

HQ NRDC-ESP

Journal I – 2022 #TwelveNationsOneTeam



COVER PHOTO

SFC Aaron M. Welch, US Army, is congratulated by His Majesty the King of Spain Felipe VI.

SFC Welch, posted at HQ NRDC-ESP G3 OPS, has been awarded with the NATO Force Structure (NFS) Top Soldier Award 2021.

The NFS Top Soldier Award is designed to recognize superior performance, professional excellence, and significant contributions to the mission of NFS Headquarters.



#TwelveNationsOneTeam

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Pages

- 2 COMMANDER'S FOREWORD**
Lieutenant General Fernando García-Vaquero Pradal (ESP-A)
Commander NRDC-ESP
- 4 INTERVIEW**
Major General José Antonio Agüero Martínez (ESP-A)
Chief of Staff HQ NRDC-ESP
- 7 TEAMING UP**
Brigadier General Miguel Ángel Guil García (ESP-A)
DCOS CIS HQ NRDC-ESP
- 10 THINKING AND ORGANIZING FOR WARFIGHTING. THE CHALLENGE OF EFFECTIVE C2 IN HIGH INTENSITY OPERATIONS**
Lieutenant Colonel Luis Escorrega (PRT-A)
G3 OPS HQ NRDC-ESP
- 14 EVOLUTION: FROM BATTLE MANAGEMENT CELL TO G35**
Colonel Federico Clemente Clemente (ESP-A)
ACOS G35 HQ NRDC-ESP
- 18 FIGHTING THE DEEP: ONE OF THE WFC MISSIONS**
Major José Alberto Gil Vázquez (ESP-A)
G3 OPS HQ NRDC-ESP
- 20 TIMELY, ACCURATE AND LETHAL JOINT FIRES**
Major Peter Harrington (USA-A)
Fires & Targeting HQ NRDC-ESP
- 22 INTRODUCTION TO NATO SPACE SUPPORT TO LAND OPERATIONS**
Major Juan José López García (ESP-A)
Space analyst STLE21 HQ NRDC-ESP
- 28 TACTICAL ASSESSMENT, A STEP FORWARD**
Major Renato Messina (ITA-A)
G5 PLANS HQ NRDC-ESP
- 32 CAPTURED PERSONS (CPERS): A MULTIDISCIPLINARY ENDEAVOUR**
Lieutenant Colonel Domingo Augusto Rivera da Cunha (ESP-A)
G1 PERS HQ NRDC-ESP
- 36 LOGISTIC CHALLENGES AND LESSONS LEARNED THROUGHOUT THE WFC HQ TRAINING AND CERTIFICATION EXERCISE**
Lieutenant Colonel Víctor Rengel Ortega (ESP-A)
G4 LOG HQ NRDC-ESP
Lieutenant Colonel Erin Humelsine (USA-A)
G4 LOG HQ NRDC-ESP
- 39 NRDC-ESP WFC LOGFAS USAGE DURING STLE 21**
Sergeant Major Sergio Rodríguez Álvarez (ESP-A)
G4 LOG HQ NRDC-ESP
- 43 TACTICAL AND STRATEGIC MEDICAL EVACUATION IN A WARFIGHTING CORPS SCENARIO**
Colonel Tomás Jacinto Ruiz Ibañez (ESP-A)
ACOS GMED HQ NRDC-ESP
Lieutenant Colonel Juan Octavio Santatecla Moreno (ESP-A)
GMED HQ NRDC-ESP
- 46 THE COGNITIVE BATTLE IN THE WARFIGHTING CORPS**
Lieutenant Colonel Antonio Álvarez Zamorano (ESP-A)
G10 STRATCOM HQ NRDC-ESP
- 50 SOCIAL MEDIA WARS**
Ms. Elvira García de Torres
Professor University CEU-Cardenal Herrera (Valencia-Spain)
- 54 CLUSTER MUNITIONS IN ALLIED OPERATIONS**
Lieutenant Pablo Xaixo Peyro (ESP-A)
LEGAD HQ NRDC-ESP
- 57 EXERCISE STLE21 - SPAIN, NOV18 - DEC03**
Mr. Ignacio CORTIÑAS (A5)
POLAD HQ NRDC-ESP
- 59 OUR BRAND NEW NRDC-ESP MILITARY HISTORICAL ROOM**
Command Sergeant Major José Juan Ríos López (ESP-A)
CSM HQ NRDC-ESP

Commander's Foreword

Lieutenant General Fernando García-Vaquero Pradal (ESP-A)
COMMANDER HQ NRDC-ESP

Dear reader.

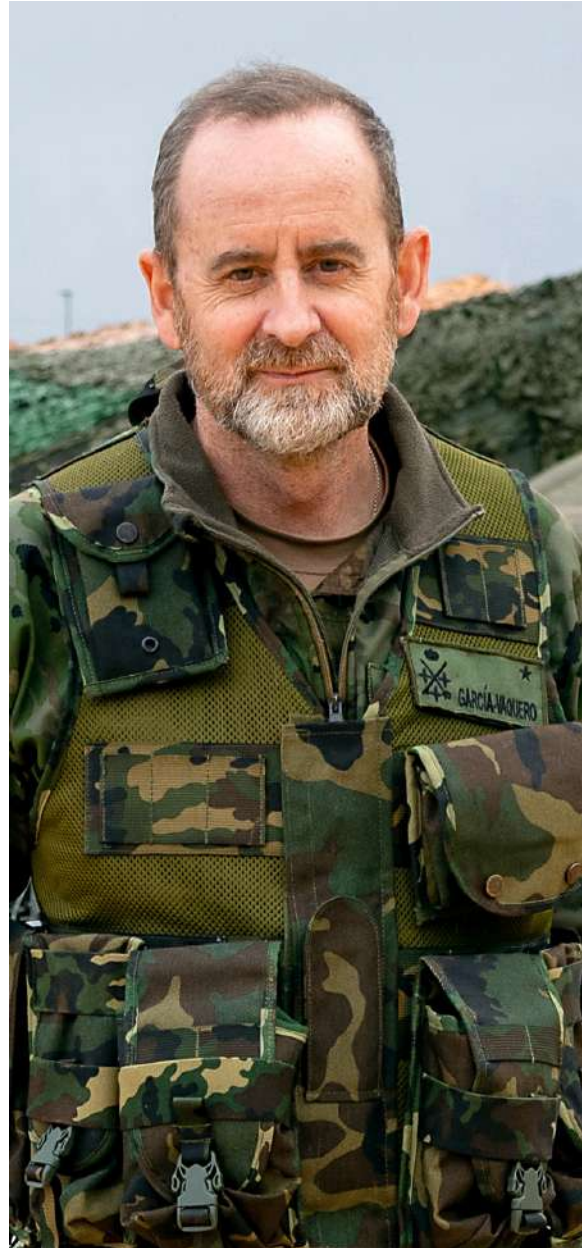
With this edition of NATO Rapid Deployable Corps Spain's magazine we focus in more detail on Warfighting. Firstly because of our recent experience during our CREVAL as NATO Warfighting Corps HQ - an experience and a lot of lessons learned, that we wanted to share with you in order to fuel the intellectual and conceptual exchange inside and outside the Land Community.

Secondly, because the conflict in Ukraine underlines drastically the importance of the subject. As the current situation demonstrates, it is still the land domain in which most of the fighting happens. Therefore, it is paramount that we master the art of warfighting and improve our capabilities and knowledge in this regard. It is still uncertain how strongly the current crisis will challenge us, but one thing is crystal clear, we need to be prepared and we will be prepared! This includes being prepared for Information Warfare as well. The conflict in Ukraine clearly shows the importance of the Information Environment and the strong need for an Information Environment Assessment.

In addition, we continue to closely monitor the development in NATO's Southern Flank. We should not forget that the imminent threats in NATO's Southern Flank have not vanished, and they need to be addressed and carefully monitored. We hope that we continue to contribute to a comprehensive situational awareness in the spirit of NATO's 360-degree approach.

One important tool to improve, in all these areas mentioned above, is a comprehensive analysis of our experiences in the past and present. Lessons Learned (LL) and Lessons Identified (LI) will help us to evolve and to improve. We shouldn't underestimate the value of LL/LI for our future operational success.

I want to close by thanking all of you for your continuous support and your friendship to NATO Rapid Deployable Corps Spain. Now



more than ever, it is this close cooperation between us that guarantees our freedom and our security. The unity of the Alliance is paramount. The friendship and close collaboration within this Community, between Commanders and Headquarters, is crucial and I want to assure all of you of **NRDC-ESP's** strong commitment to this spirit of unity. The same spirit that works inside this HQ. We are twelve nations, but we are one team. This especially includes our families. Their support is what keeps us going.

Thank you.

NATO Warfighting Corps 2022



Exercise Steadfast Leda 2021



18 Nov - 03 Dec



1000 participants,
17 allied nations



Vitoria (Spain)





**Major General José Antonio Agüero Martínez (ESP-A)
CHIEF OF STAFF HQ NRDC-ESP**

General Agüero was born in “La Calzada de Oropesa”, a small town in the province of Toledo. As a good “Toledano”, he belongs to the Infantry Branch. He has attended numerous courses related to his specialty as an infantry officer, such as parachuting and special operations. As a lieutenant and captain, he was stationed in the Airborne Brigade in Alcalá de Henares (Madrid).

General Agüero is a graduate of the General Staff and has attended other courses such as the NATO Joint Operation Course, the Advanced Management of Human Resources course and the Advanced Command and Staff Course in the United Kingdom. Among his many postings were that of Commander of an airborne battalion, Chief of the Officers Orientation Department in the Army Personnel Command, and Chief of Staff of the Light Forces Headquarters.

In the international arena, in addition to his current position as Chief of Staff, as a brigadier general, he carried out the duties of Deputy Chief of Staff of PLANS Division at the HQ NRDC-ESP. His international background does not end at HQ NRDC-ESP. General Agüero has participated in several multinational missions in Afghanistan and Bosnia-Herzegovina, both under NATO and UN mandate.

Major General Agüero assumed the position of HQ NRDCESP Chief of Staff in December 2019.

1. The NRDC-ESP HQ is undergoing several structural changes, which were tested during the exercise STLE21. What were the objectives of these changes?

The goal of these changes is to make our HQ more resilient and efficient. In order to be more efficient, we set up a Crises Establishment manning as similar as possible to our Peace Establishment, trying to work 24/7 with less than 400 people in all our Command Posts (CP) and with very few augmentees. In order to do this, it was necessary to simplify our Battle Rhythm (in this area our motto was “think more and meet less”) as well as to rationalize our products, not only shortening their length, but also reducing drastically our Report & Return Matrix. It doesn’t make sense to burden our subordinate units with requests for information that we already have or can live without. We also tried to improve our efficiency by putting in place a JAGIG (Joint Air Ground Integration Center) with the support of the DACC (Deployable Air Command & Control Centre), whose performance was outstanding. Finally, we tried to implement the “Mission Command” principle for the conduct of operations. At Corps level this means to fight in the Deep, monitor the Close and sustain from the Rear, relying as much as possible on the support provided by the Host Nation. Our experimentation with increasing resilience focused on testing our new CP model and setting up a CIS Reference Node out of the Joint Operations Area (JOA), to assure the survival of our CIS network as well as to speed up its deployment.

2. What is new in this CP model?

A CP is more efficient if it is united in a single element. Hence, the preferred option is to deploy a Main CP and a Tactical CP (TAC CP). The latter is a very small C2 structure (less than 30 staff members) to allow the COM to move to the frontline and meet his subordinate commanders and key local leaders. The TAC CP is meant to provide the COM with situation awareness and allow him to participate in the processes conducted in the Main.

But this option is not feasible against a peer enemy in a high intensity conflict. It takes at least a week to set up a Corps CP. It is too big and complex to move often if we are to

assure its survival. You cannot expect that this big an infrastructure will be undetected by the enemy. If we don't have air superiority, or the adversary has mid-range missiles, a big part of our best Air Defence will have to be dedicated to protect the Corps CP. Even then, the survival of the CP will always be at risk, because its destruction will be a priority for the enemy.

Moreover, it is the same whether the Corps CP deploys 30 or 3000 kilometres from the front-line, because most of its communications run through satellite systems. In this scenario the HQ NRDC-ESP favours deploying its Main CP out of its Area of Operations (AOO), setting up within it two TAC CP, one of them empty in order to facilitate their constant change of location. There may be non-military considerations in this scenario which force us to deploy our Main CP within the AOO. In this case an Alternate CP must be in place, if possible outside the AOO. Once out of range of enemy fire, the weak point of the Corps CP is its reliance on Satellite Communications. These may be compromised when the adversary has offensive capabilities in the space domain. That's why the search for alternate communication channels (such as the tropospheric ones) becomes paramount.

3. As COS, you chose the motto “keep it simple and keep it short”, Why keep it simple?

I'm convinced that complex C2 structures do not work, at least this is my experience.

There's a trend in all organizations to become bigger. This is especially true in the military. My impression of late is that the Corps CP is getting huge. Their Crisis Establishment (CE) may be double, or even triple, their Peace Establishment (PE). War is becoming more and more complex, and we tend to specialize people in doing things. We easily accept the development of new products but, at the same time, we seem reluctant to discard old ones. Furthermore, we risk considering anything new as good, without analysing enough whether it is worth the time, effort and personnel invested in it. Even if we speak about “Mission Command”, we risk becoming obsessed with knowing and controlling everything our subordinate formations do. This was not possible in the past and higher Headquarters were forced to trust and delegate. The problem now is that we have technical systems that allow us to monitor everything, even if there is no need to



do it. The first consequence of this dynamic is to increase the CE above our PE. This implies relying heavily on augmentees, many of them skilled people taken from combat units which are also short of personnel. It takes time to integrate augmentees into a team. It is very easy for a big structure to become inefficient - much of its energy is wasted on internal coordination. Furthermore, very specialized people are not always occupied. When trying to fill their time they often generate work for the rest of the staff: new coordination work and boards, new reports requested or produced, new briefings and products... and usually additional staff to deal with all these new tasks. All these new activities overload an already busy Battle Rhythm (BR). Key actors spend the day jumping from one meeting to another without time to think or meet with their teams. On top of that, the branches need additional personnel to attend BR events conducted simultaneously. In order to stop this crazy dynamic, the COS may be forced to take draconian measures, above all to simplify products and BR, limit the size of the organization and force the branches to adapt their procedures to the available manning.

4. And why keep it short?

Because the length of our products follows the trend of our increased manning. Perhaps the problem is that nowadays we all have access to a huge number of documents produced in previous exercises and operations. It is very easy to “cut and paste” and everybody wants to see his contribution in the final OPLAN/OPORD. Apart from being an attack on the environment, a thousand-page OPLAN is quite inefficient and poses a problem to the subordinate formations, which must fight their way through endless and useless paragraphs to find out what really matters. For the sake of our subordinates, we must make an effort to delete everything that is evident, doctrinal or repetitive from our products. A written document does not supersede the interaction between Command Levels. This risk is accentuated when one or both of them must deal in a language that is not their own. We must accept that an OPLAN/OPORD is always an imperfect and incomplete document. It must be refined and clarified through frequent exchanges between the level that executes the order and the one that produces it. When I was a young officer, I thought that the quality of my work was measured by its weight: “more weight more value”. Now, as a Major General, I’m convinced that this relationship exists, but in a completely different way: “less weight more value”.

5. How does a WFC conduct Multi Domain Operations (MDO)?

We speak a lot of late about MDO, but I think that very little has changed at tactical level. Ground forces are very used to working in close coordination with the air forces. Air Land Integration (ALI) is not new, even if it improves constantly. The same can be said about the coordination of land and naval forces when the former operates close to the coastline. There we have three domains (Land, Air and Maritime) that have been working together for a long time. Cyber and Space are new warfare domains, however the capabilities of a Corps to operate in them are very limited. In the Cyber domain the capability of a Corps is usually constrained to the protection of its own Information networks. It doesn’t have offensive capability, which normally rests in the Contribution Nations, at political or strategic level. On the other



hand, the time needed to plan, prepare, and execute a Cyber offensive operation usually exceeds the Corps Tempo. Enemy operations in the space domain may affect the Corps a lot, especially in three areas;

- **Communication: we have already said that Corps C2 is based on Satellite Communications.**
- **Navigation Warfare (NAVWAR): Critical for our protection and Deep Fight, because it affects the accuracy of long range ammunition.**
- **Intelligence, Surveillance, Target acquisition and Reconnaissance (ISTAR).**

Corps capabilities in the Space domain are even more reduced than in the Cyber one. In both of them the main role of the Corps consists of receiving situation awareness from outside and requesting effects to its superior level. Some nations consider a new warfare domain: the cognitive one. Without entering into doctrinal discussions, we must recognize that a Corps may play a relevant role in the battle of the narratives. It will always enter this battle as a player within its AOO, but it will also assume planning responsibilities depending on its level within the Command Structure. A WFC integrated into a MC LCC, under a JFC, below SHAPE and the NAC, will have little room to figure out communication objectives, define audiences or to produce narratives. Most frequently it will apply directions coming from its superior levels. However, a Corps operating as LCC or JTF will have a more important role in the planning of this cognitive battle. From my point of view, it is important to assume the role of a Corps in some of these new warfare domains. The fact that they exist doesn’t imply that the Corps has capabilities to play a relevant role within them. Nor does it imply that the Corps has to create new functional areas in its structure to deal with these new threats and opportunities. It is an option, but not a compulsory one.

TEAMING UP

Brigadier General Miguel Ángel Guil García (ESP-A)
DCOS CIS HQ NRDC-ESP

WHISPERING IDEAS

Steadfast Leda was a different kind of exercise for the CIS community supporting NRDC-ESP as Warfighting Corps, NRDC-ESP G6 and the WFC CIS support unit from Signal Regiment 21. It was a moment of harvest in CIS terms, but one of sowing seeds in Cyber and Electromagnetic activities (CEMA).

The CIS support saw the full use of the “reference node” idea, mentioned for the first time in 2018 NRDC-ESP Journal, by former ACOS G6, now reserve officer. He clearly outlined its fundamental tenets: “a system to keep all the CIS nodes permanently configured”, which is “kept with the support of a selected set of expert administrators” that “working in the rear can support them (the CIS Points of presence deployed forward) remotely, since the system relies on the rear reference node”. The Colonel also highlighted the advantage of having a system that “is always ready to be accredited to manage classified information since it is permanently clean, and a hardened

configuration, constantly updated and patched” thus shortening preparation for deployment.

From this vision, only one aspect could not be carried out -i.e. “The reference super node will always be connected to the deployed nodes”. Indeed, while physically implementing the reference node in 2018 and 2019 it became clear that something needed to be connected to the Internet – for it is in the Internet where the contractors provide patches, updates – but this cannot be simultaneously connected to a secure system, which would then not be accredited. The solution was laid out in NRDC-ESP Journal II / 2021 by the new ACOS G6: “in addition, the reference node includes a so-called ‘pre-production’ module where changes are tested prior to introducing new updates”.

But that 2018 vision needed an adjustment, described by the current ACOS in 2021 as “the Deployable System Anchor Node” (DSAN), “a CIS node placed in a secure area that provides most of the services to the network at the same time as it is managing it... so its survivability is assured”, adding that “since all users can access the information in the DSAN, they can move around the operations area and will always have access to it”.



AUDENTES FORTUNA IU VAT

During the implementation of a technical and architectural solution we found that it fitted the tactical requirements of a WFC: survivability and mobility. Brilliant! The solution was not totally ready for Trident Jackal 2019: the initial capability at the reference node eased the preparations at network node level, but the user equipment – the computers themselves – still posed a challenge because the array of different types in use. This was solved during 2020 by setting up a specific server in the reference node with the capability to host a virtual twin of every computer

in our inventory, with its subsequent variety of devices (keyboard, screens, USB ports...) thus allowing us to install and check every security policy in every computer type, and transfer that later to the actual computers. The DSAN idea was not implemented in Trident Jackal 2019 either. For one thing, it was not necessary to fulfil the JHQ task. For another, it required a number of operational tests that were successfully carried out through NRDC-ESP DEPLOYEX exercises held in 2019 and 2020. That series of exercises allowed the CIS community to refine each and every application and communications system, and to become used to and confident with distant support.

Despite all these tests and the investment in equipment and training, trust was the key word since there were remaining question marks that could not be answered before Steadfast Leda, namely the size of the network, the load posed by intense user information exchange requirements, and the interconnection with NATO networks. This latter could have been trained for previously by attending Steadfast Cobalt, but the design of this exercise still precludes participation from NFS WFC: thus, the

only training venue when it came to NATO interoperability was Coalition Warrior Interoperability Exercise (CWIX).

Aware of the calculated risk I was taking, my confidence was absolute not just because of the training, the planning and the preparations, but above all because of the team of officers, NCOs and enlisted soldiers that had been totally committed to accomplishing our mission throughout these years, consolidating a cohesive group with increasing expertise over time, despite the losses, thanks to its ability to incorporate new members.

PER ASPERA AD ASTRA

Trust and self-confidence had increased over the years in the CIS community, and kept doing so in the ramp up towards STLE 21, despite the turnover in G6 as well as in Signal Regiment 21 (RT 21). The exchange of officer positions between the two elements did not lead to confusion of tasks and disorganization - on the contrary, it enhanced the mutual understanding of the goals to achieve and the ways and means required to accomplish the mission. Current ACOS' previous appointment as RT 21 commanding officer before holding his position in G6 is just a sample of what the evaluation team described as a close-knit community. And indeed, it is. This mutual understanding made my job a lot easier, since all of the unity of command I could provide was instantly backed by self-synchronization. Every concern I had – say, the size of the network – was matched with additional planning at G6 and Regimental level showing me how we could adapt to the difficulties that we might confront.

Having addressed the challenge of continuity in assignments at officer level, the remaining one was getting that “selected set of expert



Signal Regiment 21 (RT 21) at STLE21 exercise (Vitoria-Spain)



Signal Regiment 21 (RT 21) at STLE21 exercise in JFTC (Bydgoszcz, Poland)

administrators” that former ACOS G6 had envisioned and to keep enlarging it over the years. This was achieved through training at the enlisted, non-commissioned officers (NCO) and lieutenant and captain ranks in both G6 and RT 21. But all this investment in training would have been wasted without an equal effort in motivation in all ranks. Personally, I have come to the conclusion that this is our centre of gravity. Achieving an “expert administrator” is a matter of years, and I am referring not just to information systems, but also to communications ones. And we are not seeking just technical expertise. What we are striving to achieve is a trained combat soldier who is also an “expert administrator”. Having just one of the two conditions is not enough. And accomplishing this throughout the years means keeping those soldiers in your ranks, motivated enough to remain up to date in their combat skills, and keeping them on top of the last software release, the latest Federated Mission Network Spiral, the most recent NATO functional system version and whatever other innovation comes into being in the CIS world, which is commercially driven, at least since the turn of the century, and which changes in increasingly shorter periods of time.

We managed to do that, mostly thanks to the military values of our soldiers whose main motivation is internal. That is, showing that they are up to the task to themselves and to their commanders is ninety per cent of the stimulus they need to keep working with enthusiasm over the years.

ENLARGING THE TEAM

“Noche toledana”, literally “Night of Toledo” is a Spanish saying for a sleepless and troubled night, the kind I anticipated some during

Steadfast Leda 21. To my astonishment, I had none. NRDC-ESP CIS and NATO CIS worked according to the plan almost 100 %. But the struggle was waiting for us in the Cyber and Electromagnetic Activities (CEMA) arena.

The challenge here was enlarging staff members’ capabilities to areas of expertise in this concept other than CIS, while retaining the latter. From the start it was apparent that accomplishing this task meant enlarging the team, but the solution could not be just adding new staff members. CEMA requires a holistic approach to its capabilities in order to find accumulative effects, thus demands the provision of additional background to the existing staff. First steps were taken in 2021 through briefings from members of NATO School Oberammergau, ESP Joint Command and former Joint Electronic Warfare Core Staff (JEWCS).

Prior to Steadfast Leda, personnel from the ESP Joint Cyber Command (MCCE) and Electronic Warfare (EW) Regiment were incorporated into the planning efforts. These few experts were glued together and led by a G6 team of planners, building a CEMA operations centre (CEMOC) that took its first steps during STLE execution phase.

This combination was successful in the mid and long-term planning, but it definitely demands further training to keep improving in these horizons and to develop a deeper understanding of the operations undertaken by cyber and EW units. This is the reason why NRDC-ESP has developed a program of work to be carried out during 2022, which necessarily means expanding our partnership within the NATO and ESP military –MCCE, JEWCS, having been EW Rgt 31 the first step –as well as with the University. The challenge keeps growing: so does our team.



CEMOC team at STLE21 exercise

THINKING AND ORGANIZING FOR WARFIGHTING

The challenge of effective C2 in high intensity operations

Lieutenant Colonel Luis Escorrega (PRT-A)
G3 OPS HQ NRDC-ESP

As we can already see in Eastern Europe, the near-future strategic and operational context will be characterized by completely new and different dynamics, with looming unprecedented and disruptive trends. NATO is facing, and will continue to face threats and challenges from multiple directions, state and nonstate actors, often simultaneously across physical and non-physical domains. In order to succeed in tomorrow's battles, and to deter and defend against these threats, the Alliance cannot fight with yesterday's approach and must prepare for tomorrow's fight today¹. This is the reason why these new approaches are so important – like the new NATO Warfighting Capstone Concept (NWCC), along with the Concept for the Deterrence and Defence of the Euro-Atlantic Area – and its guidance about thinking, organizing, and acting differently. At all echelons.

In this framework, the Warfighting Corps (WFC) echelon is particularly relevant, not only because it is one of the main military assets for implementing these new approaches, but also because it is one of the most relevant outputs/commitments from the NATO Forces Structure (NFS), particularly from the Graduated Response Forces (GRF-L). In this role, the WFC should be able to synchronize and integrate land power to achieve decisive effects on an adversary during high-intensity, large scale combat operations. This is why the tempo, lethality, and intensity of the WFC mission makes it the most demanding role for a GRF-L.

The evolving character of warfare is forcing the WFC echelon to extend its current thinking and understand the wider multi domain fight, leveraging or supporting multi domain effects in conjunction with higher commands. Concurrently, WFC combat power should be orchestrated to facilitate the tactical success of its subordinate units, setting conditions, synchronizing, coordinating and enabling all activities within its AOR, in close coordination with adjacent units, focusing on shaping and sustaining the battlespace to enable the subordinate units to win the decisive engagements. In order to be able to effectively exert C2, it is paramount to rely on a resilient, survivable and efficient C2CP concept that enables freedom to command and control in any environment, allowing the right decision at the right time at a speed that is faster than the adversary can cope with².

Tactical operations are trending towards frenetic and decisive engagements with an increased density and acuity of sensors, combined with the growing range and lethality of weapons systems³. In this operational context, characterized by complexity, fluidity and multi-domain operations, there are some critical factors at tactical level that may lever success in future WFC warfighting.

Maximize Critical Thinking, Design and Mission Command. Critical thinking is an essential tool in solving complex problems. It applies high standards to identify and evaluate evidence to guide decision making and requires that military leaders at all levels analyse the task, identify the goal(s), and clarify the problem to be solved. It requires the examination of own assumptions⁴ and

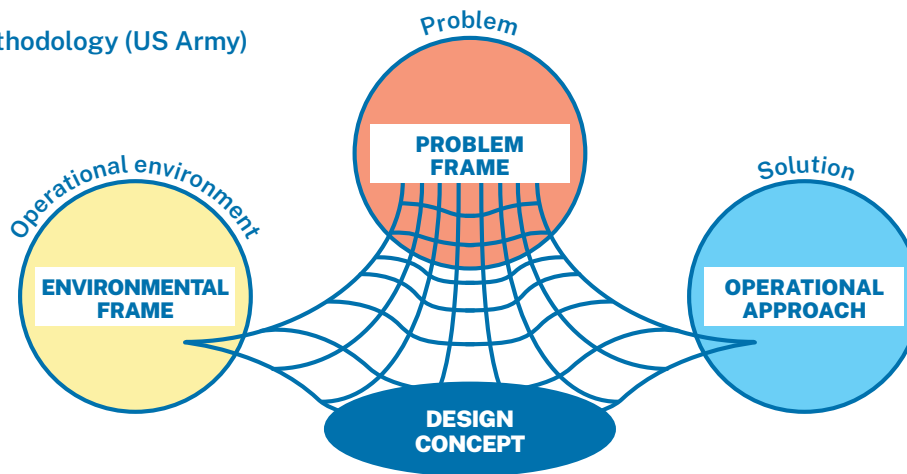
¹ NATO. 2020. Read-ahead Paper for the Global Expert Symposium on NATO's Warfighting Capstone. Concept: Building the Alliance's Decisive Advantage.

² NRDC-ESP Commander. 2022. How I understand corps warfighting.

³ RUSI. 2021. The Future of the NATO Corps.

⁴ CGSC. 2011. Student Text 22-2. Communication Skills for Army Leaders.

Design Methodology (US Army)



those of others, as well as the inferences, conclusions, implications, and consequences of those assumptions. It emphasizes creativity and the ability to think of new ideas and explore multiple avenues of actions or thoughts, maximizing mission command and appropriate decision making at all levels. The critical reasoning and thinking standards help leaders evaluate their reasoning and thinking for clarity, accuracy, precision, relevance, depth, breadth, logic, significance, and fairness.

Design is a method of critical and creative thinking for understanding, visualizing, and describing complex problems and the approaches to resolve them. Critical thinking captures the reflective learning essential to design. Never hampering discipline and mutual trust, maximizing design, critical and creative thinking will be key in order to develop leaders and to achieve success in an operational environment where decentralized execution is paramount and Mission Command absolutely mandatory.

In addition, increased complexity will also lead to greater domain interdependence and will therefore require commanders and staff to think critically, being able to master the complexity of the operational environment and the requirements of the Multi Domain Operations (MDO).

Tailoring C2 at the tactical level. As in all NATO Land Forces and doctrine, the preferred C2 philosophy for the NRDC-ESP is Mission Command, a philosophy of leadership that decentralizes execution by providing a clear intent. Mission Command is key to dealing with complexity for a number of reasons,

but particularly for creating a shared understanding of an operational environment, an operation's purpose, problems, and approaches to solving problems⁵. Effective C2 requires also continuous, and often immediate, close coordination, synchronization and information sharing across the staff. In order to promote this, commanders organize their staff and other components of the C2 system into command posts (CPs) to assist them in effectively conducting operations.

Enhancing planning synchronization.

Synchronization is the process of arranging military actions in time, space, and purpose to produce maximum relative combat power at a decisive place and time. Plans and orders synchronize the warfighting functions to amass the effects of combat power at the chosen place and time⁶. Synchronization requires communications and information systems to enable both situational awareness and effective C2, being facilitated through a combination of battlespace management and shared situational awareness⁷.

When planning operations, there are usually three integrating cells in an HQ that have major responsibilities in operations synchronization: Plans, Current Operations (CUOPS), and Future Operations (FUOPS) cells, the latter being the cell leading the overall synchronization process at the HQ. The integrating cells are organized by planning horizon, enabling the commander to integrate, coordinate and synchronize the activities across the tactical functions. In the synchronization the handover between cells is critical, so the clarification of its tasks, scope and responsibilities is paramount (see table 1).

⁵ US Army. 2019. ADP 6.0. Mission Command: Command and Control of Army Forces.

⁶ US Army. 2019. ADP 5.0. The Operations Process.

⁷ NATO. 2019. AJP-3. AJ Doctrine for the Conduct of Operations.

Table 1

	PLANS	FUTURE OPS	CURRENT OPS
SCOPE	Long-Term Planning	Mid-Term Planning	Execution/Short-Term Planning
MAIN TASKS	<p>PLANNING AND PREPARING THE NEXT TACTICAL PHASE</p> <p>Interacts with the plans cell of the higher HQ; Monitors current operations; Assesses and coordinates future planning efforts.</p>	<p>REFINING THE CURRENT TACTICAL PHASE</p> <p>Refines and modifies initial planning (by G5) based on current situation; Assesses mid-range progress of operations; Synchronizes HQ daily activities, and the hasty planning process.</p>	<p>MONITORING THE EXECUTION</p> <p>Monitors, evaluates, directs, and controls execution of orders; Conducts operations update and assessment brief; Conducts limited short-term planning; Reactive planning (through CAT).</p>
MAIN OUTPUTS	<p>Initial OPLAN and OPORD; Plans for follow-on phases (sequels); Develops branches plans and other CONPLANS.</p>	<p>Refined OPLAN and OPORDs; WNGO and FRAGOs; Daily Synch Matrix.</p>	<p>COP (Situational Awareness); Reports and Returns (R2); Needed WNGOs and FRAGOs for reactive planning.</p>

During the different phases of any operation, the responsibility for maintaining the plans shifts from the Plans cell, or FUOPS, to the CUOPS cell. This transition is particularly important at the point that OPS branch becomes responsible for controlling the execution of the OPORD and short-term/reactive planning. In a WFC role the successful synchronization and integration of all elements of combat power in time and space is paramount to disrupt, interdict, and degrade the adversary while shaping the operating environment and enabling friendly forces, in order to ensure freedom of action at the expense of its opponent. In order to achieve an efficient synchronization, transition/handover among the three cells requires careful consideration. Transition between cells must be thorough, including briefings and, if needed, rehearsals, enabling clear understanding of the situation and identification of friction points and issues to solve.

Adapting Command, Control and Command Post (C2CP) Concepts. The overriding concern of the NRDC-ESP's C2CP concept is to deploy a light and effective capability into theatre as quickly as possible and to achieve full capability within the shortest amount of time. NRDC-ESP normally retains the capacity to conduct C2 from its permanent base (PB) HQ location at Bétera Military Base (BMB), during peacetime, during the initial stages of any operation, or during the entire operation. In order to

achieve full operational effectiveness, NRDC-ESP C2CP concept adhere to the principles of flexibility, modularity, survivability, small footprint, and resilience. HQ NRDC-ESP maintains a set of CPs that can be mission-tailored to achieve its assigned mission. Unity of effort, decentralized execution, trust, mutual understanding, timely and effective decisions and actions are paramount in fulfilling the fundamental responsibilities of command in any NATO mission.

In this realm, it is important to bear in mind that the command post (CP) is the basic organization of any HQ for exercising C2 during operations. NRDC-ESP's CP concept was designed and organized in a flexible manner, in order to meet the changing situations and requirements of a specific operation or action. The primary products the CP provides are information to support SA. Other than that, most functions performed in a CP directly relate to assessing and directing the on-going operation, planning future operations and supporting the force. NRDC-ESP's HQ must be able to exert C2 from main, alternate and tactical command posts or a similarly feasible set-up, including the appropriate CIS, life and security support. It must be able to support its operations by Reach Back if required (at least during deployment and redeployment).

When a CP is deployed, a tailored Reach Back (RB) capability will always exist. This RB ca-

Table 2

	MODEL 1 Main CP inside AOO	MODEL 2 Sustainment in theatre affected by security	MODEL 3 Large AOO	MODEL 4 Threat in AOO is High	MODEL 5 Threat in AOO is High	MODEL 6 Threat in AOO is High. ALT outside AOO
	OT have Air Superiority OPFOR no TBM			OT do not have Air Superiority OPFOR with TBM		
MAIN	AOO	Out AOO	AOO	AOO	AOO	AOO
TAC	AOO	AOO	AOO	AOO	AOO	AOO
ALT					AOO	Out AOO
FWD			AOO			
REAR			AOO			
ICE		AOO				
PB	BMB					

Source: NRDC-ESP WFC SOI 0000.

pability increases efficiency of operations, contributes for reduced deployment timelines and Theatre footprints, increases Force Protection due to smaller presence and reduces logistic, infrastructure requirements and Host Nation Support. Nevertheless, the RB is heavily dependent on the CIS global structures. For this reason redundancy, additional planning and protection of key nodes are mandatory. One additional point regarding the RB is the difficulties that it may bring when the transition (HOTO) occurs with other equivalent HQ; if in a static location, many thousands of kilometres behind, a face to face handover will not be possible and needs to be carried out via CIS means⁸, so the operation overall C2 architecture must be designed to incorporate the RB requirements of each HQ.

“We do it this way, because that’s the way we do it”, often inhibits individuals and their organizations from evolving to their maximum potential”.

NRDC-ESP has developed some models intended to be an orientation for organization of NRDC-ESP CPs when facing different operational scenarios. Nevertheless, the CP articulation and composition will be decided during the initial pre-deployment planning phase (see table 2).

⁸ NATO. ACT. 2004. Reach back for deployed operations.

Difficulties in changing. Adopting a WFC posture in the new operational paradigm, based in complex, fluid and multi-domain operations, will require organizational changes. “It is not just a question of organization; we have to make best use of technology and generate the necessary mindset to make it happen”. The need to understand transformational change is more important than ever before because dramatic change is happening at different levels, particularly at the technological and organizational domain. The paradigm, “we do it this way, because that’s the way we do it”, often inhibits individuals and their organizations from evolving to their maximum potential. Making lasting permanent change is dependent on human factors and requires courage, a willingness to accept risk, and do things differently¹⁰.

These brief considerations are in no way intended to be thorough. They should only be understood as personal contributions to the improvement of complex processes that are already underway in the NRDC-ESP, in a very professional way, in order to better implement its role of WFC. These considerations result from mere reflection and from lessons learned in various positions and courses that the author had the privilege of collecting and developing.

⁹ NRDC-ESP Commander.2022. How I understand corps warfighting.

¹⁰ CGSC. 2011. L100. Reading L103RB. Applying the Kotter Model: Making a Transformational Change in a Large Organization.

Evolution: From battle management cell to G35

Colonel Federico Clemente Clemente (ESP-A)
ACOS G35 HQ NRDC-ESP

Planning horizons and Structure evolution.

One of the main pillars to sustain the NRDC's conceptual evolution to become a WFC was the definition of the planning horizons and the subsequent HQ structure change.

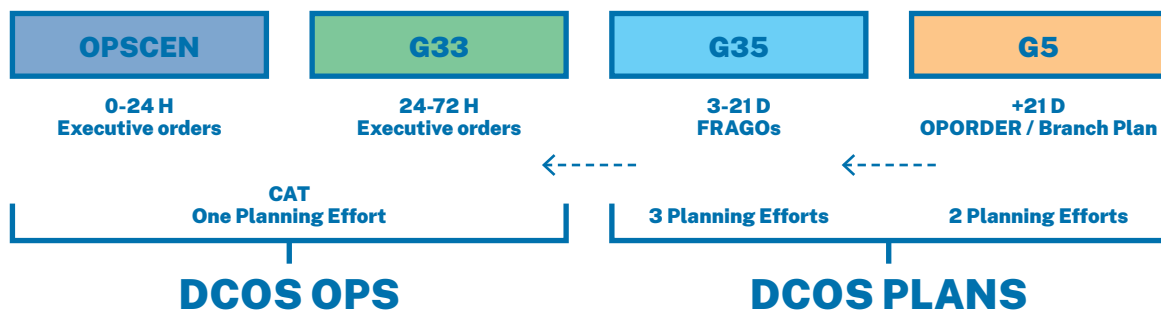
Since the beginning of the preparation phase, medium term planning was defined at 72 hours and beyond. The structure in charge of medium term planning was the Battle Management Cell (BMC). The adjustment of the BMC to the new planning horizon was done in a smooth way with the modification of the related Standard Operation Procedure (SOP). For the WFC, BMC's new name was G35 and was integrated in the PLANS Division.

this boundary was flexible considering the tactical situation and the workload.

At tactical level, for the WFC mission, taking advantage of the experience gained from the ARRC in its previous rotation as WFC, the capstone activity to support the synchronization of operations within the WFC and MSU was transferred to a new meeting, the Daily Operations Meeting (DOM).

One relevant factor to consider in the design of the new G35 was the new CP concept. The former BMC lacked the possibility of splitting that was now required not only for the planning element but also for the synchronization element. Although G35 manning was limited in number, behind the curtains was

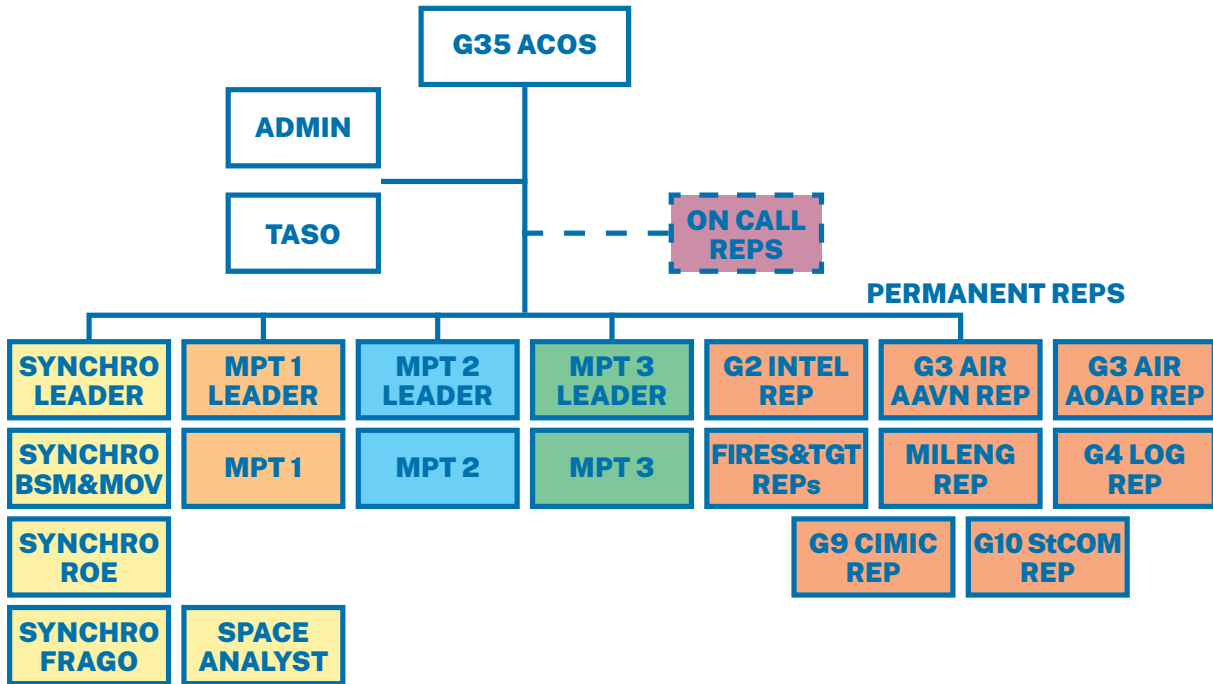
NRDC-ESP WFC PLANNING HORIZONS



The definition of the planning horizon established the delineation of responsibilities between OPS and PLANS divisions in operations and, at the same time, allowed flexibility and mutual support between G35 and G5. The upper threshold of the G35 was established as 21 days, which represented a challenge for the organization and for the subsequent manning. Nevertheless, with G5 and G35 being under the DCOS PLANS, and with the authorization granted by the COS,

another limitation: skilled personnel. G35 positions could not be considered specialized personnel, but previous skills and experience were required.

One rationale behind the planning horizons definition is with respect to the subordinate units' planning timelines in the sense of providing the MSU enough time to plan and execute the WFC FRAGOs. Releasing a WFC FRAGO to the subordinate Divisions and



formations with less than 72h time to effect would stress their planning ability and result in poor planning, rather than planning with enough calmness to reach convergence of the Commander’s intents across the different levels.

Planning horizons at Corps level are quite different than at Brigade or Division levels. Both Bde and Divisions are mainly engaged in close combat while Corps are looking to the future. This means that the level of stress for them is completely different.

Decision Support Matrix. One of the most important documents created by G5 during the planning phase, and maintained by them during the execution of the operation, was the Decision Support Matrix (DSM). This matrix identified events where a decision from COM WFC was needed, and proposed potential alternatives. The DSM, constantly refined, guided ACOS G35 to allocate planning efforts to the available planning teams while considering time constraints. The planning teams were composed of core planners and a shared set of Subject Matter Experts (SME) supporting all the medium-term planning efforts. The liaison officers from the collateral and subordinate units, supporting commands and Host Nation were also needed for the vast majority of the FRAGO while acknowledging that they are

not dedicated elements to G35, so flexibility was needed in order to be efficient.

As part of the DSM management process, the G5 Assessment team was responsible for monitoring the decision points that could be triggered by the operation. In a warfighting scenario, at tactical level, the comparison of force ratio is mandatory to identify the needs of mid-term planning efforts. This input was provided by G5 Assessment team coupled with the DSM.

Daily Operations Meeting. As already stated, the main tool to support the vertical and horizontal synchronization of WFC operations was the DOM. This should not be understood as the only activity to synchronize the WFC.

The DOM had two aims. On one hand, finding the variance between the Corps current operations and the Corps planned OPORD, and on the other, the operations synchronization in time, space, and purpose.

One of the G35 main responsibilities is to issue FRAGOs to correct the development of the operations and bring it in line with the plan. So, in the DOM, the branches reported the deviations of the operation from their perspective. A good example was G2. They permanently monitored the enemy, their attitude, location, and units’ employment

and compared it with the OCOA. Detected variations were communicated in the DOM for G35 to identify whether a FRAGO was necessary. The same way, for instance, G4LOG compares the force's logistic status with the expected one, so if a variation exists, it is presented in the DOM allowing G35 to take actions to correct it.

At the DOM it was also checked, with the lateral units' liaison officers, that their operations were going according to plan, and whether any variations influenced our own operations in any way. The coordination with the lateral Corps was crucial and provided an understanding of MC-LCC operations.

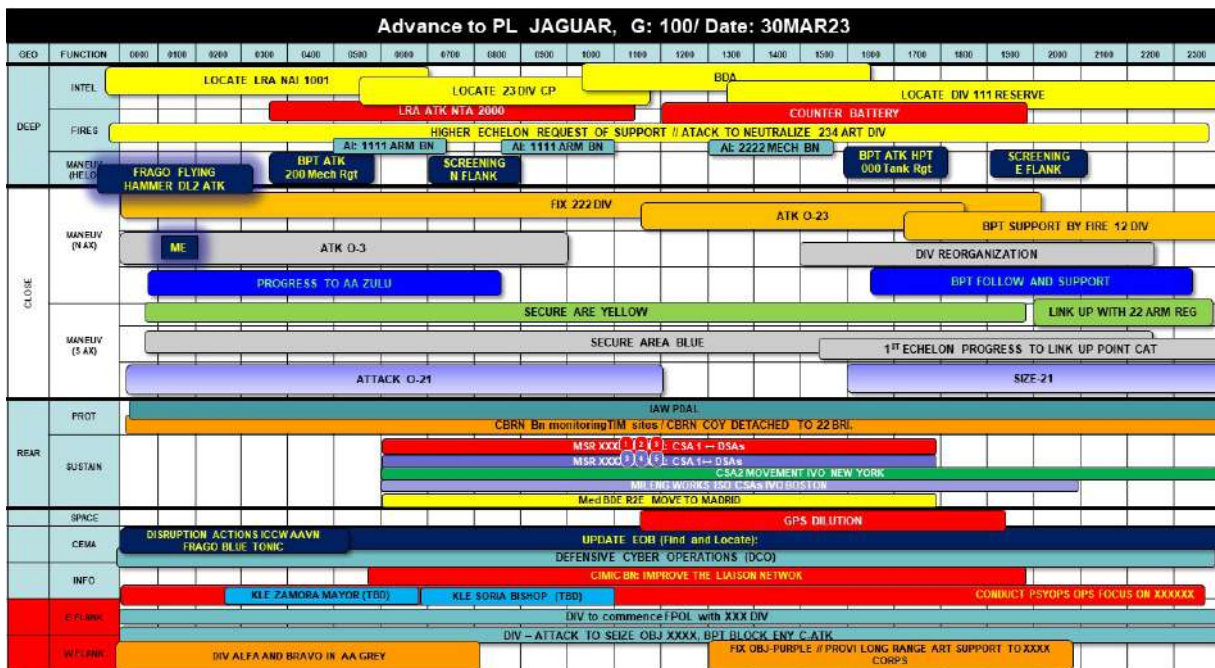
G35's second major responsibility was to synchronize the Corps' operations in time, battlespace, and purpose. Time synchronization was done in 24-hour blocks, on an hourly basis. Synchronization in battlespace consists of orchestrating actions in depth with those in the close and rear areas, so that, taking into account time synchronization, the operations take place in

the three spaces mentioned in a coordinated manner and in pursuit of the desired effects (purpose).

In addition, actions in space, CEMA actions, and the occupation of the main supply routes and the coordination of this occupation with tactical movements to avoid bottlenecks are taken into account in the synchronization process.

All these activities were represented and coordinated using the daily synchronization matrix in the figure. This same matrix was then passed on to G30PS for them to continue synchronizing from 96 down to 24 hours, and served as a basis for their modifications and further conduct of operations.

Conclusion. WFC's G35 structure was well suited for medium-term planning and operations synchronization in time, space, and purpose. The main tools for G35 to accomplish its tasks were the DSM, and the DOM. The DOM is a meeting where the deviations from the plan were identified and where synchronization was materialized.





International Women's Day

#InternationalWomensDay



FIGHTING THE DEEP: ONE OF THE WFC MISSIONS

NRDC-ESP WFC staff “deep thinking” mindset: The challenge

Major José Alberto Gil Vázquez (ESP-A)
G3 OPS HQ NRDC-ESP

One of the Warfighting Corps main missions in a tactical fight is to fight the deep, which is not the objective itself, but the way to establish successful conditions to allow subordinate Divisions to fight the close, and this implies that the staff have an adequate mentality to be able to provide to the Commander (CDR) the right “deep” assessments.

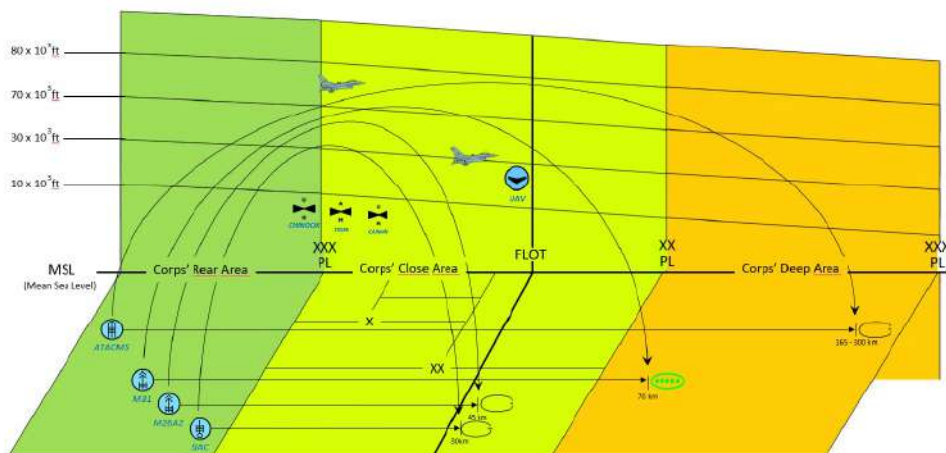
In order to execute an effective deep fight, visualizing the area of operation in a geographic sense is **an appropriate starting point**. This allows the CDR to understand things which are far away from his frontline troops, but it's not all that is expected nowadays in an Article V scenario against a near to peer enemy. The deep fight will cover not only the physical dimension but the virtual and cognitive through a Multidomain approach where the Commander will take decisions to produce effects in different

domains to achieve an objective. It means not only actions from the WFC subordinate Units and enablers but also the capacity to enhance the WFC capabilities with resources from other Component Commands (CCs) or the Joint level. And that is one of the main challenges of the WFC: the ability to plan, coordinate and synchronize those resources, to fight the deep, and the requirement for the staff to have the right mindset.

Daily Operations Meeting (DOM).

The purpose of the DOM is to coordinate & synchronize Corps operations (Deep, Close, Rear) in detail from 72hrs until 144hrs and in overview to 21days, including multi-domain operations aspects. This meeting has the following inputs among others:

- COM D&G
- Targeting WG Decisions
- Land intelligence updates
- CCIRs
- Synchronization Matrix



During STLE21, NRDC ESP WFC had three main working groups/cells (among others) that were paramount in contributing to that mission: DOM (Daily operations meeting), TGT WG (Targeting Working Group) and the JAGIC (Joint Air Ground Integration Centre).

The DOM is where NRDC ESP WFC identifies in advance what is needed to be captured in future orders (FRAGOs, WNGOs) in terms of tactical responsibilities, priorities, coordination, synchronization, and support/needs. G35 aligns the WFC scheme of manoeuvre with the resources needed to execute it, taking into account that those resources do not only belong to the WFC (e.g.: Intel needs, JFAC ASRs identified in advance, ISR, EW, SOF, Cyber, Space support..) but even so, they are not infinite or endless.

Targeting Working Group (TWG).

The TGT WG allows the COM to focus on the deep fight by refining in detail the decisions agreed in the DOM and prioritizing targets and allocating kinetic and non-kinetic assets to deliver effects.

The time frame (72 to 96 hours) will plug into other CCs Battle Rhythm - for example JFAC ATO cycle, which is key to allow the WFC to request additional assets to the Joint level (if needed) in time.

Joint Air Ground Operations Centre (JAGIC).

And finally, NRDC ESP WFC utilized the JAGIC in Current Ops to be “the hammer”. The JAGIC was integrating and delivering all the activities/actions needed (Intel, AAVn, Joint Fires, JFAC assets, Air/Battle Space Management, Air defence). The execution time frame in CUOPS was until 72 hours and more specifically JAGIC until 24 hours. The success for JAGIC relies on the two previous WGs/Cells but above all in the TGT WG: the more synchronized and refined the plans are, the easier it will be for JAGIC to execute them, with minor adjustments.

The three aforementioned tools are used by the WFC staff to achieve the deep fight. Besides

these, there are two issues that we should consider as fundamental to the WFC as the main facilitators/influencers for the deep:

- Intel processes, which will affect the whole deep fight. Intel resources are widely spread among different WFCs subordinate Units, collateral WFCs and upper echelons, and other CCs providing a huge amount of info/data through different Intel systems. It needs a significant effort from WFC Intel branch to provide timely and accurate info to the COM and the staff in a never-ending cycle, covering planning phase, targeting cycle, execution BDAs. The Intel data management capacity is a “must” for the deep fight and the ability of Intel Branch to deal with the extraordinary amount of data coming from different systems, sources, and echelons (probably exceeding human capacity, something we will have to improve in the future) is one of the milestones of the WFC.
- Deep fight main providers: In STLE21, Army Aviation Bde and Field Artillery Bde were the main deep fight providers in WFC hands. WFC staff had to facilitate the CDR’s employment of both of them: by speeding up the decision processes, making adequate Battle Space Management design, deploying them in accordance with their “deep” role and, finally by delegating the Target Engagement Authority to the right level to take advantage of every single opportunity.

To summarise, NRDC ESP WFC staff have to understand what is expected from them in terms of deep fight, from the earliest stages of an operation (starting with the tactical planning). STLE21 prior training activities were essential to achieve education in the “deep” mindset and contribute to NRDC ESP WFC successful certification.



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Timely, accurate and lethal joint fires

Major Peter Harrington (USA-A)
FIRES & TARGETING HQ NRDC-ESP

The JAGIC serving as the link at the Corps Level for seamless Air Land Integration

The Dynamic Targeting Cycle is essential to achieving effects in Large Scale Combat Operations against a near peer competitor. An enemy with capabilities as good or better than NATO capabilities requires a smooth process to properly target those systems with a degree of speed, accuracy and required ammunition to achieve the desired effect. Dynamic targeting to find, fix, track, target, engage and assess requires a collective effort amongst the Warfighting Corps staff in order to be successful. During Steadfast Leda 21 (STLE21), the NATO Rapid Deployable Corps (NRDC) Spain demonstrated that the Joint Air Ground Integration Center (JAGIC) was the right solution to ensure timely, accurate and lethal joint fires against a near peer competitor.

During STLE21, NRDC Spain built a JAGIC using the NATO Joint Fires and Airspace Management Cell (JFASMC) augmented with an Air Support Operations Center (ASOC). With this team combining NRDC Spain Fires and Targeting, G3 Air and AIRCOM trained personnel enabled for timely prosecution of all aspects of joint fires. Key to this was the delegation of airspace control from AIRCOM to the ASOC personnel, not to the NRDC Spain HQs. This specific delegation of authority ensured risk was still assumed by the AIRCOM Commander and not a ground force commander. With limited training during Battle Staff Training II and prior to the exercise during STLE21, the JAGIC team seamlessly conducted airspace deconfliction for four subordinate Divisions to prosecute targets using organic joint fires means. It was identified during the exercise that in order to meet target selection standards for near peer systems, targets must be prosecuted in under 10 minutes. Using the JAGIC at the





Warfighting Corps (WFC) level allowed for prosecution under the Coordinating Altitude (CA) in under 1 minute on average and 6 minutes above the CA. With our NATO Divisions not having an internal JAGIC, they never would have been able to meet the target selection standards of their targets and in turn, would not have achieved the desired effect.

The NRDC Spain JAGIC allowed for the use of all aspects of Joint Fires, cannons, rockets, attack aviation, Intelligence Surveillance Reconnaissance (ISR), Close Air Support (CAS) and Air Interdiction (AI) through procedural and planned control of the airspace. Through the planning by the AOCC for Air Tasking Order (ATO) and Air Control Order (ACO), G3 Air for attack aviation, G2 for ISR and Fires and Targeting for the Joint Targeting Cycle, airspace was replanned each day of execution. The ASOC containing airspace managers, procedural controllers and ATO/ACO managers was able to conduct the on-the-go procedural control to ensure the safety of all aircraft in the Corps Battlespace. This enabled an easier throughput to clear green air (i.e. ISR and attack aviation) and blue air (i.e. CAS and AI sorties) to allow for the use of cannon and rocket fires using gun target line (direction they are firing) and maximum ordinate (how high they are firing).

Building on the success of the JAGIC during STLE21, there are several ways ahead to make the process faster and more efficient. First, manning in the ASOC and JFAMSC needs to be addressed to facilitate the massive throughput of up to 600 joint fires missions per day while also operating for 24 hours. Second, interoperability of international air and fires mission command systems requires sustainment training

efforts across NATO to ensure all countries are integrated and trained in ASCA and linking into ICC. Third, planning and integration of nonlethal enablers, Space, Cyber, Electronic Warfare and Information Dominance, into the JAGIC will enable increased and layered effects of the Corps' target sets. Finally, the proper manning and placement of the G2 to allow for increased intel collection capability during the Dynamic Targeting process to ensure that we are accounting for all sources of intelligence and integrating them dynamically to the JAGIC for timely execution. As these efficiencies are gained, the JAGIC will become even more essential to NATO Divisions to increase effects across the battlefield against a near peer competitor.

The field artillery definitions of suppress, neutralize, and destroy cannot be just buzz words. We must achieve those effects through timely, accurate and lethal joint fires in the NATO Corps JAGIC. Fighting for personnel is always an issue and if international divisions cannot build a JAGIC, our NATO Warfighting Corps have to fill the capability gap. The Warfighting Corps JAGIC is the most effective way to mitigate risk to the force on the ground and in the air through timely airspace deconfliction allow for the execution of joint fires. In order to meet target selection standards in under 10 minutes, it requires delegation of control of the airspace to the ASOC and the rapid deconfliction of the airspace to ensure rounds and rockets firing quickly and with the right amount of ammunition. NRDC Spain succeeded in implementing the JAGIC concept during STLE21, however, we must always be looking for ways to mitigate risk to adequately employ the Joint Fires at our disposal. NATO Joint Fires are the best in the world, we must ensure we maintain that capability.

Introduction to NATO Space support to Land Operations

NATO Space Mission: NATO, through the Nations, will gain and maintain operational advantage in the Space Domain, enabling operations, missions and activities to protect and defend the Alliance.

Major Juan José López García (ESP-A)
SPACE ANALYST HQ NRDC ESP EXERCISE STLEZ1

NATO Space Support: Initial steps:

NATO Commanders across the Alliance have recently added Space to the traditional Operational Domains (OD) of Land, Maritime, Air, and Cyberspace. Space has the requisite capabilities which are vital to increase the previously mentioned OD's effectiveness and efficiency during the prosecution of Military Operations.

NATO declared Space as an Operational Domain at the London conference in 2019, to enhance security and enable other ODs to have a Comprehensive Operational Picture in a **contested, congested** and **disputed** environment. Consequently, the Alliance must be prepared to operate in a degraded, disrupted and denied Space environment.

In October 2020, NATO established a NATO Space Centre at Allied Air Command in Ramstein, Germany. NATO has also accepted an offer by France to establish a dedicated Space Centre of Excellence in Toulouse by 2025. At the Brussels Summit in June 2021, the Allies agreed to accelerate work to deepen and expand the use of space as an Operational Domain, to strengthen Space Domain Awareness and to better integrate space in Alliance activities, including training and exercises, resilience, and innovation efforts.

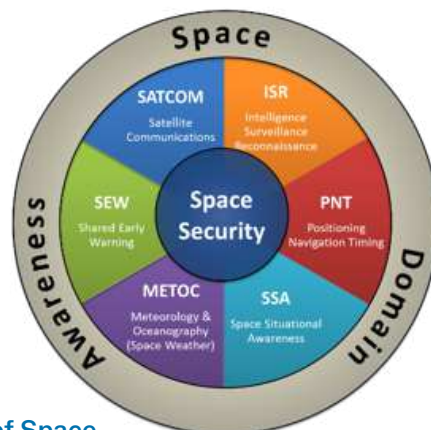
At the 2021 Brussels Summit, Allies also agreed that attacks to, from, or within space could lead to the invocation of Article 5, upon decision of the North Atlantic Council on a case-by-case basis. NATO's approach to space is defensive and will remain fully in line with international laws.

The fact that NATO does not own nor fully operate Space systems, makes the Alliance reliant on nations, commercial providers, and voluntary contributions for Space support.

Some criteria make the Space Operational Domain unique: It requires specific capabilities, assets, and technical expertise to provide **Data, Services** and **Products** (DPS) that support other domains but also deliver effects no other domain can achieve. **Space systems are key enablers providing significant opportunities to support all NATO operations in all domains.**

Understanding the Space Domain

Space will provide an enhanced and global vision of the Space environment to the Commander, by coordinating, synchronizing, and leveraging global Space Situational Awareness processes, data, and services. It will contribute to avoiding the reduction of Operational effectiveness across all domains, impacting the decision-making process as well as the planning and execution of operations.



Use of Space

The comprehensive use of Space comprises:

Space Domain Awareness: the common understanding, comprehension, and perception of **all aspects** associated with Space.

Space Mission Areas: describing the capabilities Space support brings to operations.

Space Security: understanding of non-NATO Space and counter-Space systems, capabilities.

The Space Mission Areas which enable all Space capabilities can be described as follows:

ISR (Intelligence Surveillance Reconnaissance): Space systems contribute to the development of intelligence through surveillance and reconnaissance activities, and coordinate the requirements for satellite ISR capabilities in support of operations (G2, G9, Targeting, Battle Damage Assessment (BDA), environmental monitoring) and Joint Personnel Recovery support. Surveillance through space systems can involve multiple satellites and does not have to be continuous monitoring. Most common reconnaissance sensors include Electro-Optical (EO), Infrared/Thermal (IR), and Synthetic Aperture Radar (SAR).

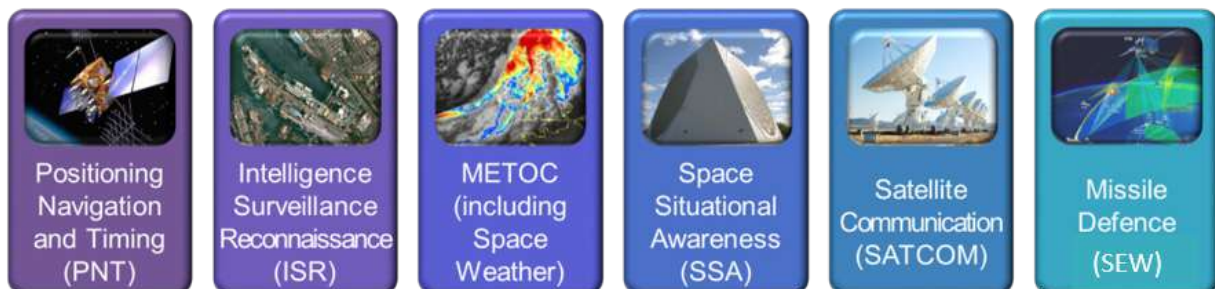
PNT (Positioning, Navigation and Timing): To determine an object or signal's geographic location, calculation of a route from position A to position B, and accurate location time, for synchronizing clocks and networks to support Precision Guided Munitions and Force tracking.

METOC (Meteorological & Oceanographic): Assess the impact of Space weather events on NATO operations. Space weather could interfere with radio signals and temporarily disrupt SATCOM and PNT satellite ranging from minutes to hours. It can also optimize Search and Rescue operations at sea and determine optimum locations for amphibious landing.

SSA (Space Situational Awareness): Monitoring of Space objects to mitigate the impacts that Space objects have on other satellites through ground-based or space-based sensors. Space surveillance and tracking uses both radar and optical detection, which are important for Space debris tracking and Satellite mapping.

SATCOM (Satellite Communications): monitoring and analysis in support of G6 and modelling of enemy GPS (Global Positioning System) jammers to assist operational planning, and also to preserve long range communications beyond Line-of-sight (BLOS), provide critical connectivity, keep Command & Control (C2) function, and maintain Remotely Piloted Aircraft (RPA) operations.

SEW (Shared Early Warning): Provides warning of Ballistic Missile launches. Potential trajectories are calculated and delivered within minutes after a missile launch occurs. Information includes launch point, predicted impact point and estimated flight time. The United States (US) is currently the only NATO Nation with Space-based SEW capabilities.



Space Mission Areas

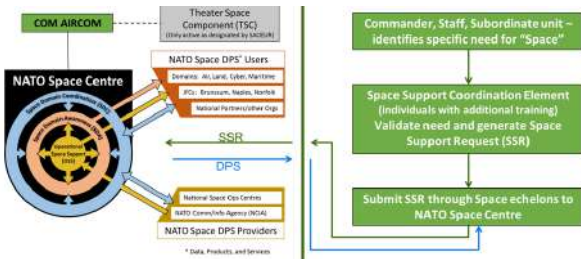
For a comprehensive use of the Space Domain, the Warfighter must:

1. Understand the Space specific threats and their impacts to Operations.
2. Know enemy and friendly capabilities
3. Learn how to utilize friendly capabilities and integrate them into planning process at early stages.
4. Be ready to mitigate threats impacting in operations.

NATO & Space: A Step Forward in Land Operations

The NATO Space Centre (NSpC) is located at Allied Air Command in Ramstein, Germany. It serves as a hub to support NATO operations, missions, and activities, to share information and to help coordinate Allies' efforts. When directed, the Space Centre coordinates with national space entities to ensure that NATO commanders have access to required space data and services. The Space Centre is a tangible demonstration of NATO's role in space and provides significant communication opportunities.

When identified, the Commander's information requirements will be requested from the Space Support Coordination Element (SpSCE), who are specific personnel with additional Space training. Once validated, SpSCE will submit a Space Support Request document to NSpC through Space upper echelons.



Flow of Information

NSpC will coordinate with other NATO Space domains, National operation centres or commercial providers for Space support to satisfy the Commander's need for the requested information.

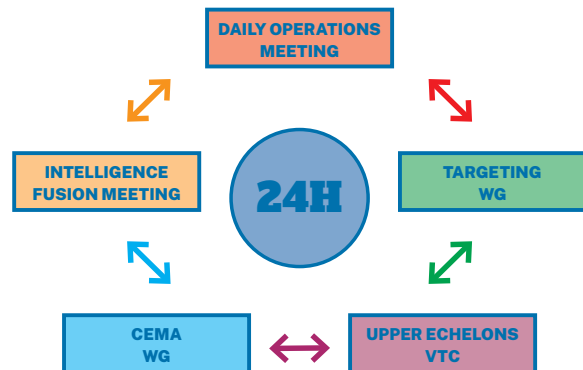
NRDC ESP Space support as Warfighting Corps (WFC)

During the exercise Steadfast Leda 21 (STLE21), NRDC ESP faced a real challenge implementing Space Support to operations. The Space Cell was established under G2 Intel branch to create a robust Intelligence structure and to reduce delays and time response while increasing the overall perception of the battlefield. During the exercise, NRDC ESP Space Cell activity was supported by a Landcom Space Technical Advisor providing a specific 360° space-related vision and advice on how to integrate the Space structure with the rest of functions.

The Space Domain essential actions at Corps Level during STLE21 were the following:

- Establish Space Support Coordination Element (SpSCE) network for relevant data flow to Multi Corps Land Component Command (MC LCC) and subordinate units.
- Employ Space Support Coordinator role as an integral part of the Planning Process, searching for convergence with actions in other domains.
- Integrate Space support Data, Products and Services into the Planning Process, and develop Space support requirements from Corps Planning Process outputs.
- Identify mission critical gaps with respect to Space capabilities and peer threats and improving Space domain awareness throughout Corps HQ.

The Space Cell started to actively participate from the early stages of the Planning Process (PP), reviewing both friendly and enemy satellite capabilities, investigating operations and incidents affecting Space-based friendly resources, and advising working groups on Space support considerations and resources. During the STLE21 Battle Rhythm (BR), the Space Cell took part in the following working groups on a daily basis: Daily Operations Meeting led by G35; targeting Working Group (Fires & TGT), daily Cyber electromagnetic activities (CEMA G6); Intelligence fusion meeting (G2); and Video Telecom Conferences with upper echelons along with flanking units to share Space information in order to perfectly integrate the Space capabilities within the Land Operation.



STLE21 Space Cell Battle Rhythm

The Corps Space Cell supports Military Operations in all related Space issues, providing timely information on Space Mission Areas to enhance the WFC capabilities. More specifically, it contributes to update the G3OPS Synchronization matrix, assesses upgrades of the Joint Prioritization Targeting List, and actively participates with CEMA to keep up to date with potential Electronic Warfare threats. It also provides Satellite activity and jammer locations coming directly from the NSpC. BDA is essential to avoid redundancy on the Space support requests dynamic cycle.

Main products in support of Operations during STLE21:

1. Meteorological / Oceanographic (METOC): Provide the Space Weather Forecast affecting WFC Operations, mainly solar storms, electromagnetic activities, sun flares, etc.
2. Positional Dilution of precision (PDOP): Depicts the weakest signal in order to optimize the PNT, Precision Guided Munitions (PGM) and troops tracking.

Space Weather G+163 31 MAR 2020

Space Weather Impact Awareness

INDICATORS	OBS 31 MAR	FCST 01 APR	FCST 02 APR
Kp =	4	4	4
Flare class >=	C	C	C
Proton flux >=	0	0	0
Sun spot #	1	1	1
X-Ray flux	10 ⁻⁷	10 ⁻⁷	10 ⁻⁷
10.7cm flux	68	68	68

R	IMPACT LIKELY
Y	IMPACT POSSIBLE
G	IMPACT UNLIKELY

Questions or feedback?
Please mail SPWX@mindef.nl or call +31 (0) 164 69 3144 or 3111.

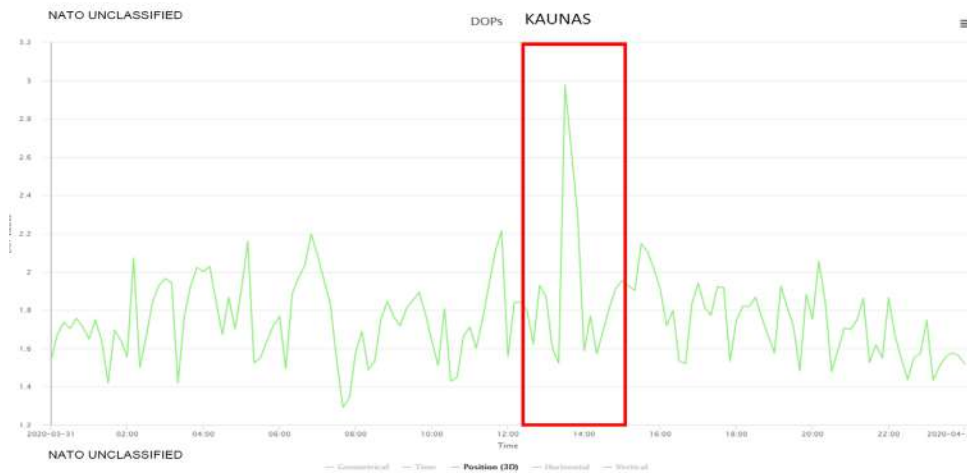
Issued at: 31 MAR 20 05:45UTC

	31 MAR			01 APR			02 APR		
	NIGHT	DAY	EVENING	NIGHT	DAY	EVENING	NIGHT	DAY	EVENING
GPS	G	Y	G	G	Y	G	G	G	G
TACSAT	G	Y	G	G	Y	G	G	G	G
HF	R	R	R	R	R	R	G	G	G
RADAR	G	Y	G	G	Y	G	G	G	G
VHF	R	Y	R	R	Y	R	G	G	G

	31 MAR			01 APR			02 APR		
	NIGHT	DAY	EVENING	NIGHT	DAY	EVENING	NIGHT	DAY	EVENING
GPS	G	Y	G	G	Y	G	G	G	G
TACSAT	G	Y	G	G	Y	G	G	G	G
HF	G	R	G	G	R	G	G	G	G
RADAR	G	Y	G	G	Y	G	G	G	G
VHF	G	Y	G	G	Y	G	G	G	G

	31 MAR			01 APR			02 APR		
	NIGHT	DAY	EVENING	NIGHT	DAY	EVENING	NIGHT	DAY	EVENING
GPS	Y	Y	Y	Y	Y	Y	Y	Y	Y
TACSAT	R	Y	R	R	Y	R	R	G	R
HF	G	R	G	G	R	G	G	G	G
RADAR	G	Y	G	G	Y	G	G	G	G
VHF	G	Y	G	G	Y	G	G	G	G

Space Weather Report



Weakest signal timeframe

3. Satellite Reconnaissance Advance Notification (SATRAN): Comprehensive understanding and sharing ENY ISR Space overflight capabilities on Joint Operating Area (JOA).

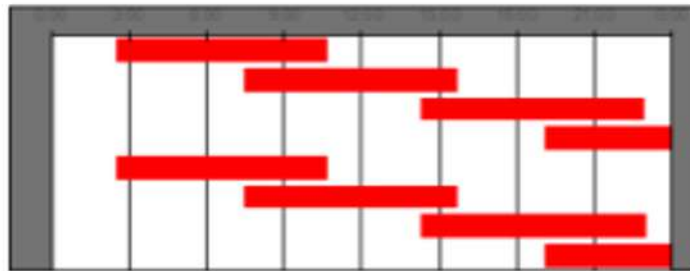
4. Jamming Modelling: Enemy electromagnetic emissions heat map, showing potential affected areas by jammers activity.

5-Flex Power: GPS Satellites usually transmit their signals with constant power. Flex Power increases the strength of individual signals to better fulfil operational constraints.

6-Tactical Optimization: Provide the highest possible GPS signal accuracy for limited area and short durations. Basically this is a modification of navigation data to reduce errors. Both Tactical Optimization and Flex Power should be requested early to assist in CPOE (Comprehensive Preparation of Environment) during the Operational Planning Process.

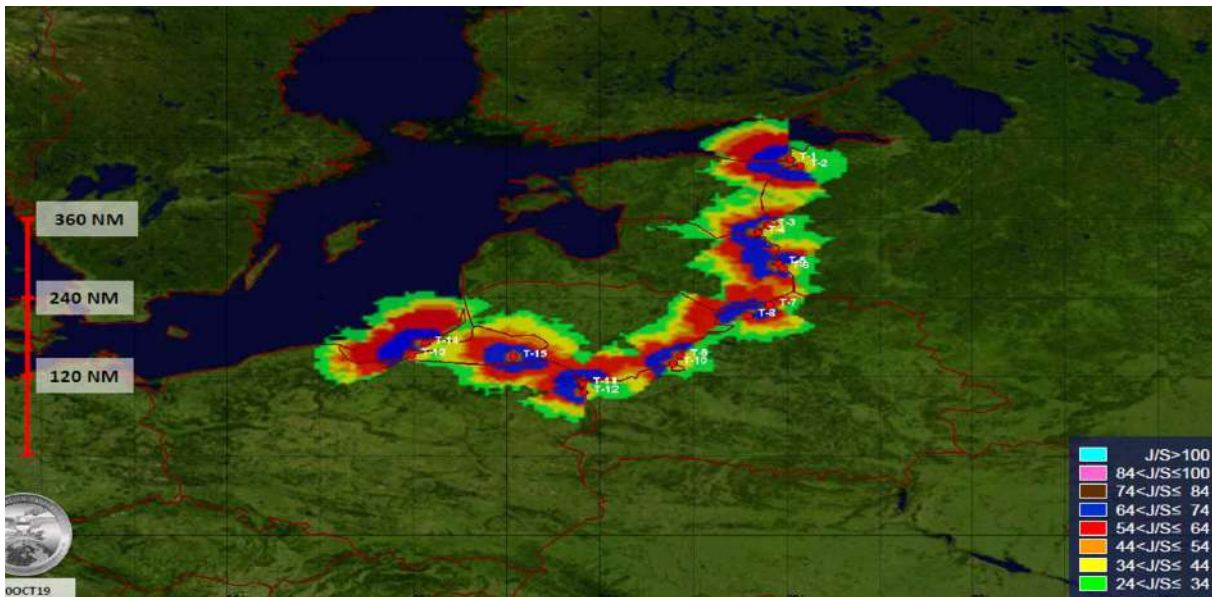
Apart from the above mentioned products, during STLE21 the Space support primary effort was focused on detecting, locating and transmitting ENY jammers activity and electromagnetic emissions, sharing data with OPSCEN G2 representative to timely take potential kinetic actions.

• **Space Situational Awareness**
Satellite Overflight Information



Name	Country	Base Area	Number	Sensor	Start Time (UTC)	Stop Time (UTC)	Duration (min)	Display Name
Edsib-3	RED	BALTICS-SE	42719	EW NA	11/14/19 2:28	11/14/19 10:40	8.12	Edsib-3EW NA
Edsib-2	RKD	BALTICS-SE	41032	EW NA	11/14/19 7:26	11/14/19 15:43	8.16	Edsib-2EW NA
Edsib-3	RED	BALTICS-SE	42719	EW NA	11/14/19 14:30	11/14/19 22:56	8.27	Edsib-3EW NA
Edsib-2	RKD	BALTICS-SE	41032	EW NA	11/14/19 19:06	11/15/19 0:00	4.53	Edsib-2EW NA
Edsib-3	RED	BALTICS-SW	42719	EW NA	11/14/19 2:30	11/14/19 10:39	8.08	Edsib-3EW NA
Edsib-2	RKD	BALTICS-SW	41032	EW NA	11/14/19 7:28	11/14/19 15:42	8.13	Edsib-2EW NA
Edsib-3	RED	BALTICS-SW	42719	EW NA	11/14/19 14:30	11/14/19 22:58	8.41	Edsib-3EW NA
Edsib-2	RKD	BALTICS-SW	41032	EW NA	11/14/19 19:04	11/15/19 0:00	4.55	Edsib-2EW NA

Satellite Advance Reconnaissance Notification Report



Affected areas depending on jammer altitude

Conclusion:

Since 2019, NATO has been stressing the importance of Space support in optimizing all NATO efforts to synchronize and coordinate the Space capabilities in order to achieve the desired effects across all domains:

- Facilitates the development and integration of Tactics, Techniques and Procedures (TTPs) necessary to conduct operations.
- Ensures NATO interoperability and coordination with Space-capable Nations' structures and organizations to reduce duplication of Space efforts.
- Allows NATO to utilize data, products, and services in order to provide timely Space support and improve effects with Space services.
- Improves the ability to connect and coordinate with scientific, research and technological capacity across the Alliance and through external entities.

NRDC-ESP laid the foundation stone of Space support during STLE21. The NATO effort stating Space as the “New Domain of confrontation,” ensures that the Commander understands how to get the maximum efficiency in combining the different domains to enhance the overall picture of the Battlefield.

The integration of Space capabilities into the joint planning and execution cycle of a NATO-led WFC HQ campaign, will become proactive engagement and education, prudent planning and execution that take the Space Domain into account through standardized, and effective processes which are critical to overall mission success.

The potential consequences of miscalculating the use of Space might result in an Operation with a limited Support of Space capabilities, a partial understanding of the COP, and also a potential diminishing of Operational effectiveness across all domains and finally to a degradation of Alliance Cohesion and credibility.



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Tactical assessment, a step forward

Major Renato Messina (ITA-A)
G5 PLANS HQ NRDC-ESP

During the execution phase of exercise Steadfast Leda 2021 (STLE21), NATO Rapid Deployable Corps (Spain) faced the challenge of preparing and executing the assessment at the tactical level. This major warfighting training event had been prepared with the proper study and training activities. However, the execution phase showed that even though we realized the relevance, we did not foresee what was needed to carry out the assessment at the tactical level.

Three significant obstacles hampered the smooth understanding and execution of the assessment.

The first one was the complete lack of NATO doctrinal reference for the implementation of assessment at the tactical level. This issue essentially meant that we started from scratch. This left some freedom for experimentation, but obviously set the conditions for some degree of failure during the execution.

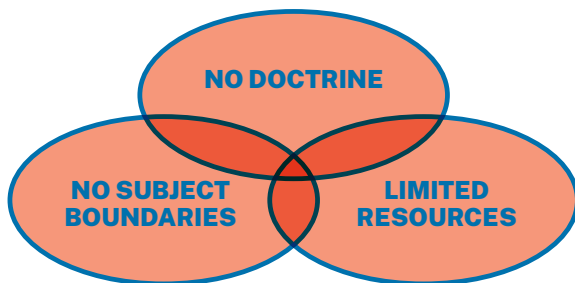
The second obstacle was the understanding of what “assessment” means at tactical level. By itself assessment is everyone’s duty, and the lack of a shared concept about the boundaries of Assessment Section (G5) tasks set the stage for a difficult path to define clear processes and responsibilities.

The third obstacle was actually addressing what we need and require for tactical assessment, while acknowledging resource limitations.

Given these “big three” issues, we actually have multiple observations and experiences thanks to STLE21 and now we retain the opportunity to build a useful, efficient, achievable and shared tactical assessment. The most important advantage is that now in our HQ, even those who are outside of the planning community have background experience in this subject.

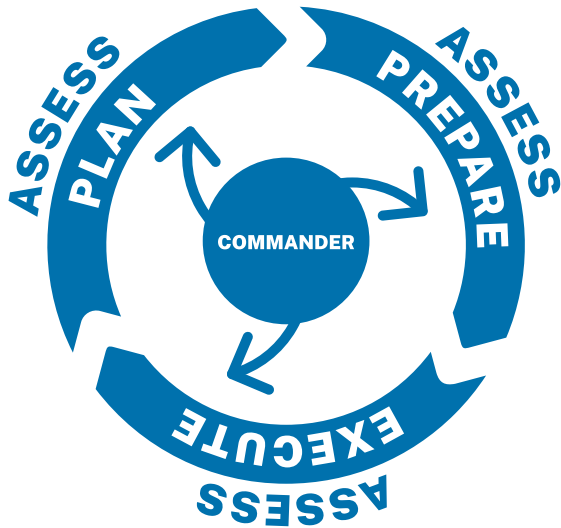
The first obstacle - the lack of doctrinal definition.

NATO Operations Assessment Handbook defines assessment as “activity that enables the measurement of progress and results of operations in a military context, and the subsequent development of conclusions and recommendations that support decision-making”. In order to build a tactical level assessment process it is reasonable to keep to the general meaning of that definition. Assessment at the tactical level should measure and report both the progress and results of the assigned mission and plan to a tactical commander, and also contribute to the assigned MOEs/MOPs (Measure of performance, Measure of effectiveness) data collection from the Higher HQ. The assumption behind this double tasking is that even the tactical commander needs his own plan to be assessed. That said, if we accept that tactical commanders need a structured assessment, then tactical assessment itself will be a whole HQ effort. We can propose a reasonable definition of tactical assessment as: “the activity at the tactical level that enables the identification of variances to the tactical plan, contributes to higher level assessment and provides the subsequent conclusions and recommendations that support own level Commander’s decision-making process”. This definition will allow both to run assessment for our own plan, and to contribute to the higher HQ’s assessment. The bottom line is that the tactical assessment core business should be the identification and monitoring of variances, and related information sharing, followed by



The “big three” tactical assessment obstacles.

recommendations. This is the reason why, as with all other activity in the Operations Process, tactical assessment should start in the long term planning and follow the usual path throughout mid-term refinement and current operations (CUOPS).

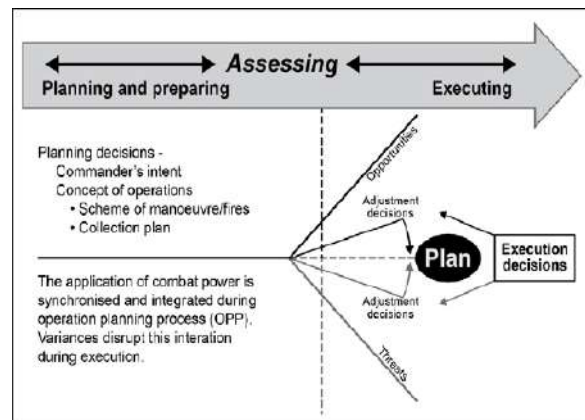


Operation Process as for ATP-3.2.2 Command and control of allied land forces.

At this point the question is: what can we actually measure to enable this proposed “variances monitoring activity”? STLE21 showed that one of the missing steps of our decision making process was the lack of a shared, recognized, and formalized variances identifying tool, process and acting body. Basically, it was not usually clear if and when we were facing a variance that required adjustment, if it was a positive or negative one, and who should act as the “variances discovering body”. The primary responsibility for this task is usually owned by current operations, but they cannot do it by themselves. Assessors in the long term planning horizon should create measuring tools (let’s temporarily call them “tactical conditions” in order to avoid using the MOP

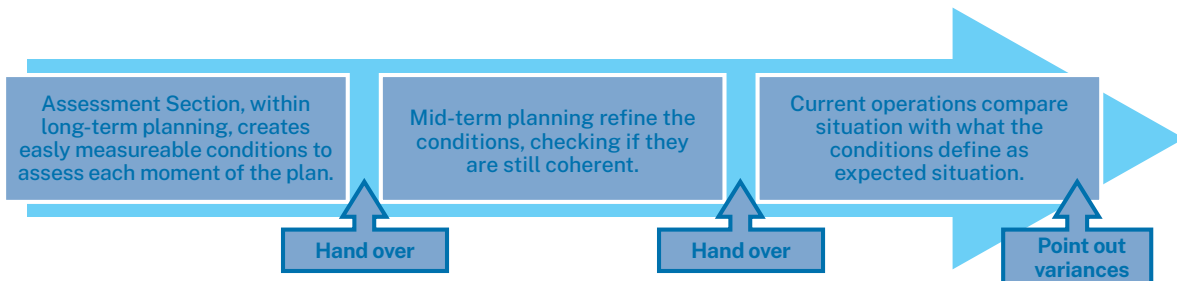
and MOE terms) in order to provide a quick “variances control checklist” for the current operations shop. These tactical conditions should be included in the plan and handed over to mid-term planners and finally to current operations, in accordance with the planning horizons. Mid-term planners can refine them and current operations should use them to point out variances as they emerge during the execution.

What is shown above is what theoretically should happen in order to set the conditions for current operations to easily identify and point out negative or positive variances to the plan. In reality this means that current operations should be given an easy and effective tool to enable the comparison of what was expected with what is happening on the ground.



Assessment continuous activity to enable adjustment decisions during execution (ATP-3.2.2).

There will be very little added workload to the current operations if this product has been made in advance by the planning team. So the first obstacle of the lack of doctrinal definition can be removed by agreeing that tactical assessment is a process to monitor the validity of the tactical plan, thanks to the



Tactical assessment and time horizons.

anticipated identification of conditions to be monitored and a continuous comparison with the current situation. As with all other planning products, tactical assessment conditions should be an integral part of the plan in order to be handed over from one planning horizon to the next.

The second obstacle - the lack of clear subject boundaries.

Once we have defined what tactical assessment is, we can agree what it is not. Tactical assessment cannot replace the Functional Area (FA)/Branch own specialized assessment and running estimate. Each FA/Branch still has to keep and be prepared to provide its own assessment about its own field of expertise. We reach the same conclusion when it comes to giving recommendations. The Assessment Section has to provide recommendations but, if we want the Assessment Section to be coherent with a specific planning horizon, recommendations should remain relevant with that time horizon. Each FA should be responsible for its own time horizons and be able to provide recommendations that come from its own assessment. The Assessment Section should be the starting point for the definition of tactical conditions to monitor the plan, but it is unable to perform the whole monitoring as in the Operational Level OPSA. Tactical operations tempo makes Assessment Section as part of G5 unfit to execute current operations assessment. Instead the Assessment Section should be ready to support mid-term and current operations shops to execute their own assessment about their own time horizon.

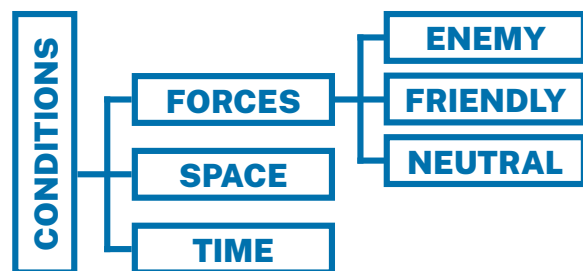
Exercise STLE21 also saw the Assessment Section responsible for the Decision Support Matrix (DSM). The experience clearly demonstrated that decision support tools cannot stay on the long term time horizon, but have to be kept on the mid/close time horizon. Each Decision Point should follow the same path as all other planning objects and be finally handed over to CUPLANS/OPS as part of the plan to be executed. In this framework the Assessment Section can effectively contribute to identification and creation of DP conditions (based on FFIRs and PIRs), but should not be the owner of the DSM. Moreover when it comes to drafting the Commander's options for a Decision Point, the Assessment Section actually plays as a COA development team, but without the support of the FAs. A Commander's option

in a Decision Point is a COA itself and it needs to be managed by the proper cross functional planning team in the proper time horizon of that given DP.

The key point is that the boundaries and responsibilities of the tactical assessment should correlate with the defined time horizons of the long/mid/short term planning and recommendations should always come from the proper Branch or FA.

The third obstacle - the lack of resources.

Once we have understood what tactical assessment in general should (and should not) be, we have to discuss whether it is feasible and achievable in the context of our HQ. Considering the experience of STLE21 we have to assume the permanent lack of dedicated assessment Officers in mid-term planning and current operations. This implies that whatever conditions the Assessment Section defines during the planning phase, they have to be few, simple, easily recognizable and relevant. During STLE21 one of the most used conditions was the force ratio between friendly and enemy forces. This is a really powerful tool to enable decision making, but the exercise made crystal clear that variances do not come only from the force ratio. Conditions have to be also time and space related (and maybe "information related" if required); if we are stuck with only the force ratio as the condition to be compared, current operations are not given a wide enough insight to compare the current situation with the one expected in the plan. Moreover force ratio cannot be an Assessment Section monopoly. Mid-term planning and current operations need to be able to run this kind of assessment autonomously; if manning issues make this impossible the Assessment Section could be called as technical support, but the final assessment and recommendation outcomes have to be the ones coming from the relevant FA/Branch.



General categories of conditions useful to assess a tactical plan.

FORCES	SPACE	TIME
<ul style="list-style-type: none"> Force ratios Availability of a capability/ weapon system Execution/not execution of defined action Logistics “hard” data conditions Change in task organization executed ... 	<ul style="list-style-type: none"> Infrastructures data conditions LLOCs availability status Weather conditions Expected location of assets ↕ 	<ul style="list-style-type: none"> Expected rate of advance Time based actions Time based phases change ↕

Examples of conditions that can enable the assessment of a tactical plan.

A pending issue: risk assessment.

Risk assessment at the Operational level is often kept within the Assessment teams. This setting can also be left unchanged at the tactical level as long as we agree risk assessment at the tactical level can actually support decision making, be feasible in terms of required time and resources and be focused on the tactical Commander’s risks. The Assessment team executed risk management during STLE21, but the predictive value provided was not significant and the changes in the likelihood/impact of the risks did not directly affect decision making. Here the discussion is probably mostly related to the proper identification of tactical risk of the tactical Commander. If we import the risks of the Higher HQ, the risk assessment at our level loses added value and even appeal for contribution from all the other FA/Branches.

Conclusions and recommendations.

The experience of STLE21 is a huge step forward in developing and understanding of tactical assessment. Now we know that assessment during a warfighting campaign in a Corps HQ should:

- Follow a similar general process than the Operational level OPSA, which begins in the long term planning and follows the path of the operations process refinement (CUPLANS/OPS).
- Stick to the planning horizons due to the high tempo of tactical operations in terms of responsibilities.
- Identify and create tactical conditions during planning that allow CUPLANS/OPS to timely point out emerging positive and/or negative variances to be addressed, without adding more workload.
- Be prepared to assist all FA/Branches and/or the Command Group about Force Ratio calculation and simulations, as well as assist them to assess anticipated tactical conditions.
- Be prepared to assist FA/Branches about Decision Point conditions drafting.
- Own the risk matrix with the contribution of FA/Branches.

This is an achievable and useful step forward for the assessment at the tactical level that could provide value to our decision-making process.



HQ NRDC-ESP Command Post.

“Prior to a conflict, U.S. forces must develop a plan on how to provide for the care and custody of detainees. While policymakers and planners need to focus on and closely monitor the size of the detainee population, and prepare to fund the needed expansions and resources. The Abu Ghraib prisoner abuse scandal is a powerful example of how detention operations are not merely the coincidental product of a conflict; they are a central part of shaping the ongoing counterinsurgency campaign and post-conflict outcomes with long-lasting operational and strategic effects.”

U. S. Army. Field Manual 3-63. Detainee Operations.

Captured persons (CPERS): a multidisciplinary endeavour

Lieutenant Colonel Domingo Augusto Rivera da Cunha (ESP-A)
G1 PERS HQ NRDC-ESP

Two years ago, when we were starting to prepare the certification of the NRDC-ESP HQ as NATO Warfighting Corps (WFC) HQ, we attended the Prisoners of War (POW) Symposium, organized and conducted by the Allied Rapid Reaction Corps (ARRC) HQ. This excellent event widened our eyes on focusing on a commonly performed function during exercises and operations, but changing the perspective from a peace-keeping operation into an Article-V one against a peer enemy. We are also grateful to this event because it provided a very good summary of the information written in the NATO doctrinal documents, and other information extracted from the UK national experience. All these data

were taken as the baseline for the planning and drafting of final orders, detailing the procedures and tasks to be carried out by the subordinate formations with an armed (or unarmed) person that opposes our units' movement forward in the battlefield within an Article-V operation. **We have to take into consideration the high number of CPERS expected in this kind of operation, and the increasing difficulties in their treatment and handling - very different from the non-Article V operations that we have been conducting for the last few decades.**

The term CPERS includes all the people taken into custody during the leading of military activities, but despite the different CPERS



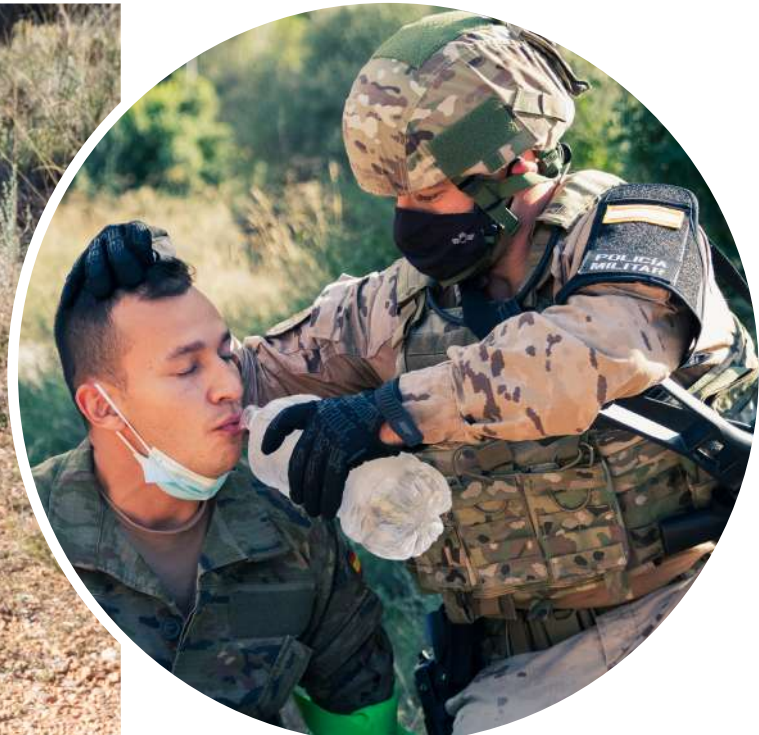
categories, for the purposes of this article, we are going to consider the activities to be performed with them at the Corps level.

The first question is: is this captured person to be considered a POW? At this point, the Legal Advisor (LEGAD) guidance is necessary due to the different treaty-based rules of International Humanitarian Law (IHL), Law of Armed Conflict (LOAC) and Customary International Law (CIL). For us, as WFC, the answer is that they are to be considered as POW when an Article-V Tribunal determines this status. But when and where will this convene? We don't know, so until this Tribunal's decision is taken, our subordinate formations must treat these persons as if they were POWs. What does this mean? This means that we have to treat them according to the 3rd Geneva Convention (1949) and its additional Protocols: to treat them humanely, provide them with shelter, medical attention, drinking water and food, and similar living conditions to our own forces.

CPERS training activities performed by Military Police units during exercise Ángel Guardián-21. (Guard, feed, search and filiation)

Who is responsible for the CPERS? The detaining power, the nation that deprives this person of liberty, and in a multinational Article-V operation each individual WFC Troop Contributing Nation (TCN). In the advisable case that one nation takes the lead in handling CPERS, the responsibility of the CPERS always remains on the capturing nation, but the custody can be transferred to the leading nation for the operation. At this point, we can foresee the need of another legal document agreed by the nations, regarding the standards to be provided for the CPERS care and custody, because what is acceptable for one country may not be for another one, despite both being partners of the same coalition, and fighting the very same enemy. Therefore, a Technical Agreement (TA) must be signed in advance by the TCNs detailing how to handle and treat the CPERS when in the chain of custody, the shared costs, and the role played and expected support to be received from the country that our WFC is deployed in, as Host Nation (HN).

At the Corps level, there should always be a unit dealing with CPERS — a CPERS Task Force (TF), of brigade/regiment size, one nation or multinational composition, self-sufficient in logistics, transportation and vertical construction engineers. This could be a Military Police unit or any other unit explicitly trained to do the



job, because the change of mindset of a combat unit takes time, and the negative effects of the CPERS mistreatment can not only lead to undesired political or legal implications, but can also affect the enemy's behaviour. **The adequate and humane treatment of the enemy CPERS must be used to form part of our coalition narrative towards the enemy soldiers**, and also to the citizens of the enemy countries. If we can prove that the enemy CPERS treatment from our coalition forces is going to be fair and good, it will be an additional point that could foster enemy individual desertions or units to surrender, decreasing their will to fight to the last soldier, and consequently reducing our own forces' casualties.

The CPERS TF main mission is to release the first line divisions/brigades from the burden of the CPERS facilitating their movement forward. The CPERS TF has to build or adapt, operate and maintain a CPERS Corps Holding Facility (CHF), where the Corps CPERS are to be kept prior to the detaining powers final transfer.



Sketch of a camp for 10.000 CPERS. 500 CPERS module design and estimated construction budget, proposed by the MILENG Branch in coordination with the Spanish Army Military Engineers Command.

The WFC subordinate units can transport and hand over their CPERS to the CPERS CHF using their own escorts and transportation means, but if the distance is too far or the number of captured exceeds their transportation capabilities, they can request the CPERS TF to do it. For this purpose, during the planning process, possible Exchange Points (XP) might be identified, where the CPERS TF will carry out all the necessary activities to take over the units' CPERS and to transport them back to the CPERS CHF along with the captured weapons, documents, personal belongings, and any other relevant material.

It is not difficult to understand that the activities depicted in the previous paragraphs must be planned in detail, far in advance of the Operations Order (OPORD) drafting. More than one year before the execution phase of the exercise Steadfast Leda-2021 (STLE21) in November 2021, the NRDC-ESP HQ set up a CPERS Working Group (WG) to develop a WFC Standard Operating Instruction (SOI) to deal with the CPERS, to determine and train the relevant procedures and activities in order to be ready to get the certification as WFC. The CPERS WG was led by G1 Branch (Personnel), which coordinates and maintains visibility on all CPERS related activities within the WFC HQ.

However, as it is cross functional in nature, there are some actions that have to be carried out by other HQ branches and elements: LEGAD must provide advice about the CPERS legal aspects and drafting the TCNs TA. G2-Intel provide estimates of the numbers of enemy captured and gathers intelligence and information from the tactical questioning and interrogation. The Provost Marshal issues guidance and procedures for treatment and handling. G3-Ops coordinate the battle space and set the locations for the CHF and XPs. G5-Plans must include the CPERS aspects into the overall planning process. The MILENG design and coordinate adequate temporary facilities to hold and custody CPERS. G4-Log must work out the CPERS logistic support, transportation means and the necessary movement bids for convoys. G-MED has to increase or adapt the medical facilities and resources. G8-Funds are required to take into consideration the expenditures and payments for additional facilities, their maintenance and other supplies and resources.

G9-CIMIC coordinate with different entities dealing with CPERS, not only for the enemy ones but also for the own forces' captured ones, mainly with the International Committee of the Red Cross (ICRC) which is the organization that has the responsibility to monitor that the CPERS health and treatment is adequate to the situation. Finally, G10 STRATCOM provide information to the media, which are nowadays the keystone in this connected world. We must prove that the treatment provided to the CPERS is appropriate and for taking advantage of this positive fact when introducing it in the WFC narrative, to fight and win the media battle.

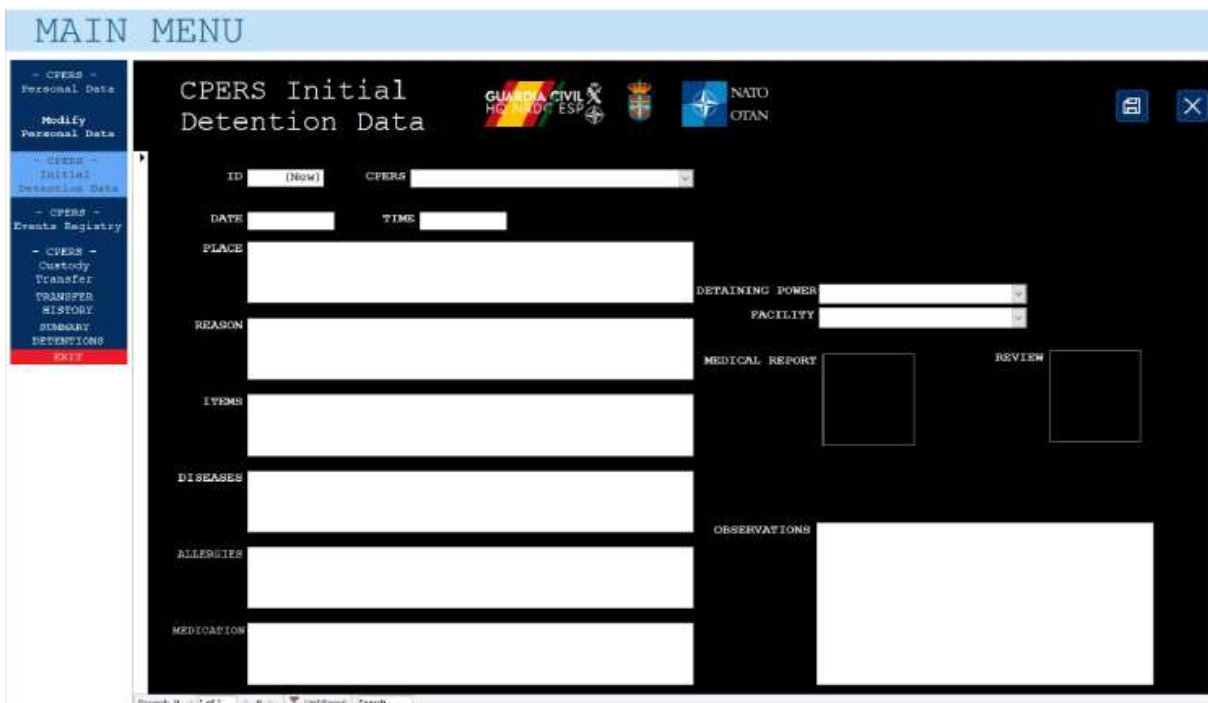
The CPERS responsibility lies with the detaining power, as previously stated, but **how can the WFC Commander (COM) know what is going on with the CPERS in detail? Using a CPERS database** agreed by all the TCNs with all the detention information uploaded: name, rank, unit, medical records, captured material, maps and documents. All the database information would be able to be analyzed at the same time from different command posts and locations, and some portion of it that may not be considered relevant by the WFC small units, might be considered very useful at corps level and above, and could also help to provide information for the ICRC and other organizations with CPERS responsibilities in near-real-time. Before the exercise STLE-21, experienced people in Microsoft Access

from the NRDC-ESP HQ worked on a CPERS database development, but it was not implemented for the exercise due to several factors, the most important being the lack of time to get the necessary training and coordination among the participating nations/entities.

The experience taken from the exercise STLE-21 preparation and evaluation, along with the internal discussions regarding CPERS, has led to the conclusion that we have to deepen the procedures to get rapid, coordinated and standardized solutions and train personnel in order to face, or at least to foresee and try to mitigate some of the negative effects of a direct confrontation against a non-NATO country in an Article-V operation.



CPERS database. Screenshots of the Log-in and Main pages. NRDC-ESP HQ Spanish Guardia Civil Platoon.



Logistic challenges and Lessons Learned throughout the WFC Training and Certification exercise

Lieutenant Colonel Víctor Rengel Ortega (ESP-A)
G4 LOG HQ NRDC-ESP

Lieutenant Colonel Erin Humelsine (USA-A)
G4 LOG HQ NRDC-ESP

One of the most important issues facing a Higher Headquarters (HHQ) of military units in combat operations is logistics. HQ NRDC-ESP's Warfighting Corps (WFC) logistic mission was to ensure its subordinate units had the required amount of supplies and materiel, at the desired location, and in a timely manner. In a NATO environment, logistics is a process that requires coordination and cooperation of both the higher and lower echelons, as well as adjacent units. NRDC-ESP G4 LOG Branch focused on how to navigate the logistic framework of a WFC HQ through the use of three Battle Staff Trainings (BST), planning conferences and seminars. The training focus of HQ NRDC-ESP was on how to provide their subordinate units the supplies and materiel needed to sustain the force, while simultaneously keeping the Multi Corps Land Component Command (MCLCC)¹, the HHQ for the WFC exercise, informed of all logistic issues.

Since 2018, NRDC-ESP has been in a constant state of high operational-tempo beginning with the train-up to be the Joint Task Force (JTF) HQ -on standby in 2020 -while simultaneously starting preparations to be a WFC HQ. In January 2022 NRDC-ESP became the NATO WFC HQ on standby, following successful completion of certification culminating on Exercise STEADFAST LEDA 21 (STLE21). The notable challenges that NRDC-ESP faced during the training for WFC included: synchronizing the working relationship with the MCLCC and building a sustainable WFC logistic plan in the context of gaps in NATO Logistic Doctrine, maintaining an open dialogue with multiple Troop Contributing Nations (TCN)

and logistic organizations, such as the Joint Logistic Support Group (JLSG) and National Support Elements (NSEs), and designing the NRDC-ESP WFC logistic process.

This article will focus on the logistic challenges encountered by the NRDC-ESP G4 LOG throughout its WFC training, and the lessons learned to shape future NATO WFC logistic processes.

The logistic challenges discussed in this article stem not only from Ex STLE21, but also the planning and preparation conducted prior to this certification. These issues are pertinent for any G4 LOG Branch acting within a WFC in the future. The focus here will be on issues identified during the exercise that have real world implications, rather than issues associated with exercise design.

Discussions during the preparation for Ex STLE21 covered the WFC relationship with the MCLCC (in this instance NRDC-GRC). In order to develop a clear and concise understanding of the logistic reporting requirements the dialogue, both formal and informal, between NRDC-ESP and NRDC-GRC was instrumental in defining the logistic requirements during BST II and III. The support received from the Allied Rapid reaction Corps (ARRC), was invaluable to understand and progress the lessons learned from their G4 LOG Branch (during their training and evaluation, and readiness as WFC HQ) in order to make further improvements in coordination with the MCLCC and to develop a clear understanding of reporting/flow procedures. It was during this period that the G4 LOG Branch refined the WFC Standard Operating Instructions. Extensive studying of the ARRC lessons learned, through reading and face to face mentoring, highlighted some

¹The primary role of the MCLCC is to provide command and control for Land Forces in a single Joint Area of Operations (C2 function that bridges tactical/operational levels) in the Major Joint Operation + scale operation.



G4 LOG Branch

major structural differences between the two HQs. For example, the ARRC made use of a Rear Area whereas HQ NRDC-ESP did not plan to structure for this. This posed a number of challenges, some of which were addressed during the BSTs and planning conferences, however further challenges that arose as a result of not having a Rear Area and could not be resolved during Ex STLE21, continue to be worked through following the NRDC-ESP lessons learned process.

Relationships are important; this is especially true within NATO. Under the NRDC-ESP WFC HQ, the main subordinate units/formations from TCNs included: Greece, Italy, Poland, Portugal, Spain and the United States. Each of these TCNs had an NSE attached. In a real-world scenario, the NSEs are the stewards of the TCN resources, as such each nation has a responsibility to ensure their individual nation's logistic needs are met first before supporting the collective good. This was not fully practiced during the exercise and as a potential friction point, this will require further testing when interacting with the NSEs of TCN. Whilst the process and procedures for engaging with NSEs were in place during the WFC exercise, the reporting relationship was distorted due to training support limitations. A key lesson identified, but not practiced is that in order to combat the above issue there must be prior coordination between the TCN and the WFC, this can include (but not limited to)

Technical Agreements (TA) or Memorandum of Understanding (MOU). Having these agreements in place prior to deployment will enable the TCNs to have a clear view of the processes to support requirements of the other TCNs and the procedures in place for this sharing to occur.

The JLSG is the logistic component of the JTF, which is responsible for conducting the deployment, sustainment and redeployment of the force. The JLSG provides the logistic support at Theatre level to the Components and Theatre Troops, by using organic means, contracting operations and Host Nation Support (HNS). Where resources are provided by the NSE the JLSG monitors the flow, supports on request and de-conflicts if required. The WFC HQ G4, working to the MCLCC, were able to maintain close communications with the JLSG to provide reliable logistic situational awareness in order to coordinate the logistic flow to the Combat Support Areas.

As previously stated, in 2020 HQ NRDC-ESP acted as the NATO's JTF HQ on standby. This is important because during the evaluation for JTF the G4 LOG Branch had direct coordination with the JLSG and so was familiar with the JLSG logistic flow of supplies and information. This prior knowledge proved invaluable to enable G4 LOG Branch's ability to ensure the correct information and logistic flow through the MCLCC during the WFC exercise.



STLE21 Exercise

In addition to the TCN and NSE, one of the relationships that NRDC-ESP cultivated during the WFC Exercise was with HNS stakeholders. Understanding of the role of the HN is imperative in logistic operations. NATO defines HNS support as civil and military assistance rendered in peace, crisis, and war by a HN to Allied forces and NATO organizations which are located on or in transit through the HN's territory.

The Movement and Transportation Section (M&T) is the logistic conduit for all aspects of movement due to having direct access to higher, lower and lateral units. The M&T usage of Logistics Functional Area Services (LOGFAS) is conduit to the overall logistic flow by the monitoring of convoys, the ability to de-conflict movements and the ability to redirect movement as the situation develops. For example, the information provided on the status of the Main Supply Routes (MSR) to all logistic partners enabled the MCLCC to have real time information which was instrumental for their holistic view of the logistic situation. The M&T contribution to the NRDC-ESP WFC exercise was fundamental to the success of the G4 LOG, and more widely to the OPSCEN and Battlespace Management Cell for planning and execution of movement along routes within the Corps AOR and wider. The employment of M&T specialists across the HQ is a positive lesson learned for the G4 LOG Branch.

During the preparation and planning phase HNS was a focal point for G4 LOG. The G4 Branch, in part based on lessons learned from the JTF HQ evaluation in 2019, implemented a distinct and separate sub-section of the LOG OPS Section to deal with the HNS issues. During the WFC exercise this decision proved

invaluable for overseeing the flow and movement of logistic supplies within the HN.

NATO has become increasingly reliant on the use of contractors for Logistic Support. This reliance had simplified our tasks for G4 Branch, even though they did not have direct contact with NATO Service Procurement Agency (NSPA). It became very clear that G4 LOG must understand the constraints and restraints of what the NSPA can support, and the relationship between the JLSG and the MCLCC, especially for future operations.

In conclusion, during the planning and preparation for the WFC exercise, G4 LOG Branch placed significant emphasis on building and developing relationships with all logistical players (MCLCC, JLSG, TCN and HN) involved in the logistic flow. The prior planning and attention to detail of the WFC logistic system enabled the NRDC-ESP G4's higher and subordinate units to have a clear and concise understanding of the reporting procedures and ways to request logistic support.

Following completion of Ex STLE21 NRDC-ESP G4 Branch conducted a thorough lessons learned deep dive to refine and streamline the WFC logistic flow process and to continue to define a well-developed logistic baseline for subordinate units.

Of course, every operational situation is different and there is not a "one size fits all", however the breadth and depth of preparation achieved by the HQ NRDC-ESP G4 LOG Branch will provide a firm baseline to inform future development. This HQ will continue to develop, share, and learn from the wider NATO Partner Logistic Community.

NRDC-ESP WFC LOGFAS Usage during STLE 21

Sergeant Major Sergio Rodríguez Álvarez (ESP-A)
G4 LOG HQ NRDC-ESP

1. INTRODUCTION

The Logistics Functional Area System (LOGFAS), was approved and implemented within NATO as the main logistics tool for planning multinational deployments and the execution, control and transfer of logistics information during NATO operations and exercises. LOGFAS was first introduced at NRDC-ESP in 2002, during the headquarters' Initial Operational Capability / Full Operational Capability.

Initially the Allied Deployment and Movement System (ADAMS) module was the main module used in Head Quarters (HQ), centralized in the G4 Movement and Transportation (M&T) Section giving the section the capability of making deployment calculations.

As the new LOGFAS modules were implemented, the usage of this tool was also expanded to other sections within G4 and other HQ branches: GMED, G1, MILENG and our former Rear Support Command (RSC). Currently, both the former RSC and G4 branches have fully implemented the use of these tools, due to the capabilities of this set of programs and the benefits that modules such as Coalition, Reception, Staging & Onward Movement (CORSOM) or Effective Visible Execution (EVE) can provide in terms of Reception, Staging and Onward Movement (RSOM) planning and movement control...

More recently, the Supply Planning Module (SPM) and Logistic Reporting (LOGREP) have been implemented within our HQ, becoming essential during all phases of our exercises, and giving the section the capability for Combat Days of Supply (CDOS) calculations and supplies accountability.

2. STLE 21 NRDC-ESP WFC CERTIFICATION - A NEW LOGISTIC CHALLENGE

2.1 - LOGFAS EDUCATION

Throughout 2021, the NRDC-ESP developed an intensive process of preparation for evaluation as a Warfighting Corps (WFC) HQ, which culminated with the STEADFAST LEDA 21 exercise (Nov/Dec 21). In addition to the usual planning processes and various preparation activities, three Battle Staff Training (BSTs) sessions were carried out. The use of LOGFAS was implemented both for the HQ positions that required it, and for the logistics representatives of the division or brigade level-Response Cells (RCs).

The LOGFAS education developed during this preparation period can be divided into two well-defined parts:

- Training of Peace Establishment personnel with LOGFAS responsibility. Two groups were formed, the first containing an expert from G4 who reinforced critical knowledge in some of the most demanding areas of LOGFAS. Two places were requested in the Supply Planning Module/Supply Distribution Module (SPM/SDM) course at the NATO Communication and Information Agency School in Oeiras (Portugal). A second group was the "newcomer group" for personnel to be taught by the Subject Matter Expert of M&T and Supply and Maintenance (S&M) of G4 Branch using an internal training calendar established to provide three training courses (three to four days each). The content of these courses was focused on the main LOGFAS modules that each Section would use during the execution phase of the exercise, mainly LOGFAS Data Manager (LDM), EVE and CORSOM, aligning the knowledge to be acquired with the tasks to be executed.



LOGFAS education

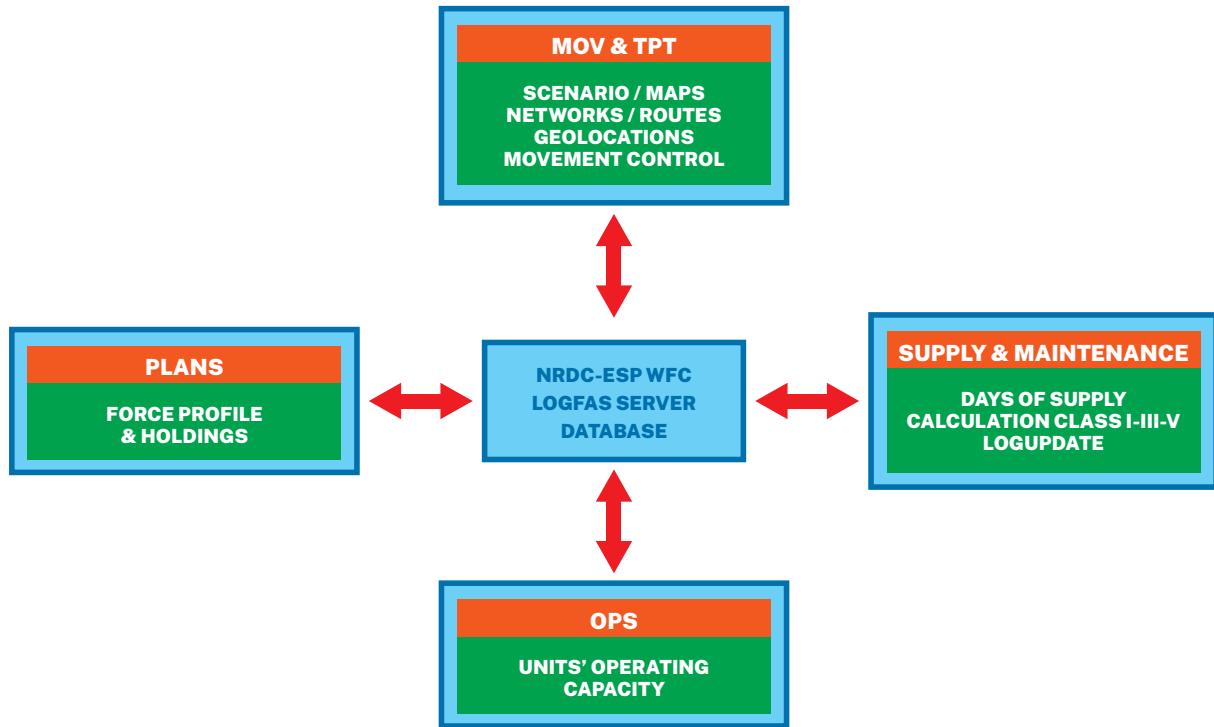
- The appropriate training of the RCs dependent on the WFC, such as the logistics representatives of the Main Subordinate Units, was addressed. This training was divided into two parts: the first during BST II, attended by the operators/analysts of the Units; and a second part later organized by G7 for all the “Communities of Interest” (COIs). The “Train the Trainers Course” was attended by the Units not present during BST II. Given the lack of LOGFAS knowledge of the personnel of several RCs, their preparation was adjusted exclusively to learning the tasks or reports to be carried out during the execution phase of the exercise, using the LDM module to carry out the LOGUPDATE and EVE-CORSOM for the

request of Movement Road Bids and control of convoys on the Main Supply Routes (MSR) of the WFC.

2.2 - DATA BASE PRODUCTION

The production of the database was directed by the “Overarching Manager LOGFAS” of the Joint Force Training Center (JFTC) in Bydgoszcz (Poland) with the guidelines and collaboration of the Multi Corps Land Component Command, NRDC-ESP and Allied Rapid Reaction Corps as main contributing actors. For our part (G4 LOG Branch NRDC-ESP), the following LOGFAS products were generated, which were later consolidated by the JFTC in what was the final database, ultimately loaded on the different servers.

WFC G4 LOGFAS STRUCTURE



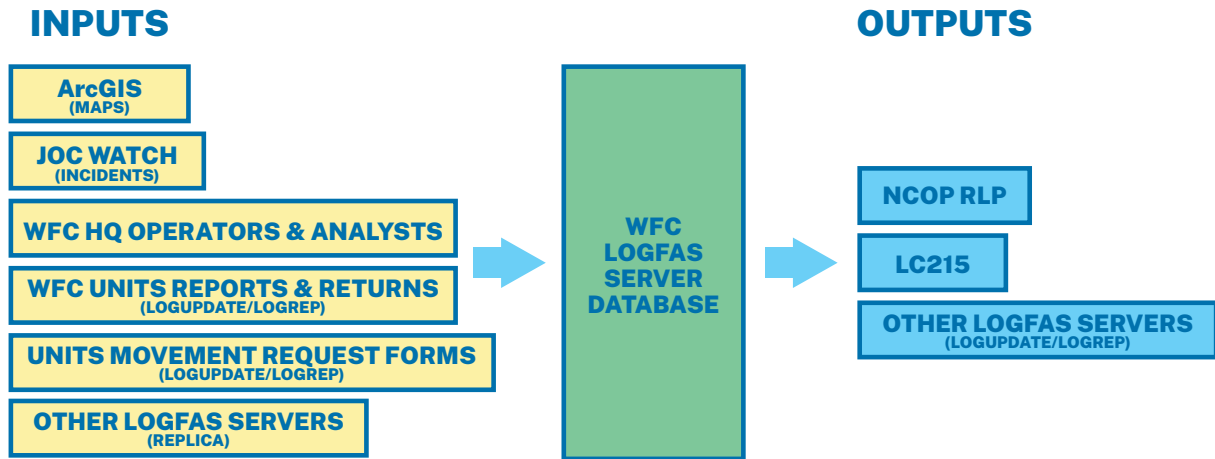
LOGFAS STRUCTURE

The LOGFAS education developed during this preparation period can be divided into two well-defined parts:

- Training of Peace Establishment personnel with LOGFAS responsibility.
- Force Profiles & Holdings (FP&H) of all the Units under the command of the NRDC-ESP, included in the Blue Book. The collaboration of the three Divisions - American, Polish and Italian Army - was needed, which sent their FP&H following the instructions of this HQ. Module used: LDM.
- Calculation and introduction, within the FP&H, of the CDOSs and Basic Load, ordered in the Operation Order (OPORD (classes I, III and V), duly arranged within their corresponding Logistics Units for easy control and location - modules used: LDM, SPM.
- Creation of more than sixty new Geolocations - visible in the GEOMAN/ CORSOM modules - giving visibility on the LOGFAS cartography about the situation of the logistics units dependent on the WFC, such as Corp / Division/Brigade Support Areas (CSAs, DSAs, BSAs), ammunition and refuelling centers etc. Module used: GEOMAN.
- Generation of the Main Supply Routes (MSRs) under the control of the Movement Coordination Center (NRDC-ESP G4 LOG), composed of three MSRs and ten Alternative Supply Routes. Module used: GEOMAN.
- Creation of a Flow Execution Plan, in which the daily supply convoys between the CSA 1 and the CSA 2 and the corresponding DSAs/BSAs were initially introduced for the STARTEX. Module used: EVE.
- Generation of the Reportable Item List based on the Mission Essential Equipment List of Annex R of the OPORD. Module used: LDM

2.3- LOGFAS ON THE GROUND

Continuing with the LOGFAS deployment process, prior to the start of the exercise, the Communication and Information System connection phase of the different systems and their verification took place in Marines (Valencia) and Araca Military Bases (Vitoria).



LOGFAS link with COIs

As far as LOGFAS is concerned, the correct operation of the database on the different servers and the operation of the replication system between them were successfully verified.

At this time LOGFAS was linked with other COIs such as the NATO Common Operational Picture by which logistical information is automatically contributed to the Recognized Logistic Picture (RLP). The connection was also established between LOGFAS and the map service (Geospatial Information System server) and with JOCWATCH application, being able to receive the incidents that the Battle Captain was uploading from the Operations Center directly in CORSOM.

The daily logistics products / reports made with LOGFAS were the following:

- Production of the LOGUPDATE by the RCs adjusting the quantities of materials, personnel, and supplies of classes I, III and V. (LDM NIC Centric).
- Loading of Road Movement Bids for convoys and their updating, as well as the control of movements by the MOC (EVE & CORSOM).
- Control of the state of the MSRs and the incidents that occurred in them. (CORSOM).
- Analysis of the operating status of the Units (LDM).
- Control of supply stocks classes I, III & V (LDM).

3. CONCLUSION

After almost a year of exhaustive preparation, it has become clear that the extensive use of computer programs (such as LOGFAS), as a means to plan and conduct operations, is viable within our Command and Control structures when they are firmly based on these three basic pillars:

Personnel

The necessary personnel must be available to cover the positions with LOGFAS responsibility, not only in the HQ, but also in the RCs at the Division or Independent Brigade level, where these positions are possibly more difficult to fill.

Education

At the HQ level, personnel must be trained and certified through the NATO courses taught at the NCIA Academy and/or National Logistics Academies, where appropriate. In addition and through the use of SMEs to the different sections of G4, there must be the capacity to instruct the subordinate units and provide them with the necessary tools for the use of the different LOGFAS modules, such as simplified user guides. The instruction must be focused on the products to be made, or web portal that contains all the necessary information for non-expert users.

Training

At the point where our staff have a sufficient level of LOGFAS knowledge, this knowledge must be put into practice by participation in internal exercises such as Functional Area Training or immersed in a full CPX exercise.

Tactical and strategic medical evacuation in a warfighting corps scenario

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Introduction

During the last year NRDC-ESP HQ was evaluated as a Warfighting Corps HQ (WFC HQ) and we had to demonstrate our readiness and capabilities for this role as a primary training audience in Exercise (EX) Steadfast Leda 21 (STLE21). Like the rest of the HQ Branches, GMED went through a NATO Combat Readiness Evaluation (CREVAL) which included 14 medical support criteria to be demonstrated.

In this article we want to share our experiences and lessons learned throughout all the phases of STLE21, highlighting the importance of HN Medical Evacuation (MEDEVAC) and Strategic Evacuation (STRATEVAC) that appeared to be fundamental to our mission success.

Operation and medical scenario

The operational mission assigned was to fight in a high intensity Article 5 scenario against a peer enemy, which demanded initiating an offensive movement that included river crossing actions under an intense and continuous struggle to push forward while the enemy air attacks and their long-range fire were falling among our troops.

During these actions our maneuver units suffered a high attrition rate at times, which resulted in massive casualties that overwhelmed the capacity of some Medical Treatment Facilities (MTFs) and tested the whole endurance of our medical structure.

The high rate of urgent Wounded in Action (WIA) patients needing Damage Control and Resuscitation Surgery forced the medical and surgical teams to be in a constant race against time to save lives. Seriously wounded casualties required long periods of recovery, and others were assessed not to be able to return to their duties. They were occupying ward and Intensive Care (ICU) beds with the consequent risk of overflowing the holding capacity of our MTFs. Less seriously injured patients were treated at the appropriate Corps MTF facilitating their return to duty in a reasonable time.

MC-LCC medical support

A method used to prevent MTFs from being overwhelmed was to transfer casualties rearwards, to upper level facilities such as MC-LCC, JLSG or JTF MTFs, normally in the logistic area. These Tactical Evacuations (TACEVAC) are the responsibility of Joint Theater Force (JTF) but in EX STLE21 they were performed directly by our upper echelon Multi Corps Land Component Command (MC-LCC).

As the number of casualties increased and the requests for evacuation to MC-LCC rose, they obtained the authorization to use HN military hospitals in the area, which provided a significant relief for our medical facilities and avoided an early Massive Casualty (MASCAL) situation. Due to the conditions of the scenario and the affordable distances to these facilities, all of these evacuations were performed by MC-LCC ground assets, once the patients were stabilized and prepared for transportation from the Casualty Staging Unit (CSU).

Host Nation (HN) support

As assessed during the planning phase, HN civilian medical resources were of a good standard and could be used under Memorandum of Understanding (MOU) or Technical Agreement (TA) prearranged conditions. Its support had to be requested through MC-LCC JMED who was responsible for its justified use. Nevertheless, during the EX STLE21 execution phase, the scenario stated that HN civilian medical facilities were primarily reserved to assure medical support to the local population, so at first we could not rely on these resources and were pushed to attempt other solutions.

A fortunate coincidence led us to establish a new procedure to increase the fluidity of MEDEVAC for an important number of our WFC troops because some units came from the HN. For example, we had a group of 400 WIA patients with a bad prognosis therefore it was decided to STRATEVAC them to their home nation, to HN civil hospitals.

After some early testing of procedures, we learned that it was easier to manage the transfer of patients by ground means to HN than to conduct a normal STRATEVAC by air transport out of the JOA. So, we could witness a case where Troop Contributing Nation (TCN) and HN are the same and STRATEVAC converges with TACEVAC.

Strategic medical evacuation

STRATEVAC is the action of transferring patients out of the JOA by any transport means but under adequate medical care. In NATO countries this is a national responsibility, although sometimes it can be fulfilled by multi-national agreements (which should be pre-arranged before the deployment¹). Therefore TCNs are responsible for evacuating their respective national patients from a MTF to their home countries, or other allied or safe country, where they can receive Role 4 medical treatment.

In recent military operations, mainly Non-article 5 operations, STRATEVAC was mainly executed by aeromedical means (national medicalized aircraft) with individual patients on a case by case basis because of the low number of casualties. But, our experience during EX STLE21, was that in a Warfighting Corps scenario bulk MEDEVAC assets such as fix wing cargo were essential to face the evacuation of groups of WIA.

The overall responsibility of planning STRATEVAC procedures lies at operational level Joint Forces Commands¹. JTF Medical Director (J-MEDDIR) is the authority to coordinate and decide how, when and where each STRATEVAC will be executed and also authorizes the casualties to be evacuated from the area of responsibility.

But as was experienced during EX STLE21, it was a shared responsibility between the WFC Commander (represented by his Medical Advisor- MEDAD) and the TCNs, because although nations were responsible for providing the assets (mainly fix wing planes) to conduct their own casualty evacuation, the diagnostics, surgery, and specialist care were expected in order to ensure the continuum of care and to prepare patients for the trip. Medical reporting and tracking of each patient fell under WFC MEDAD responsibility which increased the administrative burden for the medical cell.

As a multinational Corps, WFC-ESP GMED had to manage up to 5 STRATEVAC of patients from 5 different TCNs, approximately 1800 PAX who left the JOA, 1200 PAX to their home countries and 600 PAX to a temporary area outside the Theatre.

To carry out this massive movement of casualties we deployed an In-Transit Evacuation Facility (IEF) equipped with 300 beds in the hangars of the airport we used as departure point, as a reinforcement of the already deployed CSU. Practitioners, nurses, and medics from WFC Role 3 were detached to this facility to ensure the patients care, but this entailed an additional effort for these personnel.

Conclusions and LL

During the STLE21 execution phase, NRDC-ESP WFC units suffered high numbers of casualties that largely exceeded the estimates made during the planning phase. This resulted in a constant challenge for the whole medical structure to keep the medical facilities from being overwhelmed by MASCAL.

On reflection, we succeeded thanks to strong mutual support among all the WFC medical units, the support of the MC-LCC with HN military facilities and the number of STRATEVAC performed. All of these measures were crucial to clear our MTFs and so preserve our support capability as much as possible.

¹ AJP4.10 Allied Joint Doctrine for Medical Support. Edition C Version 1. September 2019.

But we want to stress that both HN support and STRATEVAC are very complex procedures, and they must be carefully planned and trained at Strategic and Operational Joint level in order to best prepare the tactical level Patient Evacuation Coordination Cells (PECCs) and WFC G-MED Branches.

Additionally, we would like to highlight that relying on HN transport platforms (e.g. national trains or private coaches), or on the national infrastructure (airports, train stations or seaports) to move these assets for MEDEVAC purposes, is a very complex procedure. Every capability must be detailed and agreed by the different HN and NATO stakeholders in advance so that they are ready to use once the operation starts.

On a different note, we found that there is a conceptual and doctrinal gap in planning and executing the medical support for Article 5 major operations. Current NATO medical support doctrine mainly focuses on the response to Non-Article 5 crises and, except for a few exceptions², does not adequately address the medical support in a Warfighting Corps scenario.

From our experience, we recommend a change to the NATO medical support mindset, as well as a reinforcement of our medical capabilities realistically adapted to the large number of casualties that are expected in an Article 5 major operation. Regarding medical treatment we need more and bigger field hospitals capabilities and regarding MEDEVAC, nations must develop bulk MEDEVAC capabilities such as cargo airplanes, boats, trains or coaches, all medicalized. All of them appeared to be essential to face the groups of WIA in EX STLE21.

² Patient Flow Management Guideline for Article 5 Operations. SACEUR. July 2019.



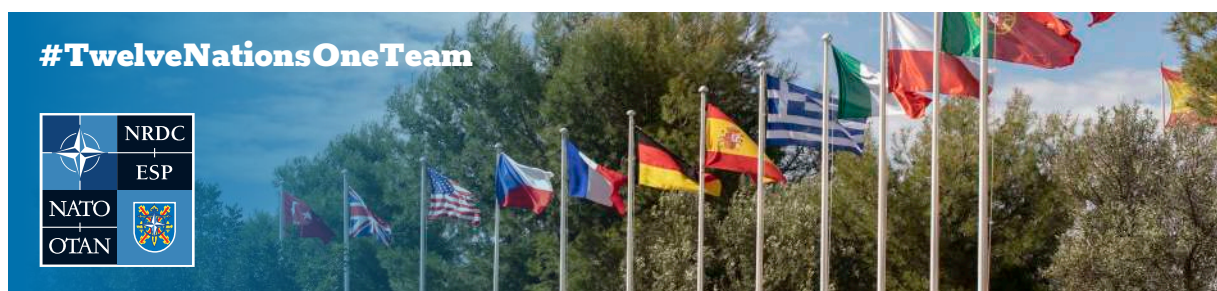
Role 3 hospital deployed.



Spanish AF Airbus A330 transport airplane.



Fix wing airplane STRATEVAC.



The cognitive battle in the warfighting corps

Lieutenant Colonel Antonio Álvarez Zamorano (ESP-A)
G10 STRATCOM HQ NRDC-ESP

Although the term warfighting implies that we are facing an armed conflict in which mainly high-intensity combat operations are carried out, we should not focus exclusively on physical force when we want to impose our will on the adversary or enemy. In fact, our objective will always be the achievement of effects that will contribute to the success of our mission. As we already know, we encompass these effects in three dimensions: physical, virtual and cognitive.

Effects on physical and virtual dimensions create perceptions in the cognitive dimension. The cognitive dimension focuses on influencing decision-making, which in turn changes behaviour in the physical and virtual dimensions. Looking deeper into the cognitive dimension, and referring to the InfoOps function, especially at tactical level, it can be said that InfoOps success is heavily dependent on the competence of individuals and the understanding of its application by commanders and their staff.

At the tactical level, the actions aimed at achieving cognitive effects will have two main targets: the enemy and the local population. The manoeuvre units of the Army Corps work on the ground and for this reason it is crucial to provide them with the capacity to reach the place where their action is effective, that is, they must be provided with “capillarity”. To understand this concept we can think of the circulatory system of the human body. Thanks to capillarity, blood reaches all the vital organs. That is exactly what we must achieve with the cognitive effects of Information Operations.

This capillarity of Information Operations in the cognitive field is achieved in several ways. One of them is a firm awareness of the codes marked in the presence, posture and profile by the components of the tactical

units, and which they have to comply with scrupulously and impeccably. In this way we are transmitting the message implicit in these PPPs through the lowest levels of these units to the most remote places in our area of operation from the first moment of our actions. The presence, posture and profile must be clearly and precisely defined in the OPORD so that there is no variation in our narrative from the political/strategic level to the lowest echelons of the tactical level, this is called the “golden thread”. It is essential that all Warfighting Corps personnel uphold the highest standards of personal and professional behaviour. Not complying with relevant standards and policies may undermine the effectiveness and credibility of our unit and the Alliance, the legitimacy of individuals, and risk the success of the mission.



Strict compliance with presence, posture and profile are key in the cognitive dimension since they are sending a message in and of themselves

In this type of scenario, two capabilities are especially important in order to get our narrative, messages and themes out there wherever possible, branching out as far as possible our ability to shape perceptions - these are PSYOPS and CIMIC. Both will actively contribute to undermining the morale of the enemy troops and preventing the appearance of unexpected enemies in the form of a hostile local population. The main way to achieve capillarity in these two

capabilities is the appropriate integration of the PSYOPS and CIMIC tactical teams in the tactical deployment of the Army Corps manoeuvre units. Normally, Divisions and Brigades will not have enough of these types of units organically to perform their intended tasks, so the higher echelon will add tactical teams to them. The type of dependency (TACOM/TACON) should not be a concern for the commander and therefore, depending on the type of operation being carried out, this dependency should somehow be standardised according to operational criteria.



Demonstrations by civilian personnel and hostile reactions from the local population can become unexpected problems that hinder the development of military operations and the units must be trained to solve them adequately.

Another useful tool at the disposal of commanders in the purely cognitive field is engagement. Traditionally, engagement has focused only on the key leader. While this remains important, recent operations have emphasized that engagement at all levels and all times can have a differential impact on behaviours, attitudes, and perceptions of audiences. Info Ops staff should be a key contributor to engagement planning if they do not own the headquarters process. Therefore, achieving the highest degree of efficiency with the engagements involves lowering the level of responsibility for these engagements and expanding the autonomy of the commanders, clearly reflecting this in the Engagements Delegation Matrix. This modification in the levels of responsibility for the engagements must consider the principles of opportunity and geographical convenience.

At the tactical level, the closeness between the commander and the manoeuvre elements, the speed of events, the rapidly changing situation and the need to anticipate future events through continuous planning, can cause the commander to focus primarily on the action of combat units, and not to take into account the cognitive aspects of war. That is why the commander, through his InfoOps staff, must be aware of the variations in the information environment and receive timely and accurate updates on this environment. As part of the behaviour-centric approach to operations, the continual assessment of audiences and the impact of activities, via the Information Environment Assessment, is a critical contribution to campaign assessment, to determine if objectives have been achieved. Therefore, the Information Environment must be considered as important as other factors such as enemy forces, terrain or weather.



The dissemination of information leaflets can be done in multiple ways. One of the most used, especially in hostile territory, is carried out with the use of different types of aircraft.



The CIMIC units play a very important role with regard to communication activities.

By modifying the attitude of target audiences, the same or better effects can be obtained than by using traditional force. For this, the cognitive battle at the tactical level will require a profound change in the approach of the preparation of the units and their leaders.

The Cognitive Battle through the Information Manoeuvre at tactical level

Winning the battle of perceptions is key in military operations. The military information power is the ability to impose our will and influence on an adversary through the use of information - producing, protecting, denying, altering or disseminating it - in order to produce a cognitive effect. Within the scope of information manoeuvre, tactical units must focus their actions on the enemy's decision-making systems, hence overwhelming and collapsing their ability to operate in the information environment.



The effectiveness of loudspeaker messages delivered by Psyops units has been proven numerous times. Distribution of information to the citizens of a locality, population control activities and operations against the enemy's morale are among the missions most frequently carried out by this type of unit.

Although initially it is not its key mission, combat units can also affect the information environment. Sophisticated information gathering systems are not infallible against confusion caused by the unexpected. Therefore, sudden and surprising actions such as demonstrations, feints, raids or seizing key terrain, can force the enemy to rethink decisions already made, retask units, overload its staff and cause confusion and cognitive dissonance in Commanders' situational awareness.

The desired cognitive effect on the enemy must be clearly identified. Otherwise, any effect on the information environment will be incidental and could be detrimental to us.

Cognitive effects can be achieved in all three operational frameworks in which operations are planned, conducted, and executed: Deep, Close, and Rear.

STEADFAST LEDA 21

To expose these effects in a more didactic way, we can review what was done in the recent exercise "STEADFAST LEDA 21".

Deep

In the case of deep operations, some civilian radio and television broadcasting antennas were included in the targets list. Physical actions against them contributed to disrupting the anti-NATO propaganda campaign carried out by the local government through national radio and television channels. Another deep operation carried out seeking cognitive effects was a potential Key Leader Engagement with the Commander of an enemy Army Corps, planned when certain vulnerabilities were detected in him.

Close

Regarding close operations, the cognitive effect was carried out mainly by presence, posture and profile.

Presence.

The passage through urban centres by tactical units and the use of civilian facilities was avoided as much as possible. This reinforced the message that the NATO units were not an occupying force and that their incursion into the country was not an invasion.

Posture.

The posture indicated was the behaviour of a unit in combat, but respecting the civil infrastructure and interacting as little as possible with the local population.

Profile.

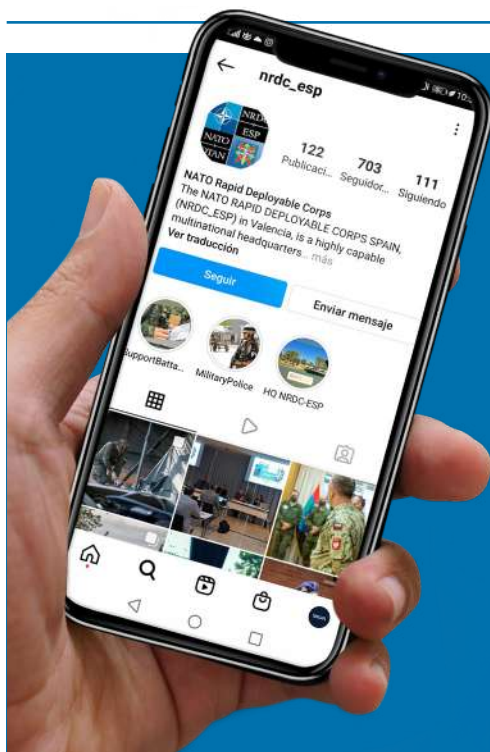
A certain proactivity was suggested on the part of the commanders, especially when it came to creating truthful information and reports to counter the large amount of fake news spread by the enemy. For this reason, the Commanders were encouraged to order their units to film enemy misconduct and similar incidents.

Rear

The cognitive actions carried out in the rear area were performed as the first-echelon units advanced. They were mainly based on spreading the narrative of the alliance and all its ramifications in the form of messages, arguments, and warnings through CIMIC and PSYOPS tactical teams. The main target audience was the local population, and the objective was the non-interference of civilians in the operations of our units. These information activities were aimed at preventing demonstrations and dissuading the civilian population from taking hostile action against our troops both for their safety

and for our freedom of action. The information campaign was called “Stay at Home”. This information campaign was complemented by KLEs with the mayors of the main cities and also with religious leaders. Although at first it might seem incongruous, great efforts were made to force an engagement with the mayor of the main city once the first echelons had passed through it. This engagement had two purposes. One of them was to transmit first-hand to the mayor the aforementioned aspects regarding the safety of citizens with the “Stay at Home” campaign. The other purpose was to document and disseminate this engagement in the media. The fact of publicizing the holding of a peaceful meeting with the mayor of one of the country’s cities would help to reinforce the alliance’s message that NATO units were not an occupying force and that there were no civilian targets in that territory for NATO units.

As a main conclusion, we can affirm that the cognitive battle at the tactical level is not going to win the war by itself, but it will contribute to preventing the enemy from winning it. The activities in the cognitive dimension carried out by the Warfighting Corps will contribute to achieving the operational objectives of the higher level, thus carrying out an effective information manoeuvre.



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Ms. Elvira García de Torres holds a PhD in Information Sciences by Universidad Complutense de Madrid and has more than 30 years of teaching experience in graduate and post-graduate courses in the field of information and communication. She has published over sixty scientific publications and has participated in the major national and international Conferences in the field of Journalism and Communication such as the International Community Association, The Future of Journalism, and the European Sociological Association.

She has directed 11 doctoral theses - two of them with Doctoral Award - as well as leading four national R&D projects related to digital information and social media with public funding by the Spanish Ministry of Science. In 2021 she was elected Chair of the Ethics of Society and Ethics of Communication Working Group of the International Association for Media Communication Research, where she had served as Vice-Chair since 2015. She also has ample experience as a reviewer of conference and journal papers as well as research projects for national and international journals and agencies, including the European Commission.

She was a visiting fellow at the University of Minnesota, the University of Texas at Austin, City University of London and Université du Québec à Montréal (UQAM). Since 2020, she has been writing a weekly opinion article in Las Provincias newspaper, a local newspaper, and part of Vocento Group.

She is also part of the NRDC-ESP team, having participated on several occasions as a social media advisor working in the Military Public Affairs office.

Ms. García de Torres is very knowledgeable about working in a multinational environment, specifically in NATO military operations. During the Trident Jaguar 2014 exercise, she first participated with HQ NRDC-ESP in promoting the use of social media in operations. Subsequently she has participated with this HQ in numerous seminars and working groups. Her latest involvement was during the Steadfast Leda 2021 exercise as part of the Military Public Affairs team, being a great support to the military personnel involved.

She is a magnificent professional with great experience in the social media arena, and her contribution to the training of this HQ is very valuable.

Ms. Elvira García de Torres

PROFESSOR UNIV. CEU-CARDENAL HERRERA

During the STEADFAST LEDA 21 exercise, HQ NRDC-ESP demonstrated its capability to integrate social media (SoMe) in each of the phases as part of the communication strategy - a critical element today in current operations, due to its impact on public opinion and ability to influence the way citizens think and act, both inside and outside the area of operations. In 2014, as part of the TRIDENT JAGUAR 14 exercise, social media was integrated into a training exercise for the first time. NRDC-ESP's current level of response on social media is a consequence of its commitment to continuous training.

STEADFAST LEDA 21 tested advanced capabilities, in accordance with the level of development of the social environment and modern disinformation techniques. Specifically, this exercise, which took place in Vitoria, validated the rapid response protocols for social networks, the knowledge of the operating logic of conventional and new media, their integration, the battle of narratives at the tactical level, the anticipation and detection of threats at the communicational level and, especially, the management of disinformation and fake news. The exercise served to verify the optimal level of Military Public Affairs for communicating in networks in accordance with the strategy generated by StratCom in the framework of operational security (OPSEC).

Population displacements, motivated by inaccurate or false information as part of discredit campaigns, can jeopardize or delay military objectives. Protection of the civilian population can be enhanced by timely distribution of messages tailored to socio-demographic profiles, including influencers. Every question and every message that could potentially disrupt or damage the image of the operation can receive a timely and immediate response. Lessons learned in the framework of modern warfare, highlight the importance of having adequate capability and resources to deliver key messages effectively through social media, identifying critical elements of the narrative and responding in a safe, rapid, coordinated, and reliable manner in a "warp speed" environment.

A clear example is the current conflict in Ukraine following Russia's invasion on February 24, 2022. It is a naked war, without walls, in which social media plays a crucial role in the battle of narratives and intelligence. It is, at the same time, the latest in a long chain of milestones in the era of social media wars. User-generated content (UGC) is increasingly influential in operations, but in addition, the use of social networks with the aim of destabilizing through disinformation has been a constant in recent years.



www.ukrainefacts.org

The first social or 2.0 wars were fought at the beginning of the century, matching the rise of war blogs¹ and military blogs. At the time, due to leaks, a damage control strategy was applied with the main objective of maximizing the security of operations. In 2003, during the Iraq war, a young architect and interpreter achieved great notoriety. Under the pseudonym Salam Pax, the “most famous blogger in the world” wrote from Baghdad: “Last night the bombs hit one big communication node in Baghdad”. Twenty years later, hundreds of similar messages, in real time, populate the social networks.

The experience achieved during the military blogging phase is important because it alerts armies to the effects of the 2.0 revolution. These are particularly noticeable in the second decade of the 21st century, since Twitter and Facebook became established: any citizen with a mobile device becomes a potential sender and receiver 24/7. The rise of social networks, mobile communications, internet access and WIFI connections is accelerating this transformation. OPSEC related to network access by troops remains a concern, but a new opportunity for communication

¹ Wall M. (2005). 'Blogs of war': Weblogs as news. *Journalism* 6 (2): 153-172

and intelligence is perceived. As an open and synchronous source, networks allow instant feedback on effectiveness and the situation on enemy ground. In Ukraine, local authorities are urging caution: messages from citizens and reporters about missile strikes allow the Russian military to redirect launches. The conversations of Russian troops on the ground are being intercepted by radio amateurs and posted on social networks; the specialized blog Oryx provides a detailed account of weapons losses almost in near real time², based on photographs and videos.



Twitter: [@partizan_oleg](https://twitter.com/partizan_oleg)

The opportunity also lies in the capability to take the pulse of public opinion and communicate without filter: the media influence the agenda, but have no veto power. Three aspects are of interest: reception (users), message production (narrative) and interpretation (analysis).

The legal framework and network access control determine reception. Russia shuts down or limits social networks as the invasion progresses to protect the official narrative; there is even talk of the possibility of total disconnection. Technological capabilities, such as access to the Internet signal (Elon Musk's Starlink satellite makes it possible to broadcast images of the resistance on a regular basis) and, ultimately, the positioning of the technological platforms, have an impact. For example, Facebook allows messages inciting violence against Russian invaders, and Twitter and TikTok label official Russian media messages as propaganda, limiting their impact.

² Jones, S., Rathbone, J.P. & Sevastopulo, D. A serious failure: scale of Russia's military blunders becomes clear. *Financial Times*. March 12, 2022.



www.dw.com

As a publishing platform, social networks constitute a digital army corps with which to win the battle of facts and capture the heart of public opinion. It is combative communication in all cases, by definition, but strategically each channel has a function, a style and even limits. Timelines and accuracy are necessary to maintain credibility³; only then does official information shine in the ocean of data, propaganda, and misinformation. Pure propaganda-oriented accounts including TikTok, the teen network, are the battleground of activists, trolls, and psy-ops⁴. On Telegram, one of the key channels in the information war in Ukraine⁵, images of Russian soldiers wounded (WIA) or killed in action (KIA) are shown to demoralize families.



2:48 a. m. · 11 abr. 2022 · Twitter for Android

Twitter: @partizan_oleg

Social Media allows both the institution's narrative and the operation to be communicated effectively at every stage: its *raison d'être*; its bases of legitimacy; unity; power; the expected ending. Russia's attempts to anchor the start of the operation in Ukraine in the Second World War have been completely ineffective in the first month of operations, overtaken by the very active pro-Ukrainian victimhood⁶ narrative: some content elaborated with initial disinformation techniques gives way to a flood of real images of personal and material damage that are difficult to counter. The role of "saviour" promoted by Putin does not resonate with international public opinion; he is more convincing in the role of "villain"⁷.

Knowledge and experience of media, proactivity, coordination, the army of "earned" users (supporters), the presence of professional photojournalists and viral incontestable images – such as the pregnant women portraying desolation in Mariupol – explain the success of the Ukrainian narrative in Social Media. In web 2.0 it is not possible to direct the flow of messages; it is the user who follows, who shares and sets the agenda.



www.apnews.com

Through visual and textual semantic codes specific to each SoMe platform, the communication strategy is revealed. The level of intensity determines the content and frequency of the messages: appearances (press statements, press conferences), data (armaments, casualties, and courses), movements (patrols, visits, mobilization) or explosions (skirmish, bombing). Hashtags are used to describe, interpret and express opinions:

#RussiaUkraine, #UkraineUnderAttack, #StopRussianAgression.

³ ACO/ACT Public Affairs Handbook 2020.

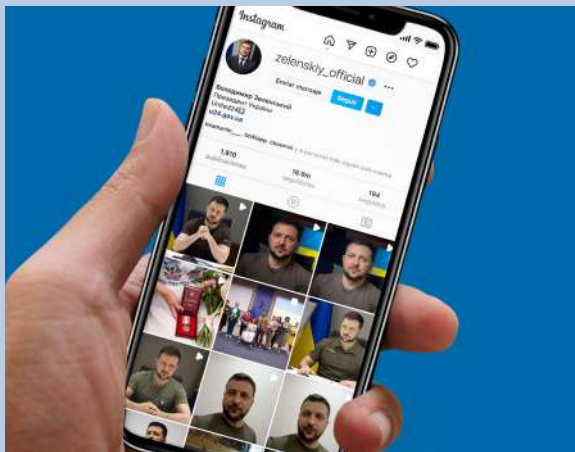
⁴ Tracking Exposed Special Report: TikTok content restriction in Russia. March 15, 2022.

⁵ Bergengruen, V. How Telegram Became the Digital Battlefield in the Russia-Ukraine War. Time. March 21, 2022.

⁶ Ehrmann, M. & Millar, G. (2011) The Power of Narratives in Conflict and Peace: The Case of Contemporary Iraq, Civil Wars, 23:4, 588-611.

⁷ Propp, V. Morfología del cuento, AKAL, 1998.

The semiotics of the image is fundamental and operates by connotation. A Ukrainian tractor pulling an abandoned tank. The image, of great visual strength, connects with the universal myth of “David against Goliath” and conveys bravery to some and ineffectiveness to others. Even the framing communicates: Zelenski’s selfie mode shot equals the sender and the receiver. Zelenski’s “appearances” on Instagram have reached millions of views and likes and are already part of the imaginary of the war and of the European collective memory.



Instagram: [@zelenskiy_official](#)

The other side of the coin is the disinformation wars, although the proliferation of fact-checking organizations has generated a very effective machinery for debunking. According to the Duke Reporters’ Lab, there are 353 active fact-checking organizations around the world. During the Ukrainian war, Ukrainefacts.org fact-checked more than 1000 pieces of content in the first month of the invasion. In terms of types of disinformation, the most common is out-of-context visual or audio content, which is very easy to create and detect: audio, images from films and video games, or old photographs that are presented as current. One of the most viral hoaxes is the “ghost of Kiev” video showing a legendary Ukrainian pilot in action. Spread on Tik-Tok, with hundreds of thousands of views, it is actually made up of images from a video game.

Russia has responded to the failure of its narrative by systematically using the ‘fake fact-check’ technique of denying the truth



Tiktok: [@ukraine_ghostofkiev](#)

and creating confusion⁸. The best-known case is the attempt to discredit the victims of the Mariupol maternity hospital attack with images from an Instagram account of a model who looks strikingly similar to one of them. Similarly, videos of environmentalist performances have been used to deny the existence of mass graves. The more sophisticated deepfake technique has been used to attack the morale of the Ukrainian population. In a video manipulated with this technique, Zelenski encourages the Ukrainian population to surrender. It was broadcast on hacked Ukrainian television and distributed on social media.

We live in the information society. The transformative capacity of training has been key to the evolution of NRDC-ESP’s communication capabilities thus far. Social Media is, in short, the fastest and most extensive communication network on earth, either through direct reach or through the feedback loop with conventional media. For all these reasons, training in Alliance simulation environments is essential to ensure that social media plays to the strategy and contributes to the success of operations now and in the future.

⁸ Strauss, V. Russia’s fake ‘fact-checking’ Ukraine videos and other news literacy lessons. *The Washington Post*. March 17, 2022.

Cluster munitions in allied operations

Lieutenant Pablo Xaixo Peyro (ESP-A)
LEGAD HQ NRDC-ESP

The attribution of the role of warfighting corps has provided the NRDC-ESP with an unbeatable opportunity to demonstrate to our allies the capacity, commitment, dedication, and technical knowledge of NATO doctrine of all its members. Obviously, it has also been a great challenge for the HQ. The preparation and training required in order to obtain the certification as a WFG Corps has caused controversies that have arisen due to legal implications related to the development and conduction of operations. These disputes have been resolved through cooperation and coordination between the Legal Offices of the NRDC-ESP, LANDCOM, ARRC and SHAPE. Nevertheless, in the legal universe it is rare to find an absolute truth and therefore it is necessary to resort to the study and investigation of these controversies with the ultimate goal of achieving excellence in the legal advice that NATO requires. One of the



questions that has required our study has been that related to the criminal responsibility of the Commander for the acts committed by his subordinates. Obviously, that issue is fully worked out. The problem appears when a Spanish Commander, therefore subject to the internal laws of his country (and the prohibitions that derive from them), assumes command over international troops whose internal regulations do not provide for such prohibitions.

The scenario is as follows: Spain is a signatory member of the Rome Statute as well as of the Convention to ban the USE, PRODUCTION AND STORAGE of cluster munitions, signed in Oslo in 2008, while other States are not party of this convention. If a contingent that includes units from a non-signatory State of these conventions is led by a Spanish Commander, is it possible to use cluster munitions, and, above all, what would be the responsibility of the Spanish Commander? Let's work it out. The Statute of the International Criminal Court establishes in its article 8, section b) that the following are war crimes: *“Other serious violations of the laws and customs applicable in international armed conflict, within the established framework of international law, namely, any of the following acts: Employing weapons, projectiles and material and methods of warfare which are of a nature to cause superfluous injury or unnecessary suffering or which are inherently indiscriminate in violation of the international law of armed conflict, provided that such weapons, projectiles and material and methods of warfare are the subject of a comprehensive prohibition and are included in an annex to this Statute, by an amendment in accordance with the relevant provisions set forth in articles 121 and 123”*.

The mentioned precept must be related, for the purposes of this study, with article 28 of the same document regarding the “Responsibility of managers and other superiors.” This provides that the military chief shall be fully responsible for the crimes within the jurisdiction of the court that have been committed by the forces under his command and effective control, when it was known or should have been known that the forces were committing or about to commit those crimes and had not adopted all the necessary measures to prevent or penalise their commission. In the same way, it is stated in Additional Protocol I to the Geneva Conventions, articles 86 and 87 that the violation of the Conventions or the Protocol by subordinates does

not exclude the criminal or disciplinary responsibility of their superiors. In addition, it recognizes the duty of managers to know if their subordinates or others under their authority are going to commit or have committed a violation of the agreement or protocol.

The recognition of the responsibility of the military chief with respect to the acts of his subordinates is nothing new. Since the times of King Charles VII of France we find references to it: In 1439, King Charles VII of France issued an ordinance identifying the failure of a commander to discipline a subordinate as a basis for the punishment of the commander:

“The King orders each captain or lieutenant to be held responsible for the abuses, ills, and offenses committed by members of his Company, and that as soon as he receives any complaint... he bring the offender to justice... If he fails to do so or cover up the misdeed... the captain shall be deemed responsible for the offense, as if he had committed it himself and shall be punished in the same way as the offender would have been.”

The use of cluster bombs constitutes war crime as they are weapons banned by Customary International Law and their subsequent express prohibition through the Oslo Convention, although it only prohibits them for the signatory countries of that Convention.

In spite of this last issue, in June 2007 the former president of the Serbian Republic Krajina, Milan Martić was convicted of war crimes for several actions (including the use of cluster munitions against the city of Zagreb in 1995) although he was not convicted by the International Criminal Court (ICC) but by the International Criminal Tribunal for the former Yugoslavia (ICTY). Since the Republic of Krajina was neither an internationally recognized State nor a Signatory State to the treaty (the convention did not exist at the moment of the conflict) but its military leaders were responsible for war crimes for the use of cluster munitions, these convictions are necessarily based on the principle of prohibition of cluster munition by Customary International Law even when this is quite debatable and that theory rarely would be developed by the ICC (unlike the ICTY). Remember that in this text we are only analyzing the possibility of punishment for the commission

of a war crime consisting in the USE of cluster munition, without taking into account the results produced by these weapons .

We must start from the principle that it is the duty of every State to exercise its criminal jurisdiction against its nationals responsible for international crimes; so the International Criminal Court will only hear the facts when the State of the person responsible “cannot or does not want” to know the facts. The jurisdiction of the Court is therefore subsidiary to the State’s jurisdiction. This principle directs our study towards the Spanish legal system, which provides in article 610 of the Criminal Code that: “Anyone who, in the course of an armed conflict, employs or orders the use of methods or means of combat which are prohibited or intended to cause unnecessary suffering or superfluous evil, as well as those designed to cause or which can essentially be expected to cause extensive, lasting and serious damage to the natural environment, compromising the health or survival of the population, or ordering not to give quarter, shall be punished with imprisonment of 10 to 15 years, without prejudice to the penalty that corresponds to the results produced.”

And it’s article 610 that provides that: “*Anyone who, in an armed conflict, performs or orders the performance of acts contrary to the prescriptions of international treaties to which Spain is a party... shall be punished with imprisonment of 6 months to 2 years.*”

The regulations studied so far lead us to understand that, in the event of the factual assumption raised in this study (that is the use of cluster munitions in a joint operation led by a Spanish Commander), it is probable that actions aimed to determine the incurred liability would be initiated. All this without prejudice to the fact that, in the opinion of the undersigned author, there are solid ways of legal defense that would allow, in order to remove the responsibility of this military chief, but that is not a matter to analyze in this text.

To conclude, we would like to summarise the way in which the nationals of each State should respond to the use of cluster munitions. To do this, we will establish 3 groups: States that have signed the Rome Statute as well as the



HQ NRDC-ESP Command Post during Steadfast Leda 2021 exercise.

Convention on the Prohibition of Cluster Munitions (Oslo Convention), States that have exclusively signed the Rome Statute, and finally the States that have not signed any of the 2 texts.

1. Signatory States Rome Statute and Oslo Convention: This is the case of Spain, in this case the responsibility to investigate lies in the first place with the Nation State. In the case where it does not want to or cannot, the Criminal Court would start an investigation. In principle, we are facing a war crime that consist of the simple use of cluster munitions, since for these States it is expressly prohibited by an International Convention.

2. Signatory States only of the Rome Statute: the simple use of cluster munitions may be a war crime, but only if the ICC assume the thesis that cluster munitions are prohibited by Customary International Law (uses and customs of the war).

3. States not signatories of any text: There will only be a war crime if it is provided for in its internal legislation. It is possible that ad hoc tribunals will be created, as in the case of the former Yugoslavia, and if necessary, the thesis that cluster munitions are prohibited by customary international law would be accepted in order to punish.

Exercise STLE21 - Spain, Nov18-Dec03

Mr. Ignacio CORTIÑAS (A5)
POLAD HQ NRDC-ESP

Introduction

POLADs are, generally, in charge of keeping the door for liaising with and within political and diplomatic areas permanently open. (IOs, NATO POL and DIP bodies, Nations). In particular, COM NRDC-ESP directed POLAD to pay attention to the conduct of the operation, permanently during the exercise, so as “not to derail” from NAC Desired End-State, and not to jeopardize the Political CoG, safeguarding the accomplishment of the mission. (All of course, from a POL perspective).

One of the most significant changes in NATO 21st Century oriented Posture is the deeper coordination of all IoP (Instruments of Power) to attain the NATO Desired End-State. Lack of the required coordination of IoP could cause a failure in reaching it, or at least in a proper way. Although it is primarily under the control of the political and upper echelons, everyone must contribute. POLADs’ interaction with Political/Diplomatic sides is paramount, so as to keep a dynamic, fruitful and coordinated engagement.

There are some opinions with regard to whether or not a POLAD Post should be permanently activated. A likely cause of such a “no need for POLADs” feeling -during tactical framed exercises -, may be found in some HQs, by not having the POLAD post activated during BACO. Missing POLADs advice during operations, regardless of the level (tactical, operational or strategic) may indirectly lead to COM interfering in Subordinate Units responsibilities (Div and Bri), due to his “overly tactical focus approach” during his own decision-making process.

POLAD ROLE AND INTERACTION WITH OTHER AREAS OF STAFF

Interaction with and within the different WGs and discussion fora of the BR (Battle

Rhythm) is being developed on a daily basis: COM Huddle; Info Activities Working Group (IAWG); Targeting Working Group (TWG); Commander update briefing (CUB) (last at the BR).

Additionally, POLAD participates when called for and required: Info Activities Coordination Board (IACB); Targeting Coordination Board (TCB); Time Sensitive Target (TST) event; Crisis Action Team (CAT) activation; Key Leaders Engagement (KLE) meetings and preparation events. And any other activity conducted by the COM that requires POLAD participation (COM to decide).

The most intensive interaction (in STLE21) was conducted at IA Working Groups and also during direct contacts with the IA team leaders, who could easily see the POLAD’s input as intrusive in their area of expertise, due to the limited room for those assessments, at tactical level. That could be avoided by POLAD sensitive approach and implementing, through SOP/SOI, a relevant-coordinated POLAD’s role, in these fora, and as we did during STLE21 by a fluent coordination between COMMs Div Staff and POLAD. Close contacts, frequent meetings and an open attitude from both sides. In this regard, given the structure of the exercise not having White Cells activated, that cooperation was crucial for the POLAD to succeed. I believe that POLAD’s assessment may be wide enough to also include some perceptions, without interfering with STRATCOM area of expertise.

One more strong influence POLAD NRDC-ESP has, given by COM, is its role as an “overall” analyst and adviser on the Operation as a whole, as opposed to and related with the political and external environments. (E.g. based on G2 studies...”so What it Means”). (Without entering into the COS area of responsibility). These exchanges of views are COM-POLAD direct one-to-one catch-ups.

OVERALL VIEW ON POLAD ROLE DURING EXERCISES

As during tactical level type exercises, there is no Political and Diplomatic environment training, at least 50% of the limitations and constrains COMs are sure to face, in reality, are outside the training circle. In my view, these political restraints and constraints are to set be a big burden for the COM to solve. (Limitations on attacks, kinetic actions not allowed, forward movements stopped... etc.), perhaps situations that will be too challenging for the COM to manage once his OpPlan is launched. POL/DIP situations that follow the discussions conducted “during the operation” in different POL fora are going to deeply influence the COM’s decision-making process, even more seriously than

the operation/enemy itself.

In this exercise, relevant International Organizations were mostly UN, EU and OSCE. Obviously, POLADs will always be considering interaction within NAC, MC and NATO Nations circle.

As a quick lesson learned, I can summarize that, in order to allow the COM to have a comprehensive picture, POLADs should be activated on a permanent basis, at all NATO HQ Corps sizes. That activation seems to be required for any operation the HQs and the COM conduct, regardless of the level, be it tactical, operational or strategic. In my view, regardless of the level of the operation, the COM should always think at “Three Star Level”.



Political Advisor during Steadfast Leda 2021.

Our brand new NRDC-ESP Military Historical Room

**Command Sergeant Major José Juan Ríos López (ESP-A)
CSM HQ NRDC-ESP**

The Military Historical Room of the NRDC-ESP is located in Santo Domingo barracks, formerly the Convento de Predicadores, which was declared a National Historic Artistic Monument on June 3, 1931. The Room was inaugurated by the Chief of the Spanish Army, General Amador Enseñat y Berea on January 11, 2022.

This old Convent dates from 1239 and was the former Captaincy of Valencia (it still maintains its name, Capitanía), and is today one of the most important monuments of the city. The Historical Room, with an exhibition area of 250m², presents the history of the NRDC-ESP, the multinational part of the Spanish High Readiness Land Military Staff HQ (CGTAD in Spanish), from its origins to

the present day. There is a digital screen with audio-visual content, and it has the following thematic areas:

- An area dedicated to the foundation of the convent, the life of San Vicente Ferrer and San Luis Beltrán within it, its confiscation and the subsequent arrival of the Army, the Captaincies General, the Levante Military Region and a model of the convent, which we have on loan from the Valencian Parliament.
- A zone dedicated to the period of the Manoeuvre Force Unit that preceded the NRDC-ESP, which includes the main milestones, focusing on the international missions carried out, and highlighting the award of the Medal of the Collective Army in 2001.



- A zone dedicated to the creation of the NRDC-ESP and its two main deployments in Pakistan (NRF 2005) and Afghanistan (ISAF 2012) showing various material from those missions (rifles, flags, etc...)
 - An area dedicated to the various exercises and manoeuvres of the NRDC-ESP since its creation.
 - An area dedicated to the Military Music Unit of the NRDC-ESP. This Music Unit enjoys recognized prestige, even beyond the military field, for the quality demonstrated in the many and different concerts they have offered and in the recordings of military music they have made.
 - A zone dedicated to the Antarctic Campaign and Operation Balmis, the largest military deployment in Spain in its fight against the coronavirus in peacetime
 - An area dedicated to the two Subordinate Units of the NRDC-ESP (NRDC-ESP Support Battalion and Military Police Battalion I), where their main capabilities and a small sample of their material are exhibited.
 - Finally, there is a small area where all the History Books of the Unit since 2001 are shown.
- With this small but relevant Historical Room, we try to show all civilians and military people the short but intense history of the NRDC-ESP.



The Military Historical Room of the HQ NRDC-ESP was inaugurated by the Chief of the Spanish Army, General Amador Enseñat y Bera on January 11, 2022.

Visit of His Majesty the King of Spain, Felipe VI, to HQ NRDC-ESP during exercise DEPLOYEX I/22. May 25, 2022





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