Hellenic (GRC) Contribution to the Reconstruction of Afghanistan Final Report of the Participation of the Hellenic Military Engineers (*)

Author: Major (GRC-A) Evripidis CHANIAS

INTRODUCTION

This article is dedicated to all Hellenic (GRC) Engineer personnel who were present and worked at the capital of Afghanistan from February 2002 to March 2011. The performance of the GRC Special Engineer Company as an organic subunit of the Hellenic Composite Battalion (HECBA) has been reviewed and praised by the ISAF's chain of command enhancing the image of the Hellenic Armed Forces among other Alliance forces.

GEOGRAPHY

Afghanistan is a rugged country whose infrastructure has been shattered by over twenty years of war. Traveling is extraordinarily difficult, whether by land or by air: roads are in very poor condition and the mountains of the Hindu Kush are a formidable obstacle to flight. Few provincial airports are safe, and some of the populated mountainous areas are at heights inaccessible to helicopters. Mines and UXO are a widespread threat. The size and composition of the population can only be estimated in the absence of a national census; much of it lacks access to basic healthcare, education, and even clean water. In some areas life has continued unchanged for centuries and can best be described as medieval. In others, people are more deprived than they have been for decades.

HISTORY OF HELLENIC CONTRIBUTION

On January 15, 2002, the Hellenic Governmental Council on Foreign Affairs and National Defense (KYSEA), with its decision no.3/2002, approved the deployment of the Hellenic (GRC) Force in Afghanistan, specifically in the Kabul region and its environs, in compliance with the Bonn Agreement, dated 5 December 2001 and based on the UN Security Council Resolution no.1510 (nondeployment of the Hellenic troops outside the city of Kabul constitutes a national caveat). Starting on 19th February 2002, the following forces were deployed:

- A Special Engineer Company (SEC) for Peacekeeping missions
- Support and security echelons
- National Support Element-NSE (in Karachi, Pakistan)
- Small number of staff officers, in liaison role, at various ISAF HQ
- Two (2) C-130s in airlift/ transport role (in Karachi, Pakistan)

Among the other vehicles of Hellenic Force in Afghanistan, flown to Kabul the following special vehicles and machinery:

- Four dump trucks
- One front loader
- Two wheeled backhoe loaders
- Two air compressors
- Three maintenance vehicles
- One fuel-tank track

Along with the above vehicles and machinery were also transferred non armoured administrative and general purpose trucks. The total force of the Hellenic contribution amounted to 175 men.

The duration of the Hellenic sojourn was initially determined to three (3) months, i.e. until 30th April 2002. Consequently, the Defence Council (SAM) gradually decided to extend the period until today.

After June 2005, following the Hellenic Governmental Council on Foreign Affairs and National Defense (KYSEA's) decision, Hellenic Force in Afghanistan was renamed to Hellenic Composite Battalion in Afghanistan (HECBA).

MISSION OF THE HELLENIC FORCE IN AFGHANISTAN

The mission of the Hellenic Force in Afghanistan is:

• To assist the efforts of the Government of Afghanistan (GOA) to reconstruct the country, offering humanitarian aid, constructions and public services support.

• To enhance the level of cooperation between the Hellenic Armed Forces and the forces of the other countries participating in ISAF.

• To participate, once again, in the implementation of the UN Security Council resolutions.

MISSION OF GRC ENGINEER

As it was mentioned previously, GRC Special Engineer Company as organic subunit of the Hellenic Composite Battalion was assigned to make infrastructure work, as follows:

- Horizontal constructions as such as road and bridge constructionreconstruction
- Vertical constructions
- Force protection
- Route Viability Reconnaissance and Engineering Reconnaissance
- Reconstruction of schools and other governmental buildings
- Construction of buildings for technical and support services in KAIA

COMMAND AND CONTROL (C2) FRAMEWORK

From 2002 to 2008 the GRC SEC deployed under the OPCON of MNEG (MultiNational Engineering Group) along with British, German, Italian and Spanish Mil Engineer Units (Battalion or Company level). After 2004, only GRC, ITA and ESP engineers participated in this multinational group.

On 10 February 2005, NATO announced that ISAF would be further expanded, into the west of Afghanistan. This process began on 31 May 2006, when ISAF took on command of two additional Provincial Reconstruction Teams (PRT), in the provinces of Herat and Farah and of a Forward Support Base (a logistic base) in Herat. At the beginning of September, two further ISAF-led PRTs in the west became operational, one in Chaghcharan, capital of Ghor province, and one in Qala-e-Naw, capital of Baghdis province, completing ISAF' s expansion into the west. The extended ISAF mission led a total of nine PRTs, in the north and the west, providing security assistance in half NOT 50% of Afghanistan's territory.

Gradually, ESP and ITA Engineer Commands and Units participated in their own PRT and finally the GRC SEC was left to be the only Military Engineer Unit and it was first under the OPCON of ITA Regiment and then under the OPCON of RC-C.

Serving ISAF and the people of Afghanistan

In these nine years which was deployed in Afghanistan, the GRC SEC was tasked with carrying out a wide variety and high value infrastructure projects. Additionally it dealt with other issues such as its training, the training of ANA's Engineers Officers and Units and the co-training with other ISAF partners (also including and non-NATO countries).



Makeshift memorial after the end of roadworks made by MNEG

(19 December 2003).

In details the GRC SEC dealt with the following group of activities:

Infrastructure

1. Roadworks

Horizontal Construction

Construction - Reconstruction and widening of roads - bridges

a. Initial incision and widening then the escape route codenamed DESPERADO for the benefit ISAF

b. Configuration of route areas in «TV HILL» and «RADAR HILL».

c. Configuration tasks spreader with aggregates service codenamed PEGASUS, which connects Kabul to the southern suburbs, in cooperation with MNEG and provide safety from Italy step in December 2004.



Engineer Recce _ March 2005

Road obstacle construction in the occasion of the ceremony of Mujahedeen day_April 2009

d. Laying aggregates in a sufficient number of existing services

e. Route viability reconnaissance (eg: routes codenamed BOTTLE, YELLOW-CRIMSON, FERRARI, MARRON, GREEN, QUATTRO)



Reconnaissance by GRC SEC in a bridge in the PEGASUS route – May 2004

- 2. Projects within military installations
 - a. HECBA installation

The GRC SEC was responsible for the repair, improvement, partial reconstruction of the accommodation buildings and other facilities to support HECBA. Also, for the construction of sheds for the equipment of HECBA.



New Shed Construction for HECBA _October 2008

Other tasks included improving force protection with the installation HESCO bunkers at the INVICTA camp, construction of warehouses with containers ensuring anti-ballistic protection and of course construction of water tanks, fuel tanks and implementing drilling for water, exclusively for the needs of the camp.

b. Construction works to tighten camp security

In the span of nine years, GRC SEC participated in many projects within military facilities for the benefit of ISAF. For example:

(1) Gazi Camp (Ex- INVICTA camp)

"Gazi" is the camp where billeting HECBA since 2002. At this point it should be noted that until May 2009 this camp was called "INVICTA" because Italy was the lead nation and then it was renamed to «GAZI» when Turkey took over its responsibility.



Commemorative marble plaque for the construction works at the new gate made by the GRC and ITA MIL ENG Units. The plaque is placed near it. (End of construction in April 2004)

Among other projects, Hellenes Military Engineers participated in the construction of the new double main entrance of the camp. Also they worked in implementing security measures with:

• the construction of fortification positions and in the installation of HESCO bankers.



Photos from a construction site at «INVICTA» camp_ April 2004

• the placement of concrete bunkers blocks with sand bangs at several locations of the camp,

• the installation of "new jerseys" concrete blocks as road barriers inside and outside the camp

- the excavation of an external perimeter
- putting barbed wire around the perimeter

Also in accordance with Italian MIL ENG, it created the septic drainage system improving the real life inside the camp and excavated a to bury multi-optic fiber cable tube aimed at improving communications. Furtheremore, training sites were constructed such as a track for new drivers, a C-IED training site, etc.

(2) ISAF HQ building

One of the first missions for MNEG in 2002, was to upgrade Force Protection of the ISAF HQ building. The GRC SEC aided this effort with the placement of HESCO BASTIONS, the construction of fortification positions etc. Also took the responsibility for drilling and attaching tissue to the flags of the countries of the Alliance in front of the building.



Force Protection in ISAF HQ _June-July 2002

(3) Kabul Multinational Brigade (KNMB) / Regional Command Capital [RC-C] HQ building and WAREHOUSE Camp

The GRC SEC participated in several projects in WAREHOUSE Camp such as :

• the upgrade of Force Protection level at the KNMB /

RCC HQ building.

- Check point construction at the main gate.
- Installation of HESCO bankers.
- Installation traffic control barriers
- Roadworks inside the camp
- (4) DOGAN Camp :

Construction of fortification positions



Force Protection projects at Dogan Camp_ September – October 2007

c. Construction projects at ANA camps

Contribution in the extension works in the camp of the 3rd Brigade of the 201 Afghan Corps in region «POL-E-CHARKI». Also GRC SPECIAL ENGINEER COMPANY participated in creating several ammunition depots in outpost codenamed PASS (POL-E-CHARKI Ammunition Storage Site). These projects included the installation of a security fence, the improvement of perimeter road, the upgrade of force protection etc.

3. Tasks at KAIA

a. Construction of technical support services buildings of the Airport

The Hellenic Military Engineers participated in a number of projects involving both the military sector KAIA (KAIA North) and the area of civilian flights KAIA South. At the same time it dealt with the placement of adapted containers to become staff residence and its security perimeter. Additionally, in April 2009, Eng staff worked to build 260 double and 160 single wooden office desks for IJC (ISAF Joint Command) use.



Construction of four large hangars at KAIA _ June 2004

b. Construction of embankment at KAIA North

It was constructed entirely of GRC Special Engineer Company with the minimal civil aid of earthmoving machinery, enhancing security measures from 19 November 2008 to 31 March 2009.



Construction of embankment at KAIA North _From November 2008 to March 2009

Four dump trucks carried a total of 35,000 cubic meters of material which were placed with the help of other machines and created the mound of 4 metres.



Construction of embankment at KAIA North _From November 2008 to March 2009

The outstanding performance and hard work of Hellenes Engineer Officers and NCO's was not only praised by all foreign officers and the commander of KAIA, but also a special ceremony was organized during which the then RC-C French Commander Brigadier Michel Stollsteiner awarded the Hellenic personnel.



Congratulations to the GRC Eng personnel given by Plaquet awarded to HECBA by the KAIA the RC-C commander French Brigadier Michel administration _ March 2009. Stollsteiner _ March 2009.

c. Construction or reconstruction of battle positions - fortification and anti-vehicle security ditches around the perimeter of the airport

For the period dating from June 2009 until the end of March 2011, GRC SEC with its equipment, carried out a variety of tasks such as:

construction of fortification positions and in the installation of **HESCO** bankers.

- placement of concrete bunker blocks
- Filling gaps at the perimeter walls
- Support of ground works for the EOD teams
- Creation of gravel roads at several locations
- Transportation of aggregates
- Creation of a security ditch at the west end of the runway
- Installation of concertina at several location of the airport.



A back hoe loader working near by the KAIA runway_ July 2002

Loading HESCO with aggregates _ September 2009





Construction of fortification positions and installation of HESCO bankers _December and January 2011

All these tasks provided valuable experience to the staff working in an operational environment with standard equipment which ensure process speed up and saves time.

4. Public Utility projects

In the framework for Humanitarian Aid towards the GOA and the people of Afghanistan, the GRC Special Engineer Coy as part of the Hellenic Armed Forces have participated in many projects. Co-ordinating with the local CIMIC center, under the MNEG orders took part in:

a. School Buildings Reconstruction

Hellenic Engineers repaired or reconstructed several school buildings in order to the educational system in the Kabul area.

A typical example is the project of reconstruction of an elementary school Kabul in the suburb of PAKTYA, attended by 630 children, in cooperation with ITA Engineer unit in November 2004. Additionally several playgrounds were constructed and placed next to schools and other locations.





The Commander of GRC Special Eng Coy, is giving an interview in a local TV station, on the occasion of ending the reconstruction works at a school building_ June 2002.

Reconstruction works in a school building in the suburbs of Kabul made by GRC NCOs_July 2002

b. Construction of culverts and drainage pipes on the outskirts of the city.

GRC Engineers participated in many projects in the suburbs of Kabul relating to everyday life of the people, including the repair of damaged and the construction of new culverts and drainage pipes.



Placement of a playground and reconstruction works in a school_June 2005

c. Construction of earthen football fields.

d. Enhancing protection measures at the UN center of Kabul in November 2006 (installation of safety fence).

5. OTHER WORKS

a. Several times during winter, snow-clearing operations were conducted to all roads in the Kabul region. This amount of work can be evaluated only if we take into consideration that Kabul is placed at an altitude of 1,815 meters with frequent snowfall. Furthermore, since 2008 the GRC SEC was ordered to conduct this kind of operation in the KAIA runway.



Snow clearing works at the RADAR HILL _ January 2005

Snow clearing works at the KAIA runway _February 2010

b. Several times has held the transporting of heavy and bulky items was held (for example NEW JERSEYS BLOCKS) for the benefit ISAF, KMNB or RC-C.



Transfer of NEW JERSEYS BLOCKS by a GRC dump truck with the assistance of an ITA crane_ May 2007

c. Control of work progress and provision of guidance to Afghan private company which manufactured the KABUL ENTRY POINT (KEP).

d. Staff and machinery were allocated during the evacuation of Afghan citizens from the ruins of the Kabul hospital which collapsed in the afternoon of 26 of July 2004.

e. Preparations taking place in the presidential palace work site in Kabul on the occasion of the inauguration ceremony of President Karzai, in cooperation with MNEG from November 26 to December 4, 2004.

ANA Engineers Training

Beyond offering help to the people and in the society of Afghanistan, the GRC SEC tasked with the responsibility to train ANA Engineers. This training was focused on Officers and on Soldiers. The training was included both earthmoving machinery and other special rolling stock of GRC MIL ENG and Allied forces under the command of MNEG.



Training of ANA Officers and NCO by GRC and ITA Eng personnel _ June 2006



Mentoring the training of ANA soldiers by GRC SEC personnel



Initial training an Afghan soldier with an AN/PSS-12 _March 2008



Initial training an Afghan soldier in explosives in KMTC _May 2010

It continued periodically with HECBA initiatives in bridging (construction of Mabey-Johnson bridge) and in other training issues such as minewarfare, counter minewarfare and explosives (pioneer and minesweeper specialties).

Co-training with Engineers

In addition, Hellenic Engineers had the opportunity to co-train with other MIL ENG units of allied NATO forces. This upgraded common work spirit and understanding for all MIL ENG Units, promoting further the concept of **INTEROPERABILITY**. This spirit of training is conducted in the MILITARY ENGINEERING Center Of Excellence (MIL ENG CoE) based in Inglostad (Munich) in which the Hellenic Army Corps of Engineer is a founding member.



An ITA excavator is loading a GRC dump truck with aggregates in a quarry in the suburbs of Kabul September 2002

a. Horizontal and vertical constructions

Between 2002 and 2007, the GRC SEC participated in various projects of horizontal and vertical constructions (especially collaborating with the Italian and the Spanish Engineers units) under the MNEG. This group, as previously reported, had the responsibility to conduct a large number of projects in the Kabul region, supporting the everyday life of Afghan citizens.



Creating a ditch for the benefit of ITA FORCE Kabul _April 2007

18

b. Demining Efforts

Appropriate EOD personnel of HECBA, especially between 2002 and 2005, conducted independently or in cooperation with other allies, control and liquidation of contaminated with UXO sites, which were then given to public use. The risk of UXO and IED (Improvised Explosive Devices) remains a great threat for members of the ISAF and Afghan National Security Forces as they continue their efforts to provide the Afghan people with safe communities where the rule of law and good governance prevail.



GRC EOD team in action_ June 2002

c. Counter Improvised Explosive Devices Training

Recently, a lot of updates on issues and procedures for Counter Improvised Explosive Devices (C-IED), which are part of the effort to upgrade the ISAF Force Protection Level. IED's and VBIED's are one of the largest causes of coalition in OEF. An IED can be almost anywhere with any type of explosive material and initiator. One must take into account that in such countries vehicles of every imaginable sort can become an VBIED.

HECBA focused on this kind of threat, and the GRC SEC had the opportunity to co-train with Italian Units in C-IED procedures and TTP's. These king of training improved dramatically personnel's awareness.



C-IED co-training with the ITA FORCE _ September 2008

d. Bridging Training

A 10-day course on constructing Mabey – Johnson type of bridge took place at least twice a year starting from May 2003 and onwards as part of a larger training and development mission in Afghanistan. Through this course, Engineer staff became familiar with bridge construction processes, installation and use. The bridge can be constructed by the cantilever launch method without the need for any temporary intermediate support. All Hellenes MIL ENG Officers and NCO cooperated with relevant allied staff from RC-C as well as civilian personnel of the manufacturing company which provided guidance and numerous tips in all constructing steps, thus making the construction capable of anywhere.



Constructing an MABEY – JOHNSON bridge_ May 2003

Also, Hellenic Engineers trained several times ANA Engineers personnel on the construction and use of Mabey – Johnson Bridge, detaching the

favorable comments of the hierarchy of RC-C. The goal of these courses was that more and more AFG engineers learned the intricacies of bridge building ensuring easier access and freedom of movement of the population so that they will grow and develop into a prosperous nation soon.

e. ENGINEER RESOURCE PARK

Since May 2010, HECBA took the responsibility of managing the only ENGINEER RESOURCE PARK (ERP) in the area of responsibility of RC-C.



The main gate of the ERP - Engineer Park Resource



Engineer Resource Park in GAZI Camp

ERP is located in the Gazi Camp and it is full of equipment that will assist the restoration of damages caused by a natural disasters and other equipment that will increase the Force Protection level. ERP is managed by ISAF Joint Command engineers. This was assigned by the command of ISAF, at the suggestion of HECBA, enhancing the role of the GRC Battalion.

Total Cost of assistance to the people of Afghanistan

According to the work carried out by the GRC SEC, the estimate cost for FY 2011 was $400.000 \in$ per year (approximately in Greek prices). Consequently, the total cost of the work done since the beginning of 2002 until the March 2011 is estimated (in preservative term) to be no less than the amount of $3.165.325,68 \in$.

Indicative also indicated that costs of works in KAIA since 2007 during the period from 01 January to 31 October 2010, according to data from the Administration of the Airport was $385.325,68 \in$ Also the cost of Engineer work done in KAIA during the period from 28 November 2010 to 10 March 2011, reached the amount $185.608 \in$.

Lessons Identified - Lessons learned

After nine years of presence in the RC-C area of responsibility, numerous lessons were taught and learned.

<u>Personnel</u>

All GRC personnel who was deployed in Afghanistan as a part of the continuous Peace Support Operation, had the chance be familiarized with a situation which was quite unprecedented. A lot of issues came along such as working in a neutral environment with possible real threat, co-operation with other MIL ENG units, training to standard procedures, mentoring a reborn army etc.

Participating in a PSO operation is very useful for all personnel in every way because after the repatriation, they will be able to transpose a number of experiences and processes acquired in daily tasks.

Procedures

It is considered as critical in all reconstucting projects, the presence of at least one well qualified CIMIC (CIVIL MILITARY COOPERATION) team. More critical has been deducted the presence of this CIMIC team in every multinational (MN) group that conducts public utility works, in order to present the executed projects and works in the local population, in accordance with the CIMIC Center of its AOR. If it does not exist, the creation of this center with specialized knowledge is essential and any other agencies will require the existence of MIL ENG. Also, the existence of a liaison GRC Officer in the G-3 of RC-C was very important. This made the communication between RC-C and the GRC SEC easier and more direct, which led to a more effective way.

Demining was also a critical task for this mission type. The existence of GRC EOD personnel was crucial for all ground field works that was conducted by the MNEG. In addition, interoperability was improved.

<u>Equipment</u>

All MIL ENG equipment generally responded to the needs of the missions entrusted. A serious drawback was the lack of any kind of armor to earthmoving machinery and dump trucks. All Engineer coalition forces have a number of armored earthmoving equipment and special purprose vehicles, which can be deployed wherever needed. It is estimated that the use of such kind of equipment has become necessity rather than luxury, due to the increase of asymmetric threats, even against reconstruction units.

Needless to mention that "**logistics dictates operations**". A critical role was played by the presence of a considerable quantity of spare parts and proper power supply, which helped in continuous use of all kind of MIL ENG equipment. Also, maintenance was very important. A significant problem was the frequent strong winds (especially during summer time) and the sand that cause maintenance problems. This situation necessitated frequent and meticulous 1st and 2nd level maintenance.

LOOKING TO THE FUTURE

Starting the 1st of April 2011, HECBA will change its mission and as part of NTM-A (NATO Training Mission In Afghanistan), will participate with 76 mentors in the training staff of NTM-A. The goal of NTM-A is to support the ISAF to enable accountable Afghan-led security not later than 31 December 2014. Among other kinds of mentoring, GRC Military Engineer personnel will continue its presence in the KABUL region with the participation in the FACILITIES ENGINEERS mentoring.

This kind of important training which supports the government of the Islamic Republic of Afghanistan in generating and sustaining the ANA, is conducted inside the KABUL Military Training Center (KMTC) and its aim is to mentor the training of individual soldiers in the specialty of plumber, electrician, carpenter, generator operator etc.

CONCLUDING REMARKS

Alexander the Great was the first Hellene who entered in this country, a long time before. Following his footsteps, our country's presence in Afghanistan has been substantial since the first moment of our participation in the International Security and Assistance Force.

Without neglecting other's branches participation in ISAF [for example from April to October 2010, a Hellenic Air Force (HAF) team had (for second time) the responsibility of the Command, Organization and Operation of the KAIA, a mission which HAF had also successfully accomplished during the period from December 2005 to March 2006], Hellenes Military Engineers for nine consecutive years, had a top performance inside the Kabul region, contributing the goal of ISAF, following the legend of the Hellenic Corps of Engineers on reconstruction and rehabilitation areas, during Peace Support Operations.

(*) This article has been published (in Hellenic language) in the "Hellenic Army Review", in November-December 2011 issue.

References:

• Field manuals – STANAG

FM 10-1, *Engineer Operations,* HAGS publication, March 2001 FM 122-1, *Peace Support Operations,* HAGS publication, May 2001 STANAG 2991, Edition 4, August 2004 STANAG 1059, Edition 8, February 2004

Internet Sites:

www. geetha.mil.gr/index.asp?a_id=2757&nid=900 www. geetha.mil.gr/index.asp?a_id=2903 www. army.gr www. isaf.nato.int

www.dvidshub.net/news/58655/engineers-bridge-gap-with-afghans-with-training#.UmzSc3C8Dn4

www.defencenet.gr/defence/index.php?option=com_content&task=view&id =9087&Itemid=47

www. centcom.mil/en/greece/

ABBREVIATIONS :		
AFG		Afghanistan
AOR	:	Area of Responsibilty
ANA	:	Afghanistan National Army
C-IED	:	Counter Improvised Explosive Devices
CIMIC	:	Civil Military Cooperation
CoE	:	Center of Excellence
ERP		Engineer Resource Park
EOD	:	Explosive Ordnance Disposal
ESP	:	Spain
FY	:	Fiscal year
	•	•
GRC	-	Greece (Hellas)
HQ		Headquarter/-s
IED	:	Improvised Explosive Devices
ISAF		International Security and Assistance Force
IJC		ISAF Joint Command
ITA	:	Italia
GOA	:	Government of Afghanistan
HAF	:	Hellenic Air Force
HECBA	:	Hellenic Composite Battalion
HAGS	:	Hellenic Army General Staff
KAIA	:	Kabul Afghanistan International Airport
KEP	:	Kabul Entry Point
КМТС	:	Kabul Military Training Center
KMNB	:	Kabul MultiNational Brigade
MNEG	:	MultiNational Engineering Group
MN	:	Multinational
MIL ENG	:	Military Engineering
NTM-A	:	NATO Training Mission in Afghanistan
NSE	:	National Support Element
NCO		Non-commissioned officer
RC-C		Regional Command Capital
OPCON		Operational Control
OEF		Operation Enduring Freedom
PSO		Peace Support Operation
PRT		Provincional Reconstruction Teams
SEC	:	Special Engineer Company
TTP	:	Tactical Techniques Procedures
UN	:	United Nations
UXO	:	Unexploded explosive ordnance
VBIED	:	Vehicle-Borne Improvised Explosive Devices
VBIED	•	venicie-donne improviseu Explosive Devices