of recruitment strategy, where to look for employees looms as a major factor in potential change.

The organization must increase its scanmng capabilities and horizons to identify candidates to promote throughout the organization. In particular, this requires looking across functions for candidates, rather than merely promoting within an area. Candidates should thus be recruited through both traditional an innovative paths. Recruitment sources have to be more open and accessible to far-ranging sets of candidates. Job posting and other recruitment strategies that encourage openness of vacancy notification and candidates specification will become necessary.

ADVANTAGES AND DISADVANTAGES OF INTERNAL AND EXTERNAL RECRUITMENT

Advantages and disadvantages are associated with promoting from within the organization (internal recruitment) and hiring from outside the organization (external recruitment) to fill openings. Promotion from within generally is thought tobe a positive force in rewarding good work, and some organizations use it well indeed. However, if followed exclusively, it has the major disadvantage of perpetuating old ways of operating.

In addition, there are equal employment concerns with using internal recruiting if protected-class members are not already represented adequately in the organization.

Advantages of interna recruitment
- morale of promotion
- better assessment of abilities
- lower cost for some jobs
- motivator for good performance
- causes a succession of promotions
- have to hire only at entry level

Disadvantages of internal recruitment
- inbreeding
- possible morale problems of those not promoted
- politica!infighting for promotions
- need for management-development program

Advantages of external recruitment
- New "blood" brings new perspectives
- Cheaper and faster than training or organization

- No group of political supporters in candidates not selected in organization already
- May bring new industry insights

Disadvantages of external recruitment
- may not select someone who will "fit" the job
- may cause morale problems for internal
- longer "adjustment" or orientation time

Pursuing internal recruiting with the advantages mentioned earlier means focusing on current employees and others with previous contact with an employing organization. Friends of present employees, former employees, and previous applicants may be sources.

Promotions, demotions, and transfers also can provide additional people for an organizational unit, if not for the entire organization. Among the ways in which interna!recruiting sources have an advantage over external sources is that they allow management to observe the candidate for promotion (or transfer) over a period of time and to evaluate that person's potential and specific job performance. Further, an organization that promotes its own employees to fill job openings may give those employees added motivation to do a good job. Employees may see little reason to do more than just what the current job requires if management's policy is usually to hire externally. This concern is indeed the main reason why an organization generally considers interna!sources of qualified applicants first.

CONCLUSION

Recruitment is the major function of the human resource department and recruitment process is the first step towards creating the competitive strength and the recruitment strategic advantage for the organisations.

Recruitment process involves a systematic procedure from sourcing the candidates to arranging and conducting the interviews and requires many resources and time.

Recruiting people with the right skills and qualities is essential for any organisation. In my opinion, ifthe organisation wants to have an adequate and competitive recruiting policy, it needs to follow:
- how many employees need
- when they are needed
- which knowledge, skills and abilities are needed which special qualifications are needed.

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BUREAUCRACY IN THE MILITARY

Lieutenant Colonel ION POPA

Bureaucracy is a way of organising work. It involves hierarchy, in which people at higher levels are bosses of those below, and so on down the chain. It also involves the division of labour, in which some people do one thing and others do other things -- cleaners, accountants, researchers, managers, etc. Other characteristic features of bureaucracy are rules which describe the duties of members, standard operating procedures and impersonal relations between members. The most important features are hierarchy and division of labour. Another way of thinking about bureaucracy is as a way of organising work in which people are treated as interchangeable and replaceable cogs to fill specialised roles.

Why Bureaucracy? Because it is the most widely spread phenomenon in our society. Nowadays when the problem of efficiency is the main requirement for progress, the necessity to decrease bureaucracy became more and more stringent than ever. Some people suggest eliminating it but this cannot be done and should not be done. This action is not justified by the reality we live in; no matter how good the technique and information technology are, no matter how frequent changes are, maintaining a reasonable flux of documents is a must. Bureaucracy and efficiency are not mutually exclusive but they even presume each other; the importance they have in the modern managerial activity is what should be very carefully established.
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BUREAUCRACY

Short history. The contribution of Max Weber

Bureaucracy is one of the most frequent obstacles in our every day life. We all complain about it, we say that it complicates our lives, that it only hinders our actions, but what is this terrible thing, could we live without it?

The origin of the term bureaucracy is from 18th century before the French Revolution of 1789, and from there rapidly spread to other countries. The early usage referred to an official workplace (bureau) in which officials worked and individual activities were routinely determined by explicit rules and regulations. As modern systems of management, supervision, and control, bureaucracies are designed to rationally coordinate the duties and responsibilities of officials and employees of organizations. The delineation of official duties and responsibilities, by means of formal rules and programs of activity (March and Simon 1958), is intended to displace and constrain the otherwise private and uniquely personal interests and actions of individuals. Bureaucratic systems of administration are designed to ensure that the activities of individuals rationally contribute to the goals and interests of the organizations within which they work

Bureaucracy is a distinctive arrangement used by human beings to organize their activities. The invention of Western bureaucracy several centuries ago helped solve the problem for leaders of governing human systems that grew larger and more complicated with each passing year. The great virtue and probably defining characteristic of bureaucracy, according to the one of the founders of sociology, German **Max Weber** (1864-1920), is as "an institutional method for applying general rules to specific cases, thereby making the actions of government fair and predictable". Bureaucracy represents the system of official rules and ways of doing things that a government organization has, and a way to organize activity in order to achieve the objectives.

Bureaucracy is not a modern invention, it has been hare since the imperial Rome and ancient China. The complexity of legislative issues arising within the modern state has caused an

enormous growth of administrative function within both government and the private sector. Consequently, the power and authority of bureaucratic administrative officials to control policy within an organization as well as the modern state has, over time, increased significantly. The rise to power of bureaucratic officials means that, without expressly intending to achieve power, non-elected officials can and do have a significant impact on a broad spectrum of activities and future developments within society.

Max Weber starts from the idea of the generalization of "rationality" bureaucracy- the most efficient tool of an organization:

- A system of impersonally applied rules
- Authority structure
- Division of labor in the organizations
- Rules and regulations grant a predictable behavior that regulate relations between organizational members
- Employment based on qualification
- Position and role of the individual member
- Safe jobs for the employees

As a matter of practicality, the bureaucracy is where the individual will interface with an organization such as a government etc., rather than directly with its leadership. Bureaucracy is a social phenomenon; ideally bureaucracy is the rational and efficient organization of people and their work. Weber said that it is the sign of modern societies in which organizations are based on rationales, offices and position are hierarchically structured and they are governed by impersonal rules. *Bureaucratic organizations are technically superior to all the other forms of administration. It is necessary to have a logical way of doing our work in order to avoid time waste and unnecessary activities. Separating work on departments makes it more efficient and people become experts in their field. Rules and regulations are created to better organize work, rules which also help to evaluate the employee's work.*

In conclusion, when I speak or hear about bureaucracy I have in my mind one of the next structural concepts which could be used in any definition:

1. an *administrative system*, especially in a government, that divides work into specific categories carried out by special departments of nonelected officials;

2. *officials collectively*: the nonelected officials of an organization or department;

3. a *state or organization* operated by a hierarchy of paid officials;

4. *frustrating rules*: complex rules and regulations applied rigidly.

Caracteristics of bureaucracy

Many of the functions of a society are possible only due to bureaucratic work; institutions depend on administration and administration means bureaucracy. The most distinguishing feature of modern rational bureaucracies is the formal control, prescription, and regulation of individual activity through the enforcement of rules. The explicit intent of enforcing these rules is to efficiently achieve specific organizational goals. The employee is the key element but in order to be efficient he must be personally free and subject to authority only with respect to the impersonal duties of their offices, his functions of each office are clearly specified, the appointments to office are made on the basis of technical qualifications, which ideally are substantiated by examinations administered by the appointing authority, a university, or both. The official or employee should able to concentrate exclusively upon the technical aspects of the work, in particular the efficient and rational completion of assigned tasks. In addition to this attempt to separate individuals' private concerns from their official duties and responsibilities, other distinguishing *characteristics of bureaucracies include*: the hierarchical ordering of authority relations, limiting the areas of command and responsibility for subordinate as well as super ordinate personnel; the recruitment and promotion of individuals on the basis of technical expertise and competence; a clearly defined division of labor with specialization and training required for assigned tasks; a structuring of the work environment to ensure continuous and full-time employment, and the

fulfillment of individual career expectations within the organization; the impersonality and impartiality of relationships among organization members and with those outside the organization; the importance of "official records" in the form of written documents.

Bureaucracy is the structure and set of regulations in place to control activity, usually in large organizations and government. It is characterized by the following main rules:

a) formal division of responsibility;

b) hierarchy;

c) impersonal relationships.

Bureaucracy comes along with writing a lot of documents. This is unavoidable because we need to keep a record of our activities. We must follow a certain path in our work in order to see where we are, the level we reached. Everything we do should be justified, should be in accordance with the law.

In a modern bureaucracy, explicit rules are designed to assure uniformity of performance in accordance with technical requirements. Bureaucracies denote systems of control that attempt to ensure that the technical abilities of individuals are effectively utilized. A concerted effort is made to systematically exclude any factor or element that would reduce the prospect of an official's or employee's performance being anything other than organizationally focused, affectively neutral, and achievement oriented (Parsons and Shils 1951, p. 76-91).

Inefficiency and arbitrariness?!

Although bureaucracy was created to order things it has its problems, too. Most people complain about two main problems with bureaucracy: inefficiency and arbitrariness. Efficiency is when we use resources in a way that the results are valuable and the work was not a waste of time. Unfortunately this is not the case all the time and so we have inefficiency.   Arbitrariness refers to "officials acting without legal authority, or with that authority in a way that offends our sense of justice. Justice means, first, that we require the government to treat people equally on the basis of clear rules known in advance. (p. 326)

Another problem is that bureaucracies are often unresponsive to the individuals and groups they were designed to serve. Sometimes the need for bureaucratic control, individual compliance with rules, development of routinely prescribed, reliable patterns of activity is implemented in a dynamic and fluctuating environment requiring more spontaneous responses, consequences are not positive. Even though the circumstances require a different type of response, prescribed and fixed patterns of response may still be adopted because such responses are legitimated and within the bureaucracy. Consequently, officials and employees do not accommodate the unique features of the situation, efficiency is undermined, and difficulties with clients and customers may appear. As Merton (1940) notes, "Adherence to the rules, originally conceived of as a means, becomes transformed into an end in itself; there occurs the familiar process of displacement of goals whereby an instrumental value becomes a terminal value. . ." While more highly adaptive and flexible behavior is required and permitted within a bureaucracy, powerful structural constraints may operate to promote situational inappropriate rule-bound behavior (Blau and Meyer 1987; Allinson 1984).

Many practical problems may arise to potentially undermine bureaucratic efficiency. These difficulties can include the unwarranted application of rules and regulations, the duplication of effort, there are many rules and regulations which are not compatible among themselves or which overlap in their range of action and this is proof of the fact that there is not a common vision of the aim and strategy which must be adopted when the role and the strategy of an organization are established. When such a thing is done there should be kept in mind the following question:" What is the interest of the social group we work for?" In order to make bureaucracy efficient there should be eliminated certain rules, others should be revised and better defined. Regulations are not needed when they make people avoid the law or they have as a result only useless work. Their cost should not be higher than the benefit they bring to the public

interest. Nonetheless, bureaucracies are relatively efficient and technically superior forms of administration proven to be indispensable to large, complex organizations and modern society. As Perrow has noted (1972), criticism of bureaucracies frequently relates to the fact that the actions of officials are not bureaucratic enough and personal interests may not be fully insulated from official duties.

Examples of everyday bureaucracies include governments, Armed Forces, corporations, hospitals, courts, ministries and schools.

BUREAUCRACY IN THE MILITARY

In military organizations, bureaucracy is a professional corps of officials in a pyramidal hierarchy and functioning under impersonal, uniform rules and procedures.

Superficially, military forces are a prime root of war. They are responsible for fighting, the organized use of force against human and technological opposition. At a deeper level, military forces may seem to be a consequence of the war system, namely as agents of ruling groups. Bureaucracy can be seen as a root of war because it facilitates the maintenance of elite power and smashes or pre-empts non-hierarchical and self-reliant forms of human interaction.

We usually think about "bureaucracy" in the context of public administration, the system of appointed officials, but in the military field there is a lot of bureaucracy too. Every organization that is based on hierarchy, on rules and regulations to be followed is a bureaucracy. The military is bureaucratic in form, and indeed in many ways is a model bureaucracy. Thus the military is closely intertwined with the state and bureaucracy, two other key roots of war. In addition, the military is strongly interconnected with patriarchy and with science and technology. Bureaucracy can be seen as a root of war because it facilitates the maintenance of elite power and smashes or pre-empts non-hierarchical and self-reliant forms of human interaction. Superficially, military forces are a prime root of war. They are responsible for fighting, the organized use of force against human and technological opposition. Without military forces, there would be no war as currently conceived. The close connection between the military, bureaucracy and state is shown by the revolutionary role sometimes played by military elites. Ellen Kay Trimberger in "Revolution from Above" has analyzed several instances in which a revolution (a forcible alteration of class forces) has been implemented by military elites acting as state administrators. She uses the examples of Japan beginning in 1868, Turkey in the 1920s, Egypt under Nasser since 1952 and Peru under the generals since 1968. In each case military bureaucrats, having captured state power without mobilization of the populace, proceeded to destroy the power of the dominant economic class, such as the aristocracy. Internally, military forces are bureaucratic in form, with a strict hierarchy and division of labour, rigid rules and duties. The function of military forces is to be able to use organized violence against opponents, usually seen as similarly organized. Because killing of other humans is not readily undertaken by many people in modern societies, military recruits undergo extensive training, indoctrination and isolation in a military environment. The key to military performance is unquestioning obedience to orders, which again has much in common with non-military bureaucracies.

All the missions the military personnel has to accomplish are subject to bureaucracy. There are steps that should be done in order to do something; there are forms to be filled in and approvals to be received before embarking on a mission; all these are marks of clear bureaucracy. All these forms and classified documents became more important after joining NATO. The problem is that now we have a double amount of official papers, their documents and ours referring to theirs. But this bureaucracy can somehow be improved. The fact that we are now NATO members does not mean that we have abolished bureaucracy, it means that we have to adapt to a different type of bureaucracy. Maybe it is better, maybe not but for sure it has the advantage that it is used in the whole organization, it is the common language spoken by everybody. This new language is called standardization. The moment this transition from our bureaucracy to NATO type bureaucracy will be finished things will become

more fluent. Will have to go through only one set of procedures that are commonly accepted by all NATO countries.

Because of the military's rigid bureaucratic structure and because of its relative isolation from other social forces, the military is an intensely conservative structure. This is well illustrated by its reluctance to adopt technological innovations of demonstrated effectiveness. For example, European armies were very slow to adopt the machine gun in spite of its years of proven effectiveness in colonial wars. The reason for this conservatism is that introducing weapons systems also requires internal social change in areas such as corps organization, training, battlefield tactics and command structures. Changes that adversely affect particular bureaucratic empires in the military are resisted most of all. Fundamental changes in military organization or doctrine often require outside intervention, for example by civilian political elites.

Another reason for the conservatism of military forces is that most of them are at war only a small fraction of time, and in between wars there is no 'marketplace' test of the current doctrines. Internal conservatism is one reason why militaries are notorious for being prepared to fight the previous war. Although military forces remain strongly hierarchical, repressive, conservative, there are two forces in particular which are modifying the internal dynamics of the military. One is the increasing technological content of modern war. Instead of being mainly composed of fighting troops, military forces are structured around systems of advanced technology. For every fighter pilot there are 10 or 20 other workers providing maintenance, planning logistics, organizing provisions and so forth. Along with sophisticated technology have come many workers in specialized occupations, including engineers, technicians, mechanics, computer programmers, accountants and filing clerks. To utilize this personnel effectively, the traditional military hierarchy with its demand for unquestioning obedience to commands and use of repression is much less appropriate. The trend is away from coercion and towards organizational and manipulative techniques of control more characteristic of civilian bureaucracies.

Life is less and less organized on the basis of physical coercion and a requirement for blind obedience to authority, and more on bureaucratic lines of hierarchy, division of labour, rules and proper procedures, all legitimized on the basis of alleged efficiency and technical merit. These changes affect personal interactions, families, schools and workplaces, and can hardly leave military forces untouched.

Military forces have two main roles in society: defence of the state against foreign military threat and defence of the state against internal challenge. Almost all treatments of military issues, including those by the antiwar movement, concern defence against external enemies. Yet the role of the military in defending the state internally warrants equal attention by antiwar activists. By supporting state power internally, the military protects the position and power of elite groups which not only help perpetuate poverty, injustice and alienation, but also sustain the state system which is the backbone of the modern war system.

The characteristics of bureaucracy in military organizations are:

-the hierarchical ordering of authority relations, limiting the areas of command and responsibility for subordinate as well as super ordinate personnel;

-the recruitment and promotion of individuals an the basis of technical expertise and competence;

-a clearly defined division of labour with specialization and training required for assigned tasks;

-a structuring of the work environment to ensure continuous and full-time employment, and the fulfilment of individual career expectations within the organization;

-the importance of "official records" in the form of written documents.

In conclusion: understand the bureaucratic organization, control excesses, the changing force is the feed-back and consider new organizational solutions **.**

BUREAUCRACY IN NATO AND EU

Bureaucracy in NATO

"Defense Secretary Robert Gates is right: The NATO hierarchy is too top-heavy and has too many layers of bureaucracy, says Adm. James Stavridis, supreme allied commander of NATO and head of the U.S. European Command."

Internally, NATO is bureaucratic in form, with a strict hierarchy and division of labor, rigid rules and duties. NATO mobilizes the states for a defense of interests against enemies, because the main function of armed forces is to be able to fight against opponents.

In this way I have some statistics data:

1. The alliance has 1.4 million troops in Europe, but only 60,000 are deployed or ready for action. NATO's official target for deployable troops is 40 percent. More deployable troops and more money in the NATO defense system point to a NATO priority.

2. NATO has a headquarters staff in Brussels of almost 4,000 people. Of these, some 2,000 are members of national delegations and staffs of national military representatives to NATO. There are also about 300 members of missions of NATO partner's countries. There are approximately 1,200 civilian members of the International Staff or agencies located within the Headquarters and about 500 members of the International Military Staff, including 100 civilians.

Worldwide, there are about 5,500 civilians working for NATO among different agencies and strategic and regional commands.

3. NATO had many missions of kind that rebuild a nation after war. A good example I have regarding Afghanistan were almost $82 billion it has been spend on the fighting, but only $7 billion on reconstruction.

According to these examples I can say that NATO deploys many people and spend a lot of money both combat and peace enforcement capabilities.

NATO is a military's rigid bureaucratic structure because it is isolated from other social forces and because it's a conservative structure. A good example for the conservatorium of armed forces from NATO is that the most of them are in the war only a small part of time, and among wars there is no "marketplace" test of the current doctrines.

In many countries from NATO, the officer corps has been drawn disproportionately from privileged classes. Within the armed forces the general corps is a politically aware status. Military elites also strongly oppose participation of women and gays, especially in key roles such as officers or combat soldiers. Fundamental changes in military organization or doctrine often require outside intervention for example by civilian political elites.

Bureaucracies are difficult to kill and NATO is unlikely to die soon. That is just as well: Abolishing it would cause real traumas and tremors, and the organization does provide useful if minor functions in military planning and training, as well as a forum.

Among a series of fiscal reforms proposed by Gates earlier this month is the reduction of overhead costs across the U.S. military. Overhead makes up 40 percent of the Pentagon's budget, and many of those expenses are unjustifiable, Gates contends. During the 1990s, the military saw deep cuts in overall force structure. The Army, for instance, was slashed by nearly 40 percent, but flag officers – generals and admirals– were cut only about half that. Management layers –civilian and military– and the number of senior executives grew during that same period.

"Our military still has more than 40 generals admirals, or civilian equivalents based on the continent. Yet we scold our allies over the bloat in NATO headquarters," Gates pointed out.

Stavridis said he expects NATO (including the U.S. component) to reduce the numbers of flag and general officers, as well as the size of staffs. "I am deeply engaged at the moment in an effort [to evaluate possible reductions] on the NATO side," said Stavridis. "I'm looking to make significant reductions in staff size and flag and general officer size." Within U.S. NATO staffs, some organizations will be downgraded and streamlined, he says. "I'll be working on this over the course of the year." This in USA but when in Romania ?

Bureaucracy in EU

An European official (George Toifl - the president of the European Association of Craft and Small and Medium Sized Enterprises) said: "There is bureaucracy even in Brussels!". I'll present you some aspects of the bureaucracy in European Union.

(Reuters) - European Union governments should stop blaming the EU's executive Commission for excessive bureaucracy unless they are ready to fight it themselves, said Commission President Jose Manuel Barroso

Administrative reform policies of the countries from European Union have intensified control methodologies for public administrations, under constant pressure for improved efficiencies, reduced budgets, clearer accountability, and better defined legitimacies.

Also it was breaking up of administrative systems: to the fragmentation of ministerial organizations, to the creation of autonomous agencies, to the development of contractual relationships, complete with competitive bidding processes and other forms of incitation in public service administration. A special importance is the economic dimension of public programmers, translation of the effects of economic crises, lower public income, and subsequent obligation to reduce public spending. In many countries from Europe which are confronting with bureaucracy it is difficult to access structural funds for development in domains of activity as: agriculture, affaires, education, infrastructure and so on, because it is a faulty legislation and a high taxation that give headaches to the investors from these countries.

In the ex communist countries it is difficult to change certain things, and sometimes this may happen because of the people's mentality. After a long period of communism, conceptions are hard to change.

Administration of the Structural Funds should be substantially simplified by giving practical effect to decentralizing decision-making and striking the right balance between simplification and flexibility so as to ensure that funds are disbursed quickly and effectively. To achieve this, responsibilities of Member States, their partners and the Commission will be clarified, bureaucracy reduced and monitoring, evaluation and control strengthened, thereby ensuring improved and sound financial management.

Bureaucracy and globalization are interlinked. However, the inter-linkage is often forgotten and globalization is related to only to free trade. Globalization is essentially an global expansion of bureaucratic structure, implying global division of labour and tasks.

For years, EU critics only had to mention the "bent cucumber rule" whenever they wanted to mock perceived European over-regulation. Now, the EU's agriculture minister has suggested scrapping a number of rules to ease the rising price of food and Mariann Fischer Boel, the EU's Danish agricultural minister, thinks it prudent to bend a few regulations.

Capitalism cannot exist without a Massive Bureaucracy. This is a discussion on *Capitalism cannot exist without a Massive Bureaucracy* within the Economy forums, part of the Issues category on Politics.ie. It's often been said that one of the biggest problems the USSR had to face was its massive reliance on. Bureaucracy was expanding in the EU and US at an unprecented rate. 50 federal agencies issue about 4,000 new rules each year. The Code of Federal Regulations is now 155,000 pages in 205 volumes.

Bureaucracy has creeped into every nook and cranny of human life, with primary school teachers, for example, wasting silly amounts of time filling out forms to give themselves some kind of performance ratings, which, of course, are entirely meaningless. This gets far worse for secondary school teachers and college lecturers. Doctors and other hospital staff, to give another random example, are also expected to waste their time with these silly forms - and, of course, an army of bureaucrats are needed to read and access all these forms and write reports on them - which, in turn, have to be read by more senior bureaucrats, etc. etc. ad infinitum. And we have not even mentioned what the ordinary punter on the street faces. After the Berlin wall fell, we heard the shocking news that the DDR police had files on 30% of the population. But, todays

western police forces have files on 100% of the population. Every electronic communication is being recorded, most urban streets are being watched by CCTV cameras, satallites photograph all our streets and isolated houses - and, again, an huge army of bureaucrats are needed to monitor and access this colossal mountain of information. Can it be said that the capitalist system works? If it needs such a gigantic bureaucracy to stop it from eating itself? Or, is capitalism doomed already to go the way of the USSR - sunk beneath it's own weight? Can we think of some kind of human system were we are not watched and recorded and lied to by a self perpetuating bureaucracy? And who are this bureaucracy really working for? Not you or me anyway.

An entity like the EU are not capitalist entities. Any organization that grows and tries to regulate business or life is regressive. This includes the EU. It is all a waste of resources.

The result of the government programme arrangements is excessive bureaucracy and slow decision-making which can be a further source of delays and inefficiency in collaboration. Of course, politicians and officials might enjoy international travel, the glamour of meeting in foreign locations and the prestige of inter-governmental conferences. Experience also suggests that international collaboration involving a large number of countries is more difficult because of the problems of reaching agreement on defining a common concept. There are at least two lessons from European collaborative defence programmes. First, care is needed in identifying the criteria to be used in evaluating collaborative programmes. Second, there remain considerable opportunities for improving the efficiency of collaborative programmes. *Efficiency could be improved by:*

a) allocating work on the basis of each nation's comparative advantage using competition to determine work shares;

b) selecting a single prime contractor for the programme and ensuring that the prime contractor is subject to contractual incentives placing it at risk (via competitively determined fixed price or target price incentive contracts);

c) applying the principle of compensation. Adequate arrangements are needed to compensate the losers from policies designed to improve efficiency in collaborative programmes. Compensation need not be organised within the programme but could involve offsets on other defence projects or more general regional aid and manpower policies (eg. training; mobility).

PROCEDURES AND METHODS FOR DECREASING MILITARY BUREAUCRACY

Social transformation requires transformation of the military. This transformation includes several actions. First aligning our legislation to NATO and EU legislation. We are EU and NATO members and we do not need to retain things that we have and are inefficient, we do not need to complicate the procedures by doing them twice. Also, technology is very important in this transformation. The use of modern technology in military forces leads to a greater use of technical specialists and bureaucratic modes of organization. In some ways specialization reduces the areas of common experience on which fraternization proceeds. But the move to technical specialization and bureaucratic organization has also decreased the role of direct coercion in maintaining social control in the military. This suggests that there will be an increasing similarity between successful grassroots strategies against bureaucracy and the military.

Then the human resources management and personnel niche training are also very important. Hyper specialization in one domain signifies that the person knows how to do that thing very well, thus reducing time spent and improving quality. We should renounce to use people in redundant tasks. We know the problem (for example terrorism) so we should spend the money on addressing it as a cause and not spend it on mending the effect. We have the responsibility to reduce waste and improve efficiency. There can be eliminated some levels in a structure, for example the elimination of some acquisition related advisory boards and make the procedure

quicker. We should switch our legislation from restrictive to permissive and align it to the EU, but at the same time we should change our mentality in order to make things work. To make the decision taking process quicker we must eliminate duplication and encourage cooperation. Another problem necessary to be solved is redundant staff .The three types of armed forces, Land Force, Air Force and Navy Force, should work under a joint command. Of course this joint command will have staff from all three armed forces but their cooperation will not be difficult because they largely work with the same issues and perform the same functions.

CONCLUSIONS

Our challenge is to transform not just the way we deter and defend, but the way we conduct our daily business. Let's make no mistake: the modernization of the Ministry of National Defense is a matter of some urgency. The men and women of this ministry, civilian and military, are our allies, not our enemies. They too are fed up with bureaucracy, they too live with frustrations. They too want to fix it. In fact, they even know how to fix it, and if asked, will get about the task of fixing it.

Above all, the shift from bureaucracy to the battlefield is a matter of national security. In this period of limited funds, we need every "leu", every good idea, every innovation, every effort to help modernize and transform the Romanian military.

We must change for a simple reason -- the world has -- and we have not yet changed sufficiently. The clearest and most important transformation is from a bipolar Cold War world where threats were visible and predictable, to one in which they arise from multiple sources, most of which are difficult to anticipate, and many of which are impossible even to know today.

The bureaucracy can be understood wrong when it is alike with:

1. corruption – most of people are associating bureaucracy with an unaccountable power, coruption, favoritism, and other unattractive characteristics, criticizing bureaucracy for these characteristics;

2. inefficiency and incompetence – people sometimes equate bureaucracy with any manifestation of administrative incompetence because it is meticulous, almost obsesive;

3. size – some people identified bureaucracy with any large organization because there are two unlikely elements of bureaucracy: strength and weakness;

4. something else – civil service, paperwork and so on.

Bureaucracies are relatively efficient and technically superior forms of administration proven to be indispensable to large, complex organization and modern society, it helps administering large organization efficiently and bureaucracies should be applied taking into consideration the type of organization that it best fits. I want to say that an important aspect of the bureaucracy structure is represented by the human resources management. I consider that the leadership must have a permanent preoccupation to maintain bureaucracy in normal limits. If bureaucracy decreases, the military and administrative system will be more efficient and transparent.

I don't know were is more bureaucracy: in the states which are developed and very developed or in the states which are poored, in the multinational organizations or in the national organizations, in NATO or in EU? It's a very dificult to answer at this question, but what I can say it is that *the bureaucracy is everywhere in the world* in many kinds of forms.

The weakness of the modern systems of military bureaucracy lies in their organization: hierarchy, specialization, and lack of mobilization of the political support of the populace. Essentially all the goals and campaigns which are useful in transforming bureaucracies can be used in relation to militaries: building networks at the rank-and-file level, promoting self-management such as democratized command structures, and fostering individual and group self-reliance. In all these efforts to *debureaucratise the military*, the long-term goal of abolishing military forces needs to be built in, which means linking the debureaucratisation efforts to implementation of conversion plans and development of social defense.

Bureaucracy is a reality and a necessity in any organization. In military organizations we meet a specific type of bureaucracy called "military bureaucracy". As a member of NATO and the EU, Romania must be a country with an efficient bureaucracy

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MANAGEMENT OF TEST AND EVALUATION ACTIVITIES

Captain Comander MARIUS PREDESCU

DEFINITIONS

Test and Evaluation (T&E) is defined as : "…demonstration, measurement and analysis of the performance of a system, and the assessment of the results."

T&E is the deliberate and rational generation of performance data, which describes the nature of the emerging system and the transformation of data into information useful for the technical and managerial personnel controlling its development.

In the broad sense, T&E may be defined as all physical testing, modeling, simulation, experimentation, and related analyses performed during research, development, introduction, and employment of a weapon system or subsystem.

A "test" is any program or procedure that is designed to obtain, verify, or provide data for the evaluation of any of the following:

1) progress in accomplishing developmental objectives;

2) the performance, operational capability, and suitability of systems, subsystems, components, and equipment items; and

3) the vulnerability and lethality of systems, subsystems, components, and equipment items.

"Test and Evaluation" is the process by which a system or components are exercised and results analyzed to provide performance-related information. The information has many uses including risk identification and risk mitigation and empirical data to validate models and simulations. T&E enables an assessment of the attainment of technical performance, specifications, and system maturity to determine whether systems are operationally effective, suitable, and survivable for intended use, and/or lethality.

The purpose of T&E in the MOD is to provide confidence (i.e. identify risk):

- that we have received what we paid/asked for;
- that it is safe to use;
- that it is "fit for purpose" in the military context across all Defence Lines of development and through life cycle (including training) Undertaking T&E leads to system design improvements, development of tactics, training, procedures and the collection of information on the employment of a system.

Basically, the T&E process function is to provide a system that:

- Meets the customer's requirements as stated when the project starts;
- Meets the customer's requirements as they exist when the project is delivered;
- Is flexible enough to allow cost effective modifications as the customer's requirements continue to evolve during the operations and maintenance phase of the system life cycle.

IMPORTANCE OF TEST AND EVALUATION (T&E) ACTIVITIES

According to Defense Procurement System the procurements includes:

- Research;
- Development
- **Test and evaluation**;

- Manufacturing;
- Operational forces endowment and military equipment maintenance.

Test and evaluation (T&E) are processes that deliberate and rational are producing data regarding characteristics of a system that emerge to be build and gaining information that are necessary for technical management personnel in order to control the development process of the system.

T&E may be define as the aggregate of physical test, models, simulations, experiments as well as data analysis, data that have been gained within research, development, promote to operating and operating a military equipment' system or a subsystem.

Test activity includes programs, procedures as well as data gaining, analyzing, and support processes that are used **to demonstrate the system level of compliance within its requirements**. Test activities are a discreet process that generates resources consumption.

TEST END EVALUATION CLASSIFICATION

In accordance to Regulations I.1000 regarding Procurement System management within RoMOD, T&E activities are classified as follows:
1. Development T&E – DT&E;
2. Operational T&E – OT&E;
3. Live Fire T&E – LFT&E.

Development test &evaluation:

Development Test & Evaluation = The scientific process of systems and subsystems experimentation and evaluation that uses the scientific method to obtain useful, statistically relevant, and accurate data.

Developmental Test and Evaluation - Test and evaluation of systems that do not have a certified or whose operating envelopes are not defined or known. Testing for safety, security, mission suitability, or specification compliance.

Testing done to develop any system to make it ready for operational use.

The role of government institutions in developmental test is:
1. Provide early operational user input so as to influence the design of the system so that it best meets the needs of the end user;
2. To verify system performance.

In COTS acquisitions, government institutions developmental testers fulfill only the second role.

Research And Flight Test Centre serves as the focal point for the conduct of all DT&E and Live Fire Test & Evaluation (LFT&E) of the military aeronautical products.

DT&E during acquisition:
- Evaluates design approaches, validates analytical models, quantifies contract technical performance and manufacturing quality, measures progress in system engineering design and development, minimizes design risks, and predicts integrated system performance (effectiveness and suitability) in operationally relevant environments.
- Identifies, tracks, and resolves design deficiencies as early as possible. Also identifies enhancements.
- Provides data for cost-performance trade decisions before system downselect, and during system development.
- Is funded from Research and Development funds.
- Supports the acquisition of new or improved material or operational capabilities before acceptance for operational use or production.
- Supports the decision to certify the system ready for dedicated OT&E.

DT&E during sustainment is planned, conducted, and reported for improvements, modifications, or upgrades to fielded systems which:

- Extend their useful military life within the current performance envelope or capabilities;
- Expand or increase the current performance envelopes or capabilities;
- Identifies, tracks, and resolves system deficiencies as early as possible. Identifies enhancements. Also identifies quality, reliability, maintainability, and safety problems and
  solutions;
- Ensures fielded systems continue to perform as required;
- Provides information that may lead to future modification or upgrade programs;
- Supports modification or upgrade programs for fielded systems when a sufficient amount of integration testing is needed;
- Provides aging and surveillance testing;
- Verifies changes in operational environments.

QUALIFICATION TEST AND EVALUATION (Q*T&E)*

Qualification Test and Evaluation is a modified form of DT&E conducted on commercial off-the-shelf (COTS), non developmental items. Candidate systems for QT&E require little or no government funded research and development (R&D), engineering design, or integration efforts.

In addition, QT&E:

- Is planned, conducted, and reported following the same test process guidance applicable to all DT&E.
- Identifies, tracks, and resolves system deficiencies as early as possible. Also identifies enhancements.
- Supports the verification of changes, modification, or upgrades to fielded systems.
- Supports the decision to certify the system ready for dedicated Qualification Operational Test and Evaluation (QOT&E).

OPERATIONAL TEST & EVALUATION OT&E.

Operational Test and Evaluation = Testing accomplished to prevent the fielding of systems that cannot be used in the combat environment.

This testing must be accomplished by operationally representative users, in an operationally representative environment, using an operationally representative system. For reasons of independence, these testers must not be the same operational users who helped develop the system or influenced its design.

Operational testers will conduct OT&E in order to:

- Determine and report operational effectiveness and operational suitability;
- Identify, track, and help resolve deficiencies as early as possible, and identify enhancements;
- Identify quality, reliability, maintainability, and safety problems and propose solutions;
- Provide information for identifying and refining logistics and software support requirements;
- Provide information on organizational structure, personnel requirements, support equipment, technical publications, training, training systems, tactics and doctrine;

- Recommend and evaluate changes in system configuration;
- Provide information for refining operations and maintenance (O&M) cost estimates, or identify system characteristics or deficiencies that affect O&M costs;
- Determine if support equipment, training and technical publications support the system and mission;
- Assess the survivability and/or lethality of the system in the operational environment;
- Evaluate system compatibility, interoperability, and integration;
- Evaluates changes and verifies correction of new deficiencies discovered after system deployment;
- Explores non-material means of satisfying changing operational requirements during system sustainment;
- Evaluates routine software block cycle changes, Operational Flight Programs (OFPs), modifications, upgrades, mission data updates, and other improvements or changes during sustainment;
- Evaluates operational systems against Foreign Material Equipment (FME) and new threat system.

LIVE FIRE TEST AND EVALUATION (LFT&E)

Live Fire Test & Evaluation (LFT&E) is testing accomplished to demonstrate the survivability and lethality of new weapon systems.

Vulnerability testing mainly involves actual use of enemy weapon systems (firing munitions, Electronic Counter Measures (ECM)) at mission configured, full production versions of the end system.

Lethality testing is the actual use of a weapon system against an enemy or similar weapon system to prove the capability of the system.

T&E have an important roll during a military system lifetime since ensure data and information that support its selection, procurement, operating and replacement.

T&E are used to support decision regarding optimum solution to be applied in order to accomplish certain missions and ensure that Forces operates only systems that complies its requirements from the point of view of design, development, manufacturing and storage. T&E provides information that is required to support decision to retain a certain system in safety condition.

The fundamental aim of T&E within Military System Procurement and Development Program is to identify hazard areas in order to decrease or eliminate risks.

During the initial phase of development T&E are dedicated to the concept suitability, appreciate design hazards, identifying design variants analysed and compare different solutions, estimate requirements compliance.

TEST AND EVALUATION PRINCIPLES

What is test and evaluation ?

A test is a controlled event designed to measure the performance of an entity in controlled circumstances (typically stimulus / load and environment).

Evaluation is the formal analysis of existing information or test results in order to inform an acceptance decision.

Test and evaluation are the means by which verification and validation are achieved to enable acceptance.

INTEGRATION OF TEST AND EVALUATION ACTIVITY

With careful planning, one test can sometimes serve several purposes, saving on time and cost. In particular, major benefits can accrue from using engineering development and manufacture test evidence to support verification.

Several tests may be required to inform one decision and one test may inform many decisions requiring alignment of test programmes. Acquisition project test, evaluation and acceptance activity should be integrated within one consolidated and optimised plan - the Integrated Test, Evaluation and Acceptance Plan (ITEAP).

Test Methods

Test techniques include simple visual inspection, logic and integrity checks, simulation, laboratory tests, live trials in test ranges, and user trials in operational environments. With care, analogy and extrapolation from other test results can sometimes be employed.

Test points include interim critical design or development milestones where a 'freeze' of a fundamental design feature is required and before more advanced testing can be allowed to proceed.

Separation from "Analysis and Experimentation"

Analysis and Experimentation and test can appear to be superficially similar but there are significant differences which justify the partitioning of analysis / experimentation and test programmes within an IPT.

Analysis / Experimentation	Test
• Exploratory • Generates insight • Can be subjective • Can tolerate approximations • Programmes often have to evolve	• Confirmatory • Generates confidence • Must be objective • Requires exactness • Programmes should be substantially pre-planned

Both employ similar techniques and technologies – operational analysis (using verification data) can be used for validation where operational trials and exercises are impractical.

TEST DATA MANAGEMENT

Test activity, like experimentation and analysis, generates volumes of data and meta-data that must be transformed into information and evaluated to create knowledge and inform acceptance decisions. That data information and knowledge must be consolidated, distributed, used and archived. ITEA activity can present a powerful argument in favour of establishing a project shared data and working environment.

Testing costs

A balance should be struck between the cost of reducing uncertainty and the risks associated with full test coverage. Engineering and costing an ITEA Plan is a non-trivial activity that should be fully resourced and managed. It requires the application of specialist knowledge, experience and sound judgement. It is imperative that test agencies are involved in T&E planning from the outset, to ensure that significant issues are not overlooked or under-resourced.

Who pays ?

All test activity by the equipment or system supplier to meet requirements for testing specified in the URD and SRD are valid charges to the contract. Where Government are

involved it is important that bidders are aware of the financial implication before a bid is submitted. Dependence on Government is a risk to both the supplier and MOD and should be managed.

ACCEPTANCE PRINCIPLES

What is Acceptance *?*
Acceptance confirms that users' needs have been met by the supplied solution.

Acceptance confirms that the Defence Lines of Development combine effectively to deliver capability and that major milestones have been achieved.

Verification and Validation informs Acceptance by establishing the evidence – set against acceptance criteria - to determine if the solution meets the needs of the users.

Acceptance should also explicitly address any integration or interoperability requirements involving other equipment or systems.

To enable acceptance every user and system requirement must have a 'testable' characteristic.

Acceptance Strategy
The acceptance strategy defines the process and management of the acceptance activities at an early stage in the project lifecycle and is recorded in the Requirements and Acceptance Management Plan (RAMP).

The plan, outlines the principal goals for the capability acquisition including its enabling equipment or systems. The goals inform development of the validation criteria in the User Requirement Document (URD), and the verification criteria in the System Requirement Document (SRD).

The Major Acceptance Milestones
There are typically three major acceptance milestones:
- Contract Acceptance
- System Acceptance
- In-Service Date
- Full Operational Capability.

Depending on circumstances there may be additional interim milestones.

Milestone	Description
Contract Acceptance	Contract Acceptance can occur when evidence demonstrates that an individual supplier has fulfilled the requirements in (a stage of) the Contract to supply the equipment or system (or a contribution to it) to the MOD.
System Acceptance	System Acceptance can occur, concurrent with or after contract acceptance of initial deliveries but before In-Service Date (ISD), when evidence demonstrates that the equipment or system acquired by the IPT has satisfied all the verification criteria in the SRD.
In-Service Date	ISD can occur when the capability defined in the URD is assessed as available for operational use - in its minimum usefully deployable form. It is the date

Milestone	Description
	on which an **Initial Operating Capability** (IOC) is achieved.
Full Operational Capability	Full Operational Capability (FOC), defined by the URD, is what the Sponsor is acquiring. Achievement of this will be monitored and acknowledged by the Sponsor, but where it occurs later than IOC and ISD it is not marked by a separate formal declaration.

Incremental Acceptance. Formal pre-planned incremental acquisition will require associated formal pre-planned incremental acceptance, reflected in the URD, SRD and ITEA Plan.

Integrated Test, Evaluation and Acceptance (ITEA) Principles

Integrated Test, Evaluation and Acceptance (ITEA) confirms that the supplied solution meets the user's needs. It is also a method of identifying and managing technical and operational risks - and hence time and cost - throughout the programme.

The Integrated Test, Evaluation and Acceptance Plan

An Integrated Test, Evaluation and Acceptance Plan (ITEAP) assigns responsibilities for test activities, agrees a customer supplier agreement and monitors progress - the what, where, why, when and how. The ITEAP is primarily a document but significantly it includes a Verification and Validation Requirements Matrix and a Schedule – the ITEAP Schedule.

The Sponsor owns the ITEAP but generally, by agreement, the IPT manages it - occasionally the owner of the Training DLoD manages it. The DLoD owners are identified in agreements made through the TLCM process at the Programme Board.

The Requirements Manager manages and processes inputs and evidence from the DLoD owners to ensure the capability can be achieved and escalates issues to the Sponsor through the Programme Board for resolution.

The data contained within ITEAPs will also be used by MOD.

- Timing - Preliminary scoping work can:
- Improve the integrity of project schedules and budgets.
- Enable early identification of risks, long lead time issues, resource availability, and cost drivers.

VERIFICATION AND VALIDATION (V&V)

What is Verification ?

Verification asks: " did we build the system right? " It confirms that the characteristics and behaviour of an equipment or system comply with the requirements specified in the System Requirements Document (SRD).

Verification also provides the information required to guide remedial action to correct shortcomings in the equipment or system.

The satisfaction arguments of each individual candidate system requirement must be verifiable.

Verification generates the evidence that informs and enables authorisation of Contract Acceptance and System Acceptance.

Progressive verification describes the practice of performing interim activities throughout the project lifecycle. It minimises the impact of any required remedial action, and gives the customer early and increasing confidence about the achievement of performance (and thereby indirectly cost and schedule) expectations.

What is Validation ?

Validation asks: " did we build the right system?" It generates objective evidence that the capability enabled by the equipment or system satisfies the needs defined in the User Requirements Document. It is dependant on identifying the correct validation criteria and effectiveness envelop at requirements capture stage.

Validation generates the evidence that informs and enables authorisation of In-Service Date (ISD).

The satisfaction arguments of every individual candidate user requirement must be testable.

1.1.1.1. Why is Verification and Validation important ?

Confidence	The customer must be confident that requirements will be satisfied. Verification ensures that confidence is based on objective evidence, not verbal assurance from suppliers. Both Customer and Suppliers need to be confident that expectations are being interpreted correctly. Progressive Verification will give both Customer and Suppliers that confidence.
Capability	Capability (as distinct from performance) can be difficult to measure. A formal verification and validation programme ensures that this challenge is properly managed, exploiting operational analysis where appropriate.
Safety and Security	A formal verification and validation programme helps to ensure that confidence in equipment or system safety and security is achieved.
Cost and Schedule	Remedial action is expensive, and delays ISD acceptance. A planned verification programme will expose shortcomings as early as possible, minimising the cost of: • remedial action • associated delays • operational impact • avoid excessive testing.
Risk	Progressive testing is a potential mitigation method to provide early confidence. Test and Evaluation can be used to identify and quantify risks and to mitigate operational and technical risks.

Integrated Test, Evaluation and Acceptance (ITEA) Process

The Integrated Test, Evaluation and Acceptance (ITEA) Process records all the actions, stages and decisions needed in the project to meet the delivery of the Capability need identified during the Through Life Capability Management (TLCM) process.

ITEA Process

It describes a structured approach to creating an Integrated Test and Evaluation Plan (ITEAP), an ITEAP Schedule and a Verification and Validation Requirements Matrix (VVRM).

In practice, there will be overlap between the steps, some iteration and a need for version control.

The ITEA process is based on six tasks, summarised below and shown in the diagram. Further information on ITEA principles is also available.

Task	Summary
Task 1 – Acceptance strategy	Plan the strategic approach for ITEA
Task 2 – Define Verification and Validation (V&V)	The V&V criteria
Task 3 – Detail ITEAP	Consolidate the sets of tests to form an ITEAP
Task 4 – Execute ITEAP	Book trials facilities, carry out tests and collate result set
Task 5 – Evidence management	Analyse the acceptance evidence and make recommendations
Task 6 – Declaration	Acceptance Authority declarations

The "solution" should include associated Defence Lines of Development (DLoD), each of which may require Verification, Validation and Acceptance.

On a major project, detail in the ITEA Plan should be limited and further detailed sub-plans from each supplier or test service provider should be included in the Annex.

INTEGRATED TEST, EVALUATION AND ACCEPTANCE (ITEA) PROCESS: THE SIX TASKS

This guidance is for those acting in the ITEA Manager role and describes how to define the ITEA products. The six tasks detailed here, form the ITEA Process .

The six tasks are:

- **Task 1 – Acceptance strategy.** Plan the strategic approach for ITEA.

- **Task 2 – Define V&V.** The Validation and Verification (V&V) criteria.
- **Task 3 – Detail ITEAP.** Consolidate the sets of tests to form an ITEAP.
- **Task 4 – Execute ITEAP.** Book trials facilities, carry out tests collate result set.
- **Task 5 – Evidence management.** Analyse the acceptance evidence and make recommendations.
- **Task 6 – Declaration.** Acceptance Authority (AA) declarations.

The process is iterative and the ITEA products should be reviewed throughout the project lifecycle, so that changes are recorded and the impact of trade off decisions are assessed.

Task 1 - Plan the approach

Plan the approach this is set out in the acceptance strategy documented in the Requirements and Acceptance Management Plan (RAMP).

Task 2 - Define the Validation and Verification criteria

As the user requirements document (URD) and system requirements document (SRD) are developed, the methods for validation and verification criteria should be recorded. This will be used as the basis for ITEA planning. Early identification of trials facilities should be planned with the DE&S TEST IPT.

Task 3 - Detail the ITEAP

<u>Step 1 – Identify</u>. Identify sources of need for Test and Evaluation building on the URD and SRD validation and verification methods. The ITEA process addresses:

- Validation of the capability, that may be incremental and covered by a Capability Implementation Plan (CIP).
- Verification of the capability that may be incremental.
- Design certification.
- Safety and environmental needs.
- Test and reference facilities.
- Technology readiness and research.
- Contract acceptance.

Early planning is required for:

- supporting roles
- operational trials
- calibration
- simulation and model validation.

<u>Step 2 – Scope</u>. Scope the outline test and evaluation requirement for individual sources of need.

As the URD and SRD start to evolve and solution options reduce, review the validation requirements to ensure their continuing appropriateness.
Identify the need for military exercises and range utilisation where long term planning is required.

Baseline the validation requirements with the rest of the URD at Main Gate. If the SRD is baselined at Main Gate and a negotiated test method differs from the SRD criteria then a formal approval will be required by submission of a Review Note.

The scope will include:

- Individual test cases that satisfy each requirement.
- Which tests are mandatory or desirable.
- The cost of Test and Evaluation (T&E) and whether it may be acceptable to test less than 100% of the requirement.
- A prioritised set of test and evaluation activities.
- Responsibility for evaluation of individual tests.
- Responsibility for management of the test and evaluation activities.
- Test, evaluation and acceptance dependencies.

- Estimated cost and elapsed time for each test.
- The impact on asset and contract delivery schedules.

Step 3 – Achievability.- Compare estimated cost (including the production of test articles and development of facilities) to budget.

Compare schedule to critical project milestones and demand for resources (test facilities, government furnished assets) to availability. Resolve problems, and inform risk management as appropriate.

Step 4 – Risk Assessment.Within the context of project risk management, perform a risk assessment on the draft ITEAP – areas to consider are:
- Non-availability of test articles and facility on the day of test.
- Failure of (integration) tests.
- Consequent collapse of project management plan.

Develop risk mitigation actions:
- Quantify the uncertainty of cost and schedule estimates.
- Consider the implications of schedule uncertainty on resource availability.
- Question if there is sufficient use of incremental verification to ensure no catastrophic surprises at completion of manufacture.

Step 5 – Consolidate. Consolidate the sets of tests and their implications as scoped in Step 2, to form a draft ITEAP, ITEA schedule and VVRM.
- Consolidate by removing duplication of test sets.
- Maintain links between test(s) and requirement(s).
- Refine the dependencies and sequencing to resolve bottlenecks and update the project master schedule.
- Identify when the Integrated Project Team (IPT) will be required to evaluate evidence, and draft a review or acceptance meeting schedule.
- Develop the plan to include all sources of test and contributing organisations.
- Explicitly define accountabilities and liabilities.

Check -
  o Does the Plan protect intellectual property rights (IPR) in test results?
  o Will there be any problems with accounting, liability and insurance where assets are 'loaned' across organisation boundaries?
  o Can each facility operate at the required security level?

Step 6 – Document. Document and cross reference to reflect the (draft) ITEAP in the:
- Stakeholder Responsibility Matrix (SRM)
- Asset and Contract Delivery Schedules.

Step 7 - Develop Implementation Processes - establish formal collaborative processes or procedures in order to agree administration of T&E activity across organisational boundaries. These might embrace areas such as:
- The verification of individual DLoD.
- The collation and management of V&V evidence.
- The evaluation of evidence, and the conduct of acceptance decision-making.
- The management of disputes, provisos, and remedial action.
- The management of test articles.
- The management of test facilities and availability problems.
- Installation and test.
- Integration and interoperability testing.
- The Test Evaluation and Acceptance of Urgent Operational Requirements (UORs).

Ensure that there is an adequate process in place to progress delivery of the non-equipment DLoD of Military Capability (MC) into validation testing.

Step 8 - Optimise the ITEAP and obtain stakeholder endorsement - Reflect the conclusions of the achievability and risk assessment in the ITEAP, and obtain stakeholder agreement to it including regulatory stakeholders such as:

- Quality Assurance
- Air and Sea worthiness
- Safety
- Security.

Baseline and publish the ITEAP and Schedule maintaining it under configuration control.

Task 4 – Execute the ITEAP

Book trials facilities, carry out tests and collate result set as acceptance evidence in the VVRM. Manage the DLoD progress and record within the ITEAP.

Task 5 – Evidence management

Analyse the acceptance evidence and make recommendations.

Step 1 Within the ITEAP update the progress of the overall development including the other DLoD. This should highlight any issues such as long term needs for test facilities and dependencies on other projects and programmes.

Step 2 The acceptance evidence is built up in the VVRM to collate the test results.

Step 3 Assessment - Analyse and assess the acceptance evidence contained in the reports from the VVRM.

Step 4 Record the outcome of the tests (pass/fail) for compliance or non-compliance.

Step 5 Following assessment of the results agreement is required between the stakeholders (Sponsor and user). These decisions may be influenced by political and operational pressures that will need to be identified in risk mitigation strategies.

Where agreement is not achieved the alternative options include:

- re-design
- quality investigation
- modification
- trade off
- re-trial or re-plan.

Step 6 Following the assessment of the tests a recommendation is made on acceptance to the acceptance authority.

Task 6 – Declaration

A recommendation to the acceptance authority is required for the following milestones:

- Contract Acceptance
- Systems Acceptance
- In-Service Date (ISD)
- Initial Operating capability (IOC)
- Full Operating Capability (FOC).

Test and evaluation recommendation can also aid the customer in the down selection to the preferred solution and mitigation of risk at the assessment stage

INTEGRATED TEST, EVALUATION AND ACCEPTANCE PLAN (ITEAP) SCHEDULE

The ITEAP Schedule shows the expected delivery of requirement products, activities, outputs, resources and key milestones.
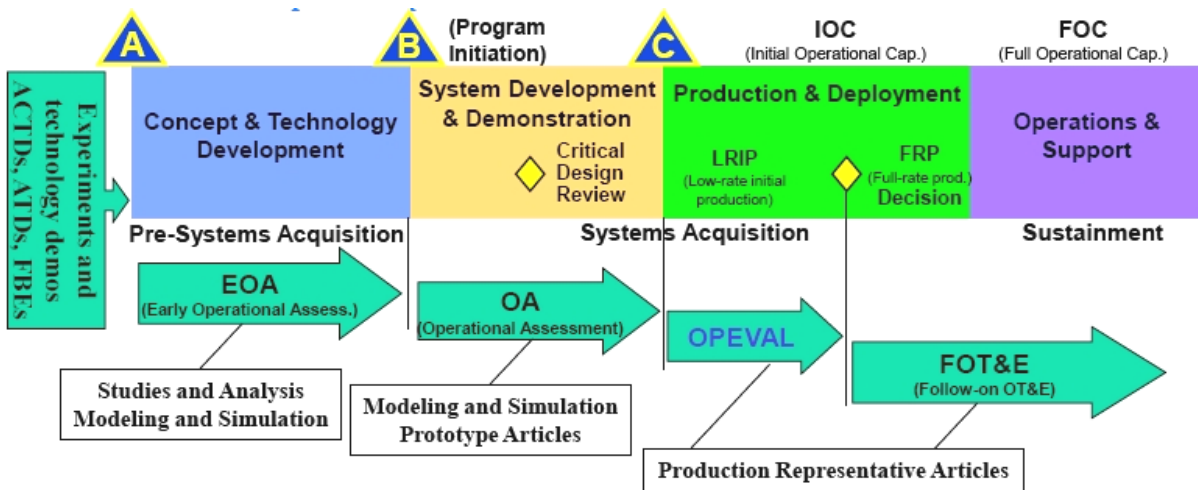
The Schedule defines the logical series of events need to meet the capability need, initially at a high level and open to change, maturing as the project timescales and milestones are defined.

Where test ranges or facilities are required, availability of the most appropriate resources should be discussed and agreed with the TEST IPT and recorded in the Schedule as early as possible.

The Schedule should be linked to the main project plans.

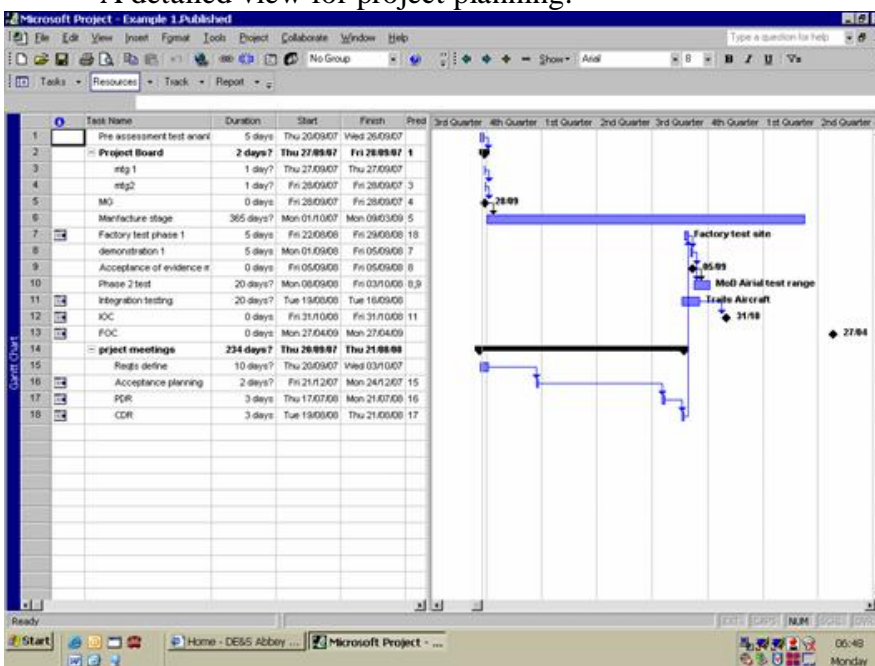It defines logical series of events and dependencies when:

- resources are required
- test activities are scheduled
- test results and evidence are to be generated.
- milestones of Defence Lines of Development (DLoD) progress.

It consists of:

- a high level plan
- a detail plan as the project matures.

A high level view for communication:

A detailed view for project planning:

VERIFICATION AND VALIDATION REQUIREMENTS MATRIX (VVRM)

A Verification and Validation Requirements Matrix (VVRM) provides traceability from requirements to the relevant testing and trials results. It forms the basis for decisions on acceptance and ensuring the stakeholder need is met.

The VVRM should include reference to:
- User and System Requirements
- Evidence and information (Test type, results)
- Acceptance criteria and recommendation
- Responsibilities
- Progress and key milestones.

A principal feature of a VVRM is to provide a tool to manage incremental verification with a definition of each of the incremental test stages and stage criteria invoked against specific requirements.

The following table illustrates an example, giving the Progressive Verification and Validation Stages:

ID	Requirement Statement	Requirement	Architecture	Design	Manufacture	Installation	Integration
n1	The system shall protect the operator from external noise. Maximum dB	Link to URD	Inspection of functional allocation	Computer simulation at Interim and Critical Design Review	Physical test of prototype and first production crew cabin in anechoic chamber (microphone)	Physical test of un-loaded vehicle in field trial (microphone and human-in-loop)	Physical test of loaded vehicle in military exercise (human-in-loop)

This illustrates an extreme example of incremental verification.
- Critically select stages according to need and benefit, not opportunity.
- A hierarchical VVRM may be constructed to address component and sub-system testing in advance of end-product verification.
- The VVRM is an appropriate place to use Technology Readiness Levels (TRLs) and System Readiness Levels (SRLs) and map progressive certification of design.

Where progressive testing is to be adopted, identify the dependency of each test on the other LoDs, for example, testing a prototype aircraft will require a trained test pilot, interim sustainability arrangements and possibly test mission plans.

Due to the complexity of managing links between related documentation and information, it is strongly recommended that a Requirements Management Tool such as DOORS is used to maintain an overall audit trail.

A suggested approach is described below.

UR	User Requirement	SR	System Requirement	Result
UR1	The [user] shall…	SR1	The [system] will	Test – Demonstration Planned – May 07 Responsibility – Progress - Test Result – Passed 7 June 07 Acceptance Recommendation References

Determination of V&V criteria in consultation with stakeholders is a matter of deciding what confidence in satisfaction of the requirement is required, and thereby what class of test method is appropriate to deliver that level of confidence.

Risk analysis and cost benefit analysis techniques should be used to inform the decision making.

Factors that influence the selection include:

- Where the capability will be deployed.
- Safety and security
- The need and feasibility to test in a realistic operating environment
- The use of simulated environments
- The development maturity of the article under test
- The use of destructive or non destructive testing
- System interfaces
- Availability of a suitable test capability, and the MOD's confidence in supplier's test capability
- Legal and regulatory requirements
- Test duration, and relationship to the acquisition critical path
- Test cost
- Whether 'probability' is an issue.

The risk that the selected method is not representative and may fail to expose a need for remedial action should be assessed. The potential impact if that risk materialises.

Reliance on testing at the completion of manufacture or integration add risk that remedial action may be too late in the programme for the impact to be within tolerable cost and schedule limits

CONCLUSIONS

T&E has several roles in the acquisition process. By:

- Identifying non-conformance to requirements, T&E prevents the delivery of unsuitable equipment to the end user.
- Identifying and reporting the capabilities of "as-delivered" equipment over and above the user requirements, T&E provides a valuable service to the user.
- Collecting generic requirements on types of systems and providing them to systems engineering, T&E helps to minimize more and more categories of missing requirements.

By making use of modern Quality theory, Knowledge Management, and Information Technology, T&E is positioned to work with systems engineering to prevent defects, test for non-conformance to requirements, and evaluate the capability of "as-delivered" equipment in a cost-effective manner over the entire life cycle.

ACRONIMS

CIP	Capability Implementation Plan
DE&S TEST IPT	Defence Equipment and Support TEST Integrated Project Team
ECM	Electronic Counter Measures
FME	Foreign Material Equipment
FOC	Full Operational Capability
IOC	Initial Operating Capability
IPT	Integrated Project Team
ISD	In-Service Date
ITEA	Integrated Test, Evaluation and Acceptance
ITEAP	Integrated Test, Evaluation and Acceptance Plan
LFT&E	Live Fire T&E
MC	Military Capability
MOD	Ministery of Defence (MOD – Ministery of National Defence)
O&M	Operations and maintenance
OFPs	Operational Flight Programs
QOT&E	Qualification Operational Test and Evaluation
QT&E	Qualification Test and Evaluation
R&D	Research and Development
RAMP	Requirements and Acceptance Management Plan
SRD	System Requirement Document
T&E	Testing and Evaluation
T&E – DT&E	Testing and Evaluation -Development Testing and Evaluation
T&E – OT&E	Testing and Evaluation –Operational Testing and Evaluation
UORs	Urgent Operational Requirements
URD	User Requirement Document
V&V	Verification and Validation
VVRM	Verification and Validation Requirements Matrix

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STRATEGIC CULTURE AND THE MANAGEMENT OF POWER APPROACHES

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This paper will try to lead the reader in a journey from conceptual analysis in a given framework to concept formation through a series of stops which will add different contextual layers to the initial landscape. Global, long-range defense planning has shifted into a more complex security design since the end of the Cold War and the dramatically change of international security environment. The task has become more difficult in several respects. Firstly, the sources and types of conflict for which military establishments must plan have become more diverse and less predictable, even if less dangerous in the worst case. Secondly, the range of missions for military forces now gives considerable weight to low-intensity and non-conflict capabilities often considered marginal during the Cold War, and thirdly, and perhaps most important with regard to future demands and constraints on military forces, the nature of security itself is changing on a global basis. The security agenda has expanded in functional terms. Formerly peripheral challenges such as migration and economic competition, together with more obvious risks from terrorism and the spread of weapons of mass destruction, now exceed conventional military rivalries as factors affecting the use of force, in a way that replace the military hard power with a soft one - deterrence.

These concerns have become soonounced that policy-makers and academics are debating the very relevance of deterrence in managing the power for security and defense reasons in the 21st century[1]. Even long-term proponents have sought to elaborate a highly complex theory to renew its place in the contemporary security dialogue.

This study speaks to one dimension of recent security debates by surveying innovations in the study of strategic culture[2]. Arguments about cultural influences on security strategy are grounded in classic works, including the writings of Clausewitz, who characterized war as a test of "moral and physical forces" [3], and Colin Gray, who argued that distinctive national styles, with "deep roots within a particular stream of historical experience" [4], shaped strategic development of the superpowers during the Cold War underlined the cultural foundations of strategic dispositions, and directed analytical attention to the link between political and military culture, and strategic choice.

Also this paper is trying to describe ways to better incorporate academic research in planning for tailored response to current security threats. Specifically, it probes links between culture and defense and identifies scope conditions that may heighten the potential utility of cultural models for calculations of military-security policy, including the presence of dominant cultural narratives, determined leadership, and prominent military organizations.

In addition, the study identifies potential limitations of the concepts of strategic culture, and new areas where cultural insights may help explain the balance of power and the security policy patterns.

CULTURAL INFLUENCES ON SECURITY

In order to understand the basis of our study in this paper and to better appreciate the potential of strategic culture as a measurable occurrence relevant to comparative analysis it is important to review both the operational concepts being used in this study to identify the framework concept and the historical development of previous research. This will help to avoid

misunderstanding, identify commonalities and eliminate isolated and context dependent variables.

Security operational concepts

Starting from our cultural awareness and knowledge, in the context of conflict resolution, the definition of "security" depends on one's cultural perspective. At the simplest level, security may be defined as "the quality or state of being secure," "freedom from danger," or "freedom from fear or anxiety." Of the many other levels on which one can analyze security, the most relevant for us are individual, group, regional, national, and global. Our task is then relatively simple; we consider how security is defined at these different levels. What emerges is a framework upon which security agreements are constructed and implemented.

Individual Security is most often understood as safety. This safety includes freedom from harm, whether physical or psychological. Threats to an individual's security can produce the fear or anxiety mentioned above. The UN Universal declaration of human rights states that all people are entitled to "security of person."[5] This declaration reinforces the concept of freedom from physical and psychological harm. Yet, what measures will be taken to protect an individual from harm? The most common forms of protection are legal structures that protect individuals from threats to their security. These include, but are not limited to, laws against murder, sex crimes, bodily harm, theft, and psychological harm such as coercion. The state assumes responsibility for constructing and implementing these legal regulations. In addition, security can be related to one's ability to attain the fundamental physical needs of a home, food, and socio-economic needs such as a job. The concept of individual security can therefore be linked to an individual's perception of her or his standard of living. The individual may thus equate security with a high standard of living.

Group Security shares many similarities with the definition of individual security; as the individual expects to have security of person, so does the group. But at the group level, an important aspect of security is freedom from discrimination. While an individual certainly can be mistreated for her or his affiliation with a religious, national, or ethnic group, this mistreatment is more obvious and perhaps more successfully prevented when an entire group is subject to the same mistreatment. Why that group is a group? Is it due to the similar nationality of its members? Are they a group because they share similar religious beliefs? Whatever the reason could be, group security may be interpreted as safety from threats to the group's identity. As with ensuring individual security, laws help ensure group security, although laws can also be discriminatory, which is actually one source of conflict.

National Security level is probably the most often examined and contentious definition of security. The nation-state often assumes the role of guarantor for individual security, group security, and perhaps regional security; for example, agricultural subsidies or steel tariffs are one way in which a nation-state protects a region within its boundaries from a foreign threat. After ensuring individual, group, and regional security, how does the state define its own security? In a few words the entirety of conditions - political, economic, military, social, and cultural - necessary to guarantee the sovereignty, independence, and promotion of national interest[6]. We can then ask what threatens those five conditions. Security from the military viewpoint is highly visible, and a nation will act when it is threatened militarily. Economic threats can also be simply defined, although domestic protectionism can often clash with international trade agreements signed by the same nation. A nation's claim that its protectionism helps ensure national economic security can cause international disagreement.

Tension is introduced when a nation defines what in particular guarantees its political, socio-economic, and cultural security. For example, actions undertaken to protect cultures can easily be interpreted as discriminatory or racist. Cultural security is especially difficult to define and protect in heterogeneous, democratic societies such as the USA or EU. Socio-economic security can also assume controversial definitions and interpretations. Surely a rapidly aging population can threaten socio-economic security. Tension can again be introduced if the state or

the society chooses to blame a specific group for the threat to socio-economic security. Here, security definitions are at odds since the state is protecting its own security by threatening a group's security. The term "national security" has recently been used to justify "security" procedures as well as military action outside national borders[7]. This widens the parameters for national security definitions, and implies a wide range of actions available to a nation.

Regional Security requires us to first define the extent of the "region." Since Romania is relatively a small country we could place regional above the national level of security and encompass the countries located in our vicinity or geographical area. For big countries (i.e. China, France), federative states (i.e. USA, Russia, India), or multinational institutions (like EU, or Schengen area) we could place the regional beneath the national level in this hierarchy, and than we are speaking of a physical area within a nation, which could be a collection of states, provinces, counties or cities. If there were certain religious, national, or ethnic groups that dominated a region, we would still speak of their security at the group level. What is regional security, then? The simplest concept of security at the regional level could be economic, implying protection of regional interests. Perhaps a regional association with, or ownership of, a valued resource could provoke desires for security, and the responsibility for protecting that security would rest on the region. Other notions of security at this level could be to maintain a certain standard of living. In this realm, members of a regional group might want to protect themselves from mass immigration, which could occur due to the region's coveted resources. The region might seek to ensure its security by campaigning against this immigration. Threats to security are often cited here, usually connected to issues of lowered living standards. On a more subtle level, religious, national, or ethnic groups may shrewdly promote their interests under the guise of regional security, and may elevate their group security to a regional priority level.

Global Security is a relatively new concept, and conjures up images of organizations such as the United Nations. Global security, however, may be undermined by national security concerns; if one nation feels threatened by another, then global security cannot exist since members of the world are in disagreement. Global security is also undermined by negative judgment by one nation of another's philosophy of government, thus is a weak concept, since it assumes a supranational entity to whose judgment nations would yield in matters of disagreement. As resources such as minerals, rare metals, water, and oil are ardently wanted by nations, global security has little chance to emerge as a durable concept in the current international relations system.

Cultural perception and reality challenge

Europe has been militarily weak for a long time, but until the Kosovo crisis its weakness had been obscured. World War II destroyed European nations as global powers, and their postwar inability to project sufficient force overseas to maintain colonial empires in Asia, Africa, and the Middle East forced them to retreat on a massive scale after more than five centuries of imperial dominance - perhaps the most significant withdrawal of global influence in human history. For a half-century after World War II, however, this weakness was covered by the geopolitical circumstances of the Cold War. Flanked by the two superpowers, a weakened Europe nevertheless served as the central strategic theater of the worldwide struggle between communism and democratic capitalism. Its sole but vital strategic mission was to defend its own territory against any Soviet offensive, at least until the Americans arrival. Although striped of great-power status, Europe remained the geopolitical pivot, and this, along with bureaucratic habits of world leadership, allowed Europeans to retain international influence beyond what their military capabilities might have afforded.

Then there was the early promise of the "new Europe". By bonding together into a single political and economic unit - accomplishment of the 1992 Maastricht treaty - many hoped to recapture Europe's old greatness but in a new political form. The perception was that EU would be the next superpower, not only economically and politically, but also militarily. It would handle crises on the European continent, such as the ethnic conflicts in the Balkans, and it would

re-emerge as a global player. In the 1990s Europeans could confidently assert that the power of a unified Europe would restore, finally, the global "multi-polarity" that had been destroyed by the Cold War and its aftermath. And most Americans agreed that superpower Europe was the future.

But the reality revealed the gap, due to a huge misperception and European pretensions and American apprehensions proved unfounded. Under the best of circumstances, the European role was limited to filling out peacekeeping forces after the US had carried out the decisive phases of a military mission and stabilized the situation. As some Europeans put it, the real division of labor consisted of the United States "making the dinner" and the Europeans "doing the dishes"[8].

Meanwhile, the very fact of the Soviet empire's collapse vastly increased US strength relative to the rest of the world. The US military arsenal, once sufficient to balance Soviet power, was now deployed in a world without a single credible adversary. This "unipolar moment"[9] had an entirely natural and predictable consequence: it made the US more willing to use force abroad — a fact reflected in the numerous overseas military interventions that began with the invasion of Panama in 1989, continuing with interventions in Haiti, Bosnia, and Kosovo, and ending with still on going operation in Afghanistan. While world wide politicians talked of pulling back troops, the reality was an increasing US intervention abroad more frequently than it had throughout most of the Cold War.

How could this growing transatlantic power gap create a difference in strategic perceptions? Europeans believed they knew better how to deal with the Soviets: through engagement and seduction, through commercial and political ties, through patience and forbearance. It was a legitimate view, shared by many Americans. But it also reflected Europe's weakness relative to the US, the fewer military options at Europe's disposal, and its greater vulnerability to a powerful Soviet Union. But appeasement is never a dirty word to those whose genuine weakness offers few appealing alternatives. For them, it is a policy of sophistication.

Strategic culture is characterized as a discrete force that shapes the security policy decision-making environment. It may be a function of common historical experiences, geo-strategic circumstances, elite articulations of national identity, and even myths and traditions. Cultural beliefs and values act as a distinct national lens to shape perceptions of events and even channel possible societal responses.

CONCEPT OF POWER IN INTERNATIONAL RELATIONS

This chapter will explore how conceptual analysis can be re-connected back to its social and political context. As a result, the analysis gets closer to linguistic pragmatics and sociology. It asks fewer questions about what the term might generally mean, but more what it means in particular contexts.

Concept formation

Concepts are not only a means to understanding. Their own understanding is an aim of scholarly endeavor. Although conceptual analysis geared towards concept formation is hence in the core of making scholarly sense of the world, and not ephemeral or purely semantic, it, in turn, can only be done through other concepts. Then, how do we analyze concepts and their formation? What is usually packaged as "conceptual analysis" comes in three versions, if distinguished according to their main purpose.

A first approach attempts at producing a language so clear, that nearly mathematics-like sentences become possible. Here, conceptual analysis serves the purpose to find as unambiguous core meanings as possible such as to allow best possible scientific statements, hypothesis formation and reproducible empirical analysis. Here, concepts are mainly a means for explanation, a tool that needs to be continuously sharpened at the empirical front.

A second approach already enlarges this picture by looking at the way how concepts are embedded in particular social theories. Here concept formation runs parallel to theory formation more generally, where theories are understood as frameworks of analysis.

Finally, conceptual analysis, then called conceptual history can be carried out for the sake of better understanding history, including its present.

Concepts of power can differ through the extent to which action x is either sufficient, or necessary and sufficient, for action y to happen or to be prevented. It comes at no surprise that the most widely used approach in empirical theorizing is therefore to see concepts as synonymous with "variables" whose content obviously needs to be severely fixed to allow for a rigorous analysis.

That any definition of "power" can be "neutral" or "descriptive"[10] has been contested in mainly two ways. On the one hand, some scholars have argued that "power" belongs to a family of "essentially contested" concepts. I will take up the discussion of this in the next section, since it will serve me as a springboard for a more contextual understanding of conceptual analysis. On the other hand, any neutral definition of "power" seems elusive, exactly because power is used as an explanatory variable. Since social theory is under-determined by evidence, available evidence may be compatible with a variety of different, or even incompatible, theories. Contrary to the natural science, there exists, moreover, a mutual interaction between observer and observed agents. As a result, there is no neutral concept of power for the dependence of theory.

In a more individualist framework, that would sound very close to Keohane and Nye's concept of power through asymmetrical interdependence[11]. Power as a medium links up one combination of alternatives to be avoided with another, yet preferred one. It ensures that this be visible to the communication partners.

Finally, there are *rules deriving from contracts*. In all these cases the direct communicative recourse to power is replaced by a reference to symbols that oblige normatively all parties and take account of the presupposed power ranking[12].

Purposes and effects of power

In the practical context, we are interested in power because we want to know which things we can effect, and what other agents can bring about. If we want to reach an outcome, and it is not in ours but in some other agent's reach, this knowledge could be the beginning of getting a deal done. "So, power, as a dispositional concept, is neither a *thing* (a resource or vehicle) nor an *event* (an exercise of power): it is a capacity". [13] It is, in his terms, a capacity to "effect". Then, Morriss suggests that power theoreticians generally concentrate on one of the different contexts, for which power concepts are used, claiming this one to be the only one. According to him, needless argument could be avoided if the plurality of contexts were recognized in which "power" operates. Finally, the most important interest might perhaps be to avoid being harmed by the effect of powers. Therefore, one has to know them.

Moreover we are interested in power because through its assessment, moral responsibility can be attributed or avoided. "Ought" implies "can". Accused persons need to show that they could not bring about an action, or that they could not prevent it.

Finally, the third context, is the evaluative one. Here people are interested in concepts of power in order to judge not individuals, but social systems. The power debate took largely place in this context. "What is wrong with being powerless is that you are powerless that is lacking in power. And if people are powerless because they live in a certain sort of society – that is, they would have more power if the social arrangements were changed – then that, itself, is a condemnation of that society" [14].

Power and politics have a strong mutual defining link in Realist theory, so much so as to be often used together as a single concept. For realists, politics is about the individual (national) pursuit of power and its collective management. Or, expressed the other way round: outcomes in international politics are decided by power differentials and their distribution. Broadening the research agenda implied a critique of this approach or, at least, of its limits. In this critique,

politics is done by other actors than states. States, in turn, have an international policy which in the time of "embedded liberalism"[15] encompasses more than strictly military or diplomatic security. This implies new forms of collective management of international politics, as through regimes or instance. Present international affairs have known the increased role of politics and power, more widely conceived.

Meanwhile, the globalization of politics undermines the very control capacities of states and other international actors. A first look at the power differentials no longer explains the outcomes. It seems, as if "structural" factors are increasingly shaping and moving world events. It is this context of both an expansion of "politics" as a potential field of action, and a perceived contraction of "politics" as real room of maneuver that has triggered the various new power research programs[16]. In today's international relations, power analysis has become a critique of "power politics".

MANAGEMENT OF POWER APPROACHES

On the all - important question of power - the efficacy of power, the morality of power, and the desirability of power - American and European perspectives are diverging. Europe is turning away from power, or to put it a little differently, it is moving beyond power into a self-contained world of laws and rules and transnational negotiation and cooperation. It is entering a post-historical paradise of peace and relative prosperity, the realization of Kant's "perpetual peace". The US, meanwhile, remains mired in history, exercising power in the anarchic Hobbesian world where international laws and rules are unreliable and where true security and the defense and promotion of a liberal order still depend on the possession and use of military might. That is why on major strategic and international questions today, Americans are from Mars and Europeans are from Venus: they agree on little and understand one another less and less. The reasons for the transatlantic divide are deep, long in development, and likely to endure. When it comes to setting national priorities, determining threats, defining challenges, and fashioning and implementing foreign and defense policies, the United States and Europe have parted ways. [17]

The psychology of power and weakness

What is the source of these differing strategic perspectives? The case of Bosnia in the early 1990s stands out as an instance where some Europeans, chiefly British Prime Minister Tony Blair, were at times more forceful in advocating military action than first the Bush and then the Clinton administration. (Blair was also an early advocate of using air power and even ground troops in the Kosovo crisis.) And Europeans had forces on the ground in Bosnia when the United States did not, although in a un peacekeeping role that proved ineffective when challenged. Despite what many Europeans and some Americans believe, these differences in strategic culture do not spring naturally from the national characters of Americans and Europeans. After all, what Europeans now consider their more peaceful strategic culture is, historically speaking, quite new. It represents an evolution away from the very different strategic culture that dominated Europe for hundreds of years and at least until World War I. As for the United States, there is nothing timeless about the present heavy reliance on force as a tool of international relations, nor about the tilt toward unilateralism and away from a devotion to international law. America's eighteenth- and early nineteenth-century statesmen sounded much like the European statesmen of today, extolling the virtues of commerce as the soothing balm of international strife and appealing to international law and international opinion over brute force.

Two centuries later, Americans and Europeans have traded places and perspectives. Partly this is because in those 200 years, but especially in recent decades, the power equation has shifted dramatically: when the United States was weak, it practiced the strategies of indirection, the strategies of weakness; now that the United States is powerful, it behaves as powerful nations

do. When the European great powers were strong, they believed in strength and martial glory. Now, they see the world through the eyes of weaker powers. These very different points of view, weak versus strong, have naturally produced differing strategic judgments, differing assessments of threats and of the proper means of addressing threats, and even differing calculations of interest. The divisive trend they together produce may be impossible to reverse.

Today's transatlantic problem, in short, is a power problem. American military strength has produced a propensity to use that strength. Europe's military weakness has produced a perfectly understandable aversion to the exercise of military power. Indeed, it has produced a powerful European interest in inhabiting a world where strength doesn't matter, where international law and international institutions predominate, where unilateral action by powerful nations is forbidden, where all nations regardless of their strength have equal rights and are equally protected by commonly agreed-upon international rules of behavior. Europeans have a deep interest in devaluing and eventually eradicating the brutal laws of an anarchic, Hobbesian world where power is the ultimate determinant of national security and success.

It is what weaker powers have wanted from time immemorial. It was what Americans wanted in the eighteenth and early nineteenth centuries, when the brutality of a European system of power politics run by the global giants of France, Britain, and Russia left Americans constantly vulnerable to imperial thrashing. It was what the other small powers of Europe wanted in those years, too, only to be sneered at by Bourbon kings and other powerful monarchs, who spoke instead of *raison d'état*. The great proponent of international law on the high seas in the eighteenth century was the United States; the great opponent was Britain's navy, the "Mistress of the Seas." In an anarchic world, small powers always fear they will be victims. Great powers, on the other hand, often fear rules that may constrain them more than they fear the anarchy in which their power brings security and prosperity.

This is one reason why in recent years a principal objective of European foreign policy has become, as one European observer puts it, the "multilateralising"[18] of the United States. It is not that Europeans are teaming up against the US hegemony, as Huntington and many realist theorists would have it, by creating a countervailing power[19]. After all, Europeans are not increasing their power. Their tactics, like their goal, are the tactics of the weak. They hope to constrain American power without wielding power themselves.

Even when Americans and Europeans can agree on the kind of world order they would strive to build, however, they increasingly disagree about what constitutes a threat to that international endeavor. Indeed, Europeans and Americans differ most these days in their evaluation of what constitutes a tolerable versus an intolerable threat. This, too, is consistent with the disparity of power.

A better explanation of Europe's greater tolerance for threats is, once again, Europe's relative weakness. Tolerance is also very much a realistic response in that Europe, precisely because it is weak, actually faces fewer threats than the far more powerful United States.

The psychology of weakness is easy enough to understand. A man armed only with a knife may decide that a bear prowling the forest is a tolerable danger, inasmuch as the alternative - hunting the bear armed only with a knife - is actually riskier than lying low and hoping the bear never attacks. The same man armed with a rifle, however, will likely make a different calculation of what constitutes a tolerable risk. Why should he risk being mauled to death if he doesn't need to?

This perfectly normal human psychology is helping to drive a wedge between the United States and Europe today. The incapacity to respond to threats leads not only to tolerance but sometimes to denial. It's normal to try to put out of one's mind that which one can do nothing about.

The European Union paradigm

European Union approaches power problems with greater nuance and sophistication. It tries to influence others through subtlety and indirection. It's more tolerant of failure, more

patient when solutions don't come quickly. EU generally favors peaceful responses to problems, preferring negotiation, diplomacy, and persuasion to coercion. Also EU is quicker to appeal to international law, international conventions, and international opinion to adjudicate disputes. European states try to use commercial and economic ties to bind nations together. They often emphasize process over result, believing that ultimately process can become substance. Europe in the past half-century has developed a genuinely different perspective on the role of power in international relations, a perspective that springs directly from its unique historical experience since the end of World War II. It is a perspective that Americans do not share and cannot share, inasmuch as the formative historical experiences on their side of the Atlantic have not been the same.

Consider again the qualities that make up the European strategic culture: the emphasis on negotiation, diplomacy, and commercial ties, on international law over the use of force, on seduction over coercion, on multilateralism over unilateralism. It is true that these are not traditionally European approaches to international relations when viewed from a long historical perspective. But they are a product of more recent European history. The modern European strategic culture represents a conscious rejection of the European past. It is a reflection of Europeans' ardent and understandable desire never to return to that past. Who knows better than Europeans the dangers that arise from unbridled power politics, from an excessive reliance on military force, from policies produced by national egoism and ambition, even from balance of power and *raison d'état*?

The Europeans, who invented power politics, turned themselves into born-again idealists by an act of will, leaving behind them what Fischer called "the old system of balance with its continued national orientation, constraints of coalition, traditional interest-led politics and the permanent danger of nationalist ideologies and confrontations." Fischer's principal contention - that Europe has moved beyond the old system of power politics and discovered a new system for preserving peace in international relations — is widely shared across Europe. As senior British diplomat Robert Cooper wrote in the *Observer* (April 7, 2002), Europe today lives in a "postmodern system" that does not rest on a balance of power but on "the rejection of force" and on "self-enforced rules of behavior." In the "postmodern world", writes Cooper, "*raison d'état* and the amorality of Machiavelli's theories of statecraft have been replaced by a moral consciousness" in international affairs[20].

But, really, why shouldn't Europeans be idealistic about international affairs, at least as they are conducted in Europe's "postmodern system"? Europeans have stepped out of the Hobbesian world of anarchy into the Kantian world of perpetual peace. European life during the more than five decades since the end of World War II has been shaped not by the brutal laws of power politics but by the unfolding of a geopolitical fantasy, a miracle of world-historical importance: the German lion has laid down with the French lamb. The conflict that ravaged Europe ever since the violent birth of Germany in the nineteenth century has been put to rest.

The means by which this miracle has been achieved have understandably acquired something of a sacred mystique for Europeans, especially since the end of the Cold War. Diplomacy, negotiations, patience, the forging of economic ties, political engagement, the use of inducements rather than sanctions, the taking of small steps and tempering ambitions for success, these were the tools of Franco-German rapprochement and hence the tools that made European integration possible. Integration was not to be based on military deterrence or the balance of power. It was quite the contrary. The miracle came from the rejection of military power and of its utility as an instrument of international affairs, at least within the confines of Europe. During the Cold War, few Europeans doubted the need for military power to deter the Soviet Union. But within Europe the rules were different.

Collective security was provided from without, meanwhile, by the *deus ex machina* of the United States operating through the military structures of NATO. Within this wall of security, Europeans pursued their new order, freed from the brutal laws and even the mentality of power politics. This evolution from the old to the new began in Europe during the Cold War. But the

end of the Cold War, by removing even the external danger of the Soviet Union, allowed Europe's new order, and its new idealism, to blossom fully. Freed from the requirements of any military deterrence, internal or external, Europeans became still more confident that their way of settling international problems now had universal application.

No doubt there are Britons, Germans, French, and others who would frown on such exuberant idealism. But many Europeans, including many in positions of power, routinely apply Europe's experience to the rest of the world. For is not the general European critique of the American approach to "rogue" regimes based on this special European insight? Iran, North Korea, Sudan — these states may be dangerous and unpleasant, even evil. But might not an "indirect approach" work again, as it did in Europe? Might it not be possible once more to move from confrontation to rapprochement, beginning with cooperation in the economic sphere and then moving on to peaceful integration? Could not the formula that worked in Europe work again with Iran or even Iraq? A great many Europeans insist that it can.

Thus we arrive at what may be the most important reason for the divergence in views between Europe and the United States. America's power, and its willingness to exercise that power - unilaterally if necessary - represents a threat to Europe's new sense of mission, perhaps the greatest threat. The common American argument that European policy toward Iraq and Iran is dictated by financial considerations is only partly right. Are Europeans greedier than Americans? Do American corporations not influence American policy in Asia and Latin America, as well as in the Middle East? The difference is that American strategic judgments sometimes conflict with and override financial interests. For the reasons suggested in this essay, that conflict is much less common for Europeans. Such American action represents an assault on the essence of "postmodern" Europe. It is an assault on Europe's new ideals, a denial of their universal validity, much as the monarchies of eighteenth and nineteenth century Europe were an assault on American republican ideals.

This phenomenon has manifested itself not only in flat or declining European defense budgets, but in other ways, too, even in the realm of "soft" power. European leaders talk of Europe's essential role in the world. And it is true that Europeans spend a great deal of money on foreign aid — more per capita, than does the United States. Europeans engage in overseas military missions, so long as the missions are mostly limited to peacekeeping. But while the EU periodically dips its fingers into troubled international waters in the Middle East or the Korean Peninsula, the truth is that EU foreign policy is probably the most anemic of all the products of European integration.[21] EU foreign policy initiatives tend to be short-lived and are rarely backed by sustained agreement on the part of the various European powers.

The answer to this phenomenon should be cultural change. As in any process of learning, there are developmental stages through which the people of an organization, individually and collectively, must pass as they resist, learn, accept, practice and live the new culture (or leave). There is a natural order and progression to these developmental stages. Just as a child must crawl before it walks, then runs, then borrows the family car, an organization cannot expect to jump directly from the old state to the new state. This model provides a framework that can be valuable for identifying and understanding the need for different leadership strategies at different developmental stages (see Annex 1):

(a) what to expect at each stage;
(b) what to communicate to the organization;
(c) what behaviors and attitudes are required of the leaders;
(d) what organization-wide actions and structural changes are needed.

Whether that particular mission is a worthy one or not, it seems unlikely to rouse European passions. The former NATO Secretary General George Robertson has taken to calling Europe a "military pygmy" in an effort to shame Europeans into spending more and doing so more wisely. But who honestly believes Europeans will fundamentally change their way of doing business? They have many reasons not to.

The United States pattern

In thinking about the divergence of their own views and Europeans', Americans must not lose sight of the main point: the new Europe is indeed a blessed miracle and a reason for enormous celebration - on both sides of the Atlantic. For Europeans, it is the realization of a long and improbable dream: a continent free from nationalist strife and blood feuds, from military competition and arms races. War between the major European powers is almost unimaginable. After centuries of misery, the new Europe really has emerged as a paradise. It is something to be cherished and guarded. Nor should we forget that the Europe of today is very much the product of American foreign policy stretching back over six decades. European integration was an American project, too, after World War II.[22]

Americans who came of age during the Cold War have always thought of Europe almost exclusively as the essential bulwark of freedom in the struggle against Soviet tyranny. But US of Roosevelt's era had a different view. In the late 1930s the common conviction of Americans was that "the European system was basically rotten, that war was endemic on that continent, and the Europeans had only themselves to blame for their plight". [23] By the early 1940s Europe appeared to be nothing more than the overheated incubator of world wars that cost America dearly. During World War II Americans like Roosevelt, looking backward rather than forward, believed no greater service could be performed than to take Europe out of the global strategic picture once and for all.

But the more important American contribution to Europe's current world-apart status stemmed not from anti-European but from pro-European impulses. It was a commitment to Europe, not hostility to Europe that led the US in the immediate postwar years to keep troops on the continent and to create NATO. The US forces presence as a security guarantee in Europe was, as it was intended to be, the critical ingredient to begin the process of European integration. Europe's evolution to its present state occurred under the mantle of the US security guarantee and could not have occurred without it.

More important, the US was the key to the solution of the German problem. France's willingness to risk the reintegration of Germany into Europe - and France was, to say the least, highly dubious - depended on the promise of continued American involvement in Europe as a guarantee against any resurgence of German militarism.

The United States, in short, solved the Kantian paradox for the Europeans. Kant had argued that the only solution to the immoral horrors of the Hobbesian world was the creation of a world government. But he also feared that the "state of universal peace" made possible by world government would be an even greater threat to human freedom than the Hobbesian international order, inasmuch as such a government, with its monopoly of power, would become "the most horrible despotism". [24] How nations could achieve perpetual peace without destroying human freedom was a problem Kant could not solve. But for Europe the problem was solved by the United States. By providing security from outside, the United States has rendered it unnecessary for Europe's supranational government to provide it. Europeans did not need power to achieve peace and they do not need power to preserve it. Europeans today believe that American military power, and the "strategic culture" that has created and sustained it, are outmoded and dangerous.

American leaders believe that global security and a liberal order as well as Europe's "postmodern" paradise cannot long survive unless the United States does use its power in the dangerous, anarchic world that still flourishes outside Europe. What this means is that although the United States has played the critical role in bringing Europe into this Kantian paradise, and still plays a key role in making that paradise possible, it cannot enter this paradise itself.

CONCLUSIONS

For this challenging graduation paper I found the complexity of each assumption regarding the strategic culture that influences the power especially the use of power in human

societies as reaction to political, social, economical and military stimuli being unbearable. As the strategic culture for a people evolves, however, there will likely remain at its core some key aspects of the original influence of the physical and strategic environment that shaped their fundamental social, political and economic organizational priorities, values, trends and patterns. There will also evolve tiers of strategic culture within any given people, dependant on an individuals or sub-groups capacity to access and capitalize on available physical resources and their strategic position relative to their local, regional and international society.

Therefore strategic culture needs not to dictate a particular course of action. Indeed domestic and external constraints frequently will prohibit such behavior, but the effects of strategic culture will be more or less strongly stamped upon strategic conduct of all kinds. Actions taken apparently out of strategic cultural character are apt to confirm the rule rather than to change it. Rarely can conceptual and empirical problems have posed such synergistic difficulties as with strategic culture.

The only problem in the security studies literature is that it usually focuses attention on the use of power and the question of which is the most important cause of armed conflict. In most cases, however, this is a misleading way to look at the issue. In particular, the attempt to force a choice between economic and political explanations of armed conflict is misguided. Explanations that highlight economic deficiencies and environmental degradation deal with cultural background and how the problems of securing the basics of life can lead people into conflict. Violent conflict can easily develop if large numbers of people become convinced that taking up arms is not only legitimate but may perhaps be the only way to secure the necessities of life. However, large numbers of people do not make such decisions spontaneously. They are mobilized politically, as leaders win their hearts and minds, as well as their loyalty and commitment, and as they are persuaded and exhorted into war. No meaningful analysis of violent conflict and of its escalation and diminishment can therefore afford to ignore the cultural dimension and the political environment. Humanity lives in an increasingly complex and interconnected world. The movers and shakers in the global community have expanded beyond the political and the corporate to include non-governmental organizations, interest groups, criminals, and individuals. It is critical to have the analytic tools at hand to make measurable comparative assessments of the stakeholder objectives and priorities in any given situation, but particularly when the situation has the potential for conflict. The effective solution to these dilemmas simply is to command that strategic culture is the realm of ideas and attitudes, which leaves the zone of strategic behavior submissive to assay for strategic-cultural influence.

The concept of strategic culture has the potential to be one of those analytic tools. It can, if properly understood, and consistently and comparatively applied, enhance understanding of the core values and motivations behind the choices and actions of stakeholders whether they are governments, corporations or interest groups, including terrorists and criminals. Embedded in this understanding of strategic culture is recognition of a need for reflective analysis. Without it, any attempted application of the concept in an operational context will tend to be unduly influenced by the projected values and priorities of the analyst and will not be adequately objective or comparative.

Nonetheless, readers are recommended not to pick either approach to power management, but rather to try and move on to a creative accommodation of the two, inside cultural limitations, if that is possible.

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THE USE OF LIFE CYCLE COST AND
LIFE CYCLE COST PROCUREMENT TECHNIQUES

Captain Commander LIVIU TIGANILA

There are two main purposes for using life cycle cost as a decision support tool for the program managers, analysts, project and team leaders etc. One of the main purposes is to use life cycle cost in economic appraisal and the other purpose is financial appraisal.

- *Economic Appraisals* are generally undertaken by organizations and Government bodies with an eye to the 'well being' of that organization or country as a whole. As such they address opportunity costs (alternative use of assets or resources) but usually not simple transfer payments such as national taxes that 'move around' the economy. Economic analysis may be simply summarized as addressing the costs and benefits of options to the national coffers and is not, necessarily, therefore concerned about precisely which part of the Department's budget is impacted. Any common costs not impacting the decision may be excluded to simplify, and hence reduce the costs of, the exercise.
- *Financial Appraisals* however include all cash flows and transfer payments and hence assess affordability. In financial appraisal, costs need to be split by budget holder, so they know their contribution, by phase to understand the significance over the life cycle and by major 'input' cost category (manpower, stocks purchased, in year expenses etc).

These two types of appraisal, although different, are not exclusive. They can make LCC a management and engineering tool with which to forecast and optimize the costs of a system. Whatever the type of use, the predictive use of LCC represents its principal interest.

LCC must be used as a benchmark against which options can be measured for 'value for money' during the acquisition process, bearing in mind that the greatest opportunities to reduce LCC usually occur during the early phases of the program. It follows LCC is used as a decision and optimization criterion in the search of the best compromise between time, cost and performance.

THE GENERAL PHASES IN THE USE OF LCC

Early in the project life cycle, studies need to address the capability gap, the numbers of equipment or platforms required and the technologies that can help to fill the gap at lowest cost. This requires a 'strategic' approach that can provide a capability to look at the 'big picture'. At this phase in the life cycle it is unlikely that the costs can be identified in a great deal of detail, rather an understanding of the 'big hand-falls' in terms of primary CBS elements and the uncertainty surrounding these figures is required.

Once a project team has been formed and given a user requirement, the focus turns to the performance, cost and time envelope of various options that will meet the requirement. Forecasts of costs for new equipment and platforms are needed. This requires an approach and tools/models that have a holistic view and can provide a 'what if' capability. The CBS can be developed and extended to reflect the acquired knowledge of the expected system characteristics.

When the preferred generic option (e.g. develop a new vehicle) is identified, industry is generally asked to compete for its supply. Assessments of these bids are based on life cycle cost analysis and need to address economic and financial treatments. Cost figures need to compliant with rules set by Governments on investment appraisal set out by central Government (usually the country's Treasury department) and at the same time provide the data by which budgets can be agreed for the long-term operation and support of the assets. At this stage the CBS should be fully developed such that all cost elements are identified.

For in-service equipment a forecast of the costs for the remaining life are required. Whilst

any in-service equipment, not nearing the end of its service life is generally considered to be in the middle of the 'bathtub' in respect of reliability, major cost drivers are driven by 'change milestones' caused by events such as overhaul, deployment, updates and safety reviews. Towards the end of equipment life, ageing effects may increase support costs or reduce availability. Not all equipment goes out of service on a particular date so phasing out expenditure depends on the introduction profile of new equipment or capability. Delays to new equipment can result in extra funds being required to continue support of legacy equipment. These costs need to be addressed and budget adjustments calculated.

In summary, it is not possible or desirable to collect and analyze information at the same level of detail throughout the life cycle although there should be a common thread in terms of program phases, main CBS groupings and resource consumption.

Economic Appraisal

Economic appraisals lead to selection of a preferred alternative for a project. After completing the cost and benefit estimates for each alternative, the individual responsible for a program or project will establish priorities and identify his or her own preferred alternatives by making comparisons of the costs and benefits of the feasible alternatives with respect to the status. The results of the comparison and a recommendation will be presented to the decision makers.

As a rule, the preferred alternative will be the alternative that provides the greatest amount of benefits in relation to its cost. In situations where it is difficult to quantify benefits and measures of effectiveness, it is important to provide as much useful information as possible so that a decision can be made as to which alternative yields the most benefits. These usually take the form of a cost benefit analysis or cost effectiveness analysis.

A cost benefit analysis is an exercise in which all of the costs and benefits of an activity are quantified and valued in monetary terms. It is therefore possible to evaluate and compare options and see if the benefits exceed the costs i.e. *'send to save'*. Benefits, such as reduced loss of life, may be set against expenditure although there may be religious and political objections to this approach.

A cost effectiveness analysis compares the costs to be expended (often discounted in later years to reflect the national time preference when spending money obtained through taxation) with the effectiveness of alternate ways of meeting an objective. By combining the analysis a measure of cost effectiveness can be obtained that can be used to decide between options.

In both cases it is possible to address just the marginal cost change from the 'status quo' if the other fixed costs apply equally to all options. It is important not to assume cost savings that cannot be realistically achieved. Where alternatives have differing economic lives, the analyst must determine whether the longest or shortest life or some other time period is to be used as a basis for comparison, and make an adjustment for unequal life.

There are a variety of quantitative methods and techniques available for comparison purposes when performing an economic appraisal. These methods and techniques provide a more definitive basis in the ranking of alternatives. Quantitative analysis of costs and benefits and the resultant ranking of alternatives can be performed by discounted and undiscounted methods and techniques. Some of these methods and techniques are as follows: Benefit cost ratio analysis, the break-even analysis, the savings investment ratio analysis, the savings investment ratio analysis, net present value, rate of return.

Financial Appraisal

The control of costs requires knowledge of current and, probable, future expenditure against assets and services. Because financial appraisal deals with budgets it is important that it is comprehensive in its coverage. Any cost breakdown structure must capture all costs.

Each nation will have their own financial control systems and these will demand different cost elements. Any CBS must therefore be as consistent as possible with each national system.

In financial appraisal it is not appropriate to employ discounting but it is important to consider all of the resources consumed in meeting an objective and any taxes that fall to a

Department's budget. These will vary by country and need to be identified separately.

Two approaches are generally employed. Financial accounting deals with day-today budget control and is concerned with detailed costs. It may be less concerned with equipment costing and does not usually provide data that can be easily related to equipment's CBS. Management accounting takes the same basic data but permits day to-day project control and decision support. This is where an equipment CBS is most appropriate.

Time Related Evaluation Factors

At any time "t" in its life cycle, a system usually contains two categories of costs.

• Past expenditures usually referred to as "sunk costs" and firm undertakings that cannot be undone without financial loss known as "committed costs".

• Future expenditures that can be amended even if there are political or severe structural implications.

To support forecasting of LCC it is essential to have a good knowledge of actual acquisition and in-service costs. Collection of actual costs during the system life cycle helps:

• To analyze differences between forecasting and actual costs,

• To feed costs databases,

• To identify cost drivers,

• To implement management control.

Any CBS must be as consistent as possible with each national "costs collecting" system although it is recognized that this depends to a large extent on the structure, and thus commonality of systems, even within one country's financial or management systems. For the exchange of data or comparison of costs within NATO it will be necessary to understand the background to the purpose behind the use of LCC and if necessary 'translate' that information into a form that can be 'mapped' to a common CB.

THE USE OF LCC IN PROJECT MANAGEMENT

Project Initiation Phase

The project initiation phase identifies a shortfall in capability. This shortfall is detailed in some necessary documents. Upon the approval of the shortfall by the management, the project will be initiated and the project planning will be started.

Project Planning and Development Phase

People try to identify options available to meet the need, analyze these options and plan the activities for the next phases. One of the major functions performed during the Project Planning and Development Phase is a review and comparison of options to determine the single or possibly two or three most attractive solutions that could satisfy the need.

Life Cycle Costing is the method used to quantify the relative costs to acquire and operate each option. This analysis will develop the costs for each option. This could be the first estimate of Life Cycle Cost (LCC). The first estimate of LCC is based upon a comprehensive statement of requirement in mission terms and an outline of a solution. Such an estimate is strictly an indication of the total project cost and completion date.

After this preliminary evaluation, a Program Planning Proposal (PPP) is prepared. The PPP identifies resources required in broad terms and is equivalent to a pre-feasibility study. Following approval of PPP, a Project Development Study is performed. This more detailed study analyses the various options of meeting the need in more detail in areas such as: capability, life cycle costs, personnel, technology and overall impact on DND. Upon the completion of these analyses, the second estimate of LCC is derived.

The second estimate of LCC is based on the general description of the end item sought, on production/construction experience, on the market conditions or on system concept or preliminary design and analysis of its cost and schedule conducted by experienced personnel. This second estimate of LCC would be sufficient for making the correct investment decision. This estimation is used in preparing of Program Development Proposal. Whenever management

approves it, the project definition phase begins.

Project Definition Phase

This phase involves a more detailed analysis of the preferred option, or additional options if required. The option(s) is analyzed to determine the probability of meeting the project requirements in relation to cost, time and performance. As well, the next phase, Implementation, is planned in detail.

From this analysis, the third estimation of LCC is prepared. It is based upon data (relative to cost, timing and production or construction) of quality. This estimation should provide for the establishment of realistic project objectives sufficiently accurate to obtain effective project approval.

The report concerning the project definition phase and the third estimate of LCC are used to prepare Program Change Proposal. When it is approved, the project implementation phase begins. The Project Implementation Phase is the final phase of the acquisition environment.

The Use of Life Cycle Cost in Acquisition Process

The defense planning activities begin with the identification of a need and continue through to the implementation of the most effective method of meeting that need. A project is initiated in response to a need to meet some capability, which is not being met. As this process progresses from the concept phase through planning development and definition, a number of factors must be considered, including meeting the mission requirements, time, socio-economic factors and cost.

A system life cycle usually consists of four phases. These are conception, acquisition, in-service and disposal.

During the conception phase, our concern is about the magnitude of life cycle costs, the technical feasibility of the proposed maintenance concept, the potential risks involved in any specific option and for assistance in performing various trade-off analyses. There may not be a great amount of detail available on the systems, but through various data banks and LCC models, we will be able to assist in determining estimates for costs in areas such as personnel, facilities, support equipment, spare parts, publications, training and training equipment, technical data, etc.

During the acquisition stage, LCC expert evaluates the contractor's submissions to validate the LCC and R&M data and begins monitoring the support system to ensure its effectiveness.

During the in-service stage, the LCC manager continuously monitors the system's effectiveness by comparing the previously estimated values of LCC with the actual values incurred to identify trends and possible problem areas, and to determine causes and interrelated effects.

In the disposal stage, we must determine the most cost-effective and operationally effective alternative. This involves using LCC to compare options to modify, rebuild or replace the system. If the system is to be replaced, the LCMM reviews the support system elements, which may be reassigned, and the most cost-effective disposal method for the non-usable elements.

THE USE OF LIFE CYCLE COST IN DEFENSE PLANNING

The techniques of LCC are used to assist the project managers and various levels of decision-makers in making the most cost-effective decisions based upon data, which has been collected and analyzed in a logical and coherent manner. The data from the LCC analysis is used for:
- Long Term Defense Planning,
- Comparison of Competing Projects,
- Comparison of Logistic concepts,
- Decisions About Replacing Aging Equipment,
- Selection between Competing Contractors.

LCC may consider non-cost related factors, which may influence decision. These factors include political decisions based on socio-economic benefits; safety related decisions, which may preclude using certain cost-saving material procedures; and legal requirements imposed upon the use or maintenance of a system.

Long Term Defense Planning

Long term defense planning, beyond ten years, requires careful analysis of all quantifiable factors which may impact the system under review, whether this is the complete defense services program or a specific project such as new ships. Most major new projects require more than five years from the start of the initial needs analysis to the actual acquisition of the system, and the system's operation and support costs must be borne by DND for between fifteen and twenty-five years. Therefore, accurate estimation of life cycle costs is a major responsibility of DPMS planners.

LCC techniques force the user to accurately define the various phases of the project. This definition requires an analysis of the work to be performed, the deliverables, and the cash flow and management requirements to control project. To determine the work to be performed, the project planners must prepare a work breakdown structure (WBS) or each phase of the project and integrate this with all related work breakdown structures. This procedure ensures that all applicable cost/work areas will be considered in the next stage of the procedure, which is estimating the costs for each work package. This WBS forms the foundation for the budgeting process. The principal cost categories should continue to be used for cost tracking over the entire life cycle of the system.

Each work package in the WBS must have an identifiable output, which can be assigned an estimated cost and a time frame for completion of that output. This relates expected costs to specific phases of a project and provides a cost profile of when project costs are expected to occur. In summary, the use of LCC techniques in long term defense planning will:
- Define details of activities in specific phases of a project (WBS),
- Relate expected costs to specific phases of a project (Cost Allocation)
- Provide a cost profile of when costs are expected to occur (Cash Flow Projections).

Comparison of Competing Projects

The comparison of competing projects is an ongoing exercise as a number of projects attempt to obtain limited funds. The comparison of competing projects includes the determination of which option is the effective in a particular project. The philosophy concerning the application of LLC techniques is the same for every option.

LCC provides a rational, logical and supportable comparative technique for the estimation of the total cost of ownership of different options. When comparing different system options, the most cost-effective technique is to analyze and consider only those aspects of a system, which are different. The use of scarce resources to analyze factors, which will have no bearing or impact on the final decision, is not cost effective. As LCC forces the user to plan more deeply and do more analysis with hard data, the actual differences between system options will become more apparent and allow a more rational analysis to be done.

Comparison of Maintenance Concepts

The maintenance concept is the basis for all aspects of the total support system. It determines where items will be repaired, removed and stored; who will be responsible for performing specific maintenance actions; what personnel an skills will be used; and who will manage the support system and all of its components.

The maintenance concept used on any particular system has a large effect on the maintenance resources required to support the system. LCC allows a planner to evaluate the effect of different maintenance concepts on any particular system option or analyze the effects of a particular system's support requirements on an established maintenance concept. Some of the major factors considered in a maintenance concept are:
- The operational scenario of the system,
- Available resources such as funding, skilled personnel, etc.

- Sources of supply, both military and civilian,
- Cooperative logistic agreements proposed or in place,
- Technology of system,
- The applicability of the established maintenance concept.

LCC allows the planner to compare different maintenance concepts and determine what cost effect the concepts may have. Once again, it is most cost effective to compare only the difference between the concepts and not consider the total life cycle costs at this point in the analysis.

Replacing Aging Equipment

As equipment ages, the support of that equipment tends to become increasingly expensive. At some point in time a decision must be made to either rebuild/refit the equipment or explore alternative methods of meeting the operational requirement. This decision is necessary when it has been determined that the present system either cannot meet the operational needs or the support costs are too great to continue carrying the present system in the inventory.

Life cycle costing is the optimum method used to address the three possible options available in resolving this scenario.

- The first possibility is to examine the support costs being incurred and determine if these costs may be reduced through the use of more advanced maintenance techniques or better support planning and operation.
- The second possibility is to determine the benefits, which may be realized by performing a rebuild/refit on the system to incorporate subsystems, which will reduce the maintenance and support system demands.
- The third and final possibility is to assess the impact on support system resource demands, which may result from replacing the old system with a new system, designed to reduce the support requirements needed to maintain the new system.

In essence, the life cycle costing approach provides the planner or life cycle manager with the tools required to make sound, rational decisions to determine which of the possible alternatives under consideration is the most cost effective.

Selection between Contractors

The cost of operating and supporting a system is, in most cases, significantly greater than the cost of acquiring it. For this reason, the post-acquisition costs have become an increasingly important component of the evaluation of potential contractors' proposals.

Contractors are being required to provide data on expected support costs either as estimate figures or as contractually guaranteed cost figures. The evaluator, planner or manager must determine when it is to their advantage to require a contractor to provide either estimated data or contractually guaranteed data. Before a data requirement is imposed on the contractor, the manager must determine the specific cost data required, the amount of detail necessary and the degree of accuracy desired. The contractor incurs a cost increase when data must be contractually guaranteed. This cost is directly related to the level of risk inherit to the provision of such data. If the data is guaranteed and the guarantee can be enforced, then the manager has relatively little analysis to do to confirm its accuracy; however, if the data is merely estimated, the manager must then have the means of evaluating the data and determining its accuracy in their needs.

When the data is to be used for the evaluation of proposals submitted by competing contractors, the manager's needs may only include data concerning the differences between the various alternatives and not the absolute costs for each alternative.

As a result, it is obvious that the techniques of life cycle costing can be used by the Life Cycle Manager as prime method for carrying out planning and management responsibilities.

LIFE CYCLE COST PROCUREMENT TECHNIQUES

Spectrum of LCC Procurement Techniques

It has been found that life cycle cost procurement provisions must be individually tailored to each program to properly transfer the appropriate amount of responsibility for Operating and Support costs to the contractor. This has resulted in the development of a spectrum of LCC procurement techniques

The currently identified LCC procurement techniques including a variety of LCC incentive provisions are:
- Source Selection Criteria,
- Pre-award Testing,
- Design To Cost / LCC Design Trade Study Requirements,
- Reliability and Maintainability Acceptance Criteria
- LCC Incentive Provisions,
  - Award Fee,
  - Reliability Improvement Warranty (RIW),
    - RIW with MTBF Guarantee,
    - Reliability Demonstration Incentive,
    - Fixed Price Repair with Incentive,
    - Design to Cost Incentive,
    - Value Engineering Incentive,

All of the LCC incentive provisions listed above involves contractual language where a contractor can expect his profits to be affected by how well he succeeds in designing and delivering a product with low life cycle cost characteristics. Source Selection Criteria and Pre award Testing techniques deal with actions that can be taken to select contractors whose products should have lower life cycle costs, but do not involve incentives tied to 0&S cost performance. The third and fourth LCC procurement techniques deal with specific O&S cost objectives which must be met, and there is no incentive to improve the contract or product performance beyond that specified in these techniques.

Factors for the Selection of Appropriate LCC Procurement Techniques

There are many factors for the selection of LCC procurement technique or combinations of techniques would be most appropriate for any particular program. They include many program and design factors that can affect the future operating and support costs and how well these costs can be predicted at contract award.

Factors which can cause uncertainty about, what future operating and support costs will be are important for the selection of appropriate LCC Procurement Techniques. These are;
- High performance requirements relative to current equipment,
- A tight development schedule,
- Limitations on funds for development and testing,
- Mission changes,
- Design to cost acquisition goals,
- Employment or operations and maintenance concept,
- Support personnel efficiency,
- Training efficiency,
- Quality control efficiency,
- Detail design decisions,
- Support equipment design and use,
- Training material quality.

When uncertainty is great in areas outside the contractor's control, techniques that place less responsibility and risk on the contractor, such as award fee and value engineering incentive provisions may be more appropriate. On the other hand if there is considerable experience with similar equipment and uncertainty results primarily from things such as design and quality control, over which the contractor has significant control, more demanding incentive provisions,

such as a Support Cost Guarantee (SCG), Reliability Improvement Warranty (RIW) or RIW with an MTBF Guarantee are applicable.

Source Selection Criteria

Life cycle costing objectives may be achieved by making life cycle cost an important source selection criterion in procurements, which may or may not use life cycle cost procurement incentive provisions. These two approaches are complementary in that use of life cycle cost as a source selection criterion motivates a contractor to consider life cycle costs prior to source selection, and use of incentive provisions motivates a contractor to consider life cycle costs after contract award. The joint use of these two techniques also motivates contractors to submit realistic 0&S cost estimates at source selection because incentives will be tied to them.

Pre-award Testing

This is a procurement approach to reducing life cycle costs, primarily characterized by testing to assess important life cycle cost related characteristics prior to source selection.

The contract is awarded based on demonstrated LCC related performance in pre award testing. Pre-contract award tests are conducted to assess the LCC related equipment characteristics of each contractor's equipments, and the results of these assessments expressed in terms of life cycle costs, are used as the primary basis for source selection.

The advantages of pre-award testing are as follows:

• It does not The source selection is based on facts concerning performance of equipment, not on promises.

• Require development and operation of a post-award measurement system to accurately verify the operating and support cost performance of the equipment in the field.

• It motivates contractors to innovate lower life cycle cost designs while they are still in competition with each other to get the prime development and production contract.

The disadvantages of pre-award testing are as follows:

• Because of the uncertainties involved, it is sometimes difficult for the Government and contractor to agree on a practical measurement system, which will equitably assess the 0&S cost performance of the equipment

• It does not motivate the contractor to further reduce the life cycle costs of his equipment after contract award.

• Its limitation to equipment procurements where it is feasible to buy and test equipments from competing vendors prior to making a source selection decision.

• There are two major steps in applying this type of life cycle cost provision. The first major step is appropriate selection of candidate equipments. The second major step is the development of testing and source selection procedures and criteria.

Design to Cost/Life Cycle Cost Design Trade Study Requirements

This technique requires that contractor conduct studies to assess the cost implication of design and support alternatives.

Design trade studies are a common requirement on most development programs. The overall process of implementing this approach includes requesting offers to propose design to cost/life cycle cost (DTC/LCC) design trade studies, evaluating these proposals, and contracting for specific trade studies.

This technique for reducing life cycle costs can almost always be applied. In fact, where technology and other uncertainties make it difficult to transfer responsibility for O&S cost performance to contractors, this approach may prove most advantageous. It also promotes the engagement of government personnel in design decisions affecting 0&S costs.

This approach does not contractually make the contractor responsible for O&S cost performance as demonstrated in the field. The methodology for the application of this technique is defined as follows:

• Determination of adequate time and design flexibility,

• Determine whether the DTC/LCC design trade studies to be involved should be specified by the Government, proposed by the contractors or both,

- Describe all required DTC/LCC design trade studies for the contractor,
- Evaluate the proposals with respect to the DTC/LCC design trade study plans presented by each contractor.
- Include in the contract Statement of Work a required list of specific trade studies, any requirements for additional trade studies, and documentation requirements for all trade studies conducted.
- Assure appropriate Government design specialists and other necessary personnel monitor the contractor's work to evolve a low life cycle cost system or equipment design.

Reliability and Maintainability (R&M) Acceptance Criteria

This is the technique used to motivate contractors to produce equipment with low O&S cost characteristics requiring reliability and maintainability demonstration tests which have to be passed before equipment is to be accepted under the contract.

This technique has been adapted as necessary for individual programs. Using reliability acceptance criteria as an example, its essential elements are;
- Minimum acceptable mean time between failure (MTBF),
- Specification of environmental and other test conditions,
- Specification of acceptance test criteria, such as sampling plans, test time, failure definitions,
- Conducting the tests and arriving at a decision to accept or reject based on the results,
- In case of rejection, redesigning the equipment and repeating the tests until achieving the results required for acceptance of the equipment.

This technique is a well-defined procedure and involves little or none of the uncertainty with respect to how equipment will be used in the field in the future that complicates other LCC procurement procedures. In addition, this approach separates development and support activities somewhat simplifying its planning and execution.

The basic disadvantage of this approach is that successful laboratory testing is a necessary but not a sufficient guarantee that the equipment will demonstrate acceptable reliability in the field. It is difficult to design a test procedure, which will correlate MTBF values observed during the tests to those expected in the field.

From an incentive standpoint, this approach is deficient in that it does not give the contractor any incentive to design the equipment any better than necessary to meet minimum reliability criteria.

LCC PROCUREMENT INCENTIVE PROVISIONS

General

The contract provisions designed to motivate a contractor to deliver lower life cycle cost systems or equipment are called as LCC Procurement Incentive Provisions. Cost reductions may be sought in support costs, acquisition costs or both. The eight types of provisions represent a spectrum of approaches, which can be used individually or in combination to match the LCC reduction motivation needs of new programs.

Award Fee

The objective of using the award fee is to motivate the contractor to take action to engage in one or more activity areas, such as design trade studies, more extensive or efficient testing, resulting in eventual life cycle cost reductions. The two essential parts of all award fee provisions are the maximum size of the fee and the criteria to be used by the Government in making a determination on how much of the maximum possible fee to award. The criteria are very important in that they communicate to the contractor what should be accomplished to earn an award fee.

The primary advantage of life cycle cost award fee incentive provisions is to provide a mechanism for evaluation of contractor management, which usually received secretarial review. An award fee determinations made at some time in the future can be based not only on evidence

of the contractor's performance, but on additional information bearing on the difficulty of achieving life cycle cost objectives, not known at the time of contract award.

Many feel and argue that award fee provisions, which do not hold contractors responsible for not delivering low life cycle cost equipment, as promised, do not adequately motivate contractors. Since award fee provisions are primarily designed to reward a contractor for moving from expected performance to better than expected performance, they may not provide motivation with respect to improving equipment with poor LCC performance. In addition, maximum life cycle cost award fees are generally small compared to the potential operating and support cost reduction opportunities.

Support Cost Guarantee (SCG)

Support Cost Guarantee (SCG) provisions should generally be used in conjunction with firm fixed price contracts. Support cost guarantee provisions generally have both negative and positive features. When a positive incentive feature is employed, it is provided either as an award fee or price adjustment provision. The simplest type of price adjustment provision is to pay a higher price for items, which have lower support cost characteristics. The negative incentive feature usually takes the form of one or more of the following type provisions:

• Hardware Correction of Deficiencies: A provision by which the contractor guarantees that support costs will meet a given target value as demonstrated by verification testing, and that he will correct deficiencies causing this value to be exceeded.

• Downward Price Adjustment: A provision similar to the hardware correction of deficiencies provision except that the remedy for exceeding the support cost target is a negotiated downward price adjustment either through a reduced fee or a reduced price for a specific production quantity. The schedule for such downward price adjustments must be included in the contract.

• No Cost Additional Spares: A provision also similar to the hardware correction of deficiencies provision except that the remedy for exceeding the support cost target is that the contractor provides, at no additional cost, additional spares to offset the support cost deficiency.

• Ceiling price for Repair: During the period of time required to develop support equipment and data, the contractor can act as the depot and accomplish repair for a unit price per repair. Given a time period, a fixed usage rate and a predictable return rate, a ceiling of the repair cost can limit the cost obligation to the Government. Contractor commitments to keep support costs below a specified level are established in the contract. Objective and realistic support cost estimates must be made early in the program. The contractor's design effort is forced to direct attention to the supportability of the equipment through the design process.

Extensive field verification tests involving training, using, acquiring and supporting command personnel are required. The time required to conduct this test may defer contract settlement, closeout, or payment. The expense associated with field verification testing is great and the administrative tasks are many; however, limiting the negative incentive to no cost additional spares can limit the testing to measuring MTBF only.

Reliability Improvement Warranty (RIW)

The objective of an RIW is to motivate contractors to design and produce equipment that will have a low failure rate, as well as low repair costs after failure, resulting from operational use. In general, an RIW will provide for the repair or replacement of failed units as well as agreed to no cost engineering changes and the associated calibration, adjustment and testing. RIW is not, however, a maintenance contract, and RTW provisions will not require a contractor to provide routine periodic upkeep, i.e., adjusting, cleaning, and replacing fuses or light bulbs.

Under RIW, the contractor has a degree of financial responsibility for field performance of his hardware. The contractor no longer may seek lowest acceptable reliability. The contractor achieves maximum profit by controlling and making appropriate tradeoffs between production costs and certain operating and support costs.

The Government can defer many initial logistics decisions concerning the purchase of spare parts, test equipment and technical data. These decisions can then be made based upon

more and better information generated during RIW.

When an RIW approach is properly considered early in development, support cost risks are surfaced at a time when they can best be addressed and costs avoided. The disadvantages of this provision are;

• It may not be practical to estimate with any degree of accuracy the warranty costs for many new items of equipment having any significant technical complexity.

• Laboratory controlled reliability demonstration tests alone may not provide a sufficient basis for developing a reasonable estimate of expected field reliability and reliability growth potential.

• The most important fact affecting the economic outcomes of an RIW is the rate of return of units to the contractor's plant. A prediction of this actor must be based on known or estimable data in order to identify and control risk. This factor is significantly influenced by how the equipment will be used in the field.

• Use and environmental conditions must be clearly defined at the time of warranty pricing. This information is often not available. However, some uncertainty on use and environmental factors can be reduced through contractual provisions, e.g., adjustment for usage rate.

Reliability Demonstration Incentive

This is a procurement technique which includes a provision paying the contractor for a variable price per unit depending on the reliability of the equipment demonstrated under a specified set of test chamber conditions.

In a reliability demonstration incentive type of life cycle costing procurement, a bonus fee schedule will be prepared based on the reliability of the equipment demonstrated under specified conditions. This approach primarily differs from other life cycle cost incentive provisions in that the basis for incentive provision settlement determinations is Government specified and closely monitored test chamber, not field, reliability demonstrating testing.

The primary advantage of this life cycle cost procurement technique is that it gets directly to the root of many operating and support cost problems, low reliability equipment. It has the advantage over some LCC procurement techniques in that it requires the demonstration and assessment of only one parameter, that is, equipment reliability as opposed to several parameters required to assess total equipment life cycle costs.

One disadvantage is that this incentive is tied only to reliability and does not include consideration of other factors which affect life cycle costs, such as time to repair, spares consumption, required maintenance skill levels, etc. Another disadvantage is that historically there has been poor correlation between reliability test results conducted at the contractor's facility and reliability demonstrated in the field. This approach cannot work effectively unless this problem is substantially corrected.

CONCLUSIONS

The use of life cycle cost must, whatever the phase of a program, inform the process by which managers can bid for future expenditure, manage existing budgets and make the best decisions on options presented to them. Most of the major costs determining decisions are made during the initial phases of the Defense Program Management. In this early decision period, the type of system technology procured, the basic design, the support system and the maintenance concept are determined. Decisions made in the early phases of any particular defense program freeze up to eighty percent of the potential life cycle cost of the aforementioned defense program. For this reason, it is essential that detailed and accurate assessments of anticipated costs must be made as early as possible.

The need for accurate objective based Cost estimation was clearly identified as a requirement to meet the future estimation and forecasting challenges, and the utilization of both commercial and non-commercial practices and the consideration of total life costing was

considered essential if the life cycle process was to be shortened. Clear differences were identified between these two (commercial, defense) paradigms and various successful costing models were presented. These models, whether developed independently or jointly, may differ in structure but clearly show similarities in some of the identified cost drivers. Further, they clearly demonstrate that there is a great deal of expertise and experience being gained throughout the NATO community, and their presentation at a single forum give nations the opportunity to present their own practices and experiences, thus fostering exchange of information among the NATO and partner communities, and to strengthen LCC studies in multinational projects.

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THE BUDGET SYSTEM IN MOLDOVA

Major SERGIU SANDU, Republic of Moldova

A country's position in the global economy depends on the organization and management of the business processes, the mechanism of the economy's national movements and cash flows in the functioning of the financial system. Each economy has its own structures, forms of business organization of the economic entities, multiple institutions with different functions, which take a toll on the development of the financial system. The entire financial system provides a match between the resources available and the needs of the country, contributing to the economic development and its integration into the global economy.

The financial system of the Republic of Moldova is changing through a constant adaptation to new conditions and requirements of the national and international development. By the development and implementation of the Economic Growth Strategy and the EU Poverty Reduction Action Plan - Moldova, and National Development Strategy, Programme of the Government of Moldova "Integration EU: Freedom, Democracy, Welfare. 2009-2013 ", the Government initiated a series of projects regarding organizational and information reforms aimed at the gradual transition to public and private Financial Management based on international standards.

In Moldova, as in many countries of the world, the budget system is a significant component of the national economy. Through various financial instruments - taxes, contributions, fees, loans, etc.. - the central government and local authorities may collect on average about 40% of the country's gross domestic product. Depending on how fair, on one hand, and rationall, on the other hand, this income redistribution is achieved, the public budget affects the profile of poverty in Moldova, the dimensions of public and private consumption, gross capital formation proportions, and in the end the economic growth and its quality.

The possibility of correctly distributing the budget is of a big importance, especially in crisis situations. Now Moldova needs a realistic and real program for finding new models to improve the budgetary system, not only in relation to the planning of the budget, but also related to its redistribution.

In the pages that follow, I will present how the central and local authorities spend money and generate revenue through the state budget, state social insurance budget, budgets of administrative-territorial units, and funds for compulsory medical insurance, they together forming the concept of the public budget. Examining issues of national budget system will give state budget priorities, which is the constituent with the decisive contribution to the formation of public budget.

WHAT IS THE BUDGET?

The state budget is a cornerstone of science finance group. We can address the legal and economic point of view.

In legal terms, the budget is an act which is authorized and provides annual state revenues and expenditures. The state budget bill provides and authorizes state expenditures and resources, having its submition to Parliament and its subsequent approval. The budget is actually a forecast of public resources and their use, elaborated on a one-year period. The State Budget Law is influenced by political views, economic and social factors specific to each period.

As an official document, the approved budget highlights the level of expenditures to be made in future, the size of the revenue that can be mobilized at the disposal of the state.

The economic approach refers to the macroeconomic correlations, and especially to the level and evolution of gross domestic product. A certain level of GDP and the extent to which it is distributed for consumption and gross capital formation, determines the indicators and budgetary resources which form the basis of favorable evolution in the future.

The state budget expresses the economic relationships that arise in the distribution process of the gross domestic product, according to social and economic policy objectives of each financial period. These relationships have double meaning: on the one hand, relationships that are mobilizing cash resources and on the other hand, the relations of distribution of these resources.

These relationships refer to resource mobilization from the economy by the state through taxes and contributions, levies and obtaining revenues through the attraction of state loans on the internal market. Also it creates relations with foreign state materialized in external financing.

The state budget is a tool for short and medium term forecasting. The budget is a economic tool for any country. In economic theory and practice, the public budget is seen usually in two ways - as an objective component of the core financial system and a forecasting and authorization document as the main financial balance of nature and binding force state.

As a central financial system, the public budget is an expression of a summary of economic relations that manifest themselves in the process of developing and centralizing the funds and the main use of cash funds of state and territorial - administrative units in order to finance activities to enhance the quality of life, the country's economic development activities, scientific research, to enhance and improve the infrastructure, state reserve, national defense, public order and law.

As the main financial balance, the public budget is the basic document of a power The law, which establishes on one hand, the nature and amount of revenue available to the state and on the other hand, the type and volume of budget allocations that will enable the state to fund various activities during the year.

There are three categories of finance (budget) laws:

A. The Annual Finance Act, or the original budget law, which authorizes and provides for each financial year, resources and expenditures throughout the state. It is passed by Parliament after it it debated and is also known as the state budget law;

B. The Amended finance laws, corrected to adjust the budget during the budget year, the initial budget law provisions; their number is not fixed and may vary by year;

C. The Regulatory Act (adjustment) of finances is adopted by Parliament after the budget year (usually one year), confirming the actual implementation of the budget and approving the differences between the results that we recorded and the forecasted annual finance law, supplemented by amending laws. This law can be considered in a narrow definition, the implementation of the budget law by the Government.

THE STRUCTURE OF THE BUDGET SYSTEM

In the current structure of Moldova's budget system, as part of public finance system, the budget provides a link to public financial resource management, which is mobilizing revenues for: the state budget, local budgets (local administrative units), the state social insurance budget, extrabudgetary funds, mandatory insurance fund healthcare. This unitary and correlated funding system outlines public financial flows resulting in the formation of tax and non-tax revenue and their sharing on destinations according to social needs and the objectives of financial policy at the macroeconomic level.

The budget of the Republic of Moldova, as in any other state, is a financial plan regulated necessarily by the state, through the following normative acts:
- Law 847-XIII of 24 May 1996 on budgetary system and budgetary process [1];.
- Law 397 - XV of 16 October 2003 local government finance [6];

- Law 1593-XV of 26 December 2002 on the amount, manner and terms of Payment of mandatory medical insurance [7];

After 1989, the country's budget system is organized into a new concept imposed by market economy, giving up the single state budget as derived from a single national plan, instrument of excessive centralism. In 1991, Moldova shifted its budgetary approach to a system of three separate budgets, which are developed, approved and implemented in complete autonomy: the state budget, the local government budget and the state social insurance budget. Thus a new notion has been introduced, that the public budget.

In the case of Moldova, as a unitary state, its budgetary system falls in the typology of the states with unitary administrative structure, and the resource needs at state budget level, respectively at local authorities level are reflected, in accordance with the Law budget system and budget process no. 847-XIII of 24.05.1996, in the national public budget [1].

Article 2 of this law stipulates that the budget system is a unitary system of budgets and funds, which constitute the national public budget (based on changes since 2005), encompassing:
a) budget;
b) the state social insurance budget;
c) the budgets of administrative-territorial units;
d) mandatory health insurance funds.

The state budget comprises indicators of its financial relations expressed by the monetary appropriations needed to achieve the objectives and actions of national interest that financial resources mobilized to the state (government). Among the categories of expenses included in this budget stand the measures of performance of areas considered of national importance such as socialcultural, defense, social security, etc. The budget provides the framework under which current resources (regular) are distinguished in the form taxes (direct and indirect), while the source of resources extraordinary is usually to state loans.

The budgets of administrative territorial units (ATU) highlights, in turn, relationships between corresponding financial expenditure for specific local actions, namely those related to income or amounts that are received from higher budget (state or district / municipality respectively). ATU budgets are designed to ensure financial performance measures to meet social, economic and cultural needs of the population and the territorial development of subordinated units. Local authorities have financial autonomy and the right to initiative in all matters of administration activities of the local government, and exercise under the law the authority within the territory administered.

Administrative-territorial units (and their budgets) have two levels:
- local authorities level I, which are established and operate within villages (communes), cities (municipalities) to promote the local interests and address local problems.
- local authorities of second level, which are organized and operate within the districts, municipalities and other territorial units, to promote interests and problems of the ATU population.

Local public finance regulation is achieved by Law no.397-XV of 16.10.2003 local public finance, structured at the first and second level, based on reform Administrative division of Moldova carried out according to the Law nr.746-XV 27 December 2001 on administrative-territorial organization of the Republic of Moldova and the Law no.436-XVI of 28.12.2006 on local government.

Administrative-territorial budgets (ATU), like all other budgets, have two sides: revenues and expenditures [66, p. 74]. According to the legal framework, ATU elaborate and approve their annual budgets within their available financial resources, which are formed of:
● revenues, consisting of local taxes, collected by each ATU, according to the Tax Code and shall be remitted directly and entirely to the respective budgets.
● special means, such as representatives of the public revenue, under conditions approved by laws, from carrying out works and provision of paid services, as well as donations,

sponsorships and other money lawfully entered into possession of the public.
● breakdowns of state revenues, according to the norms laid down by percentage Annual Budget Law.
● transfers from state budget funds which are allocated according to legal provisions, in absolute amounts from state revenues to the budget district or regional budgets to local budgets, for balancing the financial possibilities of territorial-administrative units in order to ensure the exercise of certain functions in public finance business areas that are within the competence of local authorities or other special purposes.
● special funds are funds reserved to support programs local interest, while respecting the law.

Annual expenditure budgets within the responsibility of the ATU representative that are discussed and approved only within the available financial resources. Powers regarding the public expenditures are bounded between the ATU budgets under Law on local government. They target the field of education, health, culture and art, sports and youth activities, etc..

State social security budget (SSSB) includes financial relations expressed by specific expenditure in this area, resulting in the payment of pensions, grants and allowances, social protection, namely the income characteristic of this area, primarily social security contributions. As part of the national public budget, SSSB is presented as an annual financial plan, which reflects the creation, distribution and use the funds to protect employees and retirees and their families. Separation from the state budget provides the possibility to use the social security state budget for the social protection of citizens, and if, at the end of the financial year, resources remain un-used, they shall be reported in next year's budget.

Sources of budget revenue structure of state security are rooted in: contributions for social security; partial contributions from employees for tickets for rest or treatment, differential contributions of the pensioners to obtain tickets for treatment; unemployment insurance contributions, allocation of support and aid employability; other income.

Budget expenditures for state social insurance are directed to pay: pensions for the work until the limit of age, disability pensions, to cover the loss of working capacity due to work accidents and occupational diseases; allowances for temporary incapacity for work, maternity benefits and child care allowance or child sick benefits, disease prevention, unemployment, other expenses.

Compulsory health insurance funds (CHIF). Compulsory healthcare system is guaranteed by the state to defend the interests of the population's health care by helping the expense of insurance premiums, the funds money intended to cover treatment costs conditional on the occurrence of states insured events.

Public budget components are autonomous. They are developed and approved separately, and in terms of their management, their holders have full independence. These characteristics are enshrined in the Constitution of the Republic of Moldova (Title IV: National Economy and Public Finance, Article 131: The national public budget).

In Moldova, the Law on Budget System and Budget Process, regulate the development, examination, adoption and enforcement of the state budget, sets budgets of administrative - territorial, state social insurance budget, compulsory medical insurance funds.

These four components of the public budget have their own sources of revenue and expenses. In order to obtain the total public expenditure and revenue, these four budgets are integrated as a unified budget - the national public budget.

Relations between these four categories of budgets can be examined in Figure 1. Therefore, state and public institutions collect and spend money in four different budgets, but integrate them into a common fund - the national public budget.

However, the state social insurance budget, the budgets of ATU and CHIF, can obtain a share of revenues from the state budget as transfers (Figure 1).
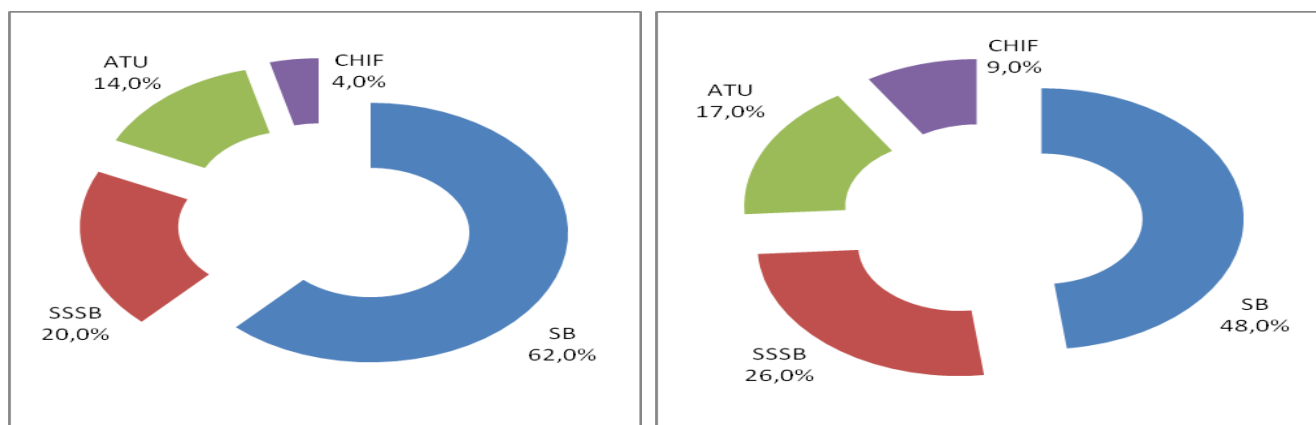
All four budgets go through the procedure in a more or less similar way of preparation, review, approval and execution.

NATIONAL PUBLIC BUDGET
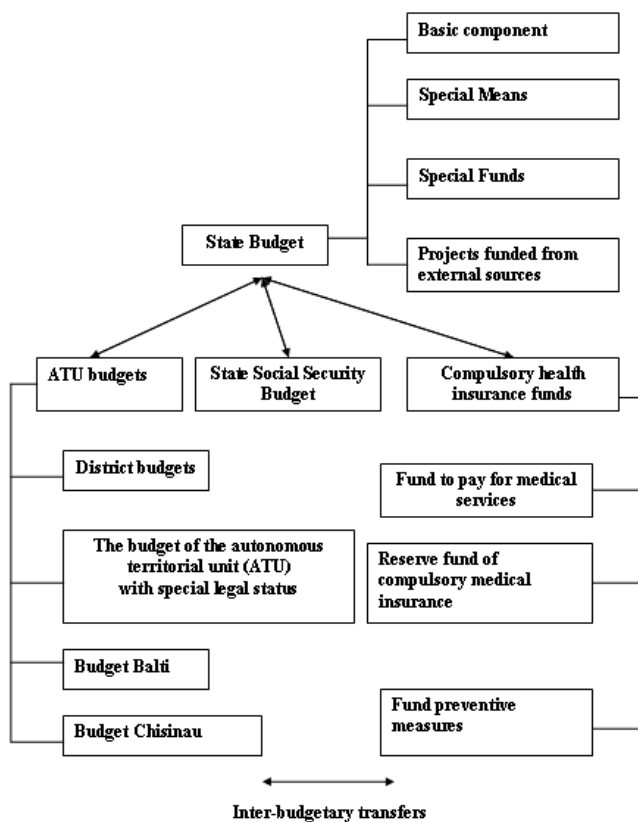
Fig.1. Components of the national public budget

The government budget revenue and expenditure has the following structure (Fig. 2):

| a) Revenue | b. Expenses |

Fig.2. The structure of the government budget revenue (a) and expenses (b), 2009

Note:
SB   - State Budget
SSSB - State Social Security Budget
ATU   - Administrative territorial units
CHIF - Compulsory health insurance funds

Both on the revenue side as well as in the public expenditure budget component, the State Budget has the largest contribution, followed by the state social insurance budget, the budgets of administrative - territorial mandatory health insurance funds.

The difference is explained by transfers made from the State Budget for the benefit of the other three components of the public budget.

CONCLUSIONS

The budget is a management plan. Public administration (central and local), by its nature and its function requires an efficient way to organize the provision of public administration bodies services and a thorough analysis to determine whether money the public is spent wisely, in compliance with the principles of justice and democracy. Its purpose is to achieve the objectives with minimum cost and minimum possible negative effects on citizens.

This concern for efficiency relates to the management staff activity and review, but also to the annual balances performance and development of a budget that achieves a correlation between objectives and costs.

Thus, the development will go through all stages, from development to execution and completion of accounts with monitoring and control during budget process.

The current global crisis will lead to major changes in operation of the banking systems and capital markets in the European Community, focused largely on new regulations and a more qualitative monitoring of the operations.

We believe that currently, Moldova, regulation and supervision of banking and financial markets are some of its strengths. Thus, changes that will occur in European countries in this respect will be simultaneously implemented in our country.

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