

# City and CEMA



## Rules for Battalion and Brigade Wargames for Urban Conflict in the Modern Era

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City and CEMA is designed primarily as a Brigade level game with Company level manoeuvre units for fighting the smaller urban battles of the Modern Era, although it can also be used at Battalion level, and could possibly be flexed up to Division or maybe even down to Company. It could also possibly stretched back as far as World War Two. It is an area based game and its inspirations include *Storm Over Arnhem*, *Christmas in Hell*, *Storm over Port Arthur* and *We are Coming Nineveh*, but it implements very different mechanisms and also hopefully adds some different insights to urban combat. It operates at a more abstracted and higher level than my *Festung: Ortona/Rubble Town* rules.

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A. Open Architecture

# BASIC GAME RULES

## 1. THE BASICS

### 1.1 Introduction

These rules are written more in the spirit of a set of miniatures rules than of a set of boardgame rules. Gamemasters and players are expected to use the rules, plus their own knowledge and expertise, to create a battle of any real (or imagined) urban environment, given access to a reference map and information.

To help get you started an Introductory Scenario is downloadable from the website which presents an initial scenario, map, counters, cards, ORBATS, deployments, special rules and victory conditions.

Ideally the game should be played on a real map (1:25,000 or better), marked out with suitable areas, but also in development are a set of modular cards which can be used to create a wide variety of abstract urban areas, which can be faster and easier than trying to generate your own area map.

Annex A - Create Your Own Scenario provides guidance on how to create your own scenarios using the map or modular card approach.

*Note: These rules are designed to be used for combat in dense urban environments, which will include both cities and large towns. For simplicity the environment is referred to simply as a "city".*

### 1.2 Level

These rules are designed primarily for use with an attacking force of around Bn to Div size. As such the house by house, and even street by street fighting at Section and Platoon level is abstracted and the fights are over areas of control. The character of an area is defined largely by the type of Urban Terrain Zone it represents, but also by the level of damage (rubble), the presence of a civilian population, and of course the presence of the enemy.

The rules seek to introduce many of the unique elements of modern combat, such as

UAVs, UXVs, Cyber, Electronic Warfare, Influence etc, whilst recognising that much of this may be more of a Divisional fight. And the whole raison d'être of the rules is to try and represent the challenges of modern urban warfare including civilian populations, collateral damage, 2<sup>nd</sup> and 3<sup>rd</sup> order effects, the subterranean, toxic industrial chemicals (TICs) etc.

Trying to include all these in a single game which is playable without too much supervision and within a reasonable time-frame (e.g. by a Bn or Bde staff in a training day or even afternoon) is a big challenge, if I can even partly succeed I'll be happy – and how well I've succeeded is very much up to you and your feedback.

### 1.3 Dice

City & CEMA primarily uses 6-sided dice. Most rolls will be a single or a couple of dice only.

2D6 (or 2D) means roll two dice and add the totals. D6 means roll once dice and use the result. D3 means roll a six-sided dice, but halve the score, rounding up. 2D3 means roll two D3 dice and add the total (AFTER division and rounding). 2x D6 means roll two D6 but don't add the results.

DM means "die modifier" and is a number that you add (or subtract if negative) from a dice roll. When rolling 2D6 you apply DMs to the total rolled, when rolling 2x D6 you apply DMs to each dice individually.

For all rolls, unless otherwise noted, a Natural 1 is an automatic fail and Natural 6 is an automatic success, regardless of any modifiers.

### 1.4 Ground, Time and Unit Scale

The table below summarises the ground, time and unit scale for 4 levels of play. Specific scenarios may vary this. The rules are designed to play with a 2 DOWN orbat, e.g. Bde force and Coy manoeuvre units (MU).

Size	Area Size*	Turn	MU
Div	c.500-1000m	~8-24 hrs	Bn
Bde	c.200-400m	~2-4 hrs	Coy
Bn	c.100 – 250m	~30 – 60 min	Pl
Coy	c. 50m – 100m	~20 minutes	Sept

\* highly dependent on the density mix of UTZ types.

Area sizes can also be flexed without wrecking the overall model depending on whether you want a quicker or slower game. A normal, game will probably have about 40-80 areas on a map, a faster game might have less.

### 1.5 The Map

The map is typically divided into 40-80 areas. The areas should be aligned to major terrain types/urban zones, ideally with each area containing one terrain type - but multiple areas may cover a large contiguous area of one terrain type. Separate areas should also be used for the approach routes through the town/city, each route being a chain of areas. Major squares and other open areas should also have their own area. More guidance is given in Annex A.

#### Major roads/thoroughfares ....

Each area will have one or more of the following parameters associated with it:

- A **PROTECTION VALUE (PV)**, usually from 0 to 4, representing the density, construction and elevation of the buildings in the area – related to its UTZ. Note that \* (and exceptionally \*\*) indicates a -1 (or -2) DM on Electro-Optical (EO) detection due to the ease of hiding vehicles in certain terrain types.
- A **MAX RUBBLE VALUE (MRV)**, sometime shown as a superscript to the PV, defining the maximum RUBBLE value an area may have.
- A base **RUBBLE (RV)** value, which may be set at the start according the scenario rules, reflecting any previous fighting, bombardment or engineering works.
- A **Civilian Presence (CVP)** value. When doing a Civil Effects Check (CEC) add this number of dice to the roll. If '-' then no CEC is made.
- A **Size Rating (SR)**, related to the geographic extent of the area, and which can effect certain activities – such as difficulty in clearing/defending, density of Fires etc.
- Whether the area is traversable by large AFVs – which may also be modified by an inability to turn around!

Refer to the scenario as to how this information (and other) is shown on the map. Some examples include::

Description			
HDMU			
P	S	R	C



The scenario will also inform you of where to put the following markers:

- **Protected Sites (PS)** markers for locations such as places of worship, civic buildings, hospitals, utility installations etc. (usually purple);
- Any **Toxic Industrial Chemical/Material (TIC/TIM)** markers (usually purple);
- Any **Utility** markers (usually purple);
- Pre-existing **rubble** (usually grey).

You may be instructed to place some of the markers face down, or for some dummy markers to also be placed – so they need to be recce'd to confirm their presence (or not).

### 1.6 Terminology

The rules refer to the two sides as Attacker and Defender. In an encounter game then each side should roll a dice and the winner is nominally the Attacker. For a particular engagement either side may be in the attacking or defending tactical role (lower case).

The rules use the terms Unit, Counter and Element synonymously. These are the objects that you move and manipulate on the wargame map.

Units may be part of higher-level groupings (e.g. Companies in a Battalion), that higher level is referred to as the Command Unit, as this is the level at which commands are issued in the game. The next higher level, representing all the forces on a side is called the Formation. Note that this is different from conventionally military usage where Formation is applied to Brigade or higher groupings.

The term "Leg" unit is used to refer to units operating away from vehicles, i.e. both infantry and engineers.

### 1.7 Unit Characteristics

Combat Units have:

- A **Close Combat Factor (CCF)** value which reflects their ability to fight within urban terrain and/or at close quarters, including assaults; and
- A **Ranged Combat Factor (RCF)** value which reflects their ability to fight at a distance
- An **Armour Class (AC)**:
  - 0 = No armour
  - 1 = Light Armour
  - 2 = Medium Armour
  - 3 = Heavy Armour
- A **Hit Capacity (HC)** which represents how many Hits/Steps they can take until they are combat ineffective. For most units this is 4 (shown by Green/ Amber(Yellow)/ Red/ Black cubes) and aligns with NATO levels, but some units may have 3 (poor unit) or 5 (excellent unit), or 2 or even 1 for small units. These are referred to as STEPS or DEGRADES in these rules. Loss of steps is noted by placing the appropriate small coloured cube by the element. Note that this cube stays with the block even if the block becomes hidden!
- Units may have a ∞ symbol in the top left which indicates organic small UAVs which provides beneficial shifts in Direct Fire and Close Combat.
- **Exhaustion?**

Hits	State	% Strength	DM
0	Fresh	100%	Na
1	Fully Operational	85%-99%	-1
2	Substantially (& 2 step)	70%-84%	-2
3	Marginally Operational	50%-69%	-3
4	Not Operational	<50%	Na

Source: MIL STD 2525D referring to ADRP1-02.

	<p>6/4 = Close Combat Factor (UCF)(if Brown/Underlined can't use in Assault)</p> <p>6/12 = Ranged Combat Factor (OCF)</p> <p>Diamonds= Steps/Hit Capacity (HC)</p> <p>Shield = Armour Rating (AR)</p> <p>∞ = Organic UAVs</p> <p>At left is the element/sub-unit designation</p> <p>At right is the parent/Command Unit designation</p>
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Units do not typically have a range distance given the small areas being represented and limited sight lines. Similarly, the small area and relatively long turn lengths makes movement allowances relatively irrelevant with the presence, or possible presence, of enemy units and defence works being what limits movement.

Dummy blocks/counters are, along with hidden counters/blocks, a key means of introducing hidden information and decreasing situational awareness and increasing operational uncertainty in City & CEMA. Typically, the attacker will get 2 Dummies per 3 elements, and the defender 1 Dummy per element. Recce units will get 1 or 2 dummies per element. In addition, each HQ element gets one Dummy and each Engineering work gets one dummy. Scenario rules may vary these.

### 1.8 Capability and Asset Cards

Many of the more advanced features of modern urban combat are abstracted in the

game by Capability Cards and Asset Cards. This includes:

- EW (detection and jamming)
- UAVs
- Cyber (attack and defence)
- Influence Ops
- Precision Guided Munitions

Asset cards typically form part of your ORBAT (or Atts & Dets) and are available each turn (although their usage may be limited). Capability Cards are “bought” each turn using your allocation of Command Points (CPs).

## 2. WARGAME PHASES

The full wargame is played in 5 phases, which reflect the phases of the USECT doctrinal approach to urban warfare (NATO RTO-TR-071). Whilst principally designed with non-peer urban warfare in mind it is sufficiently generic for use in Large Scale Combat Operations (LSCO). The phases are:

- Understand
- Shape
- Engage
- Consolidate
- Transition

The procedures for **Understand**, **Shape**, **Consolidate** and **Transition** are detailed first, and then the longer rules for the **Engage** phase, as these will form the majority of the wargame. Some run throughs of the game may only include the Engage, or Shape and Engage phases.

### 2.1 Understand

#### 2.1.1 *Intelligence Preparation of the Operating Environment*

The **Understand Phase** is all about players doing their Intelligence Preparation of the Operating Environment (IPOE – ATP2.01-3) and then devising a plan. The IPOE includes 4 main elements:

- The Threat
- The Terrain
- The Weather
- Civil Considerations

In the **Understand Phase** players can build their knowledge of the Terrain and Civil

Considerations. Each side should be given a Side Briefing document which will consist of summary information on each of these elements. They will be able to add to their knowledge of the Threat during the **Shape Phase** through using ISR resources.

#### 2.1.2 *The Terrain*

The first task for the players is to understand the map and basic geography of the urban area over which they will be fighting. Both sides should be allowed time to study the main map, along with the UTZ and possibly rubble information, and be provided with smaller maps for planning purposes. The umpire may mask some or all of the information, and place some misleading information depending on the scenario. If the scenario is set in a real-world urban location then players should be at liberty to use on-line open-source services to better understand the location.

#### 2.1.3 *Civil Considerations*

The Side Briefing will provide each side with an Understand budget in Points, and a range of information assets on which they can be spent. Typically the budget should be enough for only 30%-50% of the available information – reflecting the limited staff resource available to hunt out the information required and forcing the players to prioritise. Some information may also be at different levels of detail, the more detailed information costing more. Players should inform the Umpire of how they want to spend their budget and the Umpire will provide the material acquired. Where a real location is being used players are also encouraged to refer to open source information to get a better sense of the environment, and to potentially get some of the briefing information for free! The Umpire should also be prepared to allow players to feed real world details into the game, such as through giving them bonuses to dice rolls or other effects.

### 2.2 Shape

Some of the activities in the **Shape Phase** differ for attacker and defender. If this is an encounter battle then both sides count as attackers.

#### 2.2.1 *Planning Sub-Phase*

The players should develop their plans for the battle as appropriate. They will have some limited ability to modify plans and deployments as the phases progress. Both sides should plan the detailed laydown of their forces, typically the defender by the main map, and the attacker away from the map.

As part of this:

- Both sides should plan the assignment of their Command Points for the **Shape Phase** as detailed in Section 2.2.2.
- The defender should also plan their engineering works as shown in 2.2.3, and the attacker any artillery barrage. The Side Briefing will define the resources for both.

The scenario will specify the ORBAT of each side and any limits on deployment and what units are on the map at the start and which and which may become available as reinforcements and when.

The Attacker will, according to the scenario, define which Avenues of Attack (AoA) will be used onto the map, and the Order of March for each group, and, if required by the scenario, the location of any assembly areas or artillery groups. Each entry route will have a secret Codename which is shown on the PAC and a private map, and not shown on the main map.

The scenario will also specify how many DUMMY units each side may deploy, which should move and act as regular units, but will only be revealed as dummy counters through ISR activities or direct engagement.

Note that HQs, (Alpha, Bravo and TAC) and associated dummies must also be placed, and the Main identified on the PAC. HQ dummies must be within 3 areas of their "parent" HQ on the map, or in the same or neighbouring AOA.

Each Command Unit must be given its initial orders chit on the Force Rosta (see Section 0). Each side must also declare their EMCON state and place the relevant card on their HQ PAC.

### **2.2.2 Shape Command/Capability Points**

The Force Briefings will provide each side with a number of Command/Capability Points to spend on ISR, Non-Kinetic Effects and

Supporting Fires, each represented by cards. Points may only be spent on cards with the U (Understand) or S (Shape) tag. These represent an array of Operational, Strategic and National assets which have been assigned to support the player's Formation

Each side should decide how they want to allocate their points against the different Capability Cards during the planning sub-phase.

Once points have been allocated then players should alternate executing Capability Cards in any order they wish – attacker going first. Note that many actions may be moderated by a dice roll. Defensive cards (represented by a shield icon) can be played to "trump" and block or reduce an enemy's action as they play a relevant card.

Once the selected Capability Cards have been played the wargame moves on to the next phase.

### **2.2.3 Defender Engineering Works Planning**

Engineering tasks are either limited by engineering stores available, the equipment available or the manpower available. Budgets are shown in the Force Briefing and on the Engineering QRS.

The **Shape** Engineering resources can be spent by the Defender according to the table on the Engineering QRS. Any unspent points are lost.

Engineering work is planned as part of Section 2.2.1 and then shown on the map in Section 2.2.5. Again, an allowance for DUMMY works will be specified in the scenario.

### **2.2.4 Supporting Fires Planning**

The scenario will specify the number of Fire Missions available for the initial bombardment (usually by the attacker) and any initial interdiction (usually by the defender), both represented by Capability Cards. These represent a mix of Artillery and Air strikes. A player does not need to use them all (or any), but they cannot be saved. Note though that any counter-battery losses here will impact the availability of future fire missions.

Note that both Bombardment and Interdiction missions are more effective when ISR Capability Cards have been used to identify and target units, so plan your ISR activities to complement your Fires activities.

### **2.2.5 Laydown**

Once plans have been produced the laydown can begin.

The Defender will place their units/blocks on the map according to their plan – but with blocks orientated towards them so hidden from the enemy.

Engineering works are marked on the map by placing the relevant block, placed face-down or facing the player if using blocks, or covered with a HIDDEN counter if using counters. Except for point features (e.g. bridges) placement within an area is notional.

Attacker's blocks are placed/stacked in march order on the Avenue of Approach PAC, or on the map, as defined by the scenario.

### **2.2.6 Shape Capability Card Phase**

Players (starting with Attacker) now alternate in playing the Capability Cards they "bought" in Section 2.2.2.

Each card should explain any rules and actions to apply. It is left to players to plan the best sequencing of their actions.

Bombardment fire missions may be assigned against map areas only, and Interdiction fire missions assigned against AoA only. Resolve the fire missions using the standard Indirect Fire rules [8].

*Note: Any ammunition usage comes off of the allocation for the whole game unless otherwise noted.*

### **2.2.7 Civilian Population and Adverse Opinion Reaction**

After all shaping activities have been completed ensure that any Civilian Population blocks and Infrastructure effects and any changes to the Adverse Opinions tracks have been taken. Civilian movement and fire/TIC spreading should be assessed as per Section 13.2.

### **2.2.8 Engage Capability Deck Selection**

Each side will be given a CP allowance to build a deck of Capability cards to select from during each turn of the Engage Phase. Typically they will only have 10-28 CP points each turn, but the deck may be built of ~40 CP, depending on the scenario. The main aim is to reduce the number of cards players hunt through each turn.

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## ENGAGE

This is the phase when the majority of the kinetic (and other non-kinetic) operations take place. It consists of a number of turns (defined by the scenario) of combat actions.

### 3. ENGAGE PHASE MANAGEMENT

#### 3.1 Initiative

Unless otherwise specified in the scenario, then each side dices for initiative each turn, rerolling any ties, and the winner decides if they want to go first or second. CCs retained from the previous turn may allow modification of the dice roll.

*Optional: You can try and have sides moving alternatively by Unit (i.e. Bn) or even by element/block, but this will take more time and you need to track which elements have activated.*

#### 3.2 Turn Sequence

The standard turn sequence is shown below, but may be varied by scenario rules.

- Determine initiative
- Determine/update Environment
- Declare EMCON states
- Play any CP affecting cards
- Roll for CPs, select cards
- ISR Cards (ABA)
- Combat Engineering Tasking/Completion
- Non-FIRES Cards (ABA)
- FIRES Cards
- Fire & Manoeuvre (AB)
  - End by removing own SUPPRESSION
- Civil Effects
  - DP Movement
  - Resolve Civil Effects Checks (CEC)
  - Evolve Fires, TICS & TIMs
  - Adverse Opinion confirmation
- End of Game Check
- Recovery & Reinforcement
- End of Turn actions
  - Remove NEUTRALISATION

Note:

- AB means all one side (as chosen by Initiative player), then all other side
- ABA means alternate one side and other, one item at a time
- A=B means simultaneous

Each activity will now be described in turn.

#### 3.3 EMCON

Each side must declare what EMCON state they will be in for the coming turn. There is no cost to the change, but it must be declared at this stage as it will effect ISR tasking. Place the relevant EMCON card on the PAC. EMCON implications are shown on each card.

<b>1 - Routine</b>	Free use of voice, not normal in war
<b>2 - Essential Voice</b>	Default state
<b>3 - Voice Silence/ Data Only</b>	Only burst data
<b>4 - Blackout</b>	No radiating comms. No CPs unless using Cable/Co-Opt Comms.

### 4. COMMAND POINTS AND CAPABILITY CARDS

The Side Briefings will define how many Command Points each side gets per turn. These are spent *both* on capability cards and changing unit orders. The default is:

- 10 + D6

However, this will be reduced as follows:

Damaged Main in Control (i.e. 1STEP loss)	-1
Alt in Control (w/o Main staff)	-2
Tac in control for 1 turn	-2
Tac in control for more than 1 turn	-3
Tac destroyed (i.e. Bde Comdr lost)	-2
EMCON 3	-1
Enemy jamming (as per cards)	Various

If Main, Step-Up and Tac (see below) all Destroyed then it's game over.

**If the force is on EMCON4 (see below) then the side will have NO CPs that turn, unless they have played the Cable Comms or Co-opted Comms cards, which define how many CPs they give.**

In this sub-phase each side chooses how they are going to spend their CPs (including any for changing orders), drawing the appropriate cards. They then alternate playing a card, attacker starting.

The capability cards represent an array of Organic, Operational, Strategic and National assets which have been assigned to support the player's Formation. CPs may only be spent on cards with the Execute (E) tag. Some cards will limit how many can be played per turn, and some (marked N) will only have effect next turn.

Any requirements or rolls for the cards are stated on the cards, as are their effects if successful.

For details of Fires see Section 8 below.

### Battalion Level Game

In the Battalion game only Bn and Coy HQs are represented on the board, there is no Step-Up or Tac. The CP chart is amended as below.

Bn HQ Lost	-1
Bn CO Lost	-2
EMCON 3	-1
EMCON 4	-3
Enemy jamming (as per cards)	Various

## 5. COMMAND, CONTROL AND COMMUNICATIONS (C3)

### 5.1 HQs

Units and Formations have HQs in order to enable them to operate. Players only actively manage Bde and (if present) Div HQs. Bn HQs are abstracted.

In the standard game (which may be varied by scenarios) each formation has the following HQ Elements:

- Alpha
- Bravo
- Tac

Each of these is on the board, and moves like any other unit. The Side Briefing will also say how many HQ Dummies are available, typically 1 each for Alpha and Bravo and 2 for Tac. HQ

Dummy's may not move more than 3 areas from their "parent" HQ.

At all times one of Alpha or Bravo should be in active command of the formation – this is known as Main – *and may not move whilst it is in command*. The other HQ will be mobile or set-up ready to take command – this is known as Set-Up. Tokens should be used on the Dashboard to indicate which is Main and which is Step-Up. Tac HQ is a small HQ used by the Formation Commander to move close to the FLOT, but does not usually carry out a planning or management function.

*Note: A side with units in the AOA boxes must also observe these rules, and one HQ must be stationary on an AOA until another HQ has moved onto the map and is ready to take command.*

Any change of command is instant and takes place at the start of a turn in the C3 phase – just place the Main token on the box for Alpha, Beta or Tac.

HQs take damage like any other unit. It is suggested that there damage is marked on the Formation PAC rather than on the block so as make it harder for the opposition to track the HQ!

If the non-Main Alpha/Beta HQ is destroyed then there is no effect, beyond being no longer able to change command. Tac can take command for a maximum of 1 turn.

If Main is destroyed then roll D6:

1-3	Main and all staff killed. Step-up becomes Main with skeleton staff. -2 on all future comms checks and CPs. Use the Alt counter to show.
4-6	Main vehicles and kit destroyed but majority of staff escape. Step-up becomes Main next turn with full staff.

Tac may take control for 1 turn, or perpetually if Alpha and Beta are lost, but subject to CP and comms check DMs as shown.

### Battalion Level Game

In the Battalion game only Bn and Coy HQs are represented on the board, there is no Step-Up or Tac.

If the Bn HQ gets hit then roll for the CO to escape, and regardless the nearest Inf Coy

HQ takes over. If no Inf Coy HQ is available it's Game Over.  
In the Bn HQ (or replacement) moves in a turn then its number of CP are reduced (by buying a hidden Move HQ card).

### Battalion Level Game

In the Bn game it is unlikely that there will be time or resources for anything other than automated mine clearance and dry gap crossing.

## 5.2 Cohesion

Modern armies typically operate within clearly defined formation and unit boundaries. To help enforce this there are two rules:

- A sub-unit may not move into an area which is between areas occupied by sub-units from a different Command Unit UNLESS under RPOL or FPOL orders. Recce units may ignore this.
- If a sub-unit is further than 2 areas (for leg Inf), 3 areas (for mech inf) or 4 areas (for tanks) from another sub-unit of its parent unit then it takes an Out of Comms chit.

## 6. COMBAT ENGINEERING

During a turn there are limited opportunities for combat engineering activities. Those that can be undertaken and the turns they take are shown on the Engineering QRS.

Combat Engineering units are represented as blocks on the map and subject to detection and damage. Most are 2 Step units. An Engineering Block must be with 3 areas of any assigned task, but does not need to be explicitly moved to the site of the task.

Units undertaking a combat engineering task should be noted as TASKED at the beginning of the turn, and if the task is a multi-turn one then keep track of progress each turn (a PAC with TASKED markers can be useful here). Resolution of non-instant engineering tasks is done in the end-of-turn phase. If a unit suffers a SUPPRESSED result or worse it loses its TASKED status for that turn, and no progress is made on the task.

Any Field Engineering work (e.g. a Strongpoint or L2 trench) *must* be UNHIDDEN whenever you claim its protection or other effect.

## 7. ISR and DETECTION

### 7.1 HIDDEN State

All elements are HIDDEN until:

- They move into an en ZOC
- They are detected and UNHIDDEN by ISR activity
- They have been assaulted (i.e. *after* the assault)
- They fire from in sight on an enemy (same edge)

An element that ends its move outside an enemy ZOC automatically becomes HIDDEN, its block can be stood back up, and it loses any INT+1 markers.

All elements lose their INT+1 markers as soon as they move.

An element can never have more than two INT+1 markers.

Note: When a HIDDEN element is fired at, or subjected to Fires it is not UNHIDDEN even if it takes damage. Just put the damage cube by the block in its HIDDEN state.

### 7.2 Dummies

Dummies should be moved like any other unit – it's up to the owning player to be consistent.

If a dummy is moved into the ZOC of an enemy element it is immediately revealed and removed from the board. However if an enemy unit moves into the ZOC of the Dummy, the Dummy is not revealed until the enemy tries to assault it.

When fired upon (direct or indirect) the Dummy should take notional damage, marked as usual, but only reveal as a Dummy once it has taken 4 steps of damage (or 2 or 3 for HQ, Engineer and other specific dummies). This

might teach the value of battle damage assessment!

A dummy *must* stop once in an enemy ZOC, and shouldn't reveal itself unless fired on or "assaulted" by the enemy.

### 7.3 Close ISR

At the start of the ISR phase, any element adjacent to and assaultable by (i.e. not across a wide river) an enemy element becomes UNHIDDEN.

### 7.4 Deep ISR

The Capability Cards will provide a number of ISR points. In the Basic game each automatically provides a certain number of points, but optionally follow the instructions on the card to a) determine how many points its provides and b) any special constraints on those points.

Players roll a number of dice equal to their ISR points. They then alternate to use their dice to either UNHIDE an element or add a TARGETED marker to an UNHIDDEN element (to a maximum of 2), depending on the nature of the zone the target unit is in and the dice value, in accordance with the table in the QRS.

Provide card to cover organic ISR for force?

## 8. FIRES

The scenario will define how many Fire Missions and of what type each side has potentially available each turn, or for the game as a whole with a maximum per turn, and these are represented as Capability Cards which are bought in the normally way. Fire Mission types include:

- Guns (Battery or Regiment)
- Mortars (although usually organic and with unit combat factors)
- Attack Helicopter (AH Sortie)
- Close Air Support (CAS Sortie)

Each Capability Card contains the instructions for its use, which may include a roll to request – or a roll to ensure that a higher priority task doesn't take it away at the last moment. The number of cards is limited in reflection of the

limit on sorties or rounds available. Some cards only have an action on the *next* turn (i.e. not the one they are bought on).

Note that each enemy element can only be the subject of one Fires attack each turn – although there is no limit to the number of guns/fire missions involved - but they must all be declared and executed as a single weight of fire – you can't drip feed until you get the desired effect!

### 8.1 Fires Resolution

The Fires section of the QRS defines how to resolve any fire mission. Note that:

- Weight of all units firing on a particular mission is totalled
- If against an area rather than UNHIDDEN units divide weight by area size

### 8.2 Danger Close

Fires are normally brought down on areas not occupied by your own troops. If you do wish to bring fire down on an enemy in an area that you also occupy then roll an additional D6 and consult the table on the QRS.

### 8.3 Collateral Damage

For every XXX, place a Collateral Damage marker (e.g. a yellow or pink cube). At the end of the turn roll for every marker on the board to determine what collateral effects have been caused (see Section XXXX).

If a Civilian Block is in an area subject to fire/combat of any kind then on the following rolls it is killed, placed in the Civilian Casualty box and the Adverse Opinion track moved 5 spaces for the firing side (both if an assault).

- Non-rubble result: 5+
- Rubble1 result: 4+
- Rubble2 result: 3+

Scenario ROEs may add extra restrictions on a side firing into or near a No Fire target.

At the scale of City and CEMA it is assumed that each area is large enough, and fire control accurate enough, that missions do not stray into neighbouring areas unless there is a mishap.

## 9. FIRE & MANOEUVRE

### 9.1 Movement

#### 9.1.1 General

Units have a movement allowance, but this is spent on obstacles rather than simply in moving between areas. Movement Allowances/Points (MA/MP) are below, but may be varied by scenario:

Element Type	Movement Allowance
Leg	6
Tracked	10
Wheeled	10
Recce	12

Counters indicate Mobility in the top-right corner.

Movement costs are:

Action/Situation	MP Cost
Per Area Size	1
Per Highway Segment	1
Wood (not Leg/Recce)	+1
Per Rubble	+1
Per Civilian	+2
Per Riot	+3
Per Assault	+1
Minefield	+4

If an area is at max rubble then it is impassable to Wheeled elements.

Rubble is removed by engineering or HE actions (see below)

Elements must stop moving if:

- Moving into the next area would exceed its movement allowance (but it may always move 1 area unless Blocked).
- It moves adjacent to an enemy element (including HIDDEN DUMMY elements)

Any unused MPs are lost.

Elements have a movement allowance, (MA). Counters indicate Mobility in the top-right corner. Use first if two are shown.

Elements must stop moving if:

- Moving into the next area would exceed its movement allowance (but it may always move 1 area unless any of the following apply).
- It moves into the ZOC of an enemy element (including HIDDEN DUMMY elements), except to then assault.

An element may move and fire or fire and move and any combination, but is always possible subject to return fire each time it moves or fires.

For *each* new area that a unit moves into it *may* be subject to enemy direct fire. If fired up on the unit may return fire and may then continue moving if its movement allowance allows.

#### 9.1.2 Area Movement

An element cannot move diagonally between areas, they must move across an obvious edge from one area to another.

#### 9.1.3 Moving and Firing

An element may move and fire or fire and move and any combination. As the Phasing player it may not fire twice from the same area.

#### 9.1.4 Enemy Opportunity Fire

For every new area that an element moves into it *may* be subject to enemy direct fire. If fired upon the element may return fire and may then continue moving if its movement allowance allows.

#### 9.1.5 Clearing an Area

If an element has been stopped by entering a ZOC and then manages to remove that ZOC by either showing the projecting unit to be a Dummy (i.e. assaulting it) or by eliminating a real unit by fire then it may continue moving but must pay 1MP for the time taken to clear the area/prove the dummy.

#### 9.1.6 Moving from Avenues of Approach

When deploying from an Avenue of Approach an element is placed on one of the entry areas

and may then execute a full move – spending MPs to cross the first area.

The attacker does not need to move every element on an AOA onto the board in one turn, and can spread them out over as many turns as they desire.

Units moving from AOA onto the map *retain* any UNHIDDEN or INT+1 status that they gained whilst on the AOA since AOA actions are abstracted in time.

### 9.1.7 Stacking

There are no stacking limits – just juicy artillery targets. The number of elements that can attack from area to area **is limited to the number of blocks that can get 75% of their width onto the edge**, with a minimum of 2 blocks.

### 9.1.8 Zones of Control

Each element (including Dummies) exerts a Zone of Control (ZOC) around it. Once an element enters an enemy ZOC:

- It *must* stop moving
- It *may* conduct an assault
- Next turn it may move back out of the ZOC, but not into the ZOC of another unit (or another area in the ZOC of the same unit).

Once the ZOC is removed the unit can move as normal.

ZOCs *do not* extend from a low PV area into a higher PV area, and are not projected by units which are engaged.

**TACTICAL ISR?**

**Does organic UAV extend further?**

### 9.1.9 Highways

Roads within areas are just treated as part of the area, but some areas have HIGHWAYS running along their edge, dividing them from a neighbouring area. HIGHWAYS are divided into SEGMENTS, being a length of HIGHWAY bordered by the same 2 areas. The following special rules apply to highways:

- HIGHWAYS are NOT blocked by Rubble, but may be blocked by barricades, craters or mines.

- HIGHWAYS have a PV of 0, or exceptionally 1 (usually overpasses).
- When moving along a HIGHWAY a unit must stop when there is a potential enemy unit on any bordering area, UNLESS that unit is a DUMMY. The next turn it may proceed along the HIGHWAY whether any threat is removed or not – but must stop again at the next area with enemy counters.
- A unit may move from the HIGHWAY to any adjoining area subject to the normal MP costs.
- A unit may stop (and defend) on a HIGHWAY, blocking enemy movement along or across the HIGHWAY SEGMENT until it is removed. It has PV=0 and RUBBLE=0 for combat purposes. If forced to retreat it may retreat either one segment up the HIGHWAY or into an adjoining area.
- A unit may move across a HIGHWAY from one area to another at no additional cost, but if attacking from the HIGHWAY into an area it has a PV=0,RUBBLE=0.

### 9.1.10 Subterranean

**To do**

### 9.1.11 Mouseholing

Mouseholing and similar practices are abstracted into the units Combat stats to reflect training (or lack of) in the skill.

### 9.1.12 Rivers and Streams

**To do**

## 10. Direct Fire

Units may fire from their area on enemy troops either in their area or in an adjacent area, or on more distant targets If there are only Open or Rural areas intervening. The URBAN FIRE COMBAT factor is used for any fire into an area with a PV greater than 0, otherwise the RANGED FIRE factor is used.

Each unit performs their own firing with its own die roll, but an enemy unit can be the target of multiple attacks. Units cannot fire on

enemy in the same area as friendly troops unless the unit firing is in the same area.

The Direct Fire process is detailed on the QRS.

For every **XXX**, place a Collateral Damage marker (e.g. a yellow or pink cube). At the end of the turn roll for every marker on the board to determine what collateral effects have been caused (see **Section XXXX**).

There is no reaction fire as you will normally get your chance to return fire in your next phase, and you have had the chance to win initiative to see if you go first. If the enemy declares an assault on you then you do get the chance to fire.

## 11. ASSAULT

Close Combat Assaults are how you move from the area you in to an area occupied by the enemy. NEUTRALISED units can't start or support Assault.

The attacker can attack across multiple area edges, but a maximum of 2 companies and upto 4 smaller units across each area edge.

The process for Assault is shown on the QRS and largely follows that for Fires and Direct Fire. The URBAN COMBAT FACTOR is used regardless of where the combat takes place.

### CALL IT CLOSE AND RANGED?

The typical sequence for an assault is:

- Attacker moves into adjoining space
- Attacker fires
- Defender fires
- Defender (unless Leg being attacked by non-Leg) has option to fall back 1 area.
- Assault happens
- The Defender may take a first damage as a retreat (1 area), but all other damage must be taken as step losses. The turn is then over for the Attacker.
- Attacker can follow-up into the Defender's area if they are eliminated/retreat, or if they inflict more damage than they received, but can move no further.

- If the Defender is still fighting the Attacker can chose to:
  - Remain ENGAGED, and both units marked as such, or
  - Not continue and either remain in the area (if already there) or in own area and not marked as ENGAGED.
- If "defender" is a DUMMY, then defender must spend the +1MP assault cost, but may decide whether to move in or stay where they are before moving further if their MA allows.

It can be useful to do assaults at the end of the sub-phase once all other movement has been done – but this is optional and by mutual agreement.

### Bn Game

The number of units *attacking* in an assault is limited by the number of blocks which can fit more than 75% of themselves onto the edge between areas. The attack can be made from multiple edges.

If a unit is marked as ENGAGED then when next activated it *must* either continue the combat (but maintains attacker/defender role from initial turn), or try and disengage, in which case it must retreat straight back – and may ignore ZOCs as long as it does not end in a ZOC.

### To Disengage:

Roll D6. Disengage and normal move (less 1MP) on 3+.

Have less/more damage than en	+1/-1
Have higher/lower PV than en	+1/-1
En in same area	-2

Units marked ENGAGED may not be subject of other Direct or Indirect Fire unless one side bring down Danger Close fire.

## 12. Combat Engineering

### 12.1 Minefields

All minefields are assumed to be marked. They will be declared when en is adjacent, and the en can decide what to do next. Minefields slow movement and incur damage as for equivalent Fires.

If there are friendly troops in the same area then the minefield is assumed to be between them and the enemy!

Mines trigger whenever a unit moves into or out of an area, and on infantry debussing or embussing,

### 13. Civilian Effects

#### 13.1 Collateral Markers

TO DO

#### 13.2 Civilian Movement

Combat actions may result in civilian groups (white cubes) being placed on the board. In this sub-phase each civilian unit is moved D3 areas towards the nearest built-up area edge, and then D6 areas per turn towards the nearest map edge. Once it reaches the map edge it is placed in the DP box of the side "owning" that map edge - as defined by the scenario and current FLOT.

The following rules apply to the movement of the civilian groups:

- They will not move into an area containing both Red and Blue forces, but will move around it on whatever side is closest to the urban edge, or random if equal.
- Depending on their sentiment (see Scenario) they will not move into an area containing an enemy force and will move directly away from it.

Civilians slow element movement as shown in the movement table on the QRS. They can also be removed to the safety of a Displaced Persons camp by the use of a Civil Affairs Capability Card.

#### 13.3 Riot Evolution

Roll D6 for each riot block.

<b>1,2</b>	Fades away	<b>3,4</b>	No change
<b>5</b>	Moves 1 area randomly	<b>6</b>	Adds extra block

#### 13.4 Fire

Roll D6, DM: +1 Lt Ind, +2=Hvy Ind, Wood, Wooden

<b>1</b>	Out	<b>2,3</b>	No change	<b>4</b>	+1
<b>5</b>	Spread*	<b>6</b>	+1 and spread*		

Spreads 1 area down-wind. Auto-spreads if Fire=Size.

Any unit in a Fire=Size area must leave it.

#### 13.5 TIC

<b>1</b>	Stops	<b>2,3</b>	No change
<b>4.5</b>	Spread*	<b>6</b>	Adds Fire

Roll D6. Any unit now in a TIC area MUST move out of that area next turn or put on NBC kit (if available).

#### 13.6 Civilian Infrastructure

Check that any reverberating effects of infrastructure damage have been made as shown below.

Primary Loss	Reverberating Effect
Power	Loss of Fixed Comms, Mobile Comms, CCTV
Fixed Comms	Loss of Mobile Comms and CCTV

#### 13.7 Civilian Sentiment

Given the short duration of the combat typically represented by City and CEMA (8-24 hours) civilian sentiment is not expected to change dramatically in that time.

#### 13.8 Adverse Opinion

The Adverse Opinion track tracks how the rest of the country and the world is reacting to what is happening on the ground. Each Side Briefing will define any breakpoints on the track which may result in changes of ROE or withdrawal of troops (i.e. loss of battle). Forces *are* likely to have different breakpoints to reflect their different sensitivities to what is happening on the ground and what global opinion thinks.

Breakpoint markers should be placed on the track at the start – although their meaning may only be known from the Side Briefing, and may include dummy markers. Each side's AO

marker is then moved as indicated by in-game actions.

The following table summarises actions which effect the AO track:

Event	AO Change
Creation of Civilian DP Block	1
Civilian Death	5
Each Fire counter created	1
Each TIC counter created	1
Each Max Rubble reached	Area Size
Each Protected Site destroyed	5 or per PS rating
District infrastructure destroyed	3 per District per service

### 13.9 Unit Morale

If any Commanded Unit (i.e. Bn) or Brigade has lost at least 50% of its elements/units then it must withdraw from combat, moving back off its own map edge.

Optional:

- Superior units can roll 3+ to avoid this withdrawal *each time* a sub-unit is lost beyond 50%.
- Inferior units must roll 3+ at 66% and 4+ when at 50% strength to avoid retreat, as well as the automatic withdrawal at > 50%.

### 13.10 Assess End Execute Phase/Victory Conditions

The scenario will define what conditions result in the end of the combat phase and/or a victory by one side or the other. These will probably be based around a combination of one or more of the following:

- Objective areas taken/lost
- Percentage of all areas taken/lost
- Reduction in effective forces below a breakpoint
- Reaching an Adverse Opinion breakpoint.

Assess them at this point each turn in order to avoid nugatory work on later end of turn tasks.

If the Engage Phase is continuing then complete the following steps, otherwise jump to the Consolidate Phase.

### 13.11 Resolve Combat Engineering

Any combat engineering tasks which were started at the beginning of this or earlier turns are checked to see if they are complete. If the number of Tasked counters on them equals the requirement of the task then they are complete. Note that any Suppressed action on a unit will remove that turns Tasked counter.

### 13.12 Force Recovery

At the end of each turn (or just first night turn?) any unit at Substantially (Amber) or Marginally (Red) Operational can attempt to recover one step of damage by making the following die roll:

- If adjacent to an enemy unit: 6+
- If not adjacent to an enemy unit: 5+

Apply DMs:

- +1 if in Reserve, or +2 if in Harbour.
- -1 if moved or was in an assault

Cannot Recover if OOC.

Note that this includes recover in morale/order as well as individual replacement and force regeneration.

### Battalion Game

### 13.13 Counter Tidy

At the end of each turn do a check on counters etc and tidy as follows:

- Remove INT+1s and any UNHIDDEN DUMMYS
- Check any moved units not in ZOC hidden, and any on AOA

++++

## CONSOLIDATE

### 13.14 Consolidate (Optional)

This optional phase looks at what the military forces of both sides are doing immediately post-combat. It is primarily a discussion rather than play phase.

#### 13.14.1 Sustainment

A short discussion should be held on the state of each side's force in terms of being able to undertake any new combat operations (such as counter-attacking or responding to a counter-attack), paying special attention to:

- Ammunition levels
- Equipment levels
- Casualties
- Vehicle repairs
- Food and Water
- Tiredness

#### 13.14.2 Defence and Counter-Attack Plan

Given their forces remaining, the players now occupying the city should draw up a plan and brief the umpire on how their forces will "go firm" in the city ready to handle any counter-attack, and/or await relief or a Forward Passage of Lines (FPOL).

The opposition team should also independently develop the outline of a counter-attack plan and then the (new) defender's response to this discussed (or even COA wargamed).

++++

## TRANSITION

### 13.15 Transition (Slightly Less Optional)

Whereas previous phases have involved the players representing the two sides, in this phase the players should work together in order to understand the impact on the local population and how, in the absence of any further conflict, the city transitions to a more

normal existence. Again, this is a discussion phase.

The aim of this phase is for players to better appreciate some of the unintended consequences and 2<sup>nd</sup> and 3<sup>rd</sup> order effects of their actions, and to better understand how they may be able to modify their combat operations in order to reduce damage and ease transition, whilst still winning the fight.

#### 13.15.1 WHITE Assessment

Guided by the umpire the players should discuss:

- Where the Sentiment trackers ended up, and what the implication of these might be for future combat actions and to the support to the "winners" from the local population.
- Where the infrastructure trackers ended up, what this will mean for the civilian population, what caused the reductions, and what can be done to help restore the services.
- For each area that has a rubble marker on it how badly damaged the area is, and what the impact of that is likely to be on human life and city infrastructure.

Consider impacts under the following headings in particular:

- Dead – and implications for public health, morgues and burial
- Injured – and implications for hospitals and paramedics – and any damage to them
- Food
- Core utilities – heating, electricity, water, waste
- Internet, fixed and mobile communications, mass-media and social media
- Transport
- Policing and public order
- Industry – both factories and raw-materials, and any Toxic Industrial Chemical (TIC) releases
- Retail, Business and Commerce – white-collar roles and how quickly the city can get back on its feet again

### 13.15.2 Human Casualties

It can be very easy to be blazé about human casualties and loss of life when conducting the WHITE audit. To add a bit more of an edge, whilst risking the game becoming something of a black game, then numbers can be placed on civilian casualties as follows.

A simple version for the whole city is:

- Take the stated peacetime population
- Assumed that 2D6 x 2% of the population has remained in the city (4-24% seems to be a typical figure from historical conflicts, although I have heard estimates as high as 50%, so 2D6 x 5% may be more appropriate – it probably depends on the scenario)
- Calculate, or roughly estimate the average Rubble per area. Count rubble in Residential areas double and dense residential areas triple.
- Throw D10 and compare with the number of rubble counters consulting the table below, multiplying the result by the remaining population derived above.

D6 Rub	1	2	3	4	5	6
0	1%	2%	3%	3%	4%	5%
1	2%	4%	5%	6%	8%	10%
2	6%	8%	10%	12%	13%	15%
3	10%	12%	14%	16%	18%	20%
4	16%	18%	20%	22%	23%	25%
5	18%	22%	24%	26%	28%	30%

[source, round better, no-one will do the maths! [Online calculator](#)]

[How build in civilian blocks?]

A rough casualty split for civilians is:

Dead	T1	T2	T3
20%	8%	38%	34%

[source]

In terms of the number of Displaced Persons.....

### 13.16 Performance Assessment

You will note that there are typically no victory points or victory conditions for the base game.

Whilst the Execute phase should give you some idea of which of the two sides is the tactical winner, the sentiment trackers and consolidation assessments may indicate that it's a less clear-cut decision at the operational or even strategic/political level. In addition, the civilian assessment in the Transition phase should give players some idea of the human cost of the action. Specific scenarios may have more explicit victory points or conditions.

It is well worth remembering Wellington's reflection after Waterloo – "*Believe me, nothing except a battle lost can be half so melancholy as a battle won*".

## 14. OPTIONAL RULES

The following rule modules can be added either according to the scenario or to provide additional granularity or options and considerations for play.

### 14.1 Casevac

To do – if optional rules?

As a guide about 20% of casualties are likely to be KIA, and 80% wounded. Of the wounded about 40% will be T1, 40% Y2, and 20% T3.

Source: [Ukraine and SOHB/UL](#).

To do – if optional rules?

### 14.2 Sustainment/Logistics

Use Log Points cf Action Points?

Split Action Points into Log Points and C2 Points?

To do

### 14.3 Night

To do

### 14.4 Weather

To do

### 14.5 Air Situation

From OPUC

### 14.6 Orders

In an environment where the natural problems of urban communications are compounded by hostile cyber and electromagnetic activities (CEMA) cyber, trying to maintain command and control is a major challenge for any army.

To simulate this every Command Unit (i.e. Bn for a Bde battle) must be given an ORDERS

token which sets out its broad scope of activity. The available choices and cost are shown below. Chits are placed facedown on a side's dashboard rather than on the table (in order to hide Bn locations and intents).

State	CP	Description
Reserve	0	Ready to move, Retreat if assaulted.
Harbour	0	-2 and retreat if assaulted. +2 in reinf.
Hold	1	Won't retreat unless ordered. Allowed a counter-attack move of 2 areas incl. 1 forward.
Retreat	0	Retreat to behind own lines.
Advance	1	Move to adj in urban, 2 area in rural. Fire ok.
Attack	2	Assault en.
RPOL	3	Pull back thru own troops to behind own lines.
FPOL	3	Advance thru own troops then Advance.
RIP	3	Replace/be replaced by another unit.

(update)

Players should ensure that their units operate within the scope of their parent unit's ORDERS token at all times. If an umpire is present they will help enforce this. ORDERS can only be changed following the Comms Check (see below).

### 14.7 Comms Check

Each Command Unit needs to make a comms check. This just requires a roll of 1+ on a D6, but apply modifiers as shown on the QRS/PAC.

*Note: Jamming modifiers are not cumulative – just use the worst.*

If the check is passed then ORDERS for that unit may be changed as per any Change orders cards ought with CPs.

If the check is not passed then ORDERS for that units may not be changed and the HQ is marked OUT OF COMMS on its PAC, which may impact its operations that turn including:

- Fires happening closest to that unit will suffer a DM reflecting poor OP comms.
- Any attacks involving element from that unit may be at a negative modifier as shown on the QRS..

ONLY ON ORDER CHANGE?

# ABBREVIATIONS

The following abbreviations are used in these rules.

2D6	Roll two dice
AH	Attack Helicopter
AP	Anti-Personnel
AT	Anti-Tank/Structure
CAS	Close Air Support
CC	Close Combat (3 <sup>rd</sup> parameter)
CF	Close Fire (1 <sup>st</sup> parameter)
CP	Civil Population Number
D3	Roll one three-sided dice (1,2,3)
D6	Roll one six-sided dice
DM	Die Modifier, add/subtract the number from the die roll
DP	Displaced Persons Number (i.e. refugees)
En	Enemy
FF	Friendly Forces
KO	Knocked Out. Unit is removed, or replaced by a Wreck marker if a tank.
MA	Movement Allowance (in MPs)
MP	Movement Points (as cost or spent)
MR	Max Rubble
nD6	Roll n 6-sided dice
nD10	Roll n 10-sided dice
PV	Protection Value
RF	Ranged Fire (2 <sup>nd</sup> parameter)
UC	Urban Combat
UTZ	Urban Terrain Zones
ZOC	Zone of Control

## ANNEX A - CREATING YOUR OWN SCENARIO

### Map Area Codes

For set-up, analysis and random placement of actions it is useful if each map area has a code. The suggested approach using an A.B format is:

- Number areas within the urban boundary from 1.0,1.1.....1.9,2.0,2.1 etc up to N.M.
- Number remaining areas starting with N+1.0, N+1.1 etc up to P.Q.

The advantage of this is that:

- To get a random urban area just roll 2D10, the first die giving you the A digit, and the second the B digit. Reroll both dice if greater than N.M.
- To get any random area just roll 2D10, the first die giving you the A digit, and the second the B digit. Reroll both dice if greater than P.Q.

### Area Parameters

Each area then needs the following parameters assigned.

<b>Size</b>	Size relative to the smallest area. Only approximate and range should be 1-4. If you need more than 4 then probably split the area.
<b>UTZ</b>	Urban Terrain Zone code. See below.
<b>PV</b>	Protection Value. Derived from the UTZ. See below.
<b>Start Rubble</b>	How much the area has already been rubbleized. 0-5. Depends on the scenario/road to war.
<b>Max Rubble</b>	The maximum value of rubble for the area. Derived from the UTZ, see below.
<b>CP</b>	Number of local civilians still in place. Rate 0-10. Depending on scenario 1 ~ = 1k.
<b>DP</b>	Number of displaced civilians in the area. Rate 0-10. Depending on scenario 1 ~ = 1k.
<b>Blue Sentiment</b>	How much the locals like Blue. Rate from -3 to +3.
<b>Red Sentiment</b>	How much the locals like Red. Rate from -3 to +3.

## Urban Terrain Zones

Urban Commander uses a 4 letter code to define the urban terrain zone, along with a textual description. The codes define the following (all dominant type in area, but try to choose areas so codes are consistent):

- Building height
- Building density
- Building construction
- Building use

Note: The regularity of streets within an area is not included as this should be obvious from the mapping. Likewise details such as No Tanks/Tanks One Way are indicated by icons rather than within the code.

### Building density

S	Sparse
L	Low
M	Medium
H	High
V	Very High
P	Park (set other codes to XXX)
W	Wood (set other codes to XXX)
R	Rural (set other codes to XXX)
Z	Plaza and other public squares etc (set other codes to XXX)
O	Open, e.g. scrub, rough ground etc

### Building height

L	1	Low: 1-2 storeys
M	2	Medium: 3-5 storeys
H	4	High: 6-10 storeys
V	8	Very High: 11-30 storeys
E	16	Extremely High: 31+ storeys

### Building construction

W	Wood
B	Brick and Breeze Block
S	Stone
C	Concrete
R	Reinforced Concrete
M	Metal (inc Metal & Glass)
A	Adobe and other mud
O	Other

### Building use

R	Residential
S	Shopping & Retail
C	Commercial (i.e. offices)
L	Light Industrial
I	Heavy Industrial
T	Transportation Hubs
G	Government
A	Academic (i.e. campuses)
H	Hospitals (i.e. large campus style)
M	Military
V	Civic (incl schools and hospitals)
Z	Mixed Use

### Typical UTZs

The following table relates the UC codes to doctrinal codes used by the US and UK. Note several UC codes (not all shown here) may map to the doctrinal codes depending on the detail of construction.

City Core/Core	VHRC (Modern) HHSC (Traditional)
Old City/Town	MVSZ
Core Periphery	HMRC or MMBC
CP - Dense Random Construction	HVCZ
CP-Close Orderly Block Construction	HMCZ
Commercial Ribbon Area	MLMS
Dispersed Residential Area	LLWR (US,EE)
Residential Area	MMCR (low flats) LHBR (Victorian Terrace) LMBR (Suburban)
High-Rise Area	HMCR or VMRR
Industrial Area	MHML - Light MVMI - Hvy
Industrial- Transportation Area	MSCT
Outlying High- Rise Area	HMCR or VMRR
Permanent or Fixed Fortifications	MHRM
Military Area	MLBM
Shantytowns	LVWR

### Protection Value and Max Rubble

0	If Density = S,P,W,R,Z
1	If Construction = W or A
2	If Construction = A and Density = H or V. If Construction = B or M
3	If Construction = W and Density = H or V. If Construction = B or M and Density = H or V. If Construction = C
4	If Construction = C and Density = H or V If Construction = S or R
5	If Construction = S or R and Density = H or V