

PART 7 – ECONOMY & TECHNOLOGY

21. Production

Economy provides the major nations in the game with the means necessary to the construction of their units, as well as all the material and equipment required to sustain the war effort (recruits, munitions, economic resources). The standard economic resource used in the game is the EP, for Economic Point. For units constructions and losses replacements, there are also RP, Recruits Points.

Minor nations (and neutrals) have an abstracted economic system and their income and expenses are handled automatically by the game.

Production phase occurs every Interphase starting with Winter 1914. Players may build the ammunitions and reinforcements necessary to wage war. Minor countries have a simplified Production procedure.

21.1 The Economy

21.1.1 Economic Points (EP) Income

Each major power receives Economical Points every Interphase, called "EP". This **income** depends on the Civilian Production level (See below), except for Turkey, which has a fixed income.

EP are produced by the cities of each major nation (and you receive some from colonies and conquests too), sometimes from events, and also from diplomacy (foreign aid, loans).

EP may be kept from one Interphase to the next. The number of unspent EP is written in the "treasury" box. The maximum number of EP that may be kept in the treasury is 20 (except for the very first Interphase).

Income and War Loan

Each major power may gain EP through Political Action "War Loan" (See Politics), with the Entente (Western) Powers having an edge in this.

Income and Military Situation

When cities are conquered by the enemy, a major power no longer receives these cities' incomes. These incomes are printed in purple next to the cities.

- ❖ The conquering power receives **half** the conquered cities' incomes, rounded down.
- ❖ Special Case : **France** receives Strasbourg's and Metz's full economical incomes if conquered (cities from Alsace-Lorraine).

Income and Diplomacy

Trade and Diplomatic Agreements (Agricultural or Economic Aid) with neutral countries may provide an additional income (for example, Scandinavian countries or Holland with Germany). This depends on their diplomatic level. If the neutral country is conquered by the enemy, trading is no longer possible, and the minor country provides no more EP.

The **United States** grants automatic credits (i.e. Economic Aid) to Entente powers when the diplomatic level of the USA reaches **13** (i.e. when the USA turns Pro-Entente).

Income and Strategic Warfare

Great Britain may declare the **Central Powers Blockade** via Event or Political Action. When this blockade is in effect, Germany no longer receives the income from her colonies and from trade. On a longer scale, the blockade has effects on Central Powers' economy and morale. These effects worsen if the blockade extends to **Neutral** countries.

On the other hand, Germany may start **Submarine Warfare** to lower Britain's EP income and its morale. These effects are worsened with All-Out Submarine Warfare implementation (German Political Action).

21.1.2 Recruits Points (RP)

RP are only produced by your home nation cities. Each turn (not month!), a nation will receive a RP flow calculated on the net amount of available RP produced by her cities. RP will be used to produce new combat units and, most important, to fill losses during the battle (as if the RP stock is low or nil, units will be destroyed if they cannot refill losses with RP – See Combat).

RP and Military Situation

When cities are conquered by the enemy, a major power no longer receives these cities' RP. These RP are printed in blue next to the cities.

- ❖ The conquering power receives **no RP** from conquered cities.
- ❖ Special Case : **France** receives Strasbourg's and Metz's full RP if conquered (cities from Alsace-Lorraine).

RP and Diplomacy

RP can be exceptionally received from some countries via Diplomatic Agreements (e.g. Spain sending volunteers).

21.1.3 The Budget

Each nation has a budget, where the player can see his income (EP and PR), and its expenses. With their EP, nations will pay maintenance costs, buy munitions (MUN), naval sorties and operations for their fleets, technological research. And, last but not least, purchase new combat and support units, for which RP are also needed.

They can also invest in improving their units, building minefields to protect their coastlines, or diplomacy.

All major nations also have to pay maintenance costs for their armed forces (see below) and can see their budget reduced due to EP lost through Blockade effects or Strategic Warfare losses (submarines, bombing, raids).

 National Budget of Germany (Nov. - Dec. 1914 - May 1915)	
Current Treasury	80
Income	132
Loans	0
Economic Aid	0
TOTAL REVENUES	132
Generic spendings	0
Costs for sea sorties	0
Hit losses	0
Costs for maintenances	36
Economic losses cause by Submarine Warfare	0
TOTAL COSTS	36
Expenses for Corps training	0
Expenses for Munition building	8
Expenses for Technological researchs	3
Expenses for Diplomacy	0
Expenses for Artillery productions	0
Expenses for Aviation	0
Expenses for Fire Power improvement	0
Expenses for Minefields building	0
Other Expenses	0
TOTAL EXPENSES	11
BUDGET BALANCE	85
Treasury forecast	165

Military Maintenance

Each major power must pay a constant cost to maintain the Armies and the navy, and to train the recruits, etc. This cost does not vary for the duration of the war.

21.1.4 Production Sites

To buy the war materials you need (such as munitions, planes, combat gases, warships), it is mandatory to use specific production sites, that are usually located in the major cities of your nation, but not always operating for the war economy (see next section).

- Munitions (MUN) for artillery are produced by the Munitions factories,
- Combat gases are manufactured by chemical plants,
- Air units are built in aircraft factories (there are 2 special ones for the German airships),
- Warships are laid down, built and launched in shipyards, before they can undergo trials and join your combat fleets.

21.2 Civilian and War Production

Not all the specific production sites listed are available when the war starts in 1914. Most of them are in fact used for civilian production and they must be converted to the war economy status at some time during the conflict.

As long as the Civilian Production is high (i.e. many of the production sites are inactive, their workers being allocated to more peaceful productions), the nation's morale will remain high (because the value of the number of still civilian sites will be added to the NW level every Planning phase). But, of course, war production of essential combat assets will remain low.

21.2.1 Civilian Production

A power's Civilian Production shows how much this country's economy is involved in war production, and how much is still devoted to Civilian needs. This involvement is measured by the "Civilian Production" indicator, in the **9 to 0** range (fully Civilian toward complete war economy).

- ❖ A power's **EP income** depends on its Civilian Production.
- ❖ The number of produced MUN also depends on the Civilian Production, with a multiplicative effect when the Civilian Production decreases.
- ❖ By executing the Political Action "Adjust to Wartime Economy" (See below), the Civilian Production level may be lowered. The lower this level, the higher the proportion of Wartime Economy.
- ❖ Turkey has a **fictional** Civilian production. It gets a fixed 35-EP income each Interphase (minus income lost from conquered Turkish cities).

Effects on NW

Civilian Production has a positive effect on **NW** during each **Interphase**.

On the other side, each time the Civilian Production is voluntarily lowered by using the Political Action A-4, **NW** goes down by **-4**.

21.2.2 The Production Window

This window is used for most of the production detailed in the sections below, be they combat units or support units. Just select which thumbnail is relevant when you want to concentrate on a particular production (by default you open the window with the 'ALL' section, displaying all your ongoing production, and thus needing to scroll when your activity is important).



On the left-hand side you can see the units under production.

On the right-hand side you find the buttons for the production time and the buttons for firepower improvement (manchine-guns symbol) or repair of damaged units.

The bottom part of the window gives a summary of the information you need to be aware of when entering production: stool, sites, EP, treasury and current date.

21.3 Land Combat Units Production

All units have a manufacturing cost (in terms of EP / RP) and also a production time expressed in number of turns. A generic window indicates what is available for construction for each country. You can access it by clicking on the relevant button on the upper bar of the main interface.

Design Note: from the construction, technology and ammunition window you can access the budget window via the specific \$ button.

21.3.1 Corps Construction

Each power may build new or previously destroyed corps. ☐ Destroyed units may be rebuilt during any subsequent Interphase.

However, a destroyed fortress cannot be rebuilt. Similarly, a sunk naval unit cannot be rebuilt.

For each unit type, there are **2 different costs** depending on the **build delay**. The player chooses how long construction will take.

Build Delay : all corps being built are scheduled to arrive in a future turn as reinforcements, their Build Delay being the number of game turns (not game months!) in which they will appear. Click on the relevant button to process the production at the chosen delay. Remember that the cost is affected by the delay.

Limit : a power may build a number of new **corps** up to **half** its **basic RP flow** (rounded up)
An **African** unit costs **0 RP** to rebuild. They have no effect on the power's RP flow, nor its limit on the creation of new corps.

21.4 Ammunitions

Each power may produce "MUN" to use with their artilleries. The MUN are produced with a "**flow**" procedure each turn, but unlike the RP, the players choose how many MUN they will produce for each of the nations in their alliance.

Each power controls **MUN sites**. Each power also has a Munitions **production multiplier**. The production multiplier as well as which ammunition sites are active is based on the Civilian production level.

The Munitions **costs** are calculated from the **Munitions Table** (see Appendices) and based on both the number of active sites and the number of produced Munitions points produced per turn (maximum value = **active sites x production multiplier**). The number in the resulting **box** gives the EP cost. All this is handled automatically when you adjust the slider on the Ammunition purchase window.



Some specifics points:

- ❖ Russia spends more EP per munitions point, compared with other powers. This is shown on her Munitions table ; there is no special computation.
- ❖ Because having only one factory (in Constantinople) Turkey may produce **2 MUN** per Interphase (never more), spending 4 EP.
- ❖ The number of produced Munitions points cannot be more than **30**.
- ❖ Only friendly controlled munition sites may be used.

21.5 Recruits

Each major power receives Replacement Points each turn during the Reinforcement Phase, and the RP flow is constant.

The "RP Flow" is computed with the following procedure during each Interphase :

- Each power has a basic number, calculated from the sum of its RP values (from controlled cities),
- The power then subtracts the number of **Corps it has created** during the Interphase.

The result is the RP flow. The power will get this number of RP during each one of the next 3 turns.

However, in **1917**, and then again in **1918**, the basic monthly RP flow of most nations is lowered by 1, because of the tremendous accumulated casualties.

Example : During Winter 1914, Austria-Hungary has a basic amount of 12 RPs. She has huge losses in Galicia against the Russians. She needs to rebuild 5 corps during this Interphase. Her computed RP Flow is 7 RP per turn (12 - 5), and she will receive it during the next three turns.

21.6 Support Units

Each power may build support units : artillery, aircraft, and tanks* (for these * provided the technology is available).

The build cost for a support unit depends on the power building it. But there is **only one cost** per unit type per power (unlike the corps).

The build delay obeys a special rule. This delay is at least 4 turns, with the following particularity.

- ❖ If **several support units** (even of different types) are built at the same time, each unit, starting with the second one, needs **one more turn to be built**.
- ❖ The 1st unit is built in 4 turns, the 2nd one in 5 turns, the 3rd one in 6 turns, etc.
- ❖ The units are placed on the reinforcement scheduled one per turn, starting with the fourth turn onwards.
- ❖ The player freely chooses the order in which these units will be built ; there is no special requirement.

Attention, for this matter, Stosstruppen and Assault Troops are not considered support units.

Not all support units are available when the game starts. Some support units are added to the power's pool with the different years. This is particularly the case of aviation. These units become available and may be built during the Winter Interphase preceding the year of appearance.

21.6.1 Aircraft Building

During each **Winter** Interphase, new aircraft units are available for the building process. These are support unit. Once built, aircraft counters are deployed stacked with an HQ or GHQ (See 84.B).

21.6.2 Tanks

Germany, Austria, England, France, Russia and the United States may produce Tanks. Requirements and constraints are:

- ❖ It is necessary to possess the "**Heavy Tank**" technology.
- ❖ In the beginning, the production rate is limited to **1 Tank** per Interphase.
- ❖ A Tank is built in **4 turns**.
- ❖ Tanks are support units. It is necessary to stagger their production over several turns (i.e. mixed with the other support units).

21.7 Firepower Improvement

Some corps do not have their full authorized complement of guns, machine-guns, mortars, etc. It is possible to improve their **firepower**.

On the **Production Window**, beside the list of units, there are **buttons**. Each button may be clicked to improved the firepower, by 1 Firepower point.

The small print number is the cost the nation must invest to provide all similar corps with more weapons to improve their firepowers.

The cost varies from one corps type to the other, because of the number of units per type.

Paying part of the cost during different turns is allowed. In this case, the box is marked in a special way (circled for example). As long as the cost is not paid in full, no corps receives its additional weapons.

☐ When the cost is fully paid, the new firepower applies starting with the **next Interphase**. In the interim, the box is partly checked (one stroke only for example). During the Interphase, the box is fully checked (with the second stroke).

These units' **firepower** increases by **+1** (permanently).

If a corps is converted to an assault corps (Assault Troop / Stosstruppen marker), this corps, although now an elite one, cannot raise its firepower like other elite corps. Its maximum firepower is still the same.

Maximum firepower :

+3 Elite and Veteran

+2 Active, Reserve and Conscript

The **reverse side** firepower is lowered by **-1** (when the unit is reduced).

Note : the 5²-6-4 German corps cannot increase to +3 in fire value because they are active units and not veterans. They are limited to +2 in fire value.

Example : during the Winter 1914, France decides to improve its Active units 4¹-5-4 [A] and spends 20 EP. These units will be 4²-5-4 [A] during the next Interphase.

In Summer 1915, France continues its improvement program, and enhances its Veteran units 5²-6-4 [V] and the Foreign Legion 6¹-6-4 [E] (which is improved twice in a single Interphase). The total cost is 40 EP (20+10+10). The Veteran units will be 5³-6-4 [V] and the Foreign Legion will be 6³-6-4 [E] during Autumn 1915.

Example : in Winter 1914, Russia invests 5 EP to improve its Reserve units (3-4-3 [R]). It is not enough, so the improvement will be effective only when it is fully paid. Russia invests another 10 EP in Summer 1915, and still another 10 EP in Autumn. This time, the 25-EP investment is fully paid.

*These units become 3¹-4-3 [R] during the next Interphase, that is, Winter 1915. Russia gets NW +1 because there is a star * near the marked box.*

21.8 Naval Construction

The major powers may build warships (already scheduled even from before the start of the war), in the form of new naval squadrons. For each squadron, the power will build the individual ships that are supposed to be part of it.

21.8.1 Shipyards

Several boxes exist on the right of the individual ships. They represent the extent of the building of the ship. The value printed in each box is the **EP** cost of the building.

During each Interphase, the player may mark **1 box** per unit and pay the printed build cost.

Some boxes are shaded. These boxes are already built when the war starts.

Speeding up the building is possible. This depends on the **number** of active naval shipyards (depending on the Civilian Production level).

You may build one additional box per active shipyard. Max 2 boxes on any individual ship.

When all boxes are marked, the unit is built :

- the unit appears immediately (only 1 box built this Interphase) ;

- or it appears the next Interphase (if 2 boxes were built this Interphase).

The ship is added to the ship-counter as soon as it is complete.

Effects on NW : each BB or BC built adjusts **NW by +1** when it enters play.

The **NW +1** gain occurs during the Interphase, if the unit is to arrive the next turn.

Germany : “to launch” **BC Mackensen** and **BB Yorck**, you must have already launched BB Bayern (even with 1 battleship).

England : “to launch” **BC Hood**, you have to wait until BC Renown and BC Courageous are created and in play (even with 1 battlecruiser).

Example : during Winter 1914, the German decides to continue building BB Bayern, the keel of which has already been laid (the first box is shaded). For the moment, only the Kiel shipyard is active. The German player may mark one box per ship, plus a second one for a single unit he chooses. The German player chooses Bayern. He marks both "building" boxes and spends 12 EP (6 +6).

During Summer 1915, the German player slows down the shipyard activity, and marks one "completion" box for Bayern. The cost is 7 EP.

During Fall 1915, the German Civilian Production is 4, and the Bremen shipyard is active too. The German player may now mark 2 more boxes per Interphase. He decides to mark the second "completion" box and the "trial" box for Bayern, spending 14 EP (6 +8). He also hastens the building of BC Lützow (2 boxes too).

In Winter 1915, Bayern and Lützow enter play. Germany receives NW +2 during this Interphase.

The BAYERN ship-counter is placed on the game map, reverse side up with a single ship (Bayern herself). The counter is placed in the HochSee fleet. In addition, the DERFFLINGER counter is flipped to the front side, because it now comprises 2 units (Derfflinger + Lützow).

21.8.2 Naval Repair :

See naval rules, section 14.

21.8.3 German U-boats

Germany may build **1 to 3 U-Boats** per Interphase (no more), the quantity depending on the number of active shipyards. These U-boats are abstracted and not physically present on the map. They are used for Strategic Warfare purposes. The cost per unit is variable :

- ❖ One U-Boat costs 15 EP,
- ❖ 2 U-Boats cost a total of 25 EP,
- ❖ and 3 U-Boats cost a total of 30 EP.

21.9 Assault Troops (Stosstruppen)

Most major powers may build them. There are “Assault troops” (Entente) or “Stosstruppen” (Central Powers). Both are the same.

21.9.1 German Stosstruppen

Germany may produce **1 Stosstruppen** per Interphase when the “Stosstruppen” Technology is discovered.

A Stosstruppen is built in **4 turns**.

Once created, the unit is placed with an intact corps that has not fought during the preceding turn. This corps becomes an “assault corps”.

21.9.2 Stosstruppen for Austria-Hungary, Italy, Turkey (Central Powers)

Austria-Hungary and Italy may produce their own Stosstruppen only after the German assault victory described above (if any, if none their production will not be allowed). Their initial production is limited to 1 Stosstruppen (during the 1st Interphase), then unlimited afterwards (beginning in the 2nd Interphase).

Germany produces Turkish assault troops (Turkey cannot do it herself).

21.9.3 Entente Assault Troops

The **Entente** powers may also produce their “Assault troops”, either after the German assault victory, if they already have the required technology or as soon as they discover their own “Assault troop” Technology.

Their initial production is limited to 1 Assault Troop (at the 1st Interphase), then unlimited (from 2nd Interphase on).

The above German 21.9.1 rules are reversed if the Allies obtain an assault victory (use the same criteria as required for Germany, for one Allied power).

England produces Turkish markers (if Turkey is Allied).

21.9.4 Troops Limit (Central Powers and Entente)

The number of possible assault troops is limited by power. You cannot produce more Stosstruppen (Assault Troops) than you have available for that power. If no troop is available, you cannot produce any (i.e. when all are in play or in production).

21.9.5 End of the Stosstruppen Production (Centrals, Entente)

When a power **fails** a War Weariness Test, it may neither receive nor produce Stosstruppen / Assault troops, until the **end** of the current **year**.

Complete Example : Germany discovers the "Stosstruppen" technology in June 1915. She builds her first Stosstruppen unit in Autumn 1915 (end of August). This Stosstruppen will enter play in Jan-Feb 1916 (4 turns later). Germany may build 1 Stosstruppen per Interphase until Summer 1917. She does not hurry to get the "Infiltration" tactic, waiting for some extra technologies to show up.

In August 1917, Germany has 5 Stosstruppen available. She launches a Grand Offensive in Riga against Russia, and uses Infiltration with Stosstruppen. This is a complete success : Riga is conquered and the Russian Front is shattered (5 other hexes are conquered too).

During the Autumn 1917 Interphase (after August turn), Germany may now produce 6 Stosstruppen. They will arrive in Jan-Feb 1918 (4 turns later). Austria-Hungary may build Stosstruppen too (1 in Autumn, the other in Winter). Germany will produce 6 more in Winter (arriving in June 1918).

In September 1917, Germany and Austria launch another Grand Offensive against Italy at Caporetto. This is another complete success. Venetia is invaded and the Italian front is stabilized on the Piave river.

In 1918, Stosstruppen are used in mass against the Western Front, and this is still another success. The German advance is continuous. The second Battle of Marne occurs, but Foch's counterstrike, in July 1918, puts an end to the German offensive.

Germany has to roll a Weariness Test. The test is failed... Germany will neither receive nor build Stosstruppen until the end of 1918...

21.10 Other Constructions and Production Expenses

The various powers may spend in other fields as well, in particular the ones below:

21.10.1 Ambassadors

Each power may build AMB for its diplomacy with neutral countries. Each AMB costs **5 EP**. There is a limit for each power (see the Diplomatic Appendices).

21.10.2 New Headquarters (HQs)

Germany and England may build new Armies. The corresponding HQ appears as soon as an Army corps belonging to the created Army comes into play. The Army appears in a national **city** of the power.

Example : during Winter 1914, Germany creates a 5²-6-4 from XIV Army (choosing a 3-turn build delay). The HQ and the unit will appear at the same time, in May 1915. They will be placed in Koenigsberg (Eastern Prussia).

21.10.3 Technological Research

Each side may fund technological research to speed it up (see next section). The total cost for each side is maximum **40 EP**. Each power may fund part of it. The total spending is this side's global research investment.

Example : Central Powers invest, with Germany spending 30 EP and Austria spending 10 EP. The total spending is 40 EP.

21.10.4 Mines

Each power (except Turkey) may build naval mines (**1 EP** each). These mines are available the next turn. They are deployed within 3 hexes from a coastal city or town (with or without a port).

Case of Turkey: Central Powers / Allies may produce mines for her (if a link exists).

21.12 Various

Various rules exist on the following points:

21.12.1 American MUN Sites

The **United States** may lend from 1 to 5 MUN sites to the Entente, depending on the US diplomatic level. During each Interphase, these sites are assigned to the various Entente powers automatically, within the following limits : France (3), England (3), Italy (2), Russia (1, except Winter : 0).

No power may use more MUN sites than printed on the Munitions table (last line).

Once at war, the United States may still lend up to 5 MUN sites to Entente.

21.12.2 EP and MUN Trade (Economic Aid)

Each power may **give** EP or MUN to another friendly Power in the same Alliance during the Interphase, provided they are linked by land (rail) or by sea. Key factors are:

- ❖ Such a MUN gift is not a MUN flow, the transfer is immediate.
- ❖ However, there is a limit for each giving power. Yet, the same power may give up this same limit to several different friendly powers.
- ❖ Turkey cannot give anything.

Entente: (gift capability)

- England, France : **30 EP** and **20 MUN**.

- Russia, Italy : **10 EP** and **5 MUN**.

- Russia : Russia may receive no more than 10 EP and 5 MUN through Vladivostok, or 20 EP and 10 MUN when Archangelsk may be reached by rail (starting in 1916). During Winter, Russia may not receive anything.

• United States : nothing, the aid is already rendered by the lending of the Ammunition sites.

Central Powers: (gift capability)

- Germany : **30 EP** and **20 MUN**.

- Austria-Hungary, Italy : **10 EP** and **5 MUN**.

21.12.3 Case of Turkey

Turkey is a special case. She gets a **35 EP** fixed income during each Interphase, for the whole war, whatever the EP value of her cities.

She has only **1 Munitions site** in Constantinople. She produces **2 MUN** per Interphase, spending **2 EP** per MUN point. If Constantinople is conquered by the enemy, the MUN production ends.