

Germany at War

English manual with rules for version 1.09

(c) 2020 Ronald Wendt

Table of content

Introduction.....	4	4.Units.....	16
1.User interface.....	4	4.1.Unit types.....	16
1.1.Symbols.....	4	4.2.Core units.....	16
1.2.Buttons.....	4	4.3.Auxiliary troops.....	16
1.3.Menus.....	4	4.4.Formations.....	16
1.3.1.Main menu.....	4	4.5.Special units.....	17
1.3.2.Start a single map or a campaign.....	5	4.6.Select units.....	17
2.The panel.....	6	4.7.Replenish units.....	17
2.1.Information on the hex field.....	6	4.7.1.Ground troops.....	17
2.2.Player area.....	6	4.7.2.Air units.....	17
2.3.The mini map.....	7	5.Action points.....	18
2.4.Unit attributes.....	7	6.Moving units.....	18
2.5.Options.....	9	6.1.Zones of control.....	18
2.5.1.Resolution.....	9	6.2.Transports.....	19
2.5.2.Fullscreen.....	9	6.2.1.Abandon transport.....	19
2.5.3.Combat info.....	9	6.3.Air transport.....	19
2.5.4.Display unit movement.....	9	6.4.Rail roads and operative movement.....	20
2.5.5.Display unit movement AI.....	10	6.4.1.Damaged rails.....	20
2.5.6.Show combat results of AI attacks.....	10	6.5.Parachuter troops.....	20
2.5.7.Center on selected unit.....	10	7.Sight.....	20
2.5.8.Particles.....	10	8.Combat.....	20
2.5.9.Weather.....	10	8.1.Entrenchment.....	21
2.5.10.NATO symbols.....	10	8.2.Unit modifiers.....	21
2.5.11.End of turn dialog.....	10	8.3.Combat modifiers.....	25
2.5.12.Create a savegame each turn.....	10	8.4.Combat results.....	26
2.5.13.Language.....	10	8.5.Support fire.....	27
2.5.14.Volumes.....	10	8.6.Combat protocol.....	27
2.5.15.Zoom speed.....	10	9.Experience.....	27
2.5.16.Movement speed.....	11	9.1.Reinforcements and experience.....	28
2.5.17.Hex field colours.....	11	9.2.Support units (SUs).....	28
2.5.18.Hex field grid.....	11	10.The headquarter.....	30
2.6.Additional menus.....	11	10.1.Unit overview.....	30
3.The main map.....	12	10.2.Recruiting new units.....	30
3.1.Terrain.....	12	10.3.Disband units.....	30
3.1.1.Special case snow.....	13	10.4.Improvement of units.....	31
3.2.Objects.....	13	10.4.1.Assign support units (SUs)	31
3.3.Displays.....	14	10.4.2.Auto attach.....	31
3.3.1.Surfaces.....	14	11.Weather.....	32
3.3.2.Symbols.....	15	12.Victory and defeat.....	32
3.4.Build, damage and repair infrastructure. .	15		

13.End of a turn.....	32		
14.The campaigns.....	33		
14.1.Army Group North.....	33		
14.2.Case Blue.....	33		
14.3.Operation Barbarossa.....	33		
14.4.Arkhangel'sk-Astrakhan.....	33		
14.5.Soviet Dawn.....	33		
15.The map editor.....	34		
15.1.Options.....	34		
Save.....	34		
15.2.Landscape.....	34		
15.2.1.Hex fields.....	34		
15.2.2.Object attributes.....	34		
15.2.3.Special.....	35		
15.3.Units.....	35		
15.4.Scenario setting.....	35		
15.4.1.Map.....	35		
15.4.2.Player.....	36		
15.4.3.Weather.....	36		
16.Credits.....	37		
17.Appendix.....	41		
17.1.Short cuts.....	41		
17.2.Arkhangel'sk-Astrakhan campaign structure	42		
17.3.Soviet Dawn campaign structure	46		

Introduction

Germany at War is a turnbased strategy game that depicts the German Eastern Front during World War II. Historic battles can be played on both sides. The campaigns contain the battles of one side based on historical events.

If you play Germany at War for the first time you will notice that it was influenced by the „Generals“ series. But Germany at War has many new and interesting features as well as unique scenarios and campaigns with high replayability and depth of play.

The game is displayed on a 3d map with a 2d user interface. The map is divided in hex fields that represent five square kilometers.

1. User interface

1.1. Symbols

Many menus contain symbols to provide information. They are used to save space compared to a similar text. Tool tips are shown if you hover over the symbols with the mouse cursor. Within it the meaning of the symbol will be explained.

1.2. Buttons

Buttons have a symbol or a text on their click area which describe their function. Also there are additional tool tips that contain more information about the actions.

1.3. Menus

1.3.1. Main menu



Image 1: Buttons of the main menu

The main menu appears automatically after the game is loaded and offers the following options:

Play a campaign

The player can chose one of the nine campaigns included in the game. Five of them are described in chapter 14.

Play a scenario

Opens the scenario selection. There are currently 20 single battles included. In most of them you can choose the side and adjust the rules.

Last

Automatically loads the savegame that was last saved by the player.

Load a savegame

Saved campaigns or single maps can be loaded in the menu that follows.

Recommended

Starts the shown map or campaign directly. Only missions are displayed that were not yet played by the user.

Editor

Launches the map editor of the game. See also chapter 15.

Script Editor

Launches the external Script Editor in which you can complete the attributes and functions - like victory conditions - of your selfmade maps.

Options

Here you can choose the settings of the game. See chapter 2.5.

Credits

Shows the names of the humans that helped creating this game.

Manual

Launches this document.

Quit

Ends the game and you return to the operating system.

1.3.2. Start a single map or a campaign



Image 2: Scenario and rules selection

Difficulty and rules for a single map or a campaign can be adjusted most of the time to the liking of the player in the regarding menus. These are the available options:

- **Weather:** Influences combat and movement if activated; generally speaking bad weather reduces range and combat strength of a unit. The exact consequences can be found in chapter 11.

- **Fog of war:** The player can only see units of the enemy that are in sight of his own units if this feature is activated. If it is turned off the player can see all enemy units at any given time.

- **Supply:** If this rule is active then units will need to be refueled and restocked with ammo over time. This will cost all action points of a unit so it cannot do anything else in that turn. Without this rule fuel and ammo is unlimited for the units.
- **Detailed supply:** Fuel and ammo will cost resources with this rule. The amount it costs depends on the scenario. The base cost is 1 resource point for each ammo or fuel point.
- **Bonuses:** You can give to each side up to 150 resources per turn and/or up to 150 extra experience points as a bases for each unit at the start of a map.

2. The panel



Image 3: Panel with expanded unit attributes

You can see the panel in the middle on the bottom of the screen after a map was loaded. Important information on landscape and units can be found there. Buttons that lead to more menus are also located in it.

2.1. Information on the hex field

The left part of the panel shows information about the ground unit and the terrain of a field over which the mouse cursor is currently hovering. You are shown the equipment, the ammunition, the fuel and the entrenchment level of the unit.

Below this the terrain attributes and the movement costs are displayed. Also possible entrenchment values or loot in form of resources may show up if available.

Next to that information is the data of an air unit if one is present on the field. You are then shown its equipment and its ammunition.

Beneath the air unit you find the current weather of the turn and a forecast for the next one.

2.2. Player area

Further to the right the amount of resources is listed which the player has access to.. Below that is a turn counter and the turn limit for this map. In the middle you see the flag of the nation that is currently playing. Above and left of this are four buttons with the following functions:

- **HQ:** This button leads to the headquarter where you can buy and upgrade units. For more details see chapter 10.
- **Toggle ground/air:** Switches between ground and air display.
- **Next unit:** The game selects the next still usable unit.
- **Undo move:** One click takes back the last action of the player. This works but with movement as long as no new units were discovered. Attacks and replenishment can not be undone.

If you now select a unit with the left mouse button, you get an additional display in the middle of the panel. If an enemy unit was selected you will see its strenght, ammunition and fuel points. Own units that still have all action points can be replenished if the necessary resource are at the players disposal.

2.3. The mini map

On the right of the panel is the mini map. It shows the whole map area of the current mission zoomed out to the maximum. By left-clicking into the mini map you can move the camera of the 3d map to that specific position of the scenario.

On the left side of the mini map are several buttons to set which symbols are shown in it:

- Show/hise ground units
- Show/hide air units
- Show/hide mission targets
- Show/hide view range of the units
- Show/hide deploy hexes
- Show/hide camera view

2.4. Unit attributes

If you want to see all attributes of a unit you can click with the right mouse button on it to open the unit attributes. An extra area which contains this information will expand above the middle of the panel then.

Its upper row displays the following data from left to right:

- **Unit name:** This is also an input field in which you can alter the unit name at any time.
- **Combat readiness:** This value represents the percentage of the level of engagement of a unit. If this value is 100% the complete combat strength is used. Combat and bombardment of the enemies lowers this value but never below 15%. If a unit is not exposed to combat, it will regenerate 10% in each turn.

Example: If a unit has an attack value of 10 but its combat readiness is 50% then it will only have an attack value of 5 in a fight.

- **Experience:** Shows the current amount of experience points of this unit.
- **Movement points:** Shows the maximum and current movement points of the selected unit.

- **Action points:** Shows the maximum and current amount of action points.

Beneath the name of the unit is an i-symbol that is only shown if there are entries in the Unit history. If you hover above this symbol with the mouse cursor, a window will be displayed which contains the most important combat performances and possible awards of the unit.



Image 4:

Unit history

Below this is the marker for core units which is only visible if it is such a unit. To its right is the NATO symbol. Further right is an area with a grey background containing six symbols. These are at the top from left to right: weapon range, maximum ammunition storage and maximum/current entrenchment level. Below that also from left to right: combat type, view range and maximum fuel storage. Hovering over these symbols delivers additional information.

Next to this are the combat values of the unit. The top row contains attack values while below you will find the defense values against each unit type. The types are from left to right; infantry, tanks, cannons, aircraft and ships. These are the base values for fights and they are influenced by a number of very different factors. Read more about it in chapter 8.

On the right side are the symbols of the attached support units (chapter 9.2) and below them the markers of the unit modifiers (chapter 8.2) as well as transportations of the regarded unit if any are present.

2.5. Options

You get to this menu by using the button with a wrench on it. In the main menu of the game there is a button with the text „Options“ that leads to the same menu. Content and possible adjustments are identical in both. There are sliders to e.g. change the volume of the music, drop down menus to select one of their entries and radio buttons to switch a functions on or off. In the last case green is shown for an active state while red marks a function as deactivated.

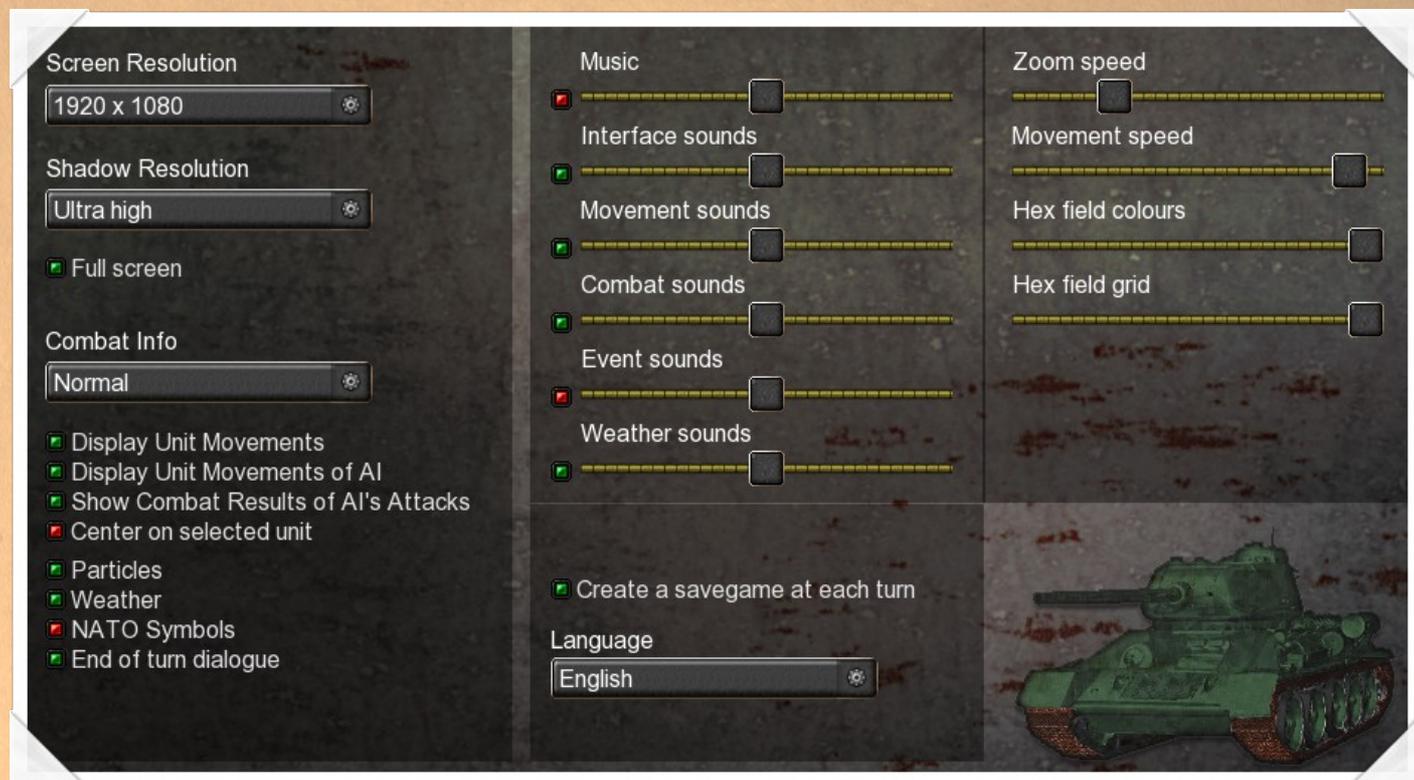


Image 5: Options

2.5.1. Resolution

You can choose the resolution in which the game will be displayed with this drop down menu. The possible selections depend on your graphics card and the connected monitor.

2.5.2. Fullscreen

Germany at War can be played in fullscreen or in windowed mode. Besides in this menu you can also use the F11 key to toggle between these modes.

2.5.3. Combat info

Adjust how detailed the information will be that is shown after a combat on the map. You can have no info at all, or select any level from basic to complex data output.

2.5.4. Display unit movement

If this is selected the movement of the units will be displayed in animations. The speed of this animation is controlled by the slider which is explained in 2.5.16. If this function is deactivated units will directly appear on the target hex of their movement.

2.5.5. Display unit movement AI

During the turn of the computer you will see its units move over the map. As this may prolong enemy turns it can be deactivated with this setting.

2.5.6. Show combat results of AI attacks

While the computer makes its move combat results will be displayed if battles are executed.

2.5.7. Center on selected unit

This will cause the camera to center any selected unit in the middle of the screen thus moving the map each time you click on a unit.

2.5.8. Particles

Combat and weather use particle systems for a more intense display of the action. This may lead to significant loss of speed on some systems. It may help to switch this off if you experience slow downs while playing.

2.5.9. Weather

Weather is not only simulated by the game values but also displayed optically e.g. by rain or fog effects if this function is turned on.

2.5.10. NATO symbols

Besides the 3d models Germany at War also offers a set of NATO symbols to depict the unit. If this function is active only NATO symbols will be shown on the map regardless of the zoom level. If it is turned off the program will switch between both sets depending on the camera view.

2.5.11. End of turn dialog

The player will be asked if he really wants to end the turn each time as a security measure. If you do not want that you can deactivate it here.

2.5.12. Create a savegame each turn

With this a savegame will be stored at the beginning of each turn during a game. Please note that this may lead to a delayed display of savegames after you played very often.

2.5.13. Language

Germany at War is delivered with the languages English and German since version 1.03. If you want to change the language you have to click on the dropdown menu and select the desired language. But this change will only occur after the game was restarted.

2.5.14. Volumes

The player may mix the acoustics of the game with six different sliders affecting the music and five sound layers. You can e.g. have very loud combat sounds and very silent music.

2.5.15. Zoom speed

You can continuously zoom into or out of the 3d map by using the page up/down keys or the mouse wheel. This slider regulates how fast this takes place.

2.5.16. Movement speed

Controls how fast the animation of the unit movement between the start and target hex is displayed. Only works if „Display unit movement“ is active.

2.5.17. Hex field colours

Different option (Move, attack, deploy etc.) are displayed in the game by colourizing hex fields. This slider determines the intensity of these colours on the map.

2.5.18. Hex field grid

To be able to recordnize hex fields on the map the game displays a border around each of them. You can adjust the intensity of this border with this slider.

2.6. Additional menus

On the right of the panle are four more buttons with these functions:

- **Objectives and statistics:** Review statistics, the combat protocol, objectives or general help topics in this menu.
- **Load/Save/Restart/Quit:** Leads to the menu in which you can store or load a savegame. There is also the option to restart the mission. You can quit the map by leaving the whole game or returning to the main menu to select another mission.
- **Quick save:** Saves the current state under an automatically generated name instantly after the button was clicked.
- **End turn:** After all battles, movements and deliberations have been done you can end the turn here.

3. The main map



Image 6: Game display showing the 3d map

The actual map on which the game takes place is a 3d one and you can zoom in or out continuously with the page up/down keys or the mouse wheel. There are also predefined zoom levels that can be chosen by pressing F1 to F5. The map cannot be rotated.

Besides the units the map consists of terrain and objects.

3.1. Terrain

The terrain influences the sight of the units and costs different amount of movement points depending on the surface. In addition each terrain has a maximum level of entrenchment. This limits the level to which a unit can dig itself in on that field. Some landscapes also influence readiness and supply of units.

The exact values and special cases are listed in this table:

Terrain	Movement costs	Sight	Entrenchment	Special cases
River	40	1	0	Impassable for all ground units except for infantry. Units with transports get an additional malus of 20 movement points.
Mountain	-	4	4	Impassable for all ground units except for mountain troops. Units lose readiness after moving on the hex and every additional turn they stay on it. They cannot be supplied on this field.
Lake	-	1	0	Impassable for ground units
Forest	30	2	3	
Plain	20	1	2	
Swampf	30	1	1	Units lose readiness after moving on the hex and every additional turn they stay on it.
Hill	30	2	3	
Road	10	1	2	
Rail road	-	1	2	Enables transport from city to city. Costs resources which the player has to own.
Steppe	20	1	2	Units lose readiness each turn they stay on this field.
Sea	10	1	0	

3.1.1. *Special case snow*

There are different movement costs on snow covered hexes for armoured vehicles depending on the nation, the type and the point of time:

- Soviet medium and heavy tanks +10
- Vehicles with Ostketten (Tiger, Panther etc.) +10
- Pz. III/IV with Ostkette (1/5/1944) +10
- Pz. III/IV with Winterkette (1/10/1942) +20
- German medium and light tanks/Western Allies' tanks/Soviet light tanks +30

3.2. Objects

There are objects on the map that distinguish themselves by the fact that they can have an owner. Among those are towns, mines and airfield to name a few. These objects influence movement and sight of the units. They also reveal the adjacent hexes to the owner if fog of war is active. A flag marks the nation which owns the object at the moment.

Object	Movement	Sight	Entrenchment	Special cases
City	20	2	4	Can be supply center and station of a rail road.
Town	20	2	3	Can be supply center and station of a rail road.
Mine	20	1	2	
Oil field	20	1	2	
Bunker	20	1	5	Can be build by engineers and destroyed by bomber
Fort	20	1	8	
Bridge	10	1	0	Can be destroyed by bomber, partisans and engineers. Can be repaired by engineers.
Laboratory	20	1	3	
Air field	20	1	2	Can be supply center for air units. Can be used to embark into air transport. Air units can be replenished adjacent hexes.
Depot	20	1	2	
Port	20	1	2	
Minefield	20	1	-	Enemy mines can cause damage to ground units.

If an object is conquered for the first time during a mission the conquerer might receive a one time bonus. If such a bonus can be collected depends on the mission and the object.

Possible bonuses are:

- **Units:** The player gets a new core or an auxiliary unit that either appears directly on the map or is added to the reserve. More about units can be found at chapter 4.
- **Amm unition:** the unit which conquered the object gets its ammo refilled.
- **Fuel:** the unit which conquered the object gets its fuel refilled.
- **Resources:** the player gets a given number of resources that is added to his storage.

3.3. Displays

3.3.1. Surfaces

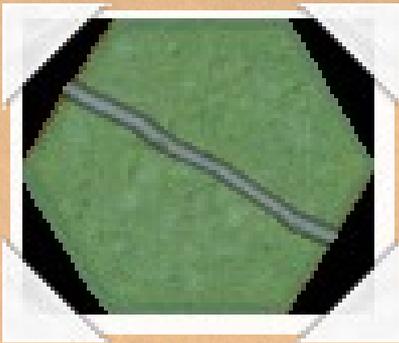


Image 7:
Filled supply hex

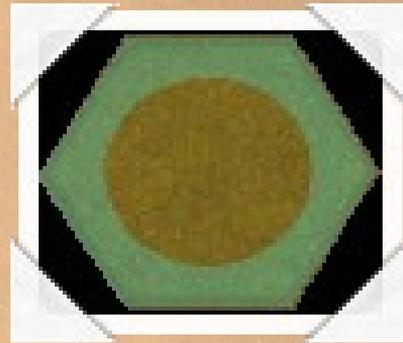


Image 8:
*female screw formed
deploy hex*

Many options in game are displayed by coloured surfaces. There are basically two different ones: filled and female screw formed surfaces.

The colours provide additional information for the player:



Image 9:
Hex without colourization



Image 10:
Unit does not use transport

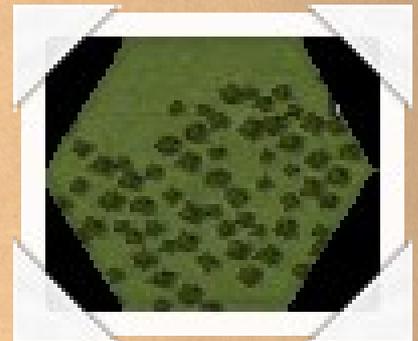


Image 11:
*Unit is embarked after
movement*



Image 14:
*Hex is occupied by another
unit*



Image 12:
*Enemy is within attack
range*

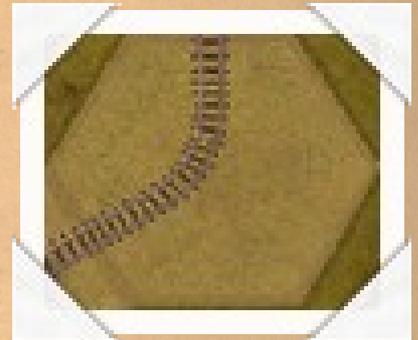


Image 13:
Path of the unit



Image 17:
unexplored area

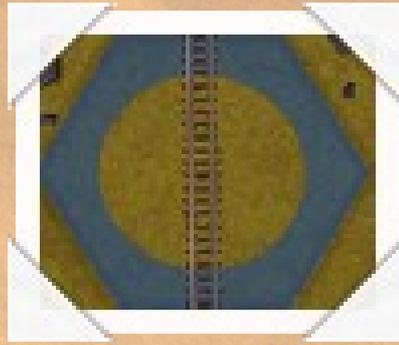


Image 15:
Rail road connection

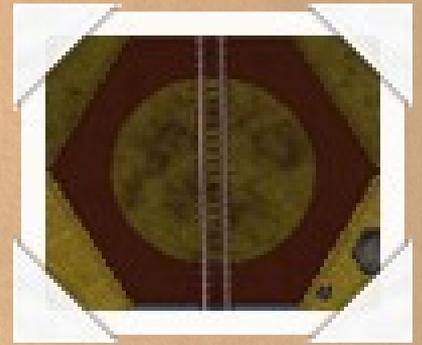


Image 16:
Cut rail road connection

3.3.2. Symbols



Image 18:
Artillery support symbol



Image 19:
Damaged rail road

3.4. Build, damage and repair infrastructure

There are infrastructures in the game with which the player can interact: Bridges, bunker and rails. To damage infrastructure a unit has to be on the same hex and have the needed ability as well as all action points of this turn. The same is true for repairing infrastructure. Which units are capable of these things can be found in chapter 4.5. Damaged infrastructure is marked on the map. Besides the action points there are these additional costs:

Action	Costs
Damage	1 ammunition
Repair	20 resources
Build	50 resources

4. Units

4.1. Unit types

There are basically three types of units that can have various subtypes: land, sea and air units.

Land	Sea	Air
Infantry, tank, artillery	Ships	Fighter, bomber

4.2. Core units

Units that stick with the player during a campaign from map to map are called core units and are marked by a white triangle in the unit attributes. You can filter for the core units in the headquarter. All other units are considered auxiliary units and disappear after a map is solved.

This distinction is unimportant on single maps as none of the units are used afterwards.

4.3. Auxiliary troops

Auxiliary troops are units that are at the players disposal to solve a mission. They can be on the map right from the beginning, arrive as reinforcements or be awarded for a certain progress in the mission. Auxiliary troops can not be taken to another mission during a campaign It is advisable to only replenish them if absolutely necessary as those invested resources are lost at the end of the mission contrary to the ones invested in core units.

4.4. Formations

This table lists all formations and their differences:

Formation	Batallion	Regiment	Brigade	Division
Maximum strenght (excluding SUs)	5	7	11	15
Replenishment costs	100%	110%	115%	120%
Number of SUs	2	3	4	5
Symbol (examples)				

4.5. Special units

Some units have special abilities:

Unit	Abilities
Engineers	Damage/repair rails and bridges Build/destroy bunker
Combat engineers	Lay/clear minefields (on plains only)
Bomber	Damage rails and bridges Destroy bunkers
Parachute troops	Air drop on hexes except for lake, sea and mountain hexes.
Partisans	Damage rails and bridges
Mountain troops	Enter mountain hexes

4.6. Select units

To select a unit on the map you have to click on it with either the left or the right mouse button. Then the unit is marked by a rotating cog. If the unit can move or attack another unit, hexes in the vicinity of the selected unit will be colourized.

4.7. Replenish units

4.7.1. *Ground troops*

Replenishing ground troops is negatively influenced by adjacent enemy units. With a growing number of enemies fewer things can reach the unit.

Number of enemies	Possible supply
0-2	Everything
3	Ammunition and fuel
4	ammunition
6	No supply possible

4.7.2. *Air units*

Air units can only be replenished at a friendly airfield. The unit has to either be on the airfield or on one of its neighbouring fields.

5. Action points

For actions units use up action points. How many depends on the action:

Action	Costs
Repelish fuel, ammunition or strength	2 points
Movement	1 point
Build bunker	All points
Repair infrastructure	All points
Lay mines (max. 4 strength points)	All points
Clear mines (max. 5 strength points)	All points
Attack	1 point

Attacks can only take place once in a turn even if there are enough actions points for another one. Movement can be executed several times as long as there are action and movement points left.

6. Moving units

If a unit was selected on the map the possible movements are displayed in form of colourized surfaces around the unit. The terrain has a major impact on the range. If the fog of war is activated all unexplored hexes are displayed a bit darker. Moving on such a hex involves the risk of an ambush (see chapter 8.3).

Units with transports (infantry and canons) have additional orange coloured hexes on which if the unit moves to one of them, it will end the turn embarked. This state brings reduced defence values for the unit and it will not cause any damage if it is attacked. In addition to the colouring the mouse cursor will also change.

If all movement points are used up the unit will remain on the current hex until the next turn. The only exception to this rule is a retreat after an enemy attack (see chapter 8.4).

Of all ground units the infantry is the only type that can cross rivers without a bridge. Infantry with transports needs 20 movement points more to enter a river hex.

Only mountain troops can enter a mountain hex on the ground level.

6.1. Zones of control

Every unit has a zone of control that extends to all adjacent hexes. Entering a hostile zone of control costs additional movement points. Zones of control may overlap and thus increase the costs of entering a hex. For example the costs double if two enemies are in neighbouring hexes of the one a unit wants to enter.

If units are moved onto unexplored hexes, zones of control of hidden enemies can result in lesser range that originally displayed.

6.2. Transports

Infantry, artillery, antitank and antiair units can embark on transports to gain a higher range during movement. In this process the units will be shown as a transport on the map. This state comes with severe disadvantages during combat as transports have their own very low defence values. Therefore using this mode should be carefully considered. Selfpropelled weapon systems cannot use transports. Transports can be added to units or upgraded in the headquarter menu „improvement“ before a unit is deployed. During movement the mode is changed automatically given the required distances.

There are three kinds of land transports:

- wagon
- truck
- halftrack

6.2.1. *Abandon transport*

If an infantry unit with a transport runs out of fuel, the unit cannot move anymore. If the unit still has all action points the option to abandon the transport then appears in the replenishment area. If this is selected the unit can move again with normal marching range but the transport is lost to the player.

Other unit types cannot abandon their transports as they cannot move without them either.



Image 20: The button of this function (marked orange)

6.3. Air transport

If infantry is placed on an airfield it can embark into an air transport. One condition for this is, that the airfield provides the possibility as not all have transport capacity. If the embarkment was successful and a friendly airfield is in reach the unit can be disembarked there in the same turn. The target airfield has to be free of ground and air units for this to take place. After the unit has landed it has no action points left to do anything else. If there is no airfield in reach the unit stays embarked and is vulnerable to attacks during the enemies' turn. In a battle the defence values of the transport are used.

Embarkment and shipping a unit via air transport costs 5 resources. Units with transports have to abandon them to use air transports.

6.4. Rail roads and operative movement

Two cities that are connected via intact rail roads and which are owned by one side enable the player to transport ground units from one city to the other. The target city has to be free of units and the unit that is to be send has to have all action points. After the operative movement the unit cannot take any further action. This kind of movement costs 10 resources per unit.

Possible connections are displayed as blue female screw formed surfaces as soon as a unit in a city is selected. For examples see 3.3.1.

6.4.1. Damaged rails

Rails can be damaged by partisans, engineers or bombers. This can lead to a disruption of a connection and thus prevent operative movement between cities.

Only engineer units can repair these damaged rails.

For this you have to place such a unit on the hex with the damaged rail. The unit needs all action points to conduct the repairs. No resources are needed for this.

Hostile units placed on an intact rail connection also prevent operative movements.

Any disturbance of a connection is displayed as a red female screw formed surface.

6.5. Parachuter troops

Parachute troops that are embarked in a transport can commence parachute operations. This can be done on all hexes except for lakes, sea and mountain hexes.

7. Sight

Units have a certain sight that is influenced by the environment. This is represented by view point that each units has. Usually a hex costs one view point to reveal its content. If the view points of the unit are used up, all hexes further away can not be seen. Those hexes are darkened in the game. Every unit and every object can at least see the adjacent hexes.

The exact costs of view points can be looked up in the tables of chapters 3.1 and 3.2.

8. Combat

To commence an attack the attacking unit has to be able to attack the enemy. (For example tanks cannot attack aircraft but it's possible the other way around) the enemy has to be in weapons range and the attacker has to have ammunition.

The hex field of the defender is the reference point for distances and the terrain. This refers to the unit modifiers (chapter 8.2) and the support by additional units (chapter 8.5).

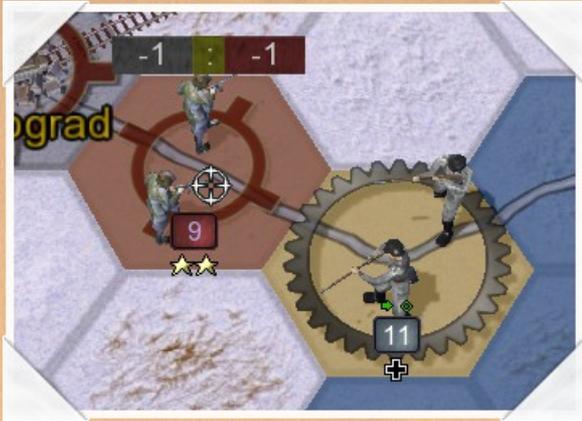


Image 21: The prediction of losses appears above the enemy

are the possible losses of the attacker, the right one the possible losses of the defender. If you turned on the combat info in the options, you will also see a preview of the combat protocol which lists the factors that lead to the prediction.

A click with the left mouse button on the enemy will now launch the attack. The final combat result may differ from the prediction.

8.1. Entrenchment

If a unit was not moved or used for an attack it will automaticall dig itself in and increase its entrenchment level by one each turn, until it reaches the maximum value the hex is granting. This value is determined by the maximum entrenchment value of the terrain or by existing structures (Cities, bunkers etc.).

Each attack on the position of a unit lowers the level of entrenchment by at least one. The levels of entrenchment increase the defence value of the entrenched unit. Exceptions can be found in chapter 8.2.

An infantry that moves onto a hex containing a bunker immediately receives an entrenchment level of 2. If the unit remains on the hex this value increases each turn up to the maximum level of 5.

As soon as a unit is moved its entrenchment level decreases to zero.

8.2. Unit modifiers



Image 22:

Symbols of the modifiers

Units have special modifiers that influence it it different ways. Most change combat values depending on the terrainthe battle takes placeon or if special cases are triggered. The modifiers are listed in the unit attributes on the right side (see chapter 2.4).

The following unit modifiers are in the game:

Urban penalty for armoured vehicles

Dense urban areas attack/defence -7

Light urban areas attack/defence -3

Urban penalty for selfpropelled artillery

Dense urban areas attack -1/defence -3

Light urban areas attack -2/defence -5

Forest penalty for armoured vehicles

Attack on forest hexes -7

Defence of forest hexes -3

Movement costs +10

Forest penalty for fighters

Attack on forest hexes -4

Hill penalty for armoured vehicles

Attack on hill hexes -8

Defence of hill hexes -4

Movement costs +30

Hill bonus for mountain troops

Attack on hill hexes +1

Defence of a hill hex against ground troops +1

Swamp penalty for armoured vehicles

Attack on swamp hex -9

Defence of swamp hex -9

Movement costs +20

Hill bonus for artillery

Marksmanship of artillery units increases by the higher position.

Attack from hill hexes +2

Defence of hill hexes +3

Radio doctrine 1941-43

German tanks are equipped with radios which leads to better synchronization in battle.

Attack/defence +3 against armoured units

Motti Training

Finnish Motti tactics has major influence during weather condition snow.

Attack +5

Defence +3

Soviet tank doctrine '40/'41

Bad communication and supply structures lead to partly reduced combat performances of early Soviet tank units.

75% chance for attack -3 and defence -2

Soviet tank doctrine '42:

Reforms and experience in battle provide for a new doctrine and better performance of tank units.

50% chance for attack -3.

Soviet tank doctrine '43:

Reforms and experience in battle provide for a new doctrine and better performance of tank units.

30% chance for attack -3.

Soviet tank doctrine '44:

Reforms and experience in battle provide for a new doctrine and better performance of tank units..

20% chance for attack -2.

Dsruption

Lowers the combat readiness of an enemy unit during an attack, values vary from 5 to 15%.

Bunker bonus

The damage a unit sustains is decreased by 1 in bunkers or forts.

Bunker killer

Ignores up to two levels of entrenchment as well as the modifier „Bunker bonus“.

Air shelter

The unit profits from the various shelters in cities for infantry.

Air attack on the unit:

Light urban area -3

Dense urban area -5

Bad supply structure of German allies

As soon as Hungary, Slovakia or Romania use German equipment the maximum storage is decreased due to worse logistics:

Ammunition -2

Fuel storage -5

Bad Soviet logistics Juni '41 bis April '42

Bad logistics in Soviet units lead to:

Ammunition -2

Fuel storage -10

Bad Soviet logistics April '42 - Januar '43

Bad logistics in Soviet units lead to:

Ammunition -1

Fuel storage -5

Ski guerrilla

Units with a ski batallion receive during weather condition snow:

View +1

Snow fighter

Adjusted und trained units are well suited for snow.

This unit ignores the consequences of the weather condition snow.

Recon combat doctrine

Evades damage up to 2 strength points

Evasive action

Evades damage up to 2 strength points

Dispersed enemies

Lower inflicted damage if enemies have less than 50% of their maximum strength points.

German artillery doctrine

Support fire for friendly units under attack – efficacy 50%

Finnish artillery doctrine

Support fire for friendly units under attack – efficacy 35%

Romanian artillery doctrine

Support fire for friendly units under attack – efficacy 30%

Soviet artillery doctrine

Support fire for friendly units under attack – efficacy 20%

British artillery doctrine

Support fire for friendly units under attack – efficacy 40%

Close air support

If at least one friendly ground unit is adjacent to the attacked unit to coordinate the attack:

50% chance of the attack value of an air attack +7

Battlefield air interdiction

If at least one friendly ground unit is adjacent to the attacked unit to coordinate the attack:

50% chance for a reduction of the combat readiness of the enemy unit by 5 - 20%

8.3. Combat modifiers

The following factors influence combat results:

- Attack value of the attacker against the unit type of the target. Example: attack value of a tank unit against infantry.
- Defence value of the defender against the unit type of the attacker.
- Current strength point of both units
- Ammunition: defenders that ran out of ammo sustain additional losses.
- Entrenchment level of the defender: each level is multiplied by three and the result is added to the defence value. Example: a defender with level 2 gets added 6 additional points to his defence value.
- Rivers: an attack from a river hex leads to a multiplication of the attack value with 0.75; the defence of a river hex leads to a multiplication with 0.8.
- Ambush: if a unit moves on a hex which is occupied by a as of yet undiscovered enemy, it will trigger an ambush with an instant battle. In this case the moving unit acts as defender and the defence value is multiplied with 0.7; the attack value of the newly discovered unit is multiplied by 2.5.
- Readiness: attack and defence values are multiplied with the readiness of each unit.
- Unit level: each unit can gain a new experience level through battles. New green units start at the level 0. The level of each unit is shown by little stars (Allies) or Iron crosses(Axis) on the map. Each level represents a factor that changes the combat values:
 - Level 0 = 1
 - Level 1 = 1.3
 - Level 2 = 1.6
 - Level 3 = 1.9
 - Level 4 = 2.2
 - Level 5 = 2.5

- Unit modifiers: Depending on the unit type and the equipment special modifiers may be triggered. See chapter 8.2.
- Support units (SUs): These units may influence the combat in different ways. Most of the time their values will simply be added to the values of the superior unit. Details and special cases are found in chapter 10.4.1.
- Flanking: The defense value of an enemy unit can be reduced by placing multiple own units on hexes adjacent to it. This way the defender has to secure his position against several flanks which leads to an overall reduction of the force density. The values change in this fashion:
 - One unit: 100% (base combat value)
 - Two units: 85%
 - Three units: 75%
 - Four units: 65%
 - Five units: 55%
 - Six units: (surrounded): 50%
- Combat distance: the power of long range attacks like by artillery is reduced by 10% for each hex between the attacker and the target. The maximum power can only be achieved from a neighbouring hex.

8.4. Combat results

After a battle one of the following five events takes place:

- **Holds position:** The defender repels the attack and stays in the position of his hex field.
- **Retreat:** The defender tries to retreat onto a free hex that is not in the zone of control of an enemy unit. This may lead to the loss (chance is 25%) of transports, 1-3 ammunition points or 5-10 fuel points. If there are only hexes available that are in an enemy's zone of control and the readiness of the retreating unit is above 50% the unit may move through or on them. This results in a penalty of 10% readiness for each zone of control. As these can overlap a single hex can cause up to 50% reduction of readiness.
- **Shattered:** If a unit is forced to retreat but there is no hex without an enemy zone of control while it has less than 50% readiness or it cannot move due to lack of fuel, it is designated „shattered“ and taken out of the game.
- **Destroyed:** As soon as the strength of a unit decreases to zero by a battle it is destroyed and taken out of the game.
- **Surrenders:** In one of the following cases:
 - the combat readiness of the defender is lower than 50% and the strength is three or lower.
 - the unit is out of ammo, cannot retreat and its strength is five or lower.
 - the unit is out of ammo and the strength is three or lower.

An attack in one of these circumstances leads to the surrender of the unit and it is taken out of the game.

8.5. Support fire

Fighter, artillery and antiair units can deliver support fire under certain conditions. If there is a battle and a unit of that kind is in reach, it will automatically intervene.

This support is executed once per battle but may happen in several fights as long as the supporting unit has ammunition.

- **Artillery** attacks an attacker that assaults a friendly ground unit.
- **Antiair** reacts if own ground troops are attacked by enemy aircraft.
- **Jäger** supports own aircraft that are attacked by enemy aircraft.

The supporting unit cannot lose strength points due to the intervention. Units that delivered support fire are marked with a symbol on the map. This is also the case with undiscovered units. The marker will be removed at the end of the turn.

8.6. Combat protocol



11. Panzer-Div.	vs.	268. Inf. Div.	Unknown
11		9	?
+2			+2
=13			
×15/16		×1/16	?
×190%		×130%	?
×85%		×80%	
=20		=1	=6
±0(-1)		-1(-3)	
+13		+2	+3
=85%		=80%	
		Destroyed	

Image 23: The combat window lists influences

next menu.

9. Experience

Units gain experience by damaging enemies, conquering cities, surviving a battle without damage and by destroying enemy units. You can see the current experience points of a unit in the headquarter by selecting the unit in the list or in the unit attributes by selecting it on the map.

If a unit collected enough experience to advance to a new level then a flashing level symbol will appear below the unit. A similar effect occurs in the headquarter in the selection list on the right side of the unit icons. Each time a unit reaches a new level it can receive a new support unit if its' formation type allows it.

The results of a battle are shown in the combat window that lists some or all factors depending on your setting.

All results of a mission are stored in the combat protocol and are saved in the savegame. You get to the protocols by pressing <c> or by using the i-button of the panel and then selecting „Combats“ in the

The levels need these points:

Level	Necessary experience
1	50 Points
2	150 Points
3	300 Points
4	500 Points
5	800 Points

9.1. Reinforcements and experience

Each time a unit receives reinforcements to adjust for losses in battle, it loses 5% experience for each strength point due to the inexperience of the new recruits. An exception are Soviet Guards units.

Example: a unit has 100 experience points and receives 5 new strength points. This means the experience decreases to 75 ($100 - 5 \times 5\%$).

9.2. Support units (SUs)

Support units or short SUs are units that can be assigned to core or auxiliary units. The condition for this is that the unit reaches a new level by gained experience. Which SUs can be assigned depends on the unit type the nation and the formation. The following table lists all SUs and their attributes:

SU	Type	Formation	Nation	Attribute
Additional Battalion	All ground	Div., Bde	All	Strength +1
Additional Company	All ground	Reg.	All	Strength +1
Additional Platoon	All ground	Bn.	All	Strength +1
Additional Squadron	All air	All	Ge, Ru	Strength +1
Motorized AT Company	Tank	All	Ge,Ru	Defense against tanks +3
Selfpropelled AT Company	Tank	All	Ge, Ru	Attack on tanks +3
Rifle Company	Tank	All	Alle	Combat in urban areas +5
Mechanized Infantry Battalion	Tank	Div., Bde	Ge, Ru	Against infantry +3
Tank Recovery Platoon	Tank	Div., Bde	All	Reinforcement costs -10%
Flame Tank Platoon	Tank	Div., Bde	All	Ignores entrenchment up to one level as well as „Bunker bonus“
AT Company	Infantry	All	Ge, Ru	Defence against tanks +3
MG Company	Infantry	All	Ge, RU	Defence against infantry +2
Mortar Company	Infantry	All	Ge,Ru	Against infantry: Attack +2, Defence +1
Recon Platoon	Recon	All	All	View +1
Heavy Mechanized Company	Recon	All	Ge, Ru	Against armoured vehicles: Attack +1 Defence +3

Special Support Unit	Artillery	All	Ge,Ru	Against armoured vehicles: Defence +4
Heavy AT Platoon	AT	All	All	Against armoured vehicles: Attack +3 Defence +3
Heavy AA Platoon	AA	All	All	Against aircraft: Attack+2 Defence +3
Fighter Squad	Bomber	All	All	Against aircraft: Defence +4
Dive Bomber Squad	Bomber	All	All	Against armoured vehicles: Attack +4
Recon Squad	Fighter, Bomber	All	All	View +1
Combined Arms Staff	Artillery	All	All	Efficacy for support fire +10%
Specialized Offense Staff	Tank, Infantry, Bomber	Div., Bde	All	Attack -1 Defence +2
Specialized Defense Staff	Tank, Infantry, Fighter	Div., Bde	All	Attack +2 Defence -1
Observation Company	Artillery	Div., Bde, Reg.	All	Ground attack +1
AA Company	Infantry, Tank, AT, Artillery	Div., Bde, Reg.	All	Against aircraft: Attack +2 Defence +3
Supply Company	All ground	All	All	Ammunition+1, Fuel +5
Repair Platoon	Tank, Recon, AT,AA,Artillery	All	All	Reinforcement costs -20% or -10%
Gaurds title	Infantry, Tank, Artillery, AA	All	Ru	Loss of experiece due to reinforcements -25%

10. The headquarter

You get to the headquarter via the HQ button on the panel or by pressing the key <h>. Existing units can be improved before deployment or new units can be formed in this area.



Image 24: The headquarter

10.1. Unit overview

At the start of a mission you are shown all core units in the headquarter. You can identify them by the white triangle. Which troops are listed can be filtered with the buttons on the right (Core units, auxiliary units, reserve, all). This selection is stored. More information about the units can be found in chapter 4.

10.2. Recruiting new units

You can only recruit new units in the headquarter. The button „Recruitment“ has to active for this. If it is not active the tool tip will provide the information about what hinders recruitment. This may for example be the case if there are no deploy hexes or no more unit slots are available. You can enter recruitment if all conditions are met. Now you have to select a unit type and then the wanted equipment as well as the formation size (Batallion, Regiment, Brigade or Division). The costs of your selection are displayed in the right column. If all is selected and the necessary resources are available you have to click on recruit to send the unit to the reserve. Back in the inspection screen you can choose „Deployment“ to place the unit on the map. The same rules that apply for movement are valid for the deployment which means you cannot place a unit on terrain they could not enter else. If the unit is placed on the map, it can immediately move and fight.

10.3. Disband units

The unit which is currently selected in the headquarter can be taken out of the game by using the button „Disband“. The player regains 50% of the value of the unit in resources. How much this amounts to can be learned if you hover the mouse over the button to trigger the tool tip.

Auxiliary troops can be disbanded but gain the player no resources.

10.4. Improvement of units

While a unit is still in the reserve its equipment can be exchanged or its formation size can be altered. For this the unit has to be selected in the inspection screen and the button „Improvement“ has to be clicked. In the following menu is a selection of alternative equipment visible which is based on the function of the unit. You can also choose another formation type. Keep in mind that equipment might be part of a series which makes upgrades much cheaper. For example a new model within the Panzer III series is cheaper than changing to a Panzer IV model. The experience of the unit is not afflicted by this action.



Image 25: Selection of support units

10.4.1. Assign support units (SUs)

When a unit reaches a new level you can assign a new support unit to it if the formation allows it. To do this you have to go to the headquarter or open the unit attributes and then click on the flashing symbol on the right side. This opens a window with the selection of support units available. Unit type and formation influence the content of this list.

10.4.2. Auto attach

As the player can add experience to his units before the start of a mission or a campaign it may happen that there are many units that can be equipped with support units. For players that only want to play a quick match or who are not interested in this detail there is a button in the inspection screen named „Auto attach“. This executes a function that assigns all possible support units to the respective units by a fixed pattern.

11. Weather

Weather influences the actions of the units. It affects all elements of a unit type in the same manner (e.g. all air units). The weather for the whole map is determined at the start of each turn. These are the possible effects:

Weather condition	Effect
Sunny	No changes
Cloudy	View of air units -25% Air combat -20% Air-ground or ground-air attacks -50%
Fog	Air-ground or ground-air attacks -50% View ground units -50%.
Rain	Range air units -30% View air units -50% Air combat -70% Air-ground or ground-air attacks -70% Range ground units -30%
Snow	Range air units -50% View air units -50% Air combat -70% Air-ground or ground-air attacks -70% Range ground units -20% View ground units -50%

12. Victory and defeat

Mission objectives decide about defeat or victory. Those are detailed for each side in every scenario and are accessible at any time by pressing <o> on the map or via the information menu. The player wins a map if he achieves his goals before the enemy does. If the case is inverted he will be defeated. During a campaign this might not be the end but lead to different paths or options.

13. End of a turn

At the end of a turn, the following things happen:

- The entrenchment level of all units that did not fight nor were moved is increased by one as long as it does not exceed the maximum amount allowed on the hex.
- Used action and movement points are restored
Verbrauchte Aktions- und Bewegungspunkte werden wieder aufgefüllt.

- Specified resources are handed to the players
- The symbols for support fire are removed
- The combat readiness of all units increases by 10% (maps may vary in this, units on some terrain might be excluded)

14. The campaigns

Campaigns consist of a string of scenarios which in turn depict single battles. Even though most scenarios are kept within historical boundaries there are maps which deal with fictional battles that none the less might have happened. Usually the player has core units during a campaign. These units can be improved or replenished inbetween the scenarios. The player can also buy new units if there are no restrictions by unit slots and he has the necessary resources.

14.1. Army Group North

The campaign describes the path of Army Group North during the year 1941 from the start in East Prussia to the last battle for Tikhvin. In the three scenarios the player has no core units but a given set of units that represent the historical order of battle.

14.2. Case Blue

The German leadership on the Eastern front stakes everything on one card in the summer of 1942. The best units of the Wehrmacht are ready to conquer the urgently needed oil of the caucasus for the German Reich. But the operation is hanging by a thread as German resources are limited. This campaign is especially focusing on supply and should be played without any bonuses to get the real challenge. The player has a core unit on the the four maps but should avoid buying new units if he plays without resource bonuses.

14.3. Operation Barbarossa

This campaign contains nine maps and is strictly bound to the historical events of 1941 and thus ends with the occupation of Khimki near Moscow in December. Up until then the most important battle of the Army Groups can be played. The core units start at the first encirclements at Bialystok and Minsk, fights for Kiev, isolates Leningrad in the North and finally marches on Moscow.

14.4. Arkhangelsk-Astrakhan

The by far vastest campaign contains 37 maps and depicts the complete paths of all three Army Groups from the German-Soviet border to historical as well as fictional battles and objectives towards Arkhangelsk in the North, Moscow in the center and Stalingrad in the South. The player has a central influence on the strategy in 1941 by choosing the Schwerpunkt, namely the main axis of attack during the campaign. There also situations that allow the transfer of units in-between Army Groups. Many decisions and branches ensure that you can replay the campaign several times and still find new aspects of it.

14.5. Soviet Dawn

The player experiences the devastating German attack on the Soviet Union, first counter attacks and the recapturing of the territory from the Soviet perspective over 22 maps. At the are battles in Poland towards Berlin or in Hungary towards Vienna. The successes of the player decides which paths can be taken.

15. The map editor

At the start you only see the top menu of the editor and an empty map in the background. Each item of the menu triggers a submenu with more options that are discussed in the next paragraphs.

On the right of the top menu are two additional buttons, a switch for ground/air view and the nations which is edited at the moment. Which nations you can select depends on the setting of the scenario.

15.1. Options

Main menu

You return to the main menu. Anything not saved will be lost in the process.

Quit game

Player ends up in the desktop. Anything not saved will be lost.

Save

Saves the current state of the map under the name that is given in the input field below the button. Older saves which bear the same name will be overwritten without advanced notice.

Load

For this there must be a scenario in the folder of the editor and it must be selected from the list below all buttons. If the name of the file appears in the input field below the button, the map can be loaded.

15.2. Landscape

The landscape of a hex can be set in two ways: You can either determine all elements of a hex at once and paint it as often as you wish onto the map or you choose every component for each hex single handed.

15.2.1. Hex fields

Field: In this sections you can transmit all choices listed below at once onto a hex field.

Landscape: You select if the hex is basically a hill or a river etc. Each of these has its own attributes regarding movement, entrenchment and combat. See chapter 3.1 .

Material: Determines the texture groupd that is mapped on the landscape. Does only affect optics.

Ornaments: Important elements that also influence the game play can be set with this function. Rail roads, street and swamps are just some of them. Some can determine terrain (forest, swamp).

Objects: Cities, air fields and other infrastructre can be added to the map here. It also opens a window with object attributes, see also next chapter and chapter 3.2 .

15.2.2. Object attributes

Name: You can choose any number of names for your objects.

Owner: a drop down menu contains the nations you can choose from. They depend on the selections in the scenario setting.

Supply hex: the owner of the object may place newly recruited units on this hex or its neighbouring fields if they are not occupied by another unit.

15.2.3. Special

Deploy hex: At the start of a mission during a campaign the player can place his core units on a map. Deploy hexes mark fields that can be used once for that purpose. This function can be used to create these hexes for a mission.

Supply hex: This can be used to deploy units as well, only they can be used infinitely.

15.3. Units

In this menu there is a column of buttons that represent all weapon types of the game. After selection one of them you get a list of the different equipments of the nations. The content depends on the date that was selected in the scenario settings. Only equipment that existed at that time will be displayed. The weapons of all nations will be displayed, regardless which nations are selected for the players. Thus you can enlist equipment to foreign nations e.g. you can add a T-34 unit to the German forces.

The values of the weapons is displayed beneath this. You can also add a transport here.

After all is selected you can paint the unit with a click of the left mouse button onto any free hex on the map. This will open a new window which enables you to specify some details of the unit. If your input is outside the limits, it will be automatically set to the regarding limit:

Name: The editor plays the default weapons name here, but the designer can choose freely how to name the unit. This is only for design purposes and has no influence whatsoever.

Stärke: By default the maximum strength is set but you can set values below that, but a unit needs at least one strength point to depict damaged units.

Ammunition: Default is the maximum amount. Values between 0 and the default value are allowed.

Experience: Values up to 800 make sense here. Please read the passages about levels of experience and the consequences in chapter 9 .

Fuel: Default is the maximum amount. Values between 0 and the default value are allowed.

Entrenchment: The level of entrenchment depends on the unit and the terrain. Which ever is smaller determines the maximum value you can set here.

Core unit: This setting is important for campaigns as these units can be transferred to new missions. There may be a limitation of the amount of units by using a limited amount of unit slots in single map.

15.4. Scenario setting

You can set the basic attributes of a mission here.

15.4.1. Map

Map size: Here you set the dimension of the map in hex field numbers. A change is happening as soon as you press „New map“. Please note that all elements that might be currently on the map (terrain setting, units etc.) will be erased by this command. Old maps are e.g. not expanded but reset with the new size. To avoid losses of work you should change the name of the saved map.

Date: The date influences which units are available to the player. Weapons are only unlocked as soon as their historical start of production is reached. If a weapon system has run out of production by a given date, it may not be bought in the game anymore, but still be used and replenished.

15.4.2. Player

The player setting contains:

Nation: Which country is played on a side. This influences the weapons and units the player can use during the mission.

AI: You can choose between aggressive or defensive AI as well as a human player.

Team: On the side of which power block is this nation ? Choose between Western Allies, the Soviet Union or the Axis.

Resources at the start: if you start the map, the player will receive this amount of resources.

Resources per day: this amount will be added to the players resources storage at the beginning of each turn.

15.4.3. Weather

Weather vastly influences the operations. Here you can enter the chances of each type of weather to occur in a turn. The values vary between 0% (weather condition will not occur) and 100% (weather conditions is present every turn). The sum of all entries should add up to 100% in the end.

Winter textures switches between winter and normal textures of units.

16. Credits

Germany at War: Soviet Dawn was created by:

PHOBETOR

LEAD DESIGNER

Ronald Wendt

LEAD PROGRAMMER

Thomas Gereke

TITLE GRAPHICS

Andras Kavalecz

MUSIC

Andrew Oudot

ADDITIONAL 3D GRAPHICS

Oliver Horschel

ADDITIONAL 2D GRAPHICS

Riko Jensen

ADDITIONAL HISTORICAL RESEARCH

Steven Bohlin

ADDITIONAL SCENARIOS/CAMPAIGNS

Jean Dillmann

Zigmunds Steins

BETA TESTERS

Jean "terminator" Dillmann

Lars "spillblood" Scharfenberg

Zigmunds Steins

Anduril

Rickie "Rick" Roberson

Pieter "ComradeP" de Jong

Qwixt

Tide1

MisterBoats

DSWargamer

Ladutre66

paxuni
deducter
Wittmann1941
Razz
Thomas Gillman
crsmany
radic202
Mattias "Rezha" Engzell
jnpoint
derfderf
Steve Pope
moet
SPNILHOB
Jeff Cherpeski
terebi
gids1
Hexagon
basem2502
Flatwater
David Pope
Markus Götz
Lesley Baines

Original release 2013:

SLITHERINE GROUP
MATRIX GAMES / SLITHERINE

PRODUCERS
Erik Rutins, JD McNeil, Iain McNeil

BOX AND LOGO DESIGN
Claudio Guarnerio

MANUAL EDITING AND CONTENT
Ronald Wendt, John Thompson

MANUAL DESIGN AND LAYOUT
Myriam Bell

PUBLIC RELATIONS & MARKETING
Marco Minoli, Filippo Chianetta

PRODUCTION ASSISTANTS

Andrew Loveridge, Gerry Edwards

ADMINISTRATION

Liz Stoltz, Dean Walker

BETA TEST COORDINATION

Karlis Rutins

CUSTOMER SUPPORT STAFF

Christian Bassani, Paulo Costa, Andrew Loveridge, Erik Rutins, Iain McNeil

FORUM ADMINISTRATION

Erik Rutins

TECHNICAL DIRECTOR

Phil Veale

WEB-DATABASE DESIGN & DEVELOPMENT

Andrea Nicola, Valery Vidershpan, Phil Veale

NETWORK AND SYSTEM ADMINISTRATOR

Valery Vidershpan, Andrea Nicola

QUALITY ASSURANCE LEAD

Erik Rutins

BETA TEST TEAM FOR GERMANY AT WAR

Lars "spillblood" Scharfenberg

Rickie "Rick" Roberson

Pieter "ComradeP" de Jong

Qwixt

Tide1

MisterBoats

DSWargamer

Ladutre66

paxuni

deducter

Wittmann1941

Razz

Thomas Gillman

crsmany

radic202

Mattias "Rezha" Engzell

jnpoint

derfderf

Steve Pope

moet

SPNILHOB

Jeff Cherpeski

terebi

gids1

Hexagon

basem2502

Flatwater

David Pope

Markus Götz

Lesley Baines

17. Appendix

17.1. Short cuts

GENERAL

File menu ('ESC')

Select/move unit (LEFT MOUSE BUTTON)

Deselect unit ('SPACE' or RIGHT MOUSE BUTTON)

Show/hide information about unit (RIGHT MOUSE BUTTON)

Select next usable unit ('TAB')

Remove selected unit from ('TAB') cycle ('Q')

Cancel last move ('BACK')

Toggle ground/air mode ('M')

Confirm menu ('RETURN')

Enter Headquarter ('H')

Enter Recruitment ('R')

See Player objectives ('O')

Check Combat Protocol ('C')

Statistic ('L')

Controls ('I')

MAP

Zoom modes ('F1'-'F5')

Panel modes ('F6'-'F8')

Toggle units on/off ('F9')

Scroll right ('CURSOR RIGHT' or 'D')

Scroll left ('CURSOR LEFT' or 'A')

Scroll down ('CURSOR DOWN' or 'S')

Scroll up ('CURSOR UP' or 'W')

Zoom in ('PAGE UP' or MOUSE SCROLL WHEEL UP)

Zoom out ('PAGE DOWN' or MOUSE SCROLL WHEEL DOWN)

GRAPHICS

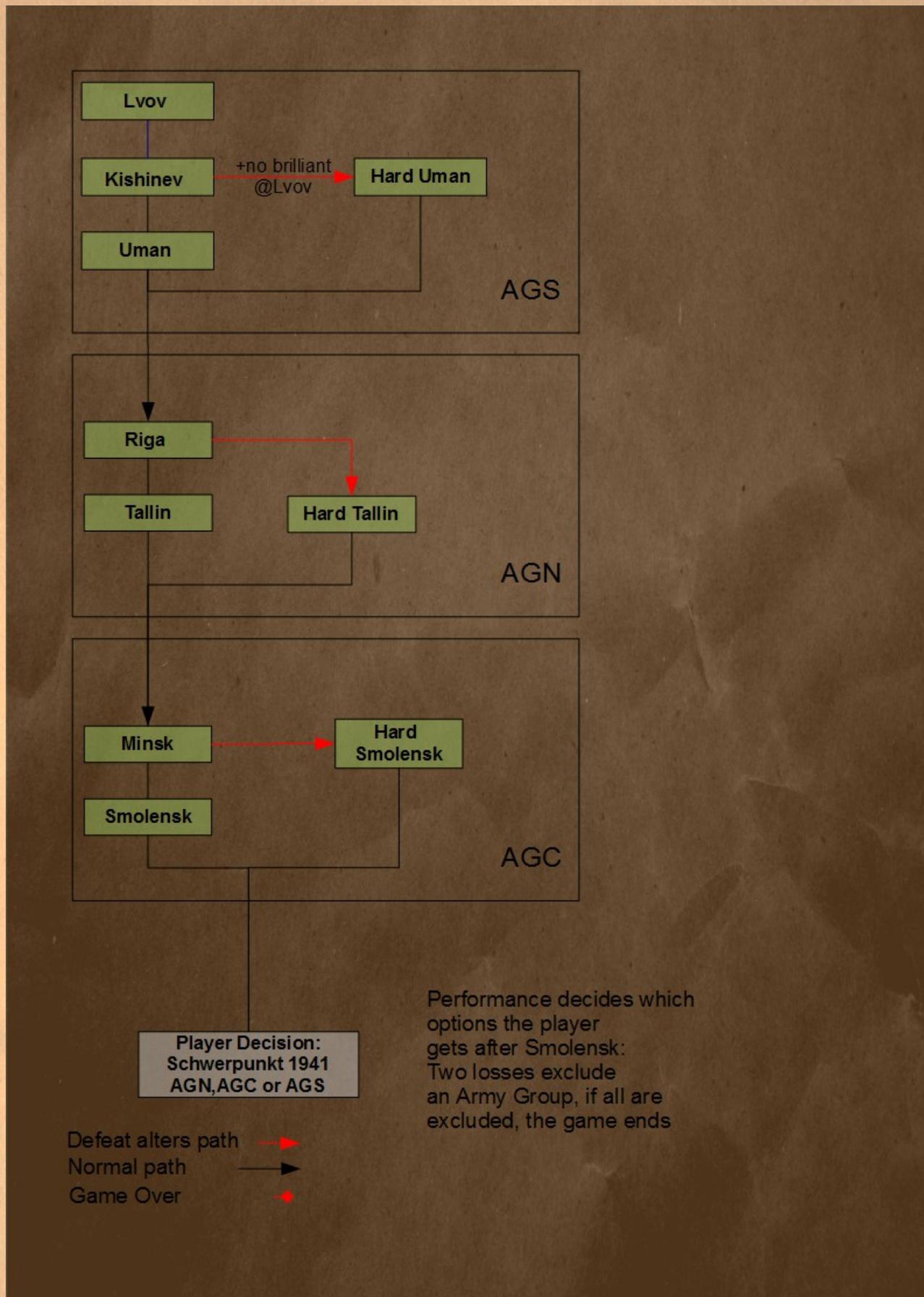
Weather visuals on/off ('2')

Toggle fullscreen/window ('F11')

Save screenshot ('F12')

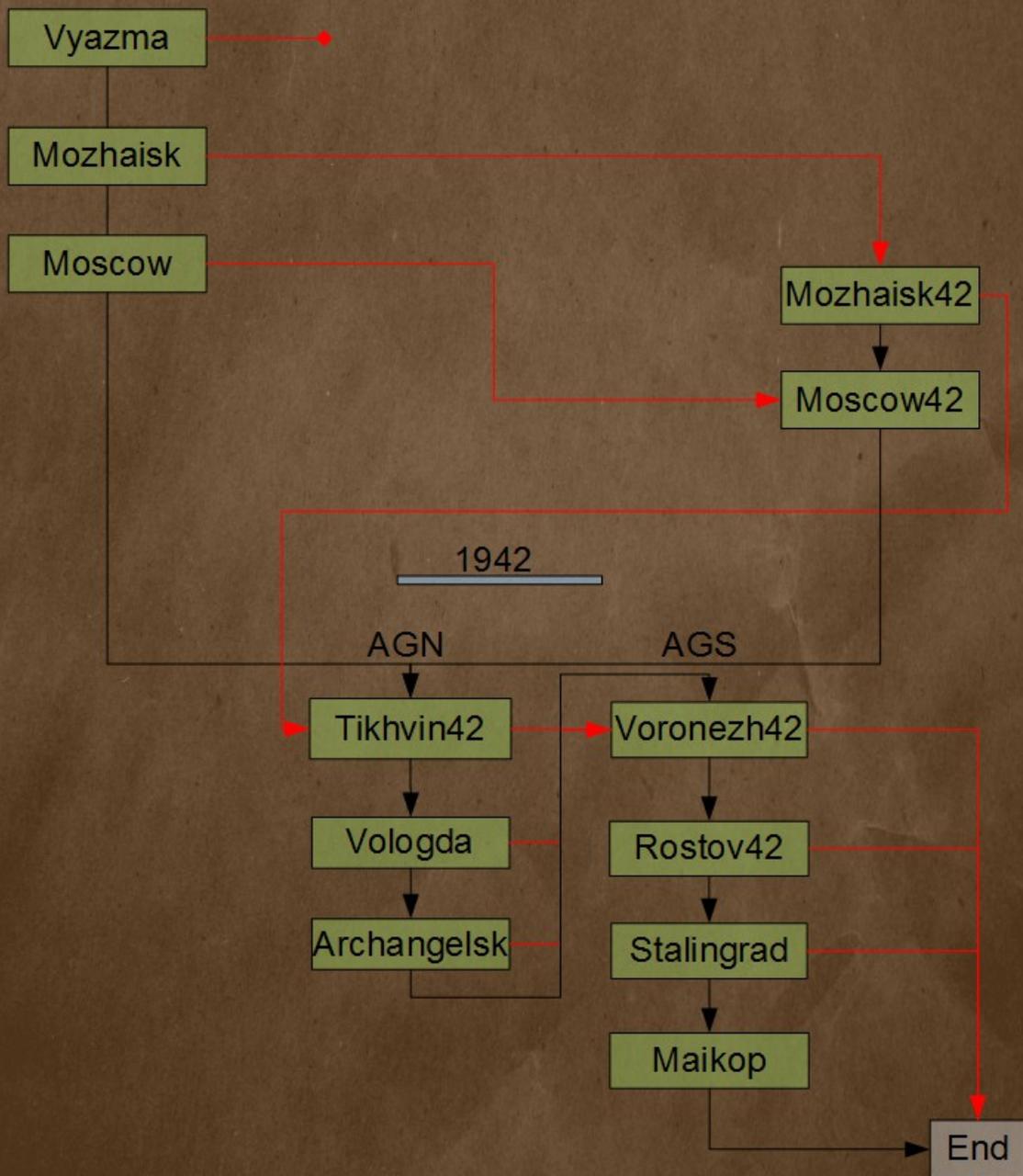
Toggle 3D units/NATO symbols ('N')

17.2. Arkhangelsk-Astrakhan campaign structure



Schwerpunkt 1941 AGC

10 units can be tranfered from AGN and AGS to AGC



Defeat alters path →
Normal path →
Game Over →

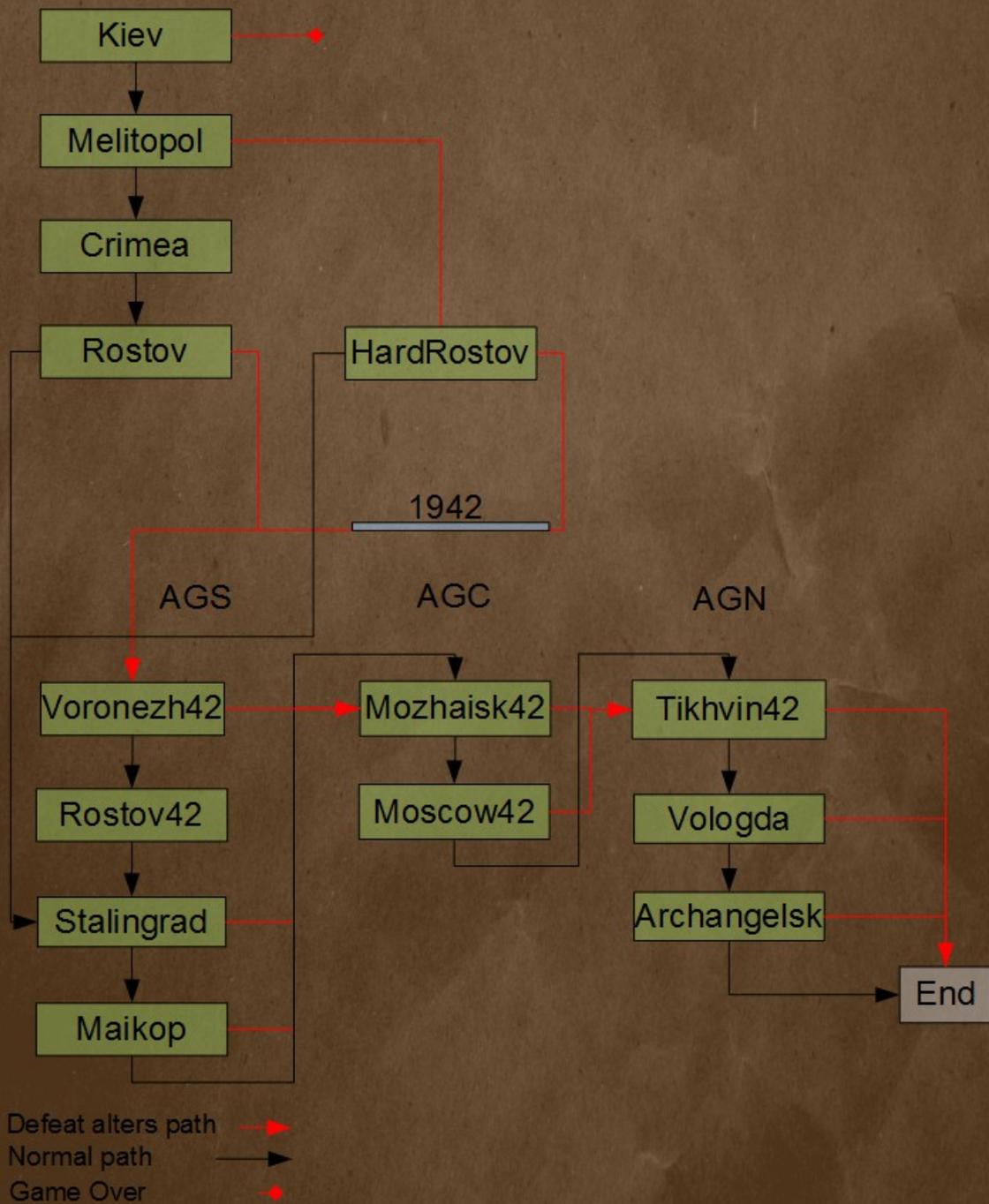
Schwerpunkt 1941 AGN

10 units can be transferred from AGC to AGN



Schwerpunkt 1941 AGS

10 units can be tranfered from AGC to AGS



Soviet Dawn

Chapter I: Death



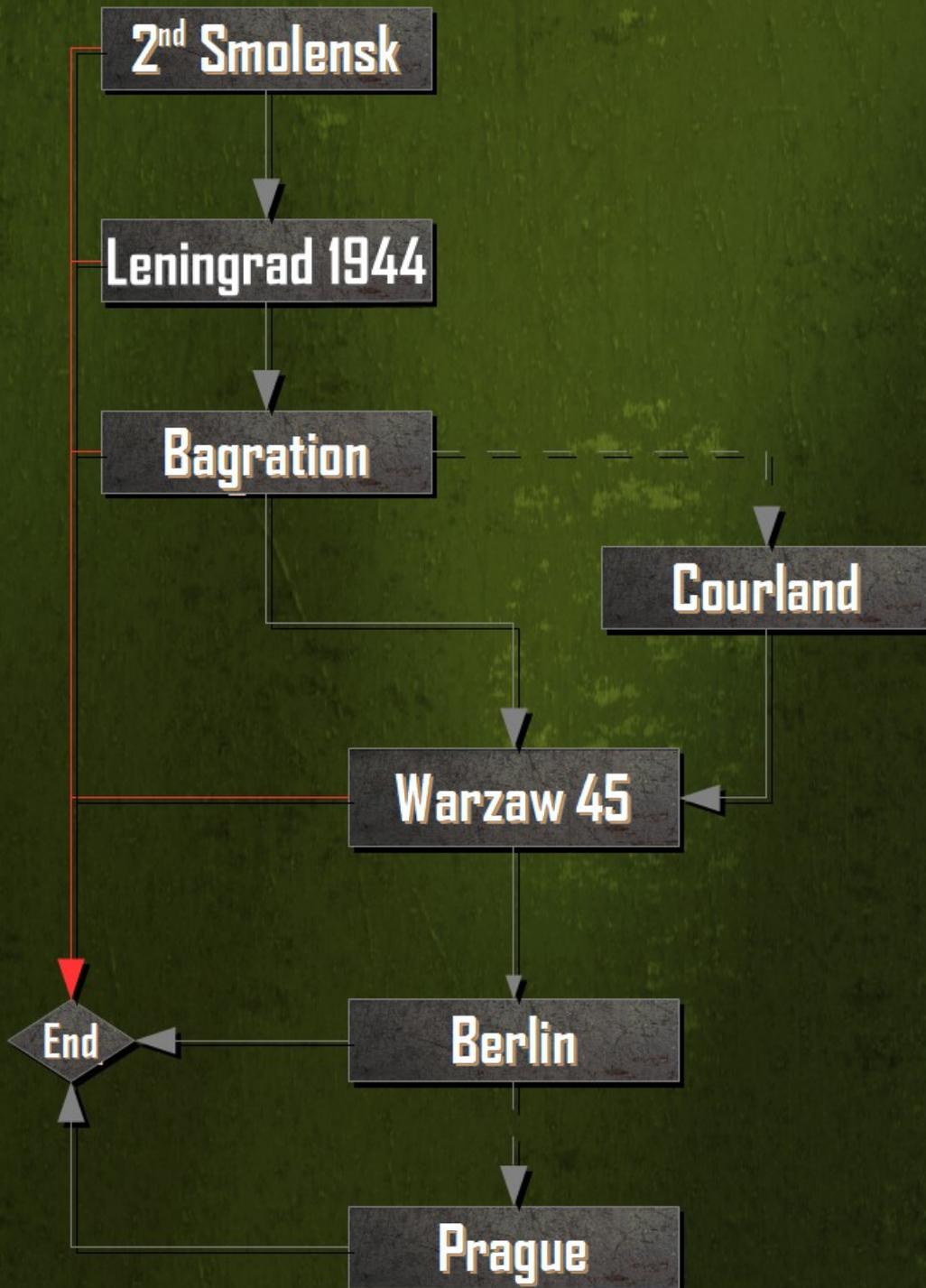
Soviet Dawn

Chapter II: Resurrection



Soviet Dawn

Chapter III: Revenge - North



Soviet Dawn

Chapter III: Revenge - South

