



NATO Deployable Corps Greece



Volume 17



NDC-GR COMMANDER'S FOREWORD

Officers, NCOs and soldiers of the NDC – GR Hqs,

As you are aware, NDC – GR has assumed the responsibility of Land Component Command for NATO Response Force (NRF) for 2012. It will be the first time, since the outset of NRF, that a NATO Force Structure HQ will be challenged with the ambitious task of assuming annual stand by period.

So far in 2011 we have been conducting a progressive and comprehensive training programme covering all NRF explicit tasks leading to required certification and LCC level integration, interoperability and combat readiness.

Although much have been done already, the culminating point of our efforts is ahead of us, with the exercises Brilliant Ledger and Steadfast Juncture in Oct and Nov 2011 respectively, that serve as the vehicle for Land and Joint certifications.

To this end, my main focus for 2011 and 2012 will be our commitment to NRF. Our mission is our overarching beacon of our thoughts and efforts and my vision is to ensure that our HQ is sufficiently manned, properly trained, equipped, and mission-ready, able to deploy following a UN

Lieutenant General Mikhail Kostarakos was born in Thessaloniki, Greece, in 1956.

He graduated from the Hellenic Military Academy in 1978 and he was commissioned in Artillery as Second Lieutenant. He attended all the respective Hellenic Field Artillery and Air Defence Artillery School Courses, the Army War College and the National Defense College. He also attended Air Defense Artillery Courses in the US (Fort Bliss, TX) and Belgium (Glons).

During his military career he had various National and International Command and Staff assignments including the Commandship of the 96 Superior Command of Reserve Battalions, in Chios island and the XII Mechanized Infantry Division in Alexandroupolis. He was also assigned as MA to the Chief Director of 3rd Office (OPS) and later as the Director of A' Branch in the HAGS. He served as JOC Director in KFOR, as DOS and DCOS SPT in NDC-GR HQ and in the International Military Staff of NATO in Brussels (IMS) at Intelligence and Current Ops Divisions, accordingly.

He graduated from the Law School of University of Athens and he acquired a post-graduate on "Diplomatic and Strategic Studies". He speaks English and French.

He has been decorated with various distinctions and metals.

Upon his promotion to the rank of Lieutenant General on 8 March 2011, was appointed as the Commander of NDC-GR.

He is married and has two daughters.





mandate and political approval, anywhere in the world, at any time, for any operation against any potential adversary / opponent, and under any condition.

We have ahead of us a very busy period. Initially we have to succeed in our evaluation exercises and later to maintain our fast response capabilities throughout 2012. For these challenging periods my general guidance can be summarized into the following fundamental principles:

- Create winners' mentality, failing is not an option
- Be optimistic and promote the "esprit de corps". Optimism and spirit are force multipliers. Have an enthusiastic go at everything
- Live up to all the Army values. Integrity and military ethos are nonnegotiable
- Know and understand the Commander's Intent
- Know and understand the Commander's Main Effort
- Take care of ourselves, our families and our subordinates and their families. Family support is imperative
- Achieve and maintain an impressive state of discipline, solidarity and professionalism
- Be honest and fast in your actions
- Don't be afraid to make mistakes, but learn from them
- Keep all actions/plans/orders/guidance/instructions simple
- Remain fit, work hard, play hard, enjoy yourself
- Maintain and improve our capabilities to deploy and maintain a sustained level of readiness
- Train realistically to achieve and sustain our combat readiness. An imaginative and evaluated exercise program will achieve that. Focus on functional areas training and use every training opportunity to improve our interoperability within LCC and with other Component Commands
- Ensure all kinds of security by all available means
- Work hard and in a professional manner. Teamwork wins!
- Use always the chain of Command. Respect and trust each other
- Always make priority lists ("Top ten charts")
- Pass information as appropriate (who needs to know what)
- Maintain all equipment and facilities at Army's standards
- Last but not least, be proud of our HQ and ourselves

Following these principles and working efficiently with professionalism and enthusiasm we will be surely successful.

Let's go for it!





HANDING OVER COMMANDER'S ORDER OF THE DAY
C'Army Corps/NDC-GR HQ
10 Mar 2011

Officers, Non-commissioned officers, Soldiers and Civilian Personnel of C'Army Corps and NDC-GR.

According to Governmental Foreign Affairs and Defence Council's resolution, I hand over today the Command of C'Army Corps and NDC-GR to Lieutenant General Michail Kostarakos assuming the post of Deputy Chief of the Hellenic National Defence General Staff.

Having completed to day one year of command of C' Army Corps and NDC-GR, I feel personal emotion and honour, contentment and optimism. I feel emotion because today I have to bid farewell to exceptional Greek colleagues and allies with whom I have shared not only their concerns, problems and anxieties but also the joy of creativeness, contribution, accomplishment of duties and the achievement of our goals. I thank all of them from the bottom of my heart for their excellent cooperation and support.

I feel highly honoured that the GOD blessed me and the Political and Military Hierarchy gave me the chance to command the historical C'Army Corps, the Corps of Thessaloniki and of our entire Macedonia, continuing its glorious course to the future.

I feel personal contentment because thanks to your help I managed to achieve the goals that I set, with the assumption of the command just one year ago with regards to:

For the C' Army Corps

- Incorporation of the Corps in national operational planning in the framework of its national mission*
- Enhancement of its combat capability and readiness by improving organizational forms, by conducting realistic training, by being equipped with new materials and by exploiting the technology to secure the installations*
- Improvement of living conditions and recreation facilities of our barracks and outposts*
- Upgrade of the historical memorials and sites in the Corps' area of responsibility*
- Improvement extended services to the permanent military personnel and their families and assumption new relative initiatives and actions to the same direction.*

For NDC-GR in the framework of its preparation for the assumption of the role of Land Component Command of NRF 2012.

- improvement to training level and further education of its personnel*
- Equipment with modern material and technical infrastructure, as far as it concerns the living conditions in the battlefield, movements and transportations, communications etc.*
- Completion and upgrade the buildings infrastructure*

I feel optimism, because I saw in your eyes, listened your thoughts and your proposals and ascertain in your actions, the determination to move forward for the final achievement of our goals, despite the today's difficult conditions.

Special thanks I would like to address to the distinguished colleagues from the allied countries who man the HQ NDC-GR for their contribution to the achievement of the HQ's goals.

Handing over the command I would like to wish the new commander LTG Michail Kostarakos every success to his difficult but nice work, whom I call you to support with all your effort, as you did for me.

I thank the authorities of Thessaloniki for our excellent cooperation and principally its residence and the residence of Macedonia for their love, respect and trust with which they encompass the C' Army Corps.

I kneel with devotion to the War Flags and pay my respect in the memory of the heroic deads of C' Army Corps. I wish and pray to the most merciful God, with the blessing of Virgin Mary and Saint Demetrious to give me health, power and inspiration, to keep on serving my country from my new assignment, like a loyal and proud soldier.

Thank all of you that with your support, I had the opportunity to feel proud for commanding the C' Army Corps and NDC-GR and I ask you to exclaim:

Long live to the Nation

Long live to the Army

Long live to the C' Army Corps and NDC-GR



Lieutenant General Georgios Nakopoulos
 Commander C' Army Corps/NDC-GR





CHANGE OF



*Lieutenant General Mickail K
Lieutenant General Georgios N*



COMMAND



*KOSTARAKOS is taking over.
AKOPOULOS is handing over.*



LCC COMMANDERS' MEETING



During 28-30 of March 2011 a Land Component Command (LCC) Commanders Meeting was held at NDC-GR HQ and attended by the Commander of NDC-GR and the Commanders of all subordinate units of NRF 2012.

The aim of the meeting was to harmonize the training and subsequent validation of the designated forces. Therefore a variety of issues were addressed and discussed regarding the preparation of NRF 2012 and all the functions of the LCC and units were elaborated.

The current situation of the forces was discussed and guidance and priorities was given for the way

ahead, including the development of the training, evaluation, certification and validation activities that have to be carried out in order the LCC formations to meet the standards and criteria for Combat Readiness.

Furthermore, it was given the opportunity to the participants to meet each other and exchange information regarding the structure and functions of each participating force having on mind that NRF 2012 is a multinational force.

At the end, all the participants were transmitted with a variety of information and were aware of the "big picture" of the NRF 2012 and the exact steps that are necessary to be fulfilled in the year 2011.





INFLUENCE OPERATIONS COORDINATION CENTRE

In the framework of NATO Response Force (NRF) 2012 process, the Influence Operations Coordination Centre (IOCC) organized a Seminar, which took place at NDC-GR HQs on 27th January 2011, in which a large number of civil organizations, both International Organizations (IOs) and Non-Governmental Organizations (NGOs), participated. COS NDC-GR chaired the meeting.

The goals of the Seminar were:

1. To establish initial contacts with those organizations.
2. To exchange information with regard to respective structure, tasks and procedures.
3. To look for further opportunities of cooperation in view of the major exercises NDC-GR is going to conduct in preparation of NRF 2012.



The Seminar was organized based on the consideration that in the context of modern military operations civil-military interaction is playing a key-role and requires strong and effective coordination, cooperation and harmonization of efforts between military forces and civil counterparts. Concepts such as Strategic Communication and Comprehensive Approach show that NATO is actively promoting and implementing stable and fruitful relations with civil organizations and agencies. Consequently, a progressive level of civil actors' involvement in NATO planning activities and exercises is to be achieved.

Eleven civil organizations attended the Seminar:

1. United Nations High Commissioner for Refugees (UNHCR)
2. United Nations Development Program (UNDP)
3. International Organization for Migration (IOM)
4. Amnesty International
5. Hellenic Red Cross
6. Medecins Sans Frontieres
7. Doctors of the World
8. World Engineers
9. Engineers of the World
10. Hellenic Rescue Team
11. Crisis Management Team.



After a presentation containing a general overview of NDC-GR organization particularly focusing on NRF 2012 issue, each civil agency described its own structure and tasks and indicated their level of interaction with NATO within theatres of operations and other activities. This phase of the Seminar was really useful in order for all attendees to perceive and understand respective roles.





Later, an open discussion followed. During that period, the main goal was to identify likely opportunities of cooperation between NDC-GR and the civil organizations along the preparation process towards NRF 2012. In particular, NDC-GR proposed to involve representatives of each organization in incoming Operational Planning Process, in particular during the War Gaming step, and in exercises as members of the Grey Cell in the Exercise Control. Also, it was announced that the NDC-GR intent is to implement a Civil Advisory Cell as a sort of pool of Subject Matter Experts in civil affairs issues to be on call for any likely operational commitment.

In general, those proposals were positively received by the civil organizations even though further study and development are required in order to better define and formalize forms of cooperation. It was finally agreed that NDC-GR shall issue a comprehensive document with the aim of precisising requests for support from civil organizations side.

In conclusion, this Seminar was a really productive event in order to enhance NDC-GR capabilities in dealing with civil counterparts and it will be surely followed by further meeting's opportunities and more integrated cooperation's activities. The road leading NDC-GR towards the Comprehensive Approach to operations is now open.





Tactical CP Demonstration - Exhibition

From 17 to 20 Jan 11 HQ SUPPORT BRANCH organized a demonstration - exhibition of HQ NDC-GR Tactical CP in the «PEDION AREOS» Camp.

Tactical (TAC) CP is not a permanent CP, but a deployed one for limited periods of time, whenever COM NDC-GR deems necessary for him to be positioned closer to the battle hotspots or to steer more directly Close Ops.

It is a flexible, modular, and rapidly deployable CP. The personnel roster and equipment are mission-tailored. It is under ACOS G3 command and possible tasks include:

- Control Corps or LCC Close Ops.
- Monitor the execution of Corps plans.
- Synchronize combat, CS and CSS in support of Close Ops.
- Issue WNGOs and FRAGOs in support of Close Ops.
- Maintain current Close Ops situation information.
- Assess the current tactical situation.
- Assess the status and capabilities of friendly forces.
- Provide initial estimate of the civil environment of friendly forces.
- Monitor the status of CS and CSS in Close Ops.
- Update CS and CSS requirements of Close Ops.
- Provide close ops situation information to the Main CP.
- Monitor Deep Ops for effects on Close Ops.
- Monitor Rear Ops for effects on Close Ops.
- Plan and control local TACCP security issues.



CIS



COM Office



OPSCEN

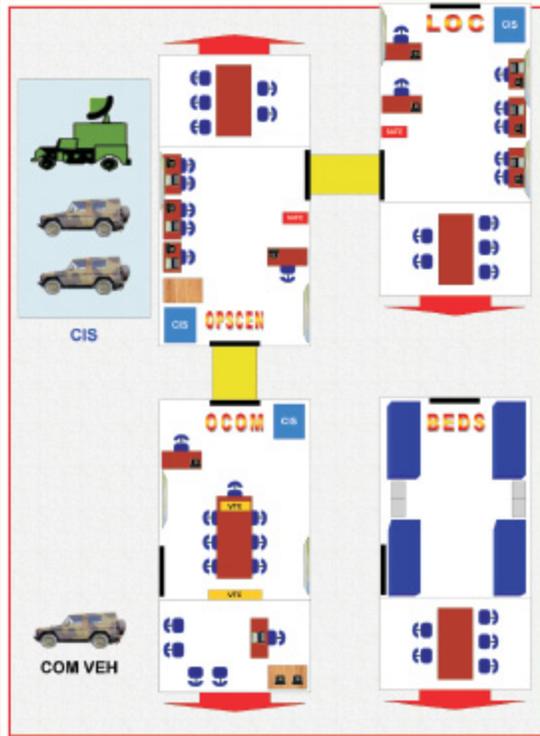


LOC



Rest Area



*Layout*

It consists of 3 vehicles with working areas (COM Office, OPSCEN, LOC), 1 vehicle as a rest area, 1 vehicle for CIS with satellite communication and 3 vehicles ½ ton as general support.

During the Demonstration - Exhibition representatives from A' - D' corps, and students from ADISPO - SDIEP, were briefed about the structure, organization and mission of HQ NDC-GR TAC CP.





**ARGIRIOS GRAMMATIKOS OF-4
(HE A)**

FIRE SUPPORT and TARGETING INTERNATIONAL SEMINAR



FCOORD Branch organized and conducted an International Seminar from 18 to 20 Jan 2011 in HQ NDC-GR.

The scope of the Seminar was to update information about the affiliated Artillery and Indirect Fire units including Army Aviation, Air and Maritime Assets, share common experiences related to both targeting and specific fire coordination procedures with other NATO military staffs and identify potential needs for revision of the existing SOP/SOI's through lessons learned information from other NRF / IEO Exercise experienced LCC HQ concerning Targeting and Fire Coordination.

Main topics of the Seminar:

Organization and Structure of the NRF 2012 Air Component Command. The presentation was given By FCOORD Chief Tgt, and it was focused mainly in the JTST Cell organization and functions

JFC BS Representative stressed out that Joint Synchronization and Execution Branch (JSEB) will probably be the NRF Director for NRF 2012.

Another issue was the importance of the Liaison Officers from LCC to JFC (JTCB) for targeting procedures and the necessity for those officers to be experienced and have the required qualifications.





He also highlighted the valid doctrine and SOP's, concerning FCOORD/Fire Coordination and Targeting. Additionally, there was a reference in Ex. SFJT'10 regarding Targeting documentation and procedures.

The second day started with a general overview concerning DJSE. The contribution of DJSE, regarding Targeting procedures, was introduced during Ex. SJ 10 as well as the implementation of these procedures for NRF 2012.

As a last topic of the second day of the Seminar, a presentation was given regarding Targeting and Joint Fires procedures in ISAF along with some examples of Dynamic and Time Sensitive Targeting engagement and execution.

The Seminar was successful and fruitful, the presentations well prepared and open for discussion, the information was interesting and the contribution of the participants helpful for the way ahead.

FCOORD Branch had also invited one national (GRC A) augmentee (Ch. CMC Cell) which had the opportunity to be familiar with the current situation and the forthcoming collective training activities of the Branch.

Especially the contribution of the external participants from other HQ's was very valuable to us for our preparation to deal with the upcoming challenges (CREVAL, Steadfast Juncture 2011 and NRF 2012) and shows exactly the importance of conducting such training activities as this FCOORD International Seminar.





DEPLOYABLE AOCC FACILITY

The deployable Air Operations Coordination Centre (AOCC) facility was delivered to NDC-GR. The project is a NATO-wide Pilot project since there is no other AOCC of the same configuration in NATO community.

Main Features

- A fully transportable and self-contained Command, Control, Communications, Computers and Intelligence (C4I) facility housed in 20-foot ISO container format shelters, suitable for use as a command post or land-sea-air operations coordination center (AOCC).
- Open architecture; designed for integration in tactical national and international defense networks.
- Transportable via road, rail, air or ship carriers. All equipment are installed on console or rack frames on shock mounts.
- Equipped for transportation and operation in adverse environmental conditions.
- Redundant voice and data networks.



Command and Control

- Accommodates 18 operator workstations (expandable)
- Supports clear and secure voice communications at each operator workstation
- Operator role selectable at each workstation.

Communications

- Built-in VHF/UHF/HF (option) radios
- Connections to external radios
- Analogue and Digital intercom and telephony connections (ISDN PRI/BRI, FXO, FXS, FoIP/VoIP)
- Sensor data and Recognized Air Picture (RAP)- Joint Environment Picture (JEP) exchange via tactical data links (e.g. Link-1, Link-11) or WAN
- Radio, telephony and data communication encryption facilities
- Recording and reproduction of voice communications
- PA system for voice announcements inside and outside the transportable facility shelters

Computers

- Shared data servers, workstation processors and data communications equipment to support the operational requirements.





System Overview

The deployable Air Operations Coordination Centre (AOCC) is housed in nine (9) 20-foot ISO container format shelters, comprising three operator shelters, two server shelters, a RED/BLACK communications shelter, a debriefing shelter, a diesel generator set and a storage.

All transportable facility shelters are equipped with EMI – RFI filtered power, uninterruptible power supplies (UPS), power monitoring equipment, inclinometer, independent fire detection and suppression equipment, as well as environmental control equipment including two Environmental Control Units (ECUs), Nuclear – Biological – Chemical (NBC) filter, and transportation heaters.

Voice and data connections between shelters are implemented using fiber optic cables with hermaphroditic connectors for easy deployment and additional flexibility.

Each **operator shelter** accommodates up to six console workstations, comprising a touch-screen Voice Communications Facility supporting clear and encrypted communications, and a computer with color monitor connected to the facility's data networks. Storage space for NBC uniforms, water and personal items is also provided.

The **server shelters** comprise a centralized computing facility, as well as a computing equipment maintenance workshop and spares storage.

The **communications shelter** is physically separated from the operator shelters, providing clear and encrypted data and voice communications connectivity. The communications shelter includes radio, GPS equipment for synchronization and voice communications recording facilities.

The **debriefing shelter** can accommodate 20 persons and it is equipped with a network computer connected to two Large Screen Displays, and voice communications playback facilities.

A containerized **diesel generator set** provides power to the transportable facility shelters and a deployable junction box manages the power distribution.

A **storage container** is used for packing all necessary power and communications cables, antennas, masts, junction box, etc.

The system was **designed and constructed** by the **Hellenic companies** KOMBOS ABETE (prime contractor and civil works), and DIENEKIS S.A. (supply of computing equipment).





COORDINATION MEETING FOR NRF 2012 WITH LCC INITIAL SUPPORT CONFERENCE

Following the Initial Logistics Planning Conference (ILPC), held by Joint Force Command (JFC) HQ Brunssum and in preparation for the NRF LCC Initial Support Conference scheduled for 1-2 June 2011, a Coordination Meeting conducted by NDC GR with S4 participation of all GRC Formations and Units.

The aim of this Coordination Meeting was the development of the NDC GR Logistics Concept for the NRF 2012 to subordinate units, updating and coordination of the actions at the frameworks for the preparation of NRF 2012, information on the ILPC outcomes, that was conducted in NDC-GR HQ at the end of February, assigned tasks and responsibilities, and the preparation of all the required Logistics Data and Calculations that will be discussed in the NRF LCC Initial Support Conference at 1 and 2 of June.

The Coordination meeting was held in the "Great Alexander" Room of our HQ on 18 April 2011.

The Chairman was DCOS SPT, BGen Kalogeropoulos with participants of the HQ SPT Branch, G1, G4, G6, G8, ENG and representatives of the subordinate Greek Formations and units such as 71 A/M Brigade/S4, CSS Brigade/S4, 3rd Signal Brigade/S4, NDC GR SPT BN, PSYOPS, CIMIC Coy etc.





OPERATION PLANNING TRAINING

THE CONCEPTUAL DIFFERENCES BETWEEN GOP AND COPD

For a number of reasons, including: the Comprehensive Approach, “Effects Based” thinking and the need for guidance on planning at the strategic and operational level, the GOP was replaced. The COPD has been published as a trial version on 25 Feb 2010. As of that day, it is in force for one year. We suppose that it will be issued again in its final version in the near future.

While the GOP mainly focused on operational planning, the COPD focuses on both the operational and the strategic level in order to better support the Comprehensive Approach (CA).

The directive examines a number of issues not covered previously in the codification of the planning process, including civil-military interaction in a comprehensive approach; a systems approach to knowledge development; effect based planning; assessment; and strategic level planning. Therefore, the directive addresses all aspects of operations planning from the political/military (HQ NATO), military strategic and the operational levels clarifying the differences in responsibilities between the strategic and operational levels while emphasizing the need for parallel/collaborative planning across all levels.

We are already familiar with parallel/collaborative planning thanks to the GOP. The COPD uses the same definition in the same way. However it lays more stress on the parallel and collaborative planning. Parallel planning is two or more echelons planning for the same operation nearly simultaneously. It is facilitated by timely warning orders. With parallel planning, subordinate units do not wait for their higher headquarters to publish an operations order to begin their own planning process.

Collaborative planning is the real-time interaction among commanders and staffs at two or more echelons developing plans for a single operation. Collaborative planning speeds up decision making by providing the higher commander with real-time information about what subordinates can and cannot do. In addition, collaborative planning allows sharing ideas and concepts for COA development. Collaborative planning is enabled by information systems that allow real-time exchange of information by voice, and video.



New and Updated Terminology



Comprehensive Approach (CA)

“A means to ensure a coordinated and coherent response to crisis by all relevant actors in order to complement and mutually reinforce each others efforts to achieve common goals.”

Tactical Level : “Our contribution to the Comprehensive Approach could be the execution of the military element of the campaign plan.”

Engagement Space

**Political,
Military,
Economic,
Social,
Infrastructure
Information**

PMESII





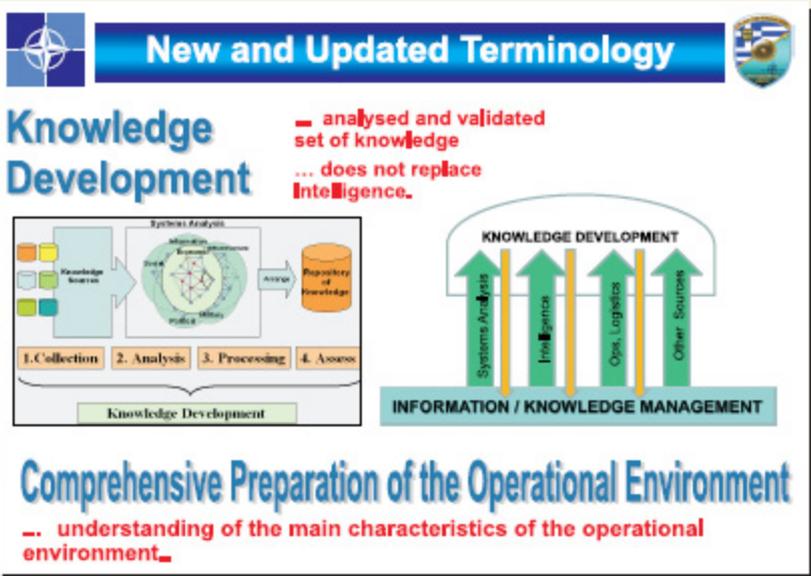
NEW AND UPDATED OPERATIONS PLANNING TERMINOLOGY

COPD has defined some new and updated operations planning terms like actions, effects, comprehensive approach (CA), effect based planning, knowledge development (KD), comprehensive preparation for operational environment (CPOE), measurement of effectiveness (MoE) etc. But what is more important is the employment of the new and updated operations planning terms into tactical level OPP.

Comprehensive Approach (CA): CA is a means to ensure a coordinated and coherent response to crisis by all relevant actors. For the Alliance, this includes the development of process and structures for effective co-ordination and co-operation with other actors in order to complement and mutually reinforce each others efforts to achieve common goals. At tactical level, our contribution to the Comprehensive Approach could / will be the execution of the military element of the campaign plan. Comprehensive approach is specifically written for Strategic and Operational level. We do not see any room for planning with a Comprehensive Approach that is at least operational level responsibility.

Engagement Space: Modern crises are characterized by complex interdependencies. This complex environment is named as the Engagement Space. In the Engagement Space, the interaction of different actors creates conditions that may be acceptable or unacceptable to the Alliance in terms of its end-state. Understanding the engagement space requires a comprehensive view of all systems relevant to the crisis. NATO recognizes six domains within an engagement space known as PMESII: Political, Military, Economic, Social, Infrastructure and Information.

Knowledge Development (KD): It provides commanders and their staff with a comprehensive understanding of complex environments, including the relationships and interactions between systems and actors within the engagement space. The purpose of KD is to provide planners with analyzed and validated set of knowledge ready for use. KD usually begins well before planning commences. It does not, however, replace Intelligence. An essential aspect of KD is therefore the fusion of intelligence with information from a variety of sources in order to produce a comprehensive picture of the operational environment. Counter part of knowledge development (KD) process in tactical level is basically gathering information, data and intelligence of which the process will be led by the responsible Branch. This means that all respective branches will provide enough and necessary information/data about their aspects of operations to command group and staff in the lead of responsible Branch which will build knowledge about not only opposite forces but also strategic actors, friendly forces and neutrals, international organizations etc.





Comprehensive Preparation of the Operational Environment (CPOE): The COPD uses this term in place of Intelligence Preparation of the Battlefield (IPB). CPOE is a coordinated analytical process to develop an integrated understanding of the main characteristics of the operational environment including its land, air/space, maritime dimensions, as well as the PMESII systems of adversaries, friendlies and neutral actors. Tactical level CPOE must be related with tactical environment which affects the operations or if it is in-range of capabilities which tactical level commander has in his hand.

Effects & Actions: An effect is a change in the behavioral or physical state of a system (or system elements), that results from one or more actions, or other causes. Effects create the conditions – let's say Decisive points – required to achieve the objective. An action is the process of engaging any Alliance instrument at any level in the engagement space in order to create (a) specific effect(s) in support of an objective. Effects are defined at strategic and operational level. Defining effects is not appropriate to tactical level. Operational Level Commander normally assigns some actions or tasks to Component Commanders. Of course MPG may imply some tasks/actions from the effects which are given by the Operational Level Commander. If MPG considers as necessary to define a specific effect for land operations, MPG can propose it as well. And also MPG defines the tasks or actions to our sub units needed to be done in operations not effects. In regard with effects, in place of defining Measurements of Effects (MoE) in the assessment process, Measurements of Performance (MoP) should be defined in order to assess whether the task/action was conducted appropriately in tactical level.

| Operational / Str. | | Tactical Level | |
|--------------------|---|----------------|-------------------------------------|
| 1 | Situational Awareness & Knowledge Development | | |
| 2 | Operational Appreciation of SACEUR's Strategic Assessment | 1 | Initiation |
| 3 | Orientation | 2 | Orientation |
| 4 | CONOPS Development | 3 | CONOPS Development |
| 5 | OPLAN Development | 4 | OPLAN Development |
| 6 | Execution, Campaign Assessment, OPLAN Review | 5 | Execution, Assessment, OPLAN Review |
| 7 | Transition | | |

RELATIONSHIPS BETWEEN OPP IN OPERATIONAL AND TACTICAL LEVEL

The OPP consists of five stages in tactical level, while COPD depicts seven stages in operational/strategic level:

It should be mentioned that this process is a continuous one, which might, depending on the development of the situation and the results of each stage, return to a former stage at any time. At this moment, the relationship between OPP in tactical level and the first two and last stages of operational level OPP should be explained. Actually the first two stages of operational level OPP occur prior to tactical level OPP as well as the last stage of operational level OPP is out of scope in tactical level. The planning activities in the rest four stages, which are Orientation, CONOPS Development, OPLAN





Development, OPLAN review / Execution / Assessment, are more or less same, but minor changes reflecting the new and updated planning terminology.

Situation Awareness / Knowledge Development:

The purpose of Situation Awareness / Knowledge Development (SA / KD) in operational level is to develop and maintain a level of awareness and understanding to support operational assessments during the planning for and conduct of operations. This begins with SACEUR's designation of an area of interest and assignment of responsibilities for situation monitoring. It includes the development of

information and knowledge requirements about the area, as well as continuous monitoring to identify changes in the situation. Situational awareness and knowledge development are normally continuing processes which affect the following stages

SA / KD mainly covers strategic and operational level activities. With regard to tactical level the OPP isn't initiated within this stage. Tactical level commands don't have significant role at this stage but have to follow and be aware of the situation which the operational level commander is dealing through the Commander's Update Meetings.

Operational Appreciation of Strategic Assessment:

Normally COPD puts forth this stage to improve linkage between strategic and operational level. Operational Level Commander proposes an Operational Advice to strategic level after receiving military response options. At this point, Operational Level Commander may ask for providing assessment or information from Component Commanders for some specific issue or deems one-two planners to involve the preparation operational advice.

While contributing to Operational Advice when JHQ (Joint HQ) asks for it, tactical level OPP may / may not initiate depending of the content of Warning Order. During the appreciation process, there is no clear decision whether LCC will be employed in the crisis or not. This will depend on the strategic/military crisis response options and decision about demonstrating small or big footprint in the theatre. If the warning order for operational advice shows high possibility to be employed, tactical level OPP can be initiated. The point to be stressed at this moment is that the tactical level activity "Contribution to Operational Advice", of course if JHQ asks for it, may happen before or in the initiation stage of tactical level OPP.

Transition:

The purpose of this stage is to develop and coordinate OPLAN for the handover of responsibility to the UN, other international organizations (e.g. EU) or indigenous actor in the crisis area and withdraw NATO forces in a controlled manner so as to avoid this action being a destabilizing influence in the region. In tactical perspective, transition simply means planning for redeployment, hand over and disengagement from the theatre in accordance with operational level command. And it requires a separate OPP in itself. At this stage, main planning activities reside at the strategic level. The role of the tactical level is to plan the disengagement at its level, and to disengage its own troops from the theatre.





G7

CREVAL

In the frame of the 3 years program of NATO Combat Readiness Evaluations (CREVAL) and preparations for taking over the Land Component Command (LCC) for the NATO Response Force (NRF), NDC-GR HQ was evaluated according to CREVAL criteria from a NATO evaluation team, from 20 till 23 June 2011.

All the staff from NDC-GR HQ and its affiliated units (NDC-GR Support Battalion, 490 Signal Battalion and 31st CIS Coy) took part at CREVAL.

The Allied NATO personnel supporting the evaluation were dispatched from:

- FC MD (Spain), the CREVAL team, consisted of MGEN Federico BONATO (ITA A) as team leader and 18 members (4 from Germany, 3 from Spain, 3 from Greece, 2 from France, 2 from Turkey, 2 from Italy, 1 from Bulgaria, 1 from U.S.A)

- SHAPE, the monitor team, consisted from Rear Admiral Bartholome BAUZA and his 3 member team (1 from Poland, 1 from Croatia, 1 from Spain).

During the evaluation 1296 criteria were evaluated, in 5 areas (Policy, Operations, Logistics, CIS and Administration).

The items that were checked are:

- In area "A":
 - Assignment / Assured availability
 - Affiliation
 - Multinationality
 - Procedures
 - Training
- In area "B"
 - Command and Control (C2)
 - Survivability



- In area "C"
 - Overall logistic requirements
 - Supply
 - Maintenance
 - Movement and transportation
 - Medical
 - Real life support
 - Host nation support
- In area "D"
 - CIS in peace HQ
 - Deployable CIS concept of operations
 - Deployable CIS
- In area "E"
 - LEGAD
 - Financial
 - Manpower

The result was "EXCELLENT". Following this result, NDC-GR HQ was certified as "COMBAT PREPARED".

CREVAL was the first evaluation that NDC-GR took part for this year, as an FLR HQ.

- As a LCC for NRF 2012, the HQ has to face other two challenges:

- Evaluation - Certification as LCC-NRF during the exercise "Brilliant Ledger 11" in October 2011.

- Evaluation as part of the Joint Force, of NRF 2012 during the exercise "Steadfast Juncture 11" in November 2011.





EXERCISE "GORDIAN KNOT 11"



GENERAL

Exercise "GORDIAN KNOT 11" (GK 11) was conducted from 27 June to 1 July 2011 in "PEDION AREOS" Camp (NDC-GR Peace Location) in Thessaloniki. It was the last step in the preparation of NRF 2012 LCC before the execution of exercise "BRILLIANT LEDGER 11" which is going to be the evaluation-certification exercise for the whole LCC package.

AIM

The overall aim of "GK 11" was to train NRF 2012 LCC CP on the planning and decision making process and to examine the LCC C2 structure and procedures.

It was a MEL/MIL driven training based on the BRLR11-SFJE11 scenario (CERASIA II) and the LCC OPLAN that will be produced for the 2 NRF exercises.



OBJECTIVES

The main objectives of "GK 11" were:

- ❖ To test the LCC CP concept.
- ❖ To train the decision making process.
- ❖ To exercise the Battle Rythm that is going to be used during "BRLR11".
- ❖ To train and integrate the augmentees into the CP Functional Areas.
- ❖ To train the NRF 2012 LCC subordinate units in their LOCON role before "BRLR 11".

PARTICIPATION

The FWD CP was fully manned with the presence of all the augmentees as a Primary Training Audience (PTA).



71st AM BDE (IRF BDE) was present with a full capability CP as Secondary Training Audience (STA).

Most of the LCC and the IRF BDE subordinate units were present with Response Cells. For those that were absent, HAGS arranged their proper representation with suitable officers.

EXECUTION

The Exercise was organized in two parts:

An one and a half-day integration training for the Augmentees and the LOCON.

A full three-days BRLR 11 Battle Rhythm.

The OPSCEN along with INTEL and FSCC FAs were deployed in the inflatable tents in front of Bld C.

FEEDBACK

The After Action Review was held on the 8th July. It provided a forum to discuss experience gained during the exercise by the Training Audience, highlighting activity that could be sustained or improved. The time driven delivery arrangement of the observations will ensure that even minor details will be kept.





CRISIS RESPONSE PLANNING EXERCISE

In the frame of the “NRF 2012” preparation, NDC-GR has conducted collaborative planning in the operational level; The Crisis Response Planning (CRP) phase of the EX “SFJE 2011” lasted for two weeks, from 02 May to 13 May 2011.

During that planning period NDC-GR has received a German Flag Officer as senior mentor to HQ NDC-GR commander, Lieutenant General Michail KOSTARAKOS, an evaluation team of two staff officers from the Operational Preparation Directorate (OPD) and a Training Team (TT) of seven staff officers from Joint Warfare Centre (JWC). Also eight staff officers from NDC-GR were appointed as Liaison Officers to JFC Brunssum and other Commands or Hqs.



The aim of the exercise was to evaluate the knowledge of NDC-GR personnel in issues regarding operational planning procedures.

The evaluation team expressed their satisfaction for the level of knowledge and professionalism of NDC-GR personnel.





Antikythera Mechanism: The technology behind the world's oldest «computer»

The Antikythera mechanism, one of the world's oldest known geared devices, is an ancient mechanical calculator, also described as the first known mechanical computer, designed to calculate astronomical positions, that has puzzled and intrigued science and technology historians since it was recovered from an 80 BC wreck off the island of Antikythera in 1901.

Dated to about 150-100 BC, the intricacy of the way in which the Mechanism works was so startling to scientists that initially they often the device's dating, doubting it could be as old as it really was. Technological artifacts of similar complexity did not reappear before the 14th century, when mechanical astronomical clocks appeared in Europe.

A lecture on the Mechanism was recently delivered by Professor Robert Hannah of the Classical Studies Department at New Zealand's Otago University to a packed audience at Sydney University in Australia, who tried to analyze the functions of the Mechanism and, more importantly, to explain how the ancient Greeks were able to create such a complex, precise and sophisticated instrument more than 2,000 years ago, stressing that scientists are still studying and trying to decipher the device.

Sometime before Easter 1900, Elias Stadiatis, a Greek sponge diver, discovered the wreck of an ancient cargo ship off Antikythera Island at a depth of 42 m (138 ft). Sponge divers retrieved several statues and other artifacts from the wreck. The mechanism itself was discovered on May 17, 1901, when archaeologist Valerios Stais noticed that a piece of rock recovered from the site had a gear wheel embedded in it. Examination revealed that the "rock" was in fact a heavily encrusted and corroded mechanism that had survived the shipwreck in three main parts and dozens of smaller fragments. The device itself was surprisingly thin, about 33 cm (13 in) high, 17 cm (6.7 in) wide, and 9 cm (3.5 in) thick, made of bronze and originally mounted in a wooden frame. It was inscribed with a text of over 2,000 characters, many of which have only just recently been deciphered.

The mechanism is the oldest known complex scientific calculator, and is sometimes called the first known analog computer, although its flawless construction suggests that it may have had a number of predecessors during the Hellenistic Period that have not yet been discovered.

It appears to be constructed upon theories of astronomy and mathematics developed by Greek astronomers, and one hypothesis is that the device was constructed at an academy founded by the ancient Stoic philosopher Posidonius on the island of Rhodes, which was known at the time as a center of astronomy and mechanical engineering, and that perhaps the astronomer Hipparchus was the engineer who designed it, since it contains a lunar mechanism that uses Hipparchus' theory for the motion of the Moon. However, newer findings of The Antikythera Mechanism Research Project published in 2008 suggest that the concept of the mechanism originated in the colonies of Corinth, which might imply a connection with Archimedes.

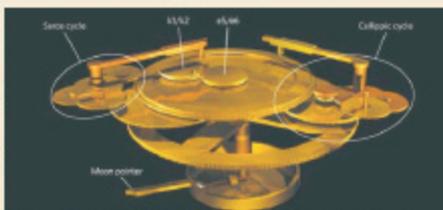


Figure 1: Wheels within wheels. The rear side of 'teeth and colligates' reconstruction' of the Antikythera mechanism, viewed sideways on. The left gear and pointer system simulated the Moon cycle for predicting lunar and solar eclipses, the right gear and pointers were for the Callippic cycle that synchronizes synodic months and solar years. At the center, mounted on the large gear wheel, were two pairs of identical gear-wheels, $\frac{1}{2}$ and $\frac{1}{3}$ at the center and $\frac{1}{2}$ and $\frac{1}{3}$ at the left (see also Fig. 3 on page 290). The pair $\frac{1}{2}$ and $\frac{1}{3}$ was provided with a pin-and-slot device that induced an irregular movement in the pointer at the level of the mechanism indicating the position of the Moon. This system simulated a model of the Moon's motion developed by Hipparchus of Rhodes in the second century BC.

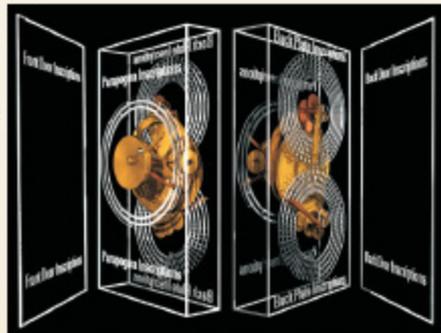




According to the Antikythera Mechanism Project researchers, the device is remarkable for the level of miniaturization and for the complexity of its parts, which is comparable to that of 18th century clocks. It has over 30 gears, although scientists have suggested as many as 72 gears, with teeth formed through equilateral triangles. When a date was entered via a crank (now lost), the mechanism calculated the position of the Sun, Moon, or other astronomical information such as the location of other planets. Since the purpose was to position astronomical bodies with respect to the celestial sphere, with reference to the observer's position on the surface of the earth, the device was based on the geocentric model.

The mechanism has three main dials, one on the front, and two on the back. The front dial has two concentric scales. The outer ring is marked off with the days of the 365-day Egyptian calendar, or the Sothic year, based on the Sothic cycle. Inside this, there is a second dial marked with the Greek signs of the Zodiac and divided into degrees. The calendar dial can be moved to compensate for the effect of the extra quarter day in the solar year (there are 365.2422 days per year) by turning the scale backwards one day every four years.

Worthy of note is that the Julian calendar, the first calendar of the region to contain leap years, was not introduced until about 46 BC, up to a century after the device was said to have been built.



The front dial probably carried at least three hands, one showing the date, and two others showing the positions of the Sun and the Moon. The Moon indicator is adjusted to show the first anomaly of the Moon's orbit. It is reasonable to suppose the Sun indicator had a similar adjustment, but any gearing for this mechanism (if it existed) has been lost. The front dial also includes a second mechanism with a spherical model of the Moon that displays the lunar phase.

There is reference in the inscriptions for the planets Mars and Venus, and it would have certainly been within the capabilities of the maker of this mechanism to include gearing to show their positions. There is some speculation that the mechanism may have had indicators for all the five planets known to the Greeks. None of the gearing for such planetary mechanisms survives, except for one gear otherwise unaccounted for.

Finally, the front dial includes a *parapegma*, a precursor to the modern day Almanac, which was used to mark the rising and setting of specific stars. Each star is thought to be identified by Greek characters which cross reference details inscribed on the mechanism.

The Antikythera Mechanism Research Project, with experts from Britain, Greece and the United States, detected in July 2008 the word "Olympia" on a bronze dial thought to display the 76 year Callippic cycle, as well as the names of other games in ancient Greece, and probably used to track dates of the ancient Olympic Games.

The four sectors of the dial are inscribed with a year number and two Panhellenic Games: the 'crown' games of Isthmia (Isthmian Games), Olympia (Olympic Games), Nemea (Nemean Games) and Pythia (Pythian Games); and two lesser games: Naa (held at Dodona, northwestern Greece, today's Dodoni) and a second game which has not yet been deciphered.

The complexity of the gears found within the Antikythera Mechanism baffled scientists, since this type of "technology" was not thought to have been in existence until around 1575, while many feel that the Mechanism helps to explain how such wonderful phenomena as the ancient pyramids, the Greek Colosseum, and the Parthenon were built with such exquisite detail.

You may find more details at the following links:



<http://www.antikythera-mechanism.gr/>

<http://www.youtube.com/watch?v=MqhuAnySPZ0&feature=fvwrel>

<http://www.youtube.com/watch?v=znM0-arQvHc&feature=related>



VISITS - EVENTS

Visit of 1st Army COM to NDC-GR - 04/11



DATE: 05 Apr 10
1st GRC ARMY COMMANDER, Lieutenant General Dimitrios AGGELOUDIS, official first visit to NDC-GR during which he attended two briefings concerning the HQ NDC-GR and the NRF 2012





Chief of HAGS' Visit - 05/11



DATE: 04 May 10
Chief of HAGS, Lieutenant General Frangoulis FRANGOS,
during his official visit at the HQ NDC-GR.





VISITS - EVENTS

Military Attaché from 10 Countries Paid a Visit to NDC-GR HQ - 06/11

On Tuesday 14 June 2011, a delegation of 10 Military Attaché to Greece, (Egypt, France, Hungary, Italy, Poland, Russia, Serbia, Slovenia, Spain, USA) paid a visit to NDC-GR HQ. They were welcomed by the COM NDC-GR LTG Mikhail Kostarakos and had a generic briefing considering the history, the role and the way ahead of NDC-GR HQ, including HQs preparations for taking over the NATO Response Force Land Component Command for the year 2012. Lastly, a display of our mobile AOCC followed.



COM NRDC-TU Visits NDC-GR HQ - 07/11

On Friday 15 July 2011, COM NRDC-TU LTG Hulusi AKAR, paid a visit to NDC-GR HQ. He was welcomed by the COM NDC-GR LTG Mikhail KOSTARAKOS and had a short cordial discussion on various issues. Then he was briefed on the history, the role and the way ahead of NDC-GR HQ, including HQs preparations for taking over the NATO Response Force Land Component Command for the year 2012. A tour followed to the mobile printery of the Geographical section and a display of the mobile AOCC. At the end of his tour he had the opportunity to pay a visit to historical monuments of Thessaloniki.





Visit of Commander Allied Force Command Heidelberg to NDC-GR HQ - 06/11



DATE: 15 June 10

On Wednesday 15 June 2011, COM AFC Heidelberg LTG John W. Morgan III, paid a visit to NDC-GR HQ. He was welcomed by the COM NDC-GR LTG Mikhail Kostarakos and had a short cordial discussion on various issues.

Then he was briefed on the history, the role and the way ahead of NDC-GR HQ, including HQ's preparations for taking over the NATO Response Force Land Component Command for the year 2012. A tour followed to the mobile printery of the Geographical section and a display of the mobile AOCC.

At the end of his tour he had the opportunity to pay a visit to historical monuments of Thessaloniki and have lunch hosted at COM NDC-GR residence.

On Thursday 16 June 2011, COM AFC Heidelberg,



*“Any mission
Anywhere
Anytime”*



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