



The Eroding Strike: Generating Efficient Attrition With UK Armoured Battlegroups in a Long War

Lieutenant Colonel Thomas Lloyd-Jukes

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Exercise Solo Flight

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Lieutenant Colonel Thomas Lloyd-Jukes

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THE ERODING STRIKE: GENERATING EFFICIENT ATTRITION WITH UK ARMoured BATTLEGROUPS IN A LONG WAR

INTRODUCTION AND THESIS

The war in Ukraine has highlighted the cost and time realities required to win a conflict between developed states. As described by Vershinin, future state conflicts will not be won in short decisive campaigns. The combination of large populations, large countries, complex geography¹ and effective cheap technology supported by international trade render the likelihood of quick, decisive military campaigns to deliver swift victory very unlikely. This line of logic is not confined to consideration of conflict with Russia or China, “*even middling global powers have both the geography and the population and industrial resources to conduct an attritional war*”.² As Watling notes in *Arms of the Future* the result is a fight “*which is operationally positional, and armies must approach operations with protracted shaping to create the conditions for successful offensive action.*”³ The British Army’s Armoured Battlegroups (Armd BGs) are not currently trained to most efficiently contribute to this protracted shaping campaign. Armd BGs are relatively small, highly agile with superb firepower, poor air defence and high sustainment burdens staffed by highly trained personnel. They are drilled to conduct bold offensive actions characterized by the quick attack and opposed crossing drills. These actions are achieved by the concentration of the Armd BG against one, or occasionally two, key points on the battlefield for overwhelming force during offensive actions.⁴ The risks identified by Vershinin from the current conflict in Ukraine are threefold. Firstly, ubiquitous drone presence and long-range fires give combatants highly efficient kill chains against concentrating forces. These fires can blunt assaults causing high casualties.⁵ The taught BG drills require concentration and are, therefore, a high-risk tactic against a peer competitor. Second, a successful assault may deliver a high casualty bill to the enemy but not necessarily lead to a cascading breakthrough which delivers campaign success; therefore, the risk is unlikely to be matched by appropriate reward. Thirdly, the casualties taken from an attempt to make decisive manoeuvre will not be replaced quickly enough to keep the UK’s scarce Armd BGs combat effective in the event of a prolonged conflict. These three challenges render the current Armd BG employment model as inappropriate for inflicting sustained, favourable attrition on the enemy should the conflict not be brought to a rapid conclusion.

¹ Including terrain that favours the defender such as: urban, woodland, marsh and man-made hazards.

² Vershinin, Alex. “The Attritional Art of War: Lessons from the Russian War on Ukraine.” RUSI Commentary, 24 March 2024. 16 The Attritional Art of War: Lessons from the Russian War on Ukraine | Royal United Services Institute (rusi.org) Accessed 9 Apr 24.

³ Watling, Jack. “*The Arms of the Future.*” United Kingdom: Bloomsbury Publishing Plc, 2023. p224.

⁴ United Kingdom. British Army. “AFM Warfighting Tactics Part 4 – Battlegroup Tactics.” AFM Warfighting Tactics_Part 4 Battlegroup Tactics web.pdf Detail available at OFFICIAL as required. Accessed 12 April 2023.

⁵ Watling, Jack, and Nick Reynolds. “Meatgrinder: Russian Tactics in the Second Year of Its Invasion of Ukraine.” RUSI Special Report, 19 May 2023. Accessed 18 Apr 24. p12

This essay's thesis is that the British Army can do better to prepare its Armd BGs to cause the maximum attrition for the minimum loss over the longest possible period of time. There are four areas for improvement. First, to allow BGs to contribute to Watling's "*protracted shaping*" a new drill for sustained attritional offensive actions is required.⁶ Second, we must continue to make cultural shifts to embrace the opportunities of urban terrain. Thirdly, there is a need for a revised approach to sustainment in order to protect our critical but easily destroyed logistics assets. Lastly, there are clearly arguments for increased provision of UAS, air defence and fires assets to complete our modernized capabilities. Due to space limitations only brief reference will be made regarding logistic adaptations as these need to be adjusted through a thorough logistic estimate. Additionally, this work will not deal with new equipment as this has been extensively covered elsewhere; and, more importantly, requires treating through acquisition and funding. The other elements presented here may, largely, be addressed through changes to training and task organisation in the shorter term.

It may be noted that there is a counter-argument against this thesis. The concept of the '*Penetration Division*' doubles down on conventional manoeuvrist thought to see large scale operational penetration. In his article on this subject Jennings notes the desirability of these operations but also describes the requirement for "*exquisite understanding of the enemy centre of gravity*" to set targets for deep penetration. Jennings also stresses the need for adequate enablers to protect and sustain the force.⁷ This essay does not contest the desirability of such ambition; however, it does provide evidence why the British Army is unlikely to succeed if it pursues this concept as its core strategy for an extended peer conflict.

THE CHALLENGE TO THE CURRENT APPROACH

Before continuing it is necessary to briefly provide an overview of the current Armd BG⁸ in offensive actions. A UK Armd or Armd Infantry BG is a combined arms force.⁹ It is organized to conduct a range of operations independently but requires support from its parent Brigade for indirect fires, air defence and sustainment. The current drill for offensive operations is '*Find, Fix Strike*'.¹⁰ Reconnaissance finds the enemy, who is then fixed in place by the recce group supported by indirect fire assets. The BG then concentrates to strike and clear the

⁶ Watling, Jack. "*The Arms of the Future*." United Kingdom: Bloomsbury Publishing Plc, 2023. p224.

⁷ Jennings, Nathan. 2022. "Considering the Penetration Division: Implications for Multi-Domain Operations" AUSA. Considering the Penetration Division: Implications for Multi-Domain Operations | AUSA Accessed 19 Apr 24.

⁸ This essay will treat Armoured and Armoured Infantry battlegroups as interchangeable. These recommendations will apply for both types of tank and infantry fighting vehicle equipped heavy battlegroups.

⁹ Typically, a UK Armd or Armd Inf BG consists of a reconnaissance platoon, one or two tank companies with Challenger 2 MBTs, two armoured infantry companies to be mounted in Warrior or Boxer IFVs, a headquarters company and a support echelon. It may also have a fire support company with mortar, sniper and anti-tank platoons. The BG includes an armoured engineer company and it will be served with artillery from a brigade artillery regiment. UAS is limited at present. Other elements such as military police, air defence and electronic warfare may be attached.

¹⁰ United Kingdom. British Army. "AFM Warfighting Tactics Part 4 – Battlegroup Tactics." AFM Warfighting Tactics_Part 4 Battlegroup Tactics web.pdf Detail available at OFFICIAL as required. Accessed 12 April 2023.

position. The strike requires a fixing fire support group who suppress the enemy position and destroy key assets and assault groups of tanks and armoured infantry who will clear the position.¹¹ This drill concentrates between two and three companies of the BG against the enemy position to suppress then destroy elements before infantry clear in detail.¹²

With this in mind we may consider the typical defensive positions seen in Ukraine and how we expect a reformed Russian Army to fight after the Ukraine war. The Centre for Strategic and International Studies has provided description of the defensive works around Mikhailivka.¹³ The Russian defences included substantial depth and width. The framework of the defence is long trench lines intended to prevent the creation of flanks of the kind NATO would intend to manoeuvre against. These trench lines are shielded by deep belts of anti-tank obstacles, gun pits, support trenches and vehicle scrapes. The overall system includes multiple lines of trenches and point fortifications exploiting urban terrain to support more exposed trench systems.¹⁴ The defensive network is supported by deep fires, armed drones, close air support and armoured reserves. In their ‘Stormbreak’ article Watling and Reynolds review the Ukrainian approach to attacking these defensive systems. Watling describes an approach in which Ukraine has not sought decisive breakthrough at brigade or above scale; instead it has conducted assaults aimed at eroding Russian positions.¹⁵ While this is likely in part due to limited combined arms manoeuvre competence, lack of trained staffs and lack of air superiority it would be excessively arrogant to assume that a UK armoured brigade could cut through such well-prepared positions while only taking modest casualties.¹⁶ The Ukrainian approach has been characterized by extensive preparations and artillery support. However, this preparation time has not prevented Russian defenders from masking assets such as tanks and anti-tank teams as seen around Novodarivka.¹⁷ In the case of Novodarivka and Rivnopil it was a combination of infiltration, mechanized feints and manoeuvre, which triggered unmasking of targets for fires, that unpicked the Russian positions. These observations are not a direct guide for the UK Armd BG as the equipment, individual training and coordination of multiple company sized elements of which the UK BG should be capable of are different to the capabilities of both the mechanized and Territorial Defence Force units described by Watling and Reynolds. However, elements of the situation above represent threats to the UK BG attempting a clearance or breakthrough attack.

¹¹ In support of this the BG engineers standby to support breaching. Anti-tank platoon or tanks typically provide flank protection while a mounted reserve is held to reinforce or support

¹² United Kingdom. British Army. “AFM Warfighting Tactics Part 3 – Brigade Tactics.” AFM Warfighting Tactics_Part 3 Brigade Tactics web.pdf Detail available at OFFICIAL as required. Accessed 12 April 2023.

¹³ Jones, Seth, Alexander Palmer and Joseph Bermudez. “Ukraine’s Offensive Operations: Shifting the Offense-Defense Balance.” CSIS. 9 June 2023. Ukraine’s Offensive Operations: Shifting the Offense-Defense Balance (csis.org)

¹⁴ Ibid.

¹⁵ Watling, Jack, and Nick Reynolds. “Stormbreak: Fighting Through Russian Defences in Ukraine’s 2023 Offensive.” RUSI Special Report, 4 Sep 2023. Stormbreak: Fighting Through Russian Defences in Ukraine’s 2023 Offensive (imagekit.io) Accessed 9 Apr 24.

¹⁶ Jones, Seth, Riley McCabe and Alexander Palmer. “Seizing the Initiative in a Defence Dominated World.” CSIS. 12 October 2023. Seizing the Initiative in Ukraine: Waging War in a Defense Dominant World (csis.org)

¹⁷ Watling, Jack, and Nick Reynolds. “Stormbreak: Fighting Through Russian Defences in Ukraine’s 2023 Offensive.” RUSI Special Report, 4 Sep 2023. Stormbreak: Fighting Through Russian Defences in Ukraine’s 2023 Offensive (imagekit.io) Accessed 9 Apr 24.

Firstly, despite the drone and manned reconnaissance by Ukrainian assets Russian troops successfully hid multiple pairs of MBT which present a significant threat.¹⁸ Secondly, despite initial local fires dominance, once Ukrainian mechanized troops were slowed down they were hit by heavy Russian fires. Thirdly, the depth of obstacle belts and movement of Russian troops when threatened allowed the defence to reconsolidate behind fresh obstacles. Fourthly, obstacle belts were thicker than doctrinally expected. Finally, the combination of all these factors meant that the complexity of the objective required multiple attacks and combinations of approach to unpick the enemy position. It may be tempting, in counterargument, to suggest that a peer conflict will move at sufficient tempo to prevent the creation of defensive works at the breadth and depth seen in Ukraine. This may be possible; however, in this case Russian doctrine in the defence is still predicated on depth and erosion of NATO combat power through the fielding of Combat Security Outposts and strongpoints, with obstacles, in the Counter Recce Zone and the Security Zone.¹⁹ The principle that an Armd BG will need to overcome a networked series of defensive positions and obstacles remains extant. The only significant difference is that in the absence of a defensive line covering the full frontage then superior manoeuvre may allow for flanking to unpick discrete positions. However, this is only likely if adequate speed, air defence, flank guards and sustainment are maintained. These latter elements are critical to prevent any breakthrough from becoming a liability as it is pinned and targeted by enemy fires and counterattack forces. In the absence of certainty that these conditions can be maintained a plan to fight with a lower risk approach is prudent.

It is possible at this point to bring together the doctrinal Armd BG approach to an enemy defensive position with the lived reality of the defences seen in Ukraine. The following inferences may be made. The assumption that the BG attack drill can achieve a rapid breakthrough that may be exploited for operational gain is unsound when confronted by deep, successive defensive positions with obstacles and agile reserves supported by effective surveillance and fires.²⁰ The engineer company in the BG has limited capacity to breach successive and varied obstacles belts due to reliance on a few prime assets and the need to change front-end equipment between some tasks. This issue is compounded by the responsiveness of adversary fires against any company grouping that is slowed down. Additionally, the enemy will hide armour which will counterattack, although this is a routine planning factor for the Armd BG and all combat elements of the force have at the least a minimum credible anti-tank defence. Finally, the breadth and depth of Russian defence systems

¹⁸ Ibid. p17

¹⁹ United Kingdom. Land Intelligence Fusion Centre. "How Russia Fights v. 4" <https://akx.sps.ahe.r.mil.uk/sites/vault/LIFC/How%20Russia%20Fights%20v4.pdf> Available at OFFICIAL SENSITIVE as required. Accessed 10 April 2023.

²⁰ Jones, Seth, Riley McCabe and Alexander Palmer. "Seizing the Initiative in a Defence Dominated World." CSIS. 12 October 2023. Seizing the Initiative in Ukraine: Waging War in a Defense Dominant World (csis.org)

will make fighting a limited breakthrough (BG to Brigade scale) action difficult due to the challenge in isolating an appropriately sized area of battlespace.

The final assumption that is worth noting is the generation of appropriate force ratios. While numerical ratios are a poor metric in planning an attack due to the advantages of synchronizing varied capabilities and generation of surprise it is doubtful that against a peer enemy the British Army will be able to rely on achieving the major force ratio overmatch required for low casualty tactical success. Surprise will be challenging due to surveillance assets and therefore the ability to pose multiple dilemmas to dissipate defensive assets may be a better enabler for success.²¹ The ubiquity of surveillance and the likely human intelligence collection capacity of Russian forces in Eastern Europe make massing multiple BGs or brigades without telegraphing a major attack very challenging. Therefore, Russian reinforcement resulting in parity of forces is relatively likely, unless air superiority has been achieved.²² The likely result of this is that the capability balance between an un-damaged Russian Battalion Detachment and UK Armd BG will be relatively even.²³

In the face of the conditions above this essay proposes that a shift in mindset is required. There is likely to be a requirement to retain the ability to conduct the BG attack drill as some areas of ground will be judged essential to make further operational progress. However, in the vision of prolonged attritional conflict as described by Watling and Reynolds this method of operation is unlikely to be successful as the primary approach to offensive tactical activity.

SMART ATTRITION

In seeking to find a more profitable ‘default setting’ for Armd BGs this essay does not propose that the British Army abandon the principal of manoeuvre warfare, namely that the *“manoeuvrist approach aims to attack an opponent’s weaknesses. We aim to create a perception of impending and inevitable defeat in the mind of the opponent by seizing and holding the initiative, shaping their understanding, undermining their will, and fracturing their cohesion”*.²⁴ This principle endures; however, the armoured brigade and its BGs should focus on reliable and sustained destruction of enemy capability rather than always seeking a higher risk breakthrough to achieve greater reward. This is a return to a Svechian understanding of attrition as described by Plotnikov: *“the struggle of attrition may aim at the most decisive end goals, up to the complete physical destruction of the enemy...operations with limited goals until the moment of*

²¹ Thunholm, Peter and Lars Henåker. 2020. *“A tentative model on effective army combat tactics.”* Comparative Strategy, 39(5), 490–504. <https://doi.org/10.1080/01495933.2020.1803713> p502. Accessed 19 Apr 24.

²² In which case the contents of this paper will no longer apply as air superiority will allow a return to reliance on air power to maximise attrition.

²³ United Kingdom. Land Intelligence Fusion Centre. *“Russia Ground Forces – BTG Doctrinal Laydown”* <https://akx.sps.ah.e.r.mil.uk/sites/vault/LIFC/20220210-BTG%20Doctrinal%20Laydown-OS.pdf>. Detail available at OFFICIAL SENSITIVE as required. Accessed 10 April 2023.

²⁴ United Kingdom. British Army. *“Army Doctrine Primer.”* 25 May 2022. 20220525_Doctrine_Primer_FINAL.pdf Detail available at OFFICIAL as required. Accessed 10 April 2023.

the final crisis, the goal of the war itself may be far from modest."²⁵ This re-focusing acknowledges the complications laid out by Biddle in *Military Power*. Biddle acknowledges the increased challenges of complexity and limitations on speed that come with modern combined arms manoeuvre against a peer.²⁶ In particular the risk to penetration-focused warfare in becoming slowed down is a concern. Russian defensive approaches are designed to slow NATO forces to allow destruction by fires. By focusing on breakthrough tactics, the British Armd BG plays to the strengths of Russian defensive warfare as it offers concentrated forces which are an ideal target for massed enemy fires and a predictable template for operation which encourages successful speculative fires by the enemy.²⁷ The objective of manoeuvre therefore should be focused on the maximization of local advantage to achieve attrition of the enemy's capability to maintain a coherent defense. In time this shaping may lead to the opportunity for decisive breakthrough and greater operational pay-off. To achieve this the framework for Brigade tactics should be amended.

THE ERODING STRIKE

The Armd Bde currently seeks to find, fix, strike and exploit. It should, however, insert an attrit phase between fix and strike. This attrit is the element on which the greatest time and effort should be made and will constitute the bulk of Armd BG combat operations when placed in an offensive role. There will be many iterations of find, fix and attrit before the BG is involved in any major strike and attempt to operationally exploit. For the purpose of this essay we will term this offensive action the Eroding Strike rather than the Attack. The catch-line for the Eroding Strike may be thought of as "Bite and Hide": as opposed to "Bite and Hold". The draft principles of the Eroding Strike are:

1. Protect own force combat power.
2. Provoke unmasking of high value targets.
3. Maximise enemy losses.
4. Minimise efficiency of enemy fires expenditure.

²⁵ Plotnikov, Dmitry. 'Still Misreading Svechin: Annihilation, Attrition, and Their Strategic and Operational Implications'. *The Journal of Military History* 86, no. 3 (2022): 670. Accessed 15 Apr 24.

²⁶ Biddle, Stephen. "*Military Power : Explaining Victory and Defeat in Modern Battle*", Princeton University Press, 2004. *ProQuest Ebook Central*. 39 <https://ebookcentral.proquest.com/lib/cfvlibrary-ebooks/detail.action?docID=664554>. Accessed 9 Apr 24.

²⁷ United Kingdom. Land Intelligence Fusion Centre. "How Russia Fights v. 4" <https://akx.sps.ahe.r.mil.uk/sites/vault/LIFC/How%20Russia%20Fights%20v4.pdf> Available at OFFICIAL SENSITIVE as required. Accessed 10 April 2023.

We will now proceed through the battlespace zoning, force groupings and conduct of the Eroding Strike.

This tactical action takes place in the divisional close battlespace. It is assumed that the BG tasked to conduct an Eroding Strike is not on the Forward Line of Own Troops (FLOT) and is not set in a position of defence, for greatest effect it should be begin protected behind a friendly force established in defence.²⁸ The BG will generate the following groupings: Enabling Groups, Erosion Groups, Cover Groups, Extraction Groups and Opportunity Groups.²⁹ The BG's area of operation is divided into the Sustainment Zone, Dispersion Zone, Forming Up Zone, Attrition Zone and Opportunity Zone. This work will now describe the groupings and zones, a series of illustrations by phase are provided at Enclosure 1.

The Enabling Group is formed around the BGs find assets: ground mounted reconnaissance platoons,³⁰ technical sensors and unmanned systems. Its function is to blind enemy recce forces and find forces in the enemy's Security Zone or similar screening positions.³¹ Where appropriate the Enabling Group will have engineers attached to conduct route proving and recce in order to increase tempo for the Erosion and Cover Groups.

Erosion Groups are the combat teams who will attrit the enemy combat forces. The Erosion Group will include tanks, armoured infantry and fire support coordination teams. The likely 'building block' is an Armd Infantry Platoon with a pair of Main Battle Tanks. Their function is to destroy and clear enemy positions below platoon strength and attack-by-fire positions at platoon or above strength.³² Erosion Groups should be trained to march, advance and strike with fires independently. They should, for example, be individually capable of defeating, but not clearing, a platoon sized grouping in a Russian Security Zone.³³ The Erosion Groups are organized under a company group scale combat team, commanded by a Major, whose function is to coordinate their actions.³⁴ The intention is for each company group to be able to conduct multiple independent Eroding Strikes simultaneously or coordinate multiple

²⁸ It is possible that when in mobile defence the BG could have elements tasked to conduct eroding strikes as part of the principle of offensive spirit; however, this will bring increased risk due to the split in allocation of combat power to erosion versus defensive tasks.

²⁹ Opportunity is used instead of Exploit to avoid confusing with the traditional forward movement of exploitation. Opportunity/Exploitation in this action is about maximizing destruction of the enemy not proceeding to move and strike further.

³⁰ For clarity this essay will keep to infantry scale descriptors of platoon and company for all arms rather than trade specific descriptors such as troop, squadron etc.

³¹ It should liaise closely with the troops holding the FLOT as these are likely to be able to provide further support to finding the enemy and defeating enemy screening forces.

³² It is noted that this is not the doctrinal ratio for offensive actions. This is reflected in the fact the intent is to cause attrition not destroy or clear as is required in the traditional attack drill.

³³ We may visualize defeat in this construct as all armoured vehicles in the enemy grouping having been destroyed and some personnel wounded or killed. This leaves the position incapable of movement and requiring support or resupply/reinforcement. This will trigger the unmasking of targets for the Opportunity Group. The position does not need to be cleared to achieve our intent.

³⁴ Erosion (and Cover) Groups will require clear boundaries as they close in on the enemy. During the approach clear communication and force identification measures will be required to reduce the risk of fratricide. Force Testing is required to understand whether the Company Command Post requires adaptation to handle the growth in complexity.

Erosion Groups to conduct a larger Eroding Strike task against more significant enemy concentrations, such as the forward edge of a Russian Main Defended Area.

The Cover Group is a spoiling attack and exploitation group. It should be comprised of Armr, Armd Inf and Anti-Tank teams. Again, these are organized in platoon-plus sized groupings and dispersed. As with Erosion Groups two to three Cover Groups form a larger company group under command of a Major. The Cover Groups march into the Forming Up Zone with the Erosion Groups but remain in hides until required. It is expected that the action of the Erosion Groups will trigger enemy response by fires but also mobile reserves. The Cover Group's target is the enemy's mobile reserve. Should the enemy launch forces to drive off the Erosion Groups or extract their own personnel the Cover Group offers the BG commander an opportunity to concentrate forces to defeat the enemy's counterattack. The Cover Group will be handed its targets by the withdrawing Erosion Groups or Brigade and BG surveillance assets.³⁵ The critical element for this to be successful is the quality of the troops' training for skirmishing in what is likely to become a meeting engagement. The Cover Groups can also be deployed to provide hasty defence or conduct a delay to protect the withdrawal of Erosion Groups should the enemy launch a more significant advance.

Extraction Groups are protected combat service support elements who will enable the movement and recovery of the Erosion and Cover Groups. They include ambulances, recovery variants and must have protection against intact bypassed elements of the enemy force. They will move into the Forming Up Zone and track behind the Erosion Groups they are supporting in order to rapidly move up to tow or conduct CASEVAC as required. For prolonged conflict we will need to maximise recovery of mobility-kill platforms before they can be destroyed by follow on fires.³⁶

The above groupings combine to conduct the 'bite and hide' action. The Opportunity Group is designed to exploit the manoeuvre activity for maximum attrition. This grouping contains artillery, unarmed, armed and suicide UAS, EW assets and, while not under BG command, supporting aviation, air and rocket assets. It is anticipated that the actions of the Enabling and Erosion groups will trigger enemy activity. We should expect increases in signals traffic from HQs, deployment of mobile reserves and unmasking of artillery once erosion is underway. Following the strike, enemy troops that have been in contact will require resupply, refueling and CASEVAC which will expose logistic assets. We may also trigger repositioning and reinforcing of obstacles which may expose engineering variants or troops fixed in the open while preparing obstacles. All of these actions present opportunities for us to strike with fires or

³⁵ Clearly there is requirement for flexible battle space management in order to reduce the risk of fratricide. This is not revolutionary but requires careful training.

³⁶ Watling, Jack, and Nick Reynolds. "Meatgrinder: Russian Tactics in the Second Year of Its Invasion of Ukraine." RUSI Special Report, 19 May 2023. Accessed 18 Apr 24. p17

uncommitted elements of the Cover Group. The task of the Opportunity Group is to strike these activities that have been stimulated by the Erosion Strike. The bulk of the Opportunity Group will remain in the BG Dispersion Zone or further to the rear.

The Eroding Strike requires a different system of zoning for the Armd BG's battlespace. This essay now describes these zones.

The Sustainment Zone is the BG's administration and hiding zone. It is likely to be in an urban area that affords for high levels of concealment. In the Sustainment Zone the BG will conduct all supply and preparation for its offensive action. The BG's A1 and A2 echelons will remain in the Sustainment Zone throughout with the exception of recovery and medical assets required to enable to support troops in contact.³⁷

The Dispersion Zone is an area of battlespace that sits between the Sustainment Zone and the FLOT. The purpose of the Dispersion Zone is to make it difficult for the enemy to track and predict the intentions of the BG prior to the Eroding Strike. This area needs to be large enough the troops can march on multiple routes in small packets. Movement in this manner will reduce the ease with which the points of erosion can be predicted and reduce the risk from fires.³⁸ The dispersion zone must be defined with sufficient areas where troops can move into well covered and dispersed hides and 'go dark' before moving again.³⁹ The BG may move in and around the Dispersion Zone for multiple days before conducting an Eroding Strike. This preparation may take place while other elements of the BG, or supporting Bde units conduct raid, feint or find actions against the enemy.⁴⁰ It should be assumed that enemy HUMINT or airborne assets will identify and track movements. However, by generating high levels of concurrent small packet, dispersed movement the enemy will not be presented with the attractive target of a company or BG march to a traditional attack.

The Forming Up Zone replaces the Assembly Area and Forming Up Point in the traditional attack drill. The Forming Up Zone is an area of battlespace that stretches across the BG frontage and is deep enough to allow all attacking Erosion Groups and Cover Groups to remain dispersed with no more than eight vehicles in a km grid square, overhead cover should be a priority in seeking to mitigate attack by UAS.⁴¹ The Forming Up Zone allows for the BG to

³⁷ Any assets required for these functions move as Extraction Groups.

³⁸ Gerwehr, Scott and Russell Glen. 2000 "The Art of Darkness: Deception and Urban Operations." RAND. The Art of Darkness: Deception and Urban Operations (rand.org) Accessed 19 Apr 24. p22.

³⁹ Troops will need to achieve concealment in both visual and electro-magnetic spectrums.

⁴⁰ The Eroding Strike compliments recent thought on the Hunter-Killer capacity of the Armoured Cavalry BG.

⁴¹ Cranny-Evans, Sam. 2022 "As Small Drones Shape How We Fight, is the British Army Ready to Face Them?" RUSI Commentary, 12 July 2022. As Small Drones Shape How We Fight, is the British Army Ready to Face Them? | Royal United Services Institute (rusi.org) Accessed 19 Apr 24.

better synchronise the force elements for strikes through movement closer to the objective; however, it keeps the force dispersed to prevent enemy fires being used efficiently.

The Attrition Zone is the battlespace in which we wish to attack enemy defensive positions. This zone covers the enemy's reconnaissance zone, security zone and the forward edge of the main defended area. The Erosion Groups will attack to destroy enemy recce and defeat platoons in the security zone while the MDA will only be engaged by fire. It is also plausible for the Erosion Groups to leave behind snipers and sniping ATGW teams in the Attrition Zone during the withdrawal in order to take on opportunity targets as the enemy reorganizes. Russian doctrine would suggest that following the destruction of the security zone troops a fresh security force will be generated and deployed, providing a further target of opportunity.

The Opportunity Zone covers the MDA and enemy rear. It is the area in which we will wish to target the enemy's response to the Erosion Groups. In this zone UAS and EW collect will seek to find enemy HQs, reserves, fires, engineering and sustainment assets ready for strike by our Opportunity Groups.

The Eroding Strike is conducted in five phases: Preparation, Staging, Eroding, Opportunity, Recovery. Preparation includes the routine activities of battle preparation but also includes the initial find of enemy positions by flanking friendly forces, airborne assets and HUMINT. This will provide the starting target list for Erosion Groups to strike. Staging sees the BG advance from the Sustainment Zone through the Dispersion Zone and into the Forming Up Zone. The emphasis is on dispersed movement concealing to the great extent possible the size of force packets and their end destination. It must also seek to generate confusion by having forces march on non-linear routes, cross the battle-space and change axis. The Enabling Group may move direct into the Attrition Zone and begin the counter-recce fight during this phase. The main phase is the Eroding Phase. In this phase the Enabling Group will complete destruction of enemy ground recce and advance to find the Forward Line of Enemy Troops. This find action should be confirmation of the target pack generated during the Preparation Phase. With the enemy location confirmed the Erosion Groups are launched to destroy enemy outposts in the Security Zone, the force should aim for maximum synchronization in strikes at multiple points on the battlespace. The Erosion Phase may be lengthy. Junior commanders will need the freedom to assess and adapt to the threat relevant to them. Freedom should be given to adapt and decide whether to conduct limited infiltration by dismounted infantry leading armour forward or manoeuvre more rapidly while remaining mounted.⁴² BG and company commanders will need to embrace the mindset of marginal gains and resist the temptation to call for speed and

⁴² Watling, Jack, and Nick Reynolds. "Stormbreak: Fighting Through Russian Defences in Ukraine's 2023 Offensive." RUSI Special Report, 4 Sep 2023. Stormbreak: Fighting Through Russian Defences in Ukraine's 2023 Offensive (imagekit.io) Accessed 9 Apr 24.

excessive aggression at the expense of caution; instead, the BG must seek a long game. Success in these actions will trigger the largest possible spikes in enemy response both in terms of communication but also deployment of reserves, fires and combat service support assets. However, unlike the traditional attack drill the BG is not concentrating to over-run major, dug-in, positions. The forward edge of the MDA will be engaged with direct and indirect fires but the Eroding Groups will not commit to assault. The intention is that the enemy will unmask fires to support his positions; however, attacking forces will remain dispersed resulting in poor efficiency of enemy fires while still unmasking assets for friendly counter-battery fires.⁴³ The Eroding Phase ends when combat team commanders feel they cannot cause further attrition without becoming decisively engaged.

The Opportunity Phase will begin while the Eroding Phase is ongoing but continues beyond it. The Opportunity Groups are poised to exploit the action of the Eroding Groups. A combination of calls-for-fire from the Eroding Group, signals and electronic intelligence collection, ground and airborne reconnaissance will provide targets for friendly deep fires, air and aviation assets.⁴⁴ Once Eroding Groups break contact the Opportunity Groups will continue the action by monitoring enemy responses and continuing to prosecute. It may be appropriate at this point for stay behind observation elements from the Enabling Group to change position in the task organization and come under command of the Opportunity Group. The BG commander will also have the option to launch the Cover Groups if the Opportunity Groups identify an opportunity that direct fire assets can exploit.

The Recovery Phase sees the BG reset for the next action. All elements will withdraw behind friendly forces whether these are positional defenses or a screening cover force. The ideal solution will be to move back into urban hides where their signature can be masked. Resupply will be conducted and battle preparation conducted for the next phase of erosion operations.

TRAINING TO ERODE

To successfully conduct sustained erosion operations, we must improve our protection of the force. Current simulation exercises confirm the lethality of the BG but also highlight the high casualty rates likely in conducting decisive attack actions.⁴⁵ By switching to eroding the enemy we may reduce the likelihood of high casualty set-piece clearance actions; but, to gain maximum value from dispersed Groups attacking by fire we need to shift our training focus to

⁴³ Cranny-Evans, Sam. 2023 "Russia's Artillery War in Ukraine: Challenges and Innovations" RUSI Commentary, 9 August 2023. Russia's Artillery War in Ukraine: Challenges and Innovations | Royal United Services Institute (rusi.org) Accessed 19 Apr 24.

⁴⁴ These assets will need to be on call for the period following the deployment of the Eroding Groups. It is expected that this will require the Brigade to synchronise the actions of multiple BGs to ensure assets are available to maximise the pay-off from Eroding Strikes.

⁴⁵ Exercises such as PRAIRIE STORM, IRON STORM, TALLINN DAWN.

optimize capacity to skirmish. Armd BG training events need to focus on the skills required for these actions namely; extremely high quality navigation to enable dispersed movement, better situational awareness and manoeuvre by pairs of armoured vehicles,⁴⁶ precise call for fire skills at corporal rank upwards,⁴⁷ comfort operating at radio silence to maintain hiding, urban camouflage and concealment, improved battle command and control at the company and BG level to coordinate multiple concurrent combat team actions, hardening of combat support elements to maintain freedom of movement by Enabling, Erosion and Cover groups. This is a shift in focus from current BG test exercises which focus on the BG set-piece decisive actions. The BG will also need to train combined arms at the platoon level as a routine not an exception. This also drives a change in sustainment processes. The company level replenishment drill is too large, slow and obvious to be practical within the enemy's deep fires reach. Instead the BG should train for a combination of smaller replenishments at 'Group' scale and self-replenishing from dumped supplies.

EMBRACING THE URBAN

The Eroding Strike proposes a mechanism for sustaining BG combat operations over a long period to support and buy time for the Corps and Divisional shaping battle which in turn sets conditions for subsequent, more operationally decisive, actions at the Division and Brigade scale.⁴⁸ However, as Ljungkvist describes, in Eastern Europe Armd BGs must expect to spend more time in urban areas than is currently trained for.⁴⁹ This will be important for both administration and combat operations. Training for urban needs to move from the current rhetoric to solid conceptual understanding leading through to terrain walks and effective field training. These tools need to be employed so that troops view urban terrain as the new normal not as a separate skill set. For the Armd BG, urban does not mean just 'cities' but all concentrations of building that constrain movement and sight. As King identifies, urban terrain offers the fortress from which Armd BGs can 'sally out' to strike.⁵⁰ Within the urban the BG is shielded from some of the effects and advantages of the enemy's recon-fires construct. Therefore, in the context of the Eroding Strike the BG's crews will be expected to conduct Eroding Strikes from, into and within urban areas.

⁴⁶ Movement in pairs provides increased security from fires through dispersed movement but increases risk of ambush from enemy infiltrated forces. Pair movement drills need to be at a higher standard to mitigate the reduction in observers present compared to standard platoon or company movement.

⁴⁷ Infantry section commander or main battle tank commander level.

⁴⁸ In this framework the Divisional Commander is seen as the level at which transition to breakthrough and exploitation operations would be considered. This essay judges that the Brigade is too small to execute such an operation.

⁴⁹ Ljungkvist, Kristin, 2022. "A New Horizon in Urban Warfare in Ukraine?". *Scandinavian Journal of Military Studies*, 5(1), p.91–98. DOI: <https://doi.org/10.31374/sjms.165> Accessed 18 Apr 24.

⁵⁰ King, Anthony. 2022 "Fighting from cities: The British army after Ukraine." *Wavell Room*. [https:// wavellroom.com/2022/05/06/fighting-from-cities-the-british-army-after-ukraine](https://wavellroom.com/2022/05/06/fighting-from-cities-the-british-army-after-ukraine) Accessed 19 Apr 24

In the Sustainment, Dispersion and Forming Up Zones the BG emphasis is on effective administration and self-protection. Crews must be trained to move and hide in urban areas while minimising their signature and maximizing battle preparation time. Significantly greater emphasis needs to be placed on soldiers understanding where and how to hide their vehicles for example, what sorts of building can their platform hide inside, what hazards needs to be checked for such as basements and gas lines and what parts of a structure are likely to be load bearing. These considerations need to be part of a crews routine training to enable movement of armour through outer walls to provide cover from airborne assets. The platoon grouping needs better training to maximise efficient administration and security in the urban area. This will include a reinvigoration of laying line between dispersed vehicles. It also requires improved drills on how best to set up patrolling that covers all elements of the combat team if vehicles are separated while still enabling rest and maintenance while incorporating unmanned systems to reduce this security burden.⁵¹ Finally, all soldiers, including echelon personnel, must possess a solid baseline in urban close combat: in reducing the threat from airborne systems we will place ourselves in positions that are more at risk from attack by infiltrating patrols including irregular combatants.⁵² It is accepted that urban training facilities will rarely be adequate in size and capacity to train these enough soldiers in these skills. However, much may be achieved through liaison with local town councils, structural engineering firms and terrain analysis walks.⁵³ Simulated training may then build on a much-elevated level of conceptual understanding. At the BG level consideration must be taken with optimizing the opportunities for administrative functions within the urban area and planning for movement in and out of the area. With regards to administration the urban area offers opportunity for hiding large vulnerable assets such as Regimental Aid Posts, the A1 Echelon and headquarters.⁵⁴ The temptation will be to exploit large areas of cover such as industrial warehousing and multi-story car parks to provide space with cover for these assets; however, the required regular movement into and out of an RAP and Echelon area will set patterns of movement that disclose their locations.⁵⁵ Instead, we must seek to disperse assets whenever possible. For example, the BG's Close Support Tankers should not concentrate for filling, fueling or administration. We must accept a longer fueling period which allows tankers to move via multiple covered locations when collecting fuel in order to generate an element of deception for any UAS that is tracking them.⁵⁶ Once fueling tasks are complete these vehicles need to the hide in separate locations rather than concentrating in an echelon area. Additional crew personnel or unmanned systems may be required to support the protection of

⁵¹ Rossiter, Ash. 2020. "Bots on the ground: an impending UGV revolution in military affairs?" *Small Wars & Insurgencies*, 31(4), 851–873. <https://doi.org/10.1080/09592318.2020.1743484> Accessed 19 Apr 24.

⁵² Anderson, Michael. 2023. "Decided among the cities: the past, present and future of war in urban environments." Army University Press. *Decided among the Cities: The Past, Present, and Future of War in Urban Environments* (army.mil) Accessed 19 Apr 24.

⁵³ Athow-Frost, James. 2022 "Better Urban Training" Wavell Room. *Better Urban Training* » Wavell Room Accessed 19 Apr 2024.

⁵⁴ Spencer, John. 2021 "The eight rules of urban warfare and why we must work to change them." Modern Warfare Institute. *The Eight Rules of Urban Warfare and Why We Must Work to Change Them - Modern War Institute* (westpoint.edu) Accessed 19 Apr 24.

⁵⁵ Gerwehr, Scott and Russell Glen. 2000 "*The Art of Darkness: Deception and Urban Operations*." RAND. *The Art of Darkness: Deception and Urban Operations* (rand.org) Accessed 19 Apr 24. p.

⁵⁶ Ibid. p44.

these assets. Other elements, such as the Regimental Aid Post (RAP), can only operate when concentrated. In this case we must focus on the time spent static, minimising signature and disclosure by movement to the RAP. The RAP can have a low signature and be well concealed in the urban area; however, it's location will be disclosed by the movement of ambulances to the RAP. This may be addressed through two approaches. Low severity cases and administrative movement to the RAP must be done with the lowest possible risk of giving away its location. For example, routine visitors and non-battle casualties could move to the RAP in civilian transport. However, during a tactical action the scale and urgency of casualties is likely to increase and it will be necessary for marked ambulances to reach the RAP direct. The RAP must therefore be in as hardened a location as possible and thought must be given to its relocation plan once it is engaged or reaches a lull in operations. This relocation plan will need to include secondary locations, efficient routes, deception plan and a backup plan for treatment of casualties while the RAP is relocating. In planning for all of the above the civilian population requires consideration. Again, the detail of legal/ethical and targeting impacts regarding the conduct of the Eroding Strike within highly populous requires more space than this paper allows and must await further work.

While the above deals with preparation and protection the Eroding Strike has utility in addressing offensive action in urban terrain. As King identifies defended urban positions “cannot be taken by rapid, lightning manoeuvre” in peer conflict and instead “require slow, deliberate operations, aimed at their reduction.”⁵⁷ King notes further that armour, engineers and precise, coordinated firepower are required. These components are found in the Armd BG and the mindset of the Eroding Strike is ideal for the process of finding and reducing urban strong points prior to an attack to secure action. While further wargaming is required to complete the generation of the Eroding Strike drill it seems logical that the application of its groupings, zoning and phases may be applied to enemy position in built up terrain. It is also possible that should battlefield surveillance and the Eroding Group commander assess that a position has been adequately reduced by his/her combat team then the BG commander could launch a fresh Cover Group combat team to secure the objective. If this aspiration was held prior to the strike then tempo could be increased by the Cover Group commander moving with the Erosion Group to begin planning a hasty attack by their combat teams.

CONCLUSION

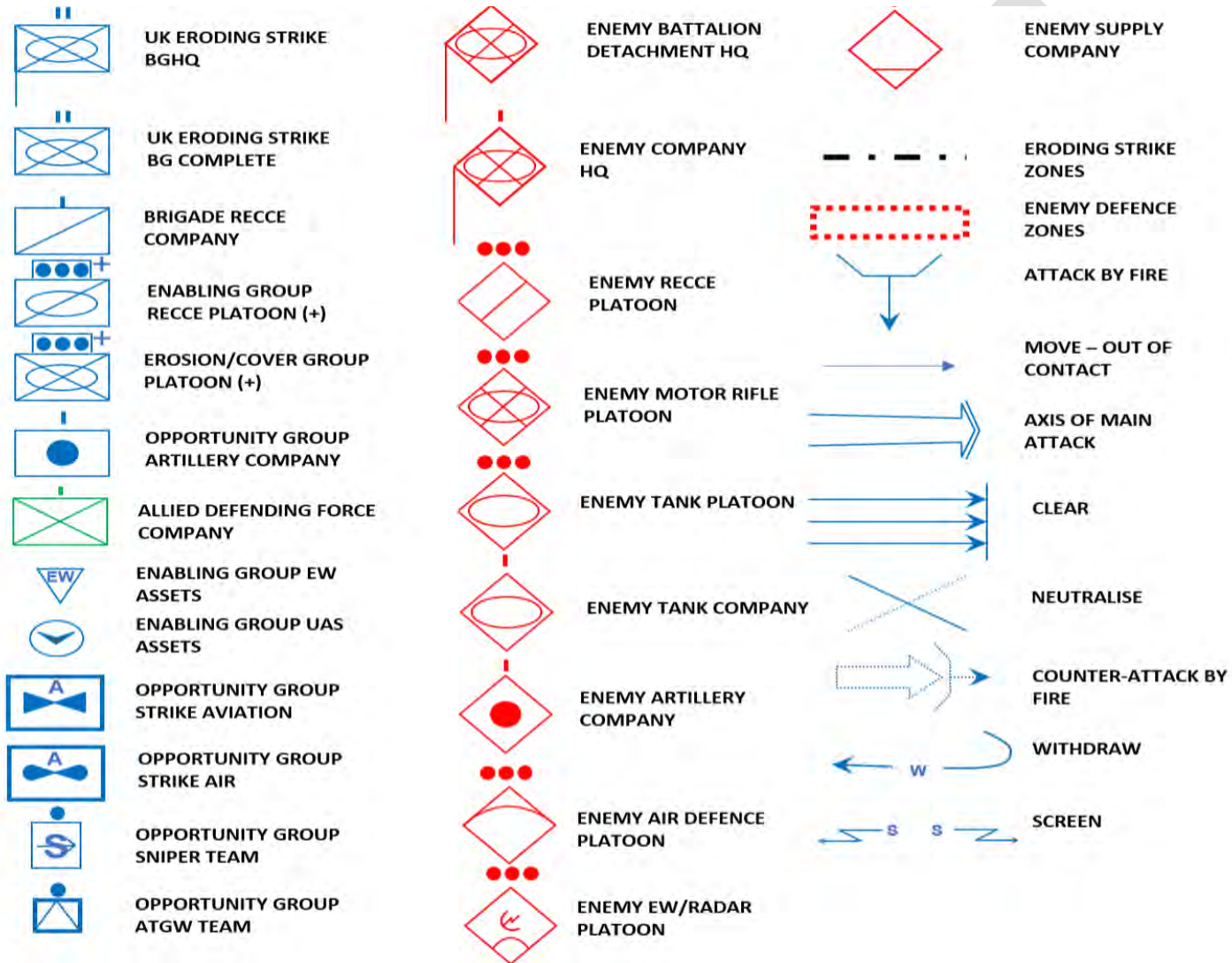
The application of NATO air power, cyber, diplomacy and trade warfare may mean that a long conflict against a peer adversary is not required; however, the evidence from current conflicts is that conflict with a peer adversary will not be quick. The British Army must,

⁵⁷ King, Anthony. 2022 “Fighting from cities: The British army after Ukraine.” Wavell Room. [https:// wavellroom.com/2022/05/06/fighting-from-cities-the-british-army-after-ukraine](https://wavellroom.com/2022/05/06/fighting-from-cities-the-british-army-after-ukraine) Accessed 19 Apr 24.

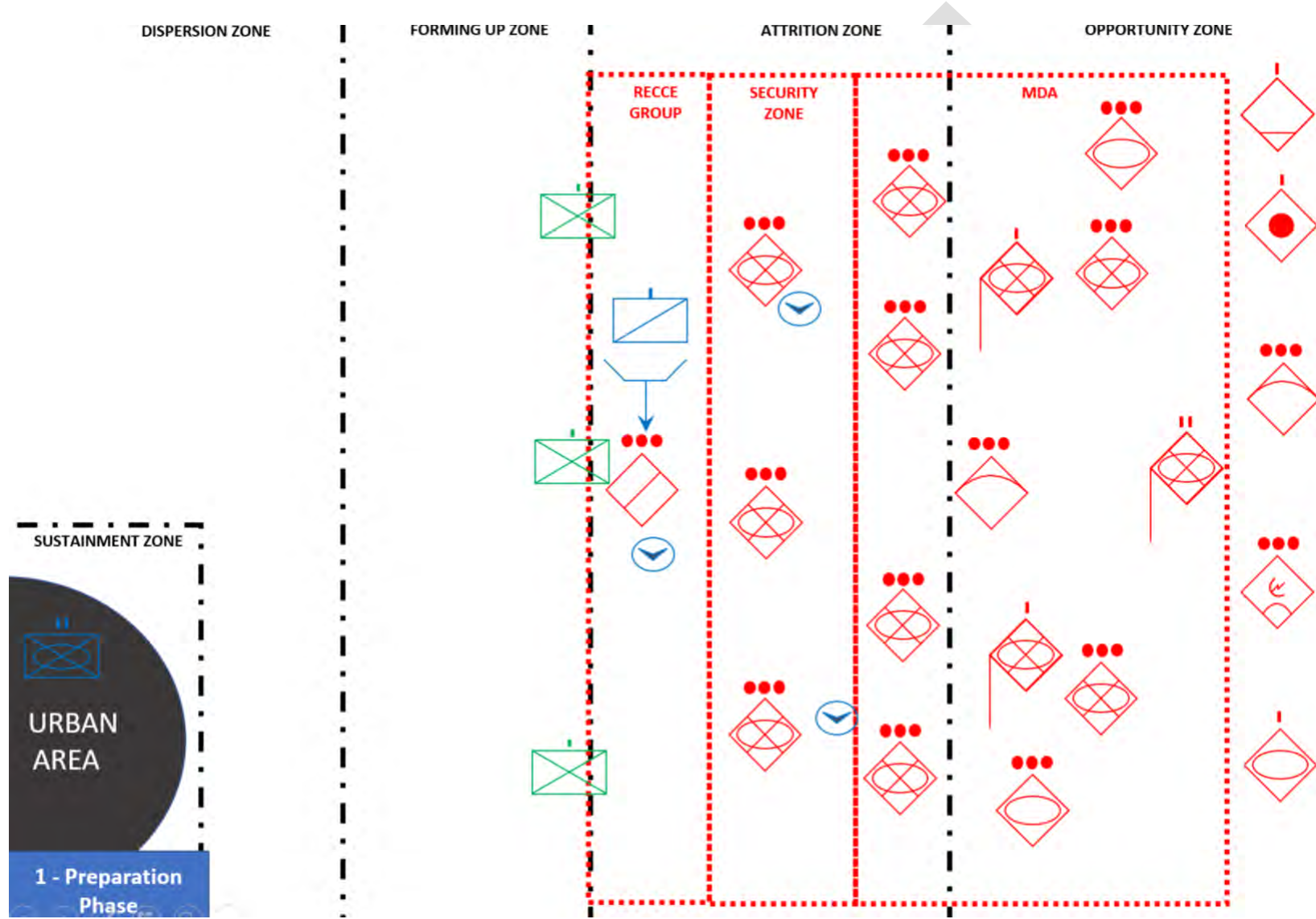
therefore, prepare for a long conflict; failure to do so risks the destruction of the UK's limited striking forces before further mobilization can occur. To do this the Army must prepare to fight in a manner that minimizes our losses while maximizing cost to the enemy as a preparatory stage of conflict that sets conditions for decisive subsequent action (Svechin). To this end the British Army should embrace urban areas as fortresses, or 'aircraft-carriers' from which agile, highly lethal forces can strike and recover. The tactical mechanism for sustaining long term attritional operations against a peer has been described here through the adoption and training of the Eroding Strike. There are crew and platoon level skills which need to be better trained for this to be successful; however, the greater leap to be made is an intellectual shift that seeks non-decisive, attrition of enemy combat power while protecting the friendly force.⁵⁸ It is acknowledged that the proposition in this work requires further refinement and enactment at unit and formation level through to Land Warfare Centre involvement in test exercises.

⁵⁸ Many of the core skills required to fight in this manner are already trained, or trained in part. There is adaptation required to tailor current warfighting skills and exercises. However, the changes required to train the Eroding Strike are more modest in scale than those required to train soldiers for a counterinsurgency such as during the Afghanistan campaign.

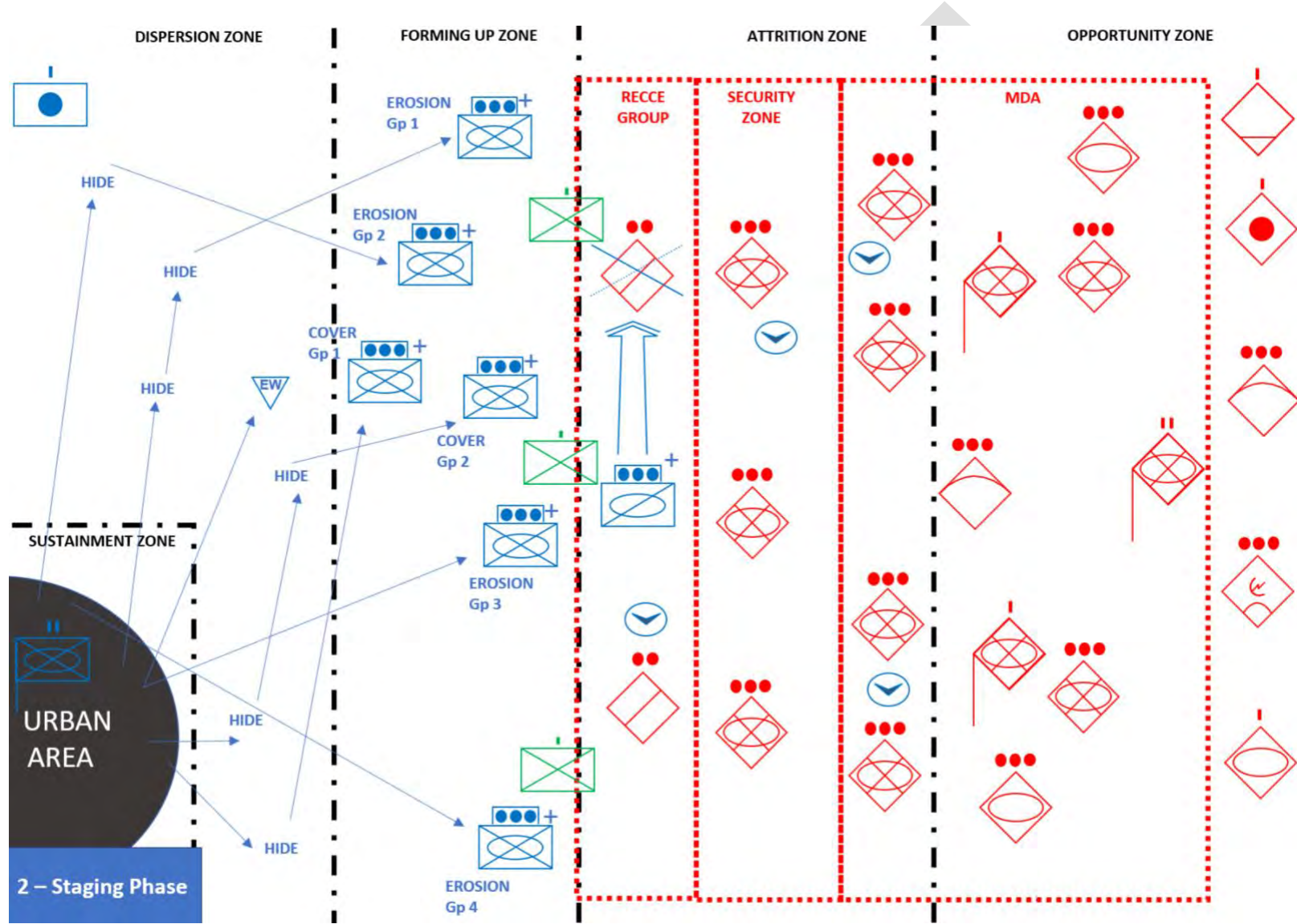
Enclosure 1: The Eroding Strike. Image 1/6 - Key.



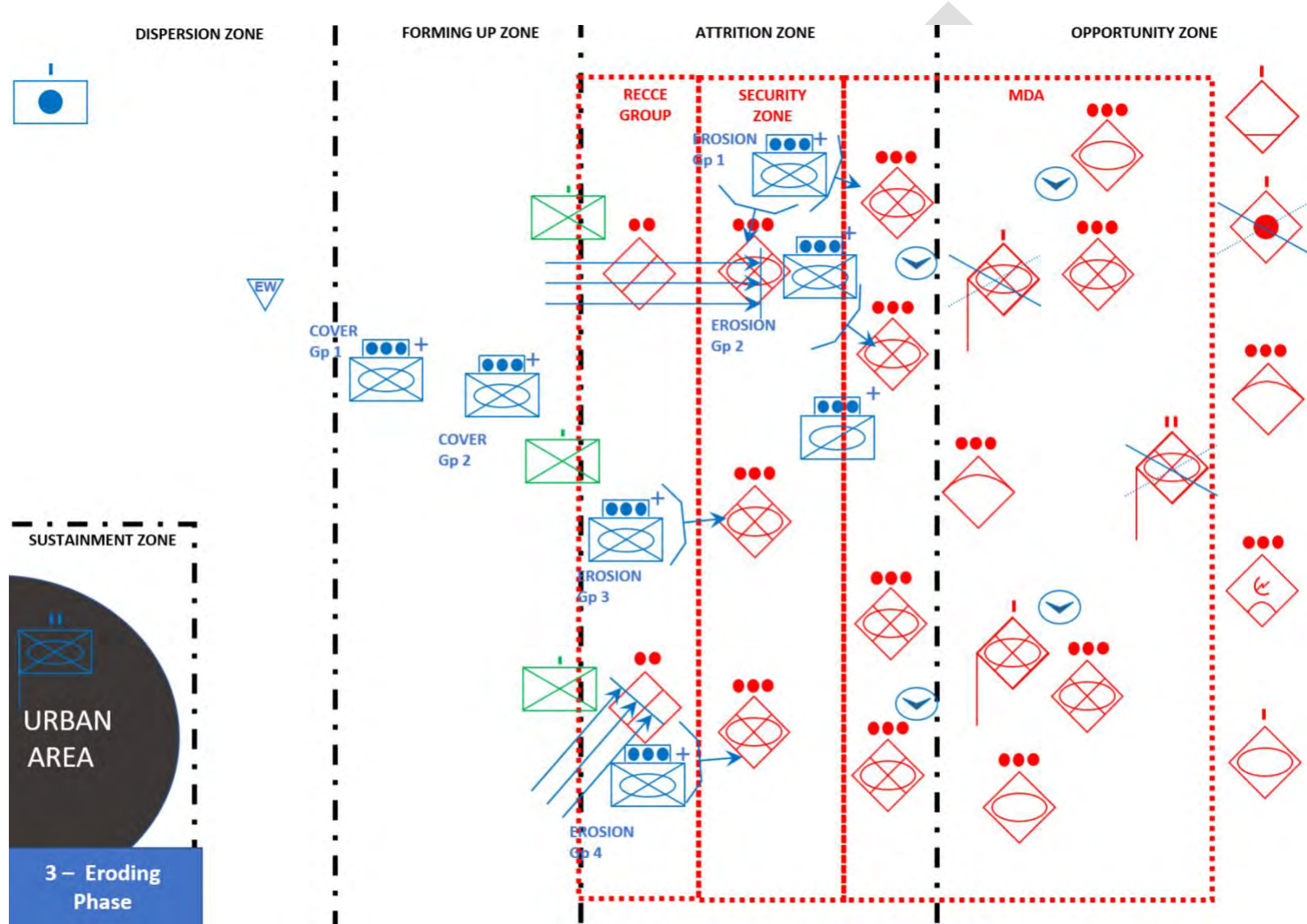
Enclosure 1: The Eroding Strike. Image 2/6 – Preparation Phase (1).



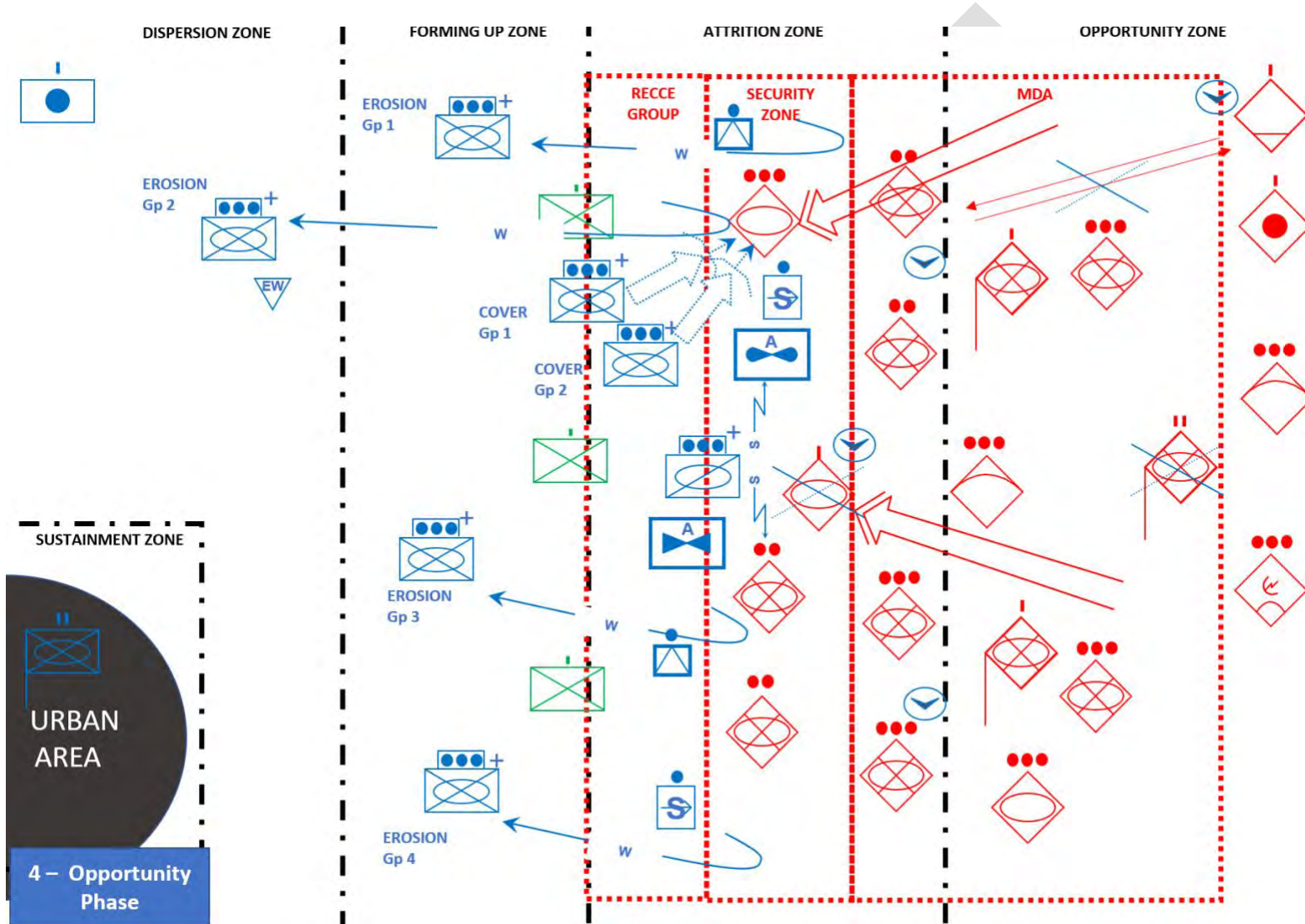
Enclosure 1: The Eroding Strike. Image 3/6 – Staging Phase (2).



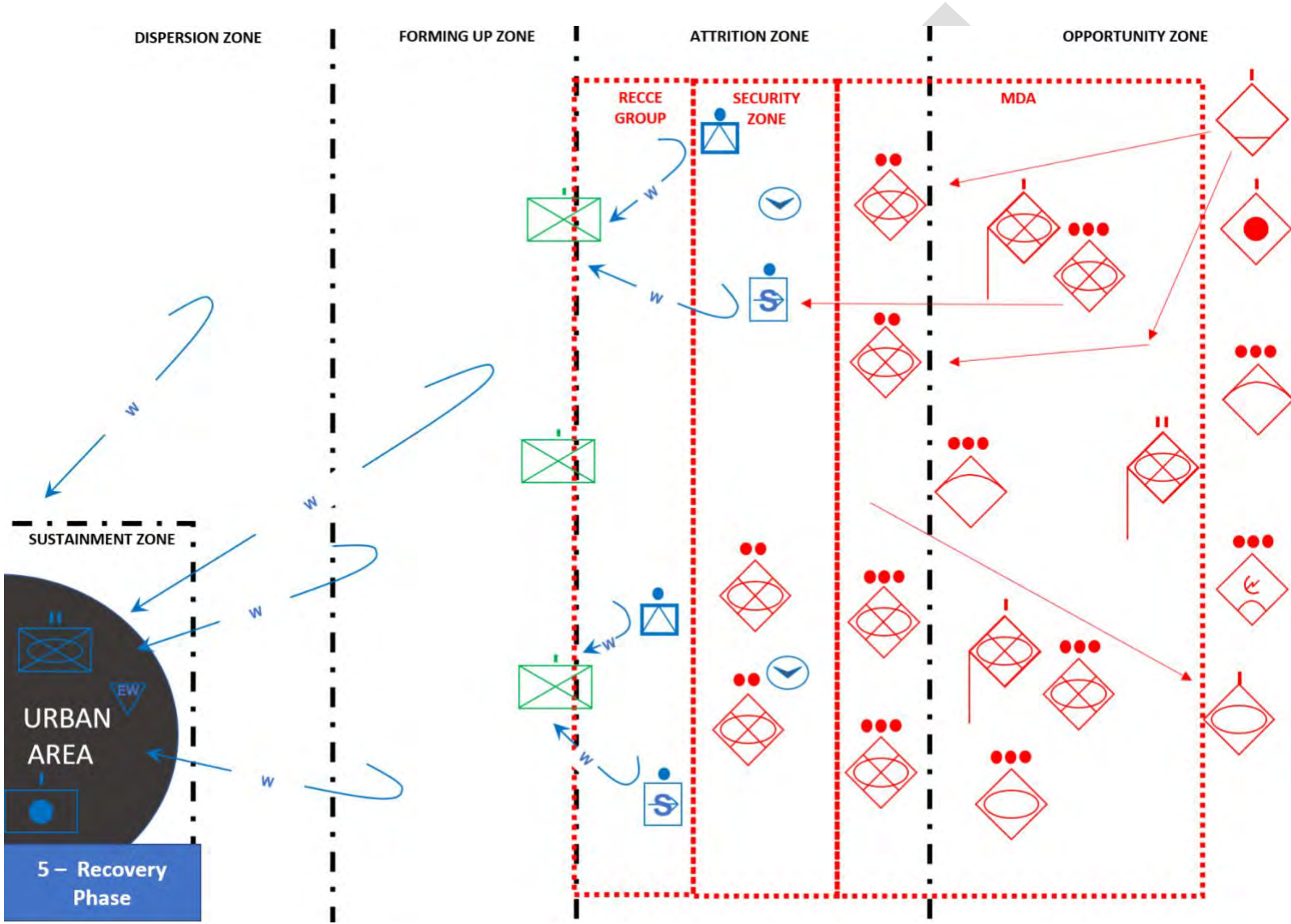
Enclosure 1: The Eroding Strike. Image 4/6 – Eroding Phase (3).



Enclosure 1: The Eroding Strike. Image 5/6 – Opportunity Phase (4).



Enclosure 1: The Eroding Strike. Image 6/6 – Recovery Phase (5).



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