

18EU — A Century of Railroading in Europe from the 1830s to the 1930s

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18EU — A Century of Railroading in Europe from the 1830s to the 1930s

1 Introduction

18EU is an “18xx” game set in the areas of continental Europe where most of the rail development in the 19th century occurred. 18EU attempts to show the evolution of railroad development from a modest force of local impact to a continent-spanning economic colossus.

1.1 Game Components

The game includes a Map; a Stock Market chart; various additional play-aid cards; eight Corporation charters, each associated with nine share certificates representing ten shares; fifteen Minor Company charters; train cards, each representing a train; track tiles; markers, mostly representing station tokens; and twelve thousand Pounds (£12,000) in various denominations, which represents the amount of money in the Bank.

1.2 Setting Up The Game

Lay the Map and the Stock Market flat between the players. Place the eight “M” markers with the £120 side facing up on the eight “M” hexes. Place the Round Marker (the white token with the flanged wheel) in the Turn Order space marked “Initial Sale Round”. Separate and sort the Corporation and Minor Company charters, share certificates, train cards, track tiles, and tokens. Put the Corporation and Minor Company charters near the play area.

Place one 2 train in the “Trains” section of each Minor Company charter. Place the five Pullman Cars (“P” trains) in the open area below the Stock Market marked “Pool”. Agree which (if any) of the trains marked as optional will be included and set aside any optional trains that are not included. Arrange the remaining trains in a stack, in order from top to bottom, such that the first (topmost) train is a 3 train and the last (bottommost) one is an 8 train, and place the stack in the space below the Stock Market marked “Available Trains”.

Place the share certificates for each Corporation in the “Treasury” section of the associated Corporation’s charter, with the President’s Certificate on top. Sort the Bank into denominations and place it near the play area within easy reach of the players. Distribute money to each player as shown below. Randomly determine the move order using the tokens numbered one through six: give the Priority Deal card to the first player, and begin the Minor Company Initial Sale Round.

Number of Players	2	3	4	5	6
Initial Cash	£750	£450	£350	£300	£250

1.3 How To Win

Players win by having the highest net worth at the end of the game. Cash on hand and stock shares owned add to net worth. Corporation or Minor Company capital and other Corporation-owned assets, such as trains, neither add to nor subtract from net worth.

1.4 Player Etiquette

Players should attempt to speed play as much as possible. In particular, determining what share to buy or what tile to lay or upgrade is best done during another player’s turn.

A player must disclose his current cash and the current capital of any Corporation or Minor Company he controls upon request by another player. Both player cash and Corporation or Minor Company capital should be piled neatly in front of the player (in the case of personal cash) or in the Treasury section of the Corporation or Minor Company charter. Corporation or Minor Company trains should also be neatly displayed in the train section of the Corporation or Minor Company charter.

Each player should display his owned Certificates neatly in front of him and must reveal his holdings in a Corporation on demand.

Corporate transactions are public knowledge, whether conducted between a Corporation or Minor Company and the Bank, a Corporation or Minor Company and a player, two Corporations, a Corporation and a Minor Company, or two Minor Companies.

Players may engage in public, verbal discussions and enter into public, verbal agreements. Such discussions should be reasonably brief in order to speed play. Performance is not enforceable except by moral suasion: a player who has

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performed an action under such an agreement in the anticipation of future action by his partner has no other recourse if his partner reneges on the agreement. Secret discussions or agreements, whether verbal or written, are prohibited.

If a player commits an infraction of the rules that is detected prior to the next player's turn, it must be immediately corrected. All other infractions that are detected must be adjusted in a manner that is fair and reasonable under the circumstances. If the players are unable to agree unanimously to a solution, the issue must be decided by majority vote, excluding the player who committed the infraction.

2 Game Phases

18EU proceeds through a series of Phases, which affect which tiles may be played, which trains are available to be bought or rusted, how many trains may be owned by Corporations, and the status of Minor Companies. Each Phase lasts until the Triggering Event for the next Phase.

Phase	Triggering Event	Maximum Trains Owned ⁽¹⁾	New Tiles and Improvements Available	Number of Operating Rounds	Total Trains Available	Trains Rusted	Off-Map Value Used
2	-	4/2	Yellow	2	15 x 2	-	First (Top)
3	Purchase of first 3 train	4/2	Green	2	5 x 3 ⁽²⁾ 5 x "P"	-	First (Top)
4	Purchase of first 4 train	3/1	-	2	4 x 4 ⁽³⁾	2	First (Top)
5	Purchase of first 5 train	2/1 ⁽⁴⁾	Brown	2	3 x 5	⁽⁵⁾	Second (Bottom)
6	Purchase of first 6 train	2/1 ⁽⁴⁾	-	2	2 x 6	3	Second (Bottom)
8	Purchase of first 8 train	2/1 ⁽⁴⁾	Grey	2	8 x 8 ⁽⁶⁾	4	Second (Bottom)

⁽¹⁾ Numbers shown are for Corporations/Minor Companies.

⁽²⁾ There are two additional 3 trains provided as an option.

⁽³⁾ There is one additional 4 train provided as an option.

⁽⁴⁾ Each Minor Company may own and operate a single train until the Minor Company Final Exchange Round.

⁽⁵⁾ Conduct the Minor Company Final Exchange Round immediately prior to the next Stock Round.

⁽⁶⁾ Eight actual train cards are provided. There is no limit on the number of 8 trains that may be in play.

3 The Stock Market

The Stock Market shows the current value of each Corporation's stock. The values shown are the amount represented by a single share certificate, worth ten percent of a Corporation. The highlighted spaces represent the possible Starting Values for new Corporations: £70, £75, £82, £90 and £100.

3.1 Shares, Share Certificates, and Limits on Ownership

There are important distinctions between shares and share Certificates. A single share of a Corporation is equivalent to ten percent of a Corporation. The President's Certificate represents twenty percent of a Corporation. For the purposes of share ownership in a Corporation, only the percentage of ownership as represented by shares is relevant: for the purposes of Certificate limits, only the number of Certificates held is relevant.

Each Minor Company is considered a Certificate. Players are limited to owning Certificates (not shares) in accordance with the following table:

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Number of Players	2	3	4	5	6
Certificate Limit	28	20	16	13	11

Players are normally limited to owning sixty percent (60%) of a Corporation's stock. However, a player may, through the exchange of Minor Companies for shares, find himself with more than 60% of a Corporation. If so, he must correct the situation by selling at his next legal opportunity. However, in no case may a player sell stock in a Corporation that has not yet operated. Thus, it is possible for a player to have more than 60% of a Corporation for an entire set of Operating Rounds.

A Corporation may never have more than fifty percent (50%) of its stock in the Pool (except possibly as a result of a bankruptcy). A Corporation may have up to eighty percent (80%) of its stock in its Treasury.

A President's Certificate may never be sold, and consequently may never enter the Pool. It may, however, be transferred to another player as a result of stock sales. A player who owns a President's Certificate may only sell sufficient shares to transfer it if another player (not the Corporation Treasury or the Pool) owns at least two shares. All adjustments in share holdings are made concurrently: hence, a player who owns a President's Certificate may always sell a number of shares sufficient to transfer the President's Certificate while leaving himself with exactly one share, provided the sale is otherwise legal.

3.2 Movement of Stock Prices

Share prices move as a result of several factors. These are described below:

- If a player sells one or more shares during a single Turn of the Stock Round, or a Corporation sells one or more shares during its Operating Round, the share price of the Corporation moves down one row in price for every share sold.
- If, at the conclusion of the Stock Round, none of a Corporation's shares are in the Pool or the Corporation Treasury, the share price of the Corporation moves up one row.
- If a Corporation Operates and withholds its earnings or its earnings are zero, its share price is moved one column to the left.
- If a Corporation Operates and declares a Full or Half Dividend which is equal to or greater than the current market value of the Corporation, its share price moves one column to the right.

If a share price should be moved left or right but cannot do so because it is at the end of a row, it is moved down or up respectively, following the arrow. If a share price should be moved up but is on the top row, it does not move. If a share price should be moved down but there is insufficient room for the full drop, it is moved to the bottom row in its column; if it is already on the bottom row, it does not move.

If a Corporation's token must be placed in a space which one or more other Corporations' tokens already occupy, it is placed at the bottom of the stack of tokens. This is true of Starting Value token placement as well as token movement for the reasons described above.

If a Corporation does not Operate, or Operates and declares a Dividend (Full or Half) which is less than the current market value of the Corporation shown on the Stock Chart, its share price remains unchanged, and it retains its relative position in a stack of tokens.

4 Sequence of Play

Play of 18EU consists of Stock Rounds, each followed by two Operating Rounds. Play always continues through a complete set of two Operating Rounds. At the beginning of the game, the players conduct the Minor Company Initial Sale Round in lieu of a normal Stock Round. Prior to the Stock Round that follows the set of Operating Rounds during which the first 5 train is purchased, players conduct the Minor Company Final Exchange Round.

4.1 Stock Round

During a Stock Round, players may sell and then buy stock. Players begin with the player who has the Priority marker and proceeds in accordance with the move order determined by the numbered tokens at the beginning of the game (this is also referred to as "Stock Round order") until all players have passed sequentially. The priority marker

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is then given to the player who initiated the final round of passes, the share prices of Corporations are adjusted, and the next Operating Round begins.

4.1.1 Selling Stock

During each of his turns in the Stock Round, a player may sell as many shares of stock as he wishes, subject to the limitations on Pool holding. However, stock of Corporations that have not yet operated may not be sold. Once a player has sold stock of a particular Corporation, he may not buy stock in that Corporation for the remainder of the current Stock Round. Players may sell shares of different Corporations in any order they choose.

Stock is sold into the Pool at the current market value shown on the Stock Market. When selling more than one share of stock, the value received from the Bank is the same for all shares sold. The share price of the sold Corporation moves down a number of rows equal to the total number of shares sold, or to the bottom row in its column, whichever is less. Players may not choose to sell multiple shares of a single Corporation's stock as multiple transactions in the same turn of a Stock Round.

4.1.2 Buying Stock

After selling all the shares he wishes to sell, a player may then buy one Certificate. He may buy any certificate available in a Corporation's Treasury, or in the Pool, subject to Corporation share limits and Certificate limits. Once a player has bought stock, he may not sell any more stock that turn. Stock purchased is bought at current market value, whether purchased from the Pool or from a Corporation's Treasury. When stock is bought from the Pool, the money is paid to the Bank. When stock is bought from a Corporation's Treasury, the money is paid to the Corporation Treasury.

When a Corporation's stock is purchased for the first time, the President's Certificate must be the first Certificate purchased. Once a Corporation floats, its stock may only be bought from the Corporation's Treasury or the Pool. Otherwise, there are no restrictions on stock purchases from the Pool or from a Corporation's Treasury.

A player may, under certain circumstances described below, exchange a Minor Company for a share of stock. This is not considered a "stock purchase" as described in this paragraph: however, except when initially forming a Corporation, such exchanges are performed in lieu of a stock purchase. When a Minor Company is exchanged for a share of stock, the transaction is performed as a straight swap, without regard for the stock's market value: the Minor Company's assets are exchanged for the stock certificate. If the stock certificate is in the Corporation Treasury, the assets are given to the Corporation: if the stock certificate is in the Pool, the assets are given to the Bank.

4.1.3 Starting A Corporation

When a player buys a President's Certificate, he declares the Starting Value of the stock, placing a token in the appropriate Starting Value (highlighted) space on the Stock Market below any other tokens in that space. He then pays twice the Starting Value to the Corporation's Treasury. If the Corporation is starting prior to Phase 5, he must immediately exchange one of his Minor Companies for a share of the Corporation's stock, placing the Minor Company's Treasury and trains on the Corporation charter, and replacing the Minor Company's token with the Corporation's. This is the only time that a player may acquire more than one Certificate in his turn.

If a player has no Minor Companies remaining prior to Phase 5, he may not start a Corporation.

4.1.4 Ending the Stock Round

Once the Stock Round has been ended by a complete set of passes, the priority marker is given to the player who initiated the final round of passes, the share prices of Corporations are adjusted, and the first Operating Round begins.

4.2 Minor Companies

The Minor Companies represent the early phase of railroad development in Europe. Minor Companies operate like Corporations, but are not represented by stock certificates: they are fully owned by the single player who buys them from the Bank. Each Minor Company starts with a single 2 train and no money in its Treasury. Minor Companies always declare a Half Dividend, i.e., they pay half their income to their owner and retain half in the company Treasury.

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4.2.1 Minor Company Initial Sale Round

At the beginning of the game, after the initial capital has been distributed and the seating order established, the Minor Company charters (numbered one through fifteen) are placed near the board, each with a 2 train.

The player with the Priority Deal card now selects a Minor Company. Once this Company has been sold, as described below, the next player in Stock Round order will select another, and so on until all fifteen have been sold. The person who selected the Minor Company is called the auctioneer. In what follows, a player may not bid more than his available cash, nor may he buy the Minor Company for more than his available cash.

Once the Minor Company has been selected, each player in turn, starting with the auctioneer, may elect to start a standard auction by bidding at least £100 and a multiple of £5. Failure to do so does not constitute a pass. If an auction is started, all players, including any who declined to start the auction may, in turn, increase the bid by a multiple of £5, or pass. Once a player has passed he may not rejoin the auction for that Minor Company. Once all players but one pass in turn, the Minor Company is sold to the highest bidder. He receives the Minor Company charter with a 2 train and no cash, and places the Minor Company's token on the appropriately numbered City circle on the map.

If all players decline to start a standard auction, each player in turn, starting with the auctioneer, is offered the Minor Company for £90. If all players decline to buy it, then each player is offered the Minor Company at £80, then £70, and so on down to £10. If all players decline the Minor Company at £10, the auctioneer must take the Minor Company for nothing.

The Minor Company Initial Sale Round does not affect the Priority Deal. When all the Minor Companies have been disposed of, the players proceed to the first Operating Round, where each Minor Company places up to two yellow tiles and operates its 2 train, immediately followed by a second Operating Round.

4.2.2 Minor Company Final Exchange Round

Once Phase 5 begins, Minor Companies operate only until the point when the next Stock Round would normally begin. Then, the players conduct the Minor Company Final Exchange Round, during which all Minor Companies are exchanged for shares of stock (or, in some cases, discarded) as set forth below.

The Final Exchange Round is conducted in player order like a stock round, except that it begins with the president of the company that started Phase 5 by buying the first 5 Train, regardless of who holds the Priority Deal card. The Priority Deal card does not change hands during the Final Exchange Round.

Each player, on his turn, must choose one of his remaining Minor Companies and dispose of it as described below (if a player has no more Minor Companies, he must pass).

To dispose of a Minor Company, if the Minor Company is connected to at least one Corporation, the player must choose a Corporation to which the Minor Company is connected and declare that the Minor Company will merge into that Corporation.

“Connected,” for the purposes of this rule, means the same as under the rules for formation of Corporations: the Minor Company must be able to trace a legal route from its token to one of the tokens of the Corporation using an infinitely-long train, or be collocated in the same hex with one of the Corporation's station tokens.

- If the Corporation has at least one share of treasury stock, the player receives a share of the Corporation's treasury stock. Note that it is possible for a Corporation that has previously been started but not floated to exchange shares in this round. If this causes the Corporation to float, the remaining five shares are monetized as if the Corporation had been started after the beginning of Phase 5. The Corporation receives the Minor Company's money and trains (if any) (a Corporation may exceed its train limit as a result, but only until the end of the Final Exchange Round. Then it must transfer just enough trains to the Pool to comply with the limit. The Corporation's president chooses which trains to return, except that a Pullman must always be returned first. Corporations discard in their current movement order.). Then, if the Corporation has a token remaining, it chooses whether to accept or decline the Minor Company's token. If it accepts the token, it replaces it with one of its own and the Minor Company's token is removed from the board. If it declines, or has no token remaining, the Minor Company's token is removed from the board.
- If the Corporation has no treasury stock, but has shares in the Pool, the player receives a share of the Corporation's stock from the Pool. The Minor Company's money is returned to the bank and its trains (if any) are transferred to the Pool, and its token is removed from the board.

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- If the Corporation has neither treasury stock nor stock in the Pool, the player receives nothing. The Minor Company’s money and trains (if any) are returned to the bank, and its token is removed from the board.
- If the Minor Company is not connected to any Corporation, the player simply declares the Minor Company closed. The player receives nothing, the Minor Company’s money is returned to the bank and its trains (if any) are transferred to the Pool, and its token is removed from the board.

The Final Exchange Round continues until all Minor Companies have been disposed of. Then all Corporations must discard excess trains as described above, and play continues with the Stock Round.

As a result of such additional Minor Company mergers, it is possible for a Corporation to have more than one station token in a hex. Specifically, this can occur in Paris, Berlin or Vienna. These additional station tokens may be retained as long as they are in non-contiguous City circles: that is, until these cities are upgraded using the brown tiles designated for the purpose. When this occurs, any tokens beyond one in either Berlin or Vienna are removed from the map and returned to the Corporation for reuse: any tokens beyond one in each of “northern” and “southern” Paris are likewise removed from the map and returned to the Corporation for reuse. It is possible under these circumstances for a Corporation to retain two station tokens in Paris: one each in the “northern” and “southern” City circles.

A player may, through the exchange of Minor Companies for shares, find himself with more than 60% of a Corporation. If so, he must correct the situation by selling at his next legal opportunity. However, in no case may a player sell stock in a Corporation that has not yet operated. Thus, it is possible for a player to have more than 60% of a Corporation for an entire set of Operating Rounds.

Minor Company	English Translation	Move Order	Home Base
Chemin de Fer du Nord	Northern Railway	1	Paris (NE)
État Belge	Belgian State	2	Brussels
Paris-Lyon-Méditerranée	Paris-Lyon-Mediterranean	3	Paris (SE)
Leipzig-Dresdner-Bahn	Leipzig-Dresden Railway	4	Dresden
Ferrovía Adriatica	Adriatic Railway	5	Venice
Kaiser-Ferdinand-Nordbahn	Emperor Ferdinand Northern Railway	6	Vienna (N)
Berlin-Potsdamer-Bahn	Berlin-Potsdam Railway	7	Berlin (SW)
Ungarische Staatsbahn	Hungarian State Railway	8	Budapest
Berlin-Stettiner-Bahn	Berlin-Stettin Railway	9	Berlin (NW)
Strade Ferrate Alta Italia	Upper Italy Railway	10	Milan
Südbahn	Southern Railway	11	Vienna (S)
Hollandsche Maatschappij	Holland Company	12	Amsterdam
Ludwigsbahn	Ludwig’s Railway	13	Munich
Ligne Strasbourg-Bâle	Strasbourg-Basel Line	14	Strasbourg
Grand Central	Great Central	15	Lyon

4.3 Formation of Corporations

Corporations have ten shares available: the President’s Certificate, worth twenty percent of the Corporation, and eight shares in single certificates, each worth ten percent of the Corporation.

To start a Corporation prior to Phase 5, the player must merge one or more of his Minor Companies into the Corporation. The player declares which Corporation he will start, sets the Starting Value of the Corporation on the Stock Market, and buys the President’s Certificate for twice the Starting Value. He then takes the Corporation charter and places this amount in the Corporation’s Treasury. He then declares which Minor Company he is merging. The Minor Company’s money and trains are placed on the new Corporation’s charter, and it is exchanged

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for a single share of the Corporation. The Minor Company's station token is replaced by a station token of the new Corporation. The Minor Company is permanently eliminated from play. The Corporation now receives four additional station tokens, for which it must pay £100 out of its Treasury.

Each player may, on his turn, exchange a Minor Company for a share of stock in the new Corporation in lieu of buying a share of stock. The Minor Company's Treasury and trains are placed on the new Corporation's charter, and it is exchanged for a single share of the Corporation. The Minor Company is permanently eliminated from play. This applies to the President as well when it is once again his turn. The only limitation on Minor Companies merging is that the merging Minor Company must either be able to trace a legal route to one of the new Corporation's station tokens, using a train of infinite length, or be collocated in the same hex with one of the new Corporation's station tokens. When additional Minor Companies merge with a Corporation in this fashion, the President of the Corporation may replace the merging Minor Company's token with one of its own four tokens, although it is not required to do so. In the unlikely event that a Corporation cannot replace a Minor Company's station token (i.e., if a fifth Minor Company merges into it), the opportunity to do so is lost. In any event the Minor Company's token is removed and permanently eliminated from play.

As a result of such additional Minor Company mergers, it is possible for a Corporation to have more than one station token in a hex. Specifically, this can occur in Paris, Berlin or Vienna. These additional station tokens may be retained as long as they are in non-contiguous City circles: that is, until these cities are upgraded using the brown tiles designated for the purpose. When this occurs, any tokens beyond one in either Berlin or Vienna are removed from the map and returned to the Corporation for reuse: any tokens beyond one in each of "northern" and "southern" Paris are likewise removed from the map and returned to the Corporation for reuse. It is possible under these circumstances for a Corporation to retain two station tokens in Paris: one each in the "northern" and "southern" City circles.

A Corporation that finds itself with trains in excess of the Train Limit at the end of the Stock Round must immediately discard the excess to the Pool. The President chooses which trains to discard, although a Pullman, if owned, must always be the first train discarded.

If a player has no Minor Companies remaining prior to Phase 5, he may not start a Corporation.

A player may, through the exchange of Minor Companies for shares, find himself with more than 60% of a Corporation. If so, he must correct the situation by selling at his next legal opportunity. However, in no case may a player sell stock in a Corporation that has not yet operated. Thus, it is possible for a player to have more than 60% of a Corporation for an entire set of Operating Rounds.

Except in the Minor Company Final Merger Round, Minor Companies may never merge with a Corporation once it has operated. However, if a Corporation is started but not floated, any Minor Companies that would be legally allowed to merge are allowed to do so in a subsequent Stock Round just as if the Corporation had been started that Stock Round.

Once fifty percent or more of the available shares of a Corporation are in the hands of players, the Corporation forms ("floats"). Any remaining unsold shares of stock are placed in the Corporation Treasury. When additional shares are bought from the Corporation, the money is paid to the Corporation Treasury.

If a Corporation is started, but does not float, prior to Phase 5, and subsequently floats in Phase 5, the five unsold shares are monetized in accordance with the rules below: the last five shares in the Treasury are placed in the Pool and the Corporation receives an additional five times its Starting Value. In effect the Corporation will start with full capitalization, as if it had started in Phase 5, except for the monies received for exchange shares.

Corporation	English Translation
Société Nationale des Chemins de Fer Belges	Belgian National Railways Corporation
Nederlandsche Spoorwegen	Dutch Railways
Königlich-Bayerische Staatseisenbahn	Royal Bavarian State Railway
Königlich-Preussische Eisenbahn-Verwaltung	Royal Prussian Railway Administration
Kaiserlich-Königliche Österreichische Staatsbahn	Imperial and Royal Austrian State Railway
Ferrovie dello Stato	Italian State Railways

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Société Nationale des Chemins de Fer Français	French National Railways Corporation
Deutsche Reichsbahn	German State Railway

To start a Corporation after the beginning of Phase 5, a player selects an unopened Corporation and places its base station token in an open City. Normally this will be an open City circle in a tile already on the map, though it may alternatively be placed in an unbuilt City (i.e. one that does not have any track). If there is no such City, the Corporation cannot be started.

The Player then declares the Starting Value and buys the President's Certificate, paying twice the starting value to the Corporation's Treasury. Since all remaining Minor Companies were eliminated during the Minor Company Final Exchange Round, he does not merge a Minor Company. Instead, he pays for additional shares one by one, paying the money to the Corporation Treasury.

Once five shares have been bought, the five remaining shares of stock are placed in the Pool (this does not affect the stock price), and the Corporation receives money from the Bank for them at the Starting Value (in effect the Bank underwrites the last fifty percent of the Corporation's stock). Thus, the Corporation starts with a total of ten times its Starting Value (i.e., £700, £750, £820, £900 or £1000), from which it must buy four additional station tokens for a total of £100.

The additional tokens are placed on the Corporation charter. The shares in the Pool may be bought and sold according to the normal rules for stock in the Pool.

4.3.1 Change in Presidency

The President of a Corporation is the player who owns the most shares of the Corporation. If two or more players are tied for most owned shares, the player who currently owns the President's Certificate is the President.

If at any time the President owns fewer shares than another player does, he must exchange the President's Certificate for two single share certificates owned by the other player. The new President receives the Corporation charter and all assets of the Corporation. If two or more players are eligible to become President and have an equal number of shares, the player whose turn is the earliest using Stock Round rules after the current President becomes the new President.

4.4 Operations Round

Each Operating Round begins with the Minor Companies operating in numerical order from #1 through #15, skipping the turn of any that have been eliminated from play. After the Minor Companies have operated, each Corporation that has floated operates in descending order of their Stock Market position. Corporations whose stock tokens are at the same price but in different spaces of the Stock Market operate in order from rightmost to leftmost. Corporations whose stock tokens are stacked in a single space on the Stock Market operate in order from top to bottom.

Each Corporation or Minor Company operates once during each Operating Round. When all Corporations have operated, players begin a new Operating Round or a new Stock Round, depending on the number of Operating Rounds already conducted.

Corporations must conduct their operations in strict conformance to the order described below.

4.4.1 Lay or Upgrade Track

A Minor Company may lay one yellow tile, except in the first Operating Round, when it may lay up to two yellow tiles, in accordance with the rules set forth below. A Minor Company may never upgrade a tile. A Corporation may lay one yellow tile or upgrade one yellow, green or brown tile in accordance with the rules set forth below. If a Corporation or Minor Company lays a yellow tile on a Rough (small brown triangle marked £60) hex, it must immediately pay the £60 from its Treasury. If a Corporation or Minor Company lays a yellow tile on a Mountain (large brown triangle marked £120 in a hex with an "M"), it must immediately pay £120 from its Treasury, and turn the "M" marker so that the side marked £60 is facing up, on the yellow tile it just laid. If a Corporation upgrades a yellow tile with an "M" to a green tile, it must pay £60 from its Treasury. Once an "M" tile is upgraded to green, the "M" marker is removed and there is no additional cost to upgrade it to brown.

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4.4.2 Additional Token Placement

A Corporation may place an additional station token, if it has one available, in any open City circle to which it has a legal route, given a train of infinite length, on a hex in which it does not already have a station token. Placing the station token is free: each Corporation pays for all its tokens at the time it is floated.

4.4.3 Train Operation and Earnings Calculation

A Corporation or Minor Company that owns one or more trains now operates them and calculates the resulting earnings. A Corporation or Minor Company must calculate the maximum possible earnings (not necessarily the maximum possible dividend for any particular train if more than one train is owned).

A Corporation or Minor Company that finds itself with trains in excess of the Train Limit after a new Phase has begun must immediately discard the excess to the Pool. The President chooses which trains to discard, although a Pullman, if owned, must always be the first train discarded. If the phase change affects multiple Corporations, each one, beginning with the one currently operating, discards in Operating Round order, cycling around to the top of the order after the lowest-ranked Corporation has discarded.

Earnings are calculated as follows:

- Each train must operate on a legal route. A legal route consists of a continuous unbranched length of track, including on it a City containing the Corporation's or Minor Company's station token (not necessarily at the beginning or end of the route). In order to score revenue, the route must also contain one or more other Cities (which may contain additional station tokens of the Corporation), Towns, Ports, or Off-Map Locations.
- The maximum number of Cities and Off-Map Locations that may be included in the route is the train number. Towns and Ports do not count against the train number.
- All Cities, Towns, Ports, and Off-Map Locations included in the route count for revenue.
- Except for Hamburg, Off-Map Locations must be at the ends of a train's route. A train may begin and end its route at two different Off-Map Locations, provided the route is otherwise legal. If a train both begins and ends its route at Off-Map Locations ("Red-to-Red run"), it receives an additional bonus, varying with the phase, for each of its station tokens on the route. A route with an Off-Map Location at one end that runs through Hamburg and has other than an Off-Map Location at the other end of the route does not receive this bonus. The bonus is summarized in the following table:

	One Station	Two Stations	Three Stations	Four Stations	Five Stations
Yellow Phase	-	-	-	-	-
Green Phase	£10	-	-	-	-
Brown Phase	£20	£40	£60	£80	-
Grey Phase	£30	£60	£90	£120	£150

- A train may not use the same track more than once, except for four-way junctions (a junction is defined as the area in the middle of a track tile where three or more track elements intersect: these are considered to have interchanges that obviate the need to reuse track, though the interchanges are not visible to the naked eye) on brown plain track tiles.
- A train may not run more than once to the same City, Town, Port, or Off-Map Location, including separate City Circles in Paris, Berlin and Vienna. Note that this limitation specifically applies to the determination of whether a Minor Company is connected to a Corporation's station token.
- A train may run to, but not through, a City that is completely filled with other Corporations' or Minor Companies' station tokens. For the purposes of this rule, each Minor Company is considered a separate Corporation.
- Trains may not use track used by any of the Corporation's or Minor Company's other trains in the same Operating Round, except for junctions. Trains may, however, run to or through the same Cities, provided they do not reuse any track used by the other train.

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- The route value is equal to the sum of the values of all Cities, Towns, Ports, and Off-Map Locations included in the route. The Corporation or Minor Company earnings are equal to the sum of the value of all the Corporation's train routes, plus the value of any bonuses provided by a Pullman Car and by running from one Off-Map Location to another.

Although not mandatory, players may find it helpful to use one of the Corporation's spare tokens to mark the Corporation's earnings on the chart at the left hand side of the map. Carrying over this information may speed up the game.

4.4.4 Dividend Payment

A Corporation may declare a Full Dividend, a Half Dividend, or may withhold its earnings. A Minor Company always declares a Half Dividend. A Minor Company Half Dividend is half of the Minor Company's earnings. A Corporation Half Dividend is half of the Corporation's earnings, rounded up to the nearest £10. The Bank pays each player the amount of the dividend, multiplied by the percentage shown on the shares owned by the player. Shares in the Corporation's Treasury pay dividends to the Corporation. Shares in the Pool do not pay dividends. If the Corporation pays a Half Dividend, the Bank pays half the Corporation earnings, rounded down to the nearest £10, to the Corporation Treasury in addition to the dividends paid to the Corporation from Treasury shares. If the Corporation withholds its earnings, the Bank pays the entire Corporation earnings to the Corporation Treasury.

4.4.5 Share Price Adjustment

The President of the Corporation adjusts the Corporation's current value token, if necessary.

4.4.6 Train Purchase

If a Corporation or Minor Company has operated in the current Operating Round, and if it has fewer trains than the current Train Limit, it may purchase a train from the Bank or from another Corporation or Minor Company. To purchase a train from the Bank, it must pay the purchase price of the available train it wishes to buy to the Bank from its Treasury. If the purchase of a train causes a phase change, any required actions are taken, after which the operating Corporation or Minor Company may purchase additional trains, up to the current Train Limit. If the Phase change includes a reduction in the Train Limit, all Corporations and Minor Companies, including the one operating, must discard any trains in excess of the Train Limit to the Pool. To purchase a train from another Corporation or Minor Company, it must pay the other Corporation or Minor Company a mutually agreed price, which may be as little as £1.

Trains are purchased from the Bank in the order they appear at the top of the train stack. At the beginning of the game, the next train available is a 3 train, as each of the fifteen 2 trains have been assigned to a Minor Company. When a Corporation or Minor Company buys a new train, it must purchase the topmost train in the train stack. If a new type of train is purchased, a new phase begins and any adjustments pertinent to that new phase come into effect immediately after the new train is bought. The following trains are available in the game:

Train Type	2	3	P	4	5	6	8
Total Number Available	15	5 (+2*)	5	4 (+1*)	3	2	8
Cost Apiece	£100	£200	£100	£300	£500	£600	£800
Phase Available	2	3	3	4	5	6	8
Trains Rusted	-	-	-	2	-	3	4

4.4.7 Extra Trains (Optional Rule)

There are two extra 3 trains and one extra 4 train provided. These trains are marked "Optional Train" to avoid confusion as to the total number in play. Players may add these trains to the train mix in any combination, but must all agree on the exact train mix before starting play. In the absence of an explicit agreement, none of the optional trains are in play.

Adding these trains may make the early train rush somewhat less pronounced, at the cost of making the game considerably longer, and of creating a capital overhang which results in a late-game train rush (typically when the

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first 6 train is finally bought). Players wishing to try the optional trains might add a single 3 train in the four-player game, and either two 3 trains or a 3 train and the 4 train in the five or six-player game.

4.4.8 Corporation Stock Selling and Buying

Except in its first Operating Round, a Corporation may sell any amount of its Treasury stock to the Pool, subject to the limitations on Pool holding. If there are shares of the Corporation's stock in the Pool, it may buy any amount of its own stock from the Pool, up to the limits of its available Treasury cash (even in its first Operating Round). It may only sell or buy: it may not buy, then sell, or sell, then buy. Stock sales are made at the current market value and lower the stock price as if made in the Stock Round. Stock purchases are also made at the current market value and do not affect the stock price.

4.4.9 Pullman Cars

The Pullman Car (marked with a "P") is a special type of train. Unlike normal trains, the Pullman Car operates in concert with another train already owned by the Corporation or Minor Company. Pullman Cars cost £100 and may be bought after the beginning of Phase 3. Pullman Cars are considered to be in the Pool and may be bought in lieu of the current train available: however, a maximum of one such purchase may be made in any Operating Round by each Corporation or Minor Company. A Corporation or Minor Company must already have at least one train in order to buy a Pullman. A Corporation or Minor Company may never own more than one Pullman Car.

When running a train with a Pullman Car, the train doubles the value of any one City or Off-Map Location of the President's choice when calculating its run.

A Pullman Car may not be bought or sold between Corporations or Minor Companies. If all the Corporation's other trains are sold or rusted and the Corporation is left without any other train than the Pullman Car, the Pullman Car is immediately discarded without compensation to the Pool, from which any Corporation or Minor Company may repurchase it, including (if eligible) the Corporation that has just discarded it. It is possible for a Corporation or Minor Company to voluntarily discard a Pullman Car, purchase a train, and then repurchase the Pullman Car in the same Operating Round.

A Corporation or Minor Company which starts its turn with a Pullman Car, and which is at the current train limit, may voluntarily discard the Pullman Car at the start of its train-buying phase, without cost or compensation, provided that it then immediately buys a train other than a Pullman Car. This train may be bought from the Bank, the Pool, or another Corporation or Minor Company.

If, due to a phase change, a Corporation or Minor Company finds itself with excess trains and must discard one or more, the Pullman Car is discarded before any other train.

4.5 *Mandatory Train Purchase*

A Corporation that has operated in the current Operating Round must own a train (other than a Pullman Car) at the end of its turn in the current Operating Round whether or not it has a legal run. If it has sufficient funds in its Treasury, it may buy any train or trains that are available from the Bank or the Pool. If a Corporation must buy a train and has insufficient funds to buy a more expensive train from the Bank, but sufficient funds to buy a less expensive train from the Pool, it must do so.

4.5.1 Emergency Money Raising

If a Corporation does not have sufficient funds to buy a train from the Bank or the Pool, the Corporation President must make up the difference from his own cash to allow the Corporation to buy the least expensive train available, from the Bank or Pool. Treasury stock may not be sold. If he has insufficient cash on hand, he must sell sufficient stock to raise the difference. The President may sell any stock he wishes to raise the required amount, subject to the normal limitations on stock sales. Since stock in a Corporation that has not yet operated may never be sold, the President may be prohibited from selling stock in the operating Corporation, or in any other Corporation that has not yet operated for the first time. The President may not sell sufficient stock in the operating Corporation to cause a change in presidency. He may, however, cause a change in presidency of any other Corporation.

If, after selling all the stock he is legally permitted to sell, the President cannot raise sufficient cash to buy a train, he is bankrupt. His remaining holdings are placed in the Pool (for the purposes of this rule only, the Pool may contain more than fifty percent of a Corporation, and the stock price remains unchanged) and he is eliminated from the

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game. The Presidency of any of his controlled Corporations is transferred to the next eligible player. If no such player exists (i.e., if no player holds two shares of one of the affected Corporations), the Corporation is closed and all its shares are removed without compensation. Its station tokens are removed from the map and any trains it owns are placed in the Pool and become available for purchase. Its shares are returned to the Corporation Treasury, and it may subsequently reenter play as a new Corporation.

If the Presidency of the Corporation for which the bankrupt player was buying a train is transferred in this manner, its Treasury will contain the total amount raised by the now bankrupt President during his Emergency Money Raising. The new President must complete the Emergency Money Raising using his own resources and buy a train for the Corporation.

4.5.2 Train Purchases from Other Corporations or Minor Companies

As an alternative, the President may purchase a train from another Corporation or Minor Company, at a mutually agreed price as little as £1. If the Corporation purchasing the train has no money at all, the President may use his cash on hand to make the purchase, paying the other Corporation up to the face value of the train to be purchased. However, he may not sell stock to raise additional cash: the maximum he may contribute is the actual cash on hand he has at the moment of purchase.

4.5.3 Minor Companies

Unlike Corporations, Minor Companies need never own a train. If a Minor Company is ever left without a train, and cannot afford the lowest-priced train available from the Bank, it may purchase a train from another Corporation or Minor Company with any money it has in its Treasury, subject to the normal limitations. However, the President of the Minor Company cannot make up the difference out of his own hand. Minor Companies left without a train continue to operate normally but generate no revenue.

4.6 Tile Placement and Tile Upgrades

Players lay track by placing tiles on the map or upgrading previously placed tiles. At first, only yellow tiles may be placed. During the first Operating Round, each Minor Company may place two yellow tiles: subsequently, only one tile per Operating Round may be placed. Once the first 3 train has been bought, Corporations (not Minor Companies) may upgrade yellow tiles to green tiles. Corporations may in turn upgrade green tiles to brown tiles (once the first 5 train has been bought), and may in turn upgrade brown tiles to grey tiles (once the first 8 train has been bought).

Tiles must always be upgraded progressively: a yellow tile must be upgraded to a green tile before it can be upgraded to a brown tile. It is possible for a yellow tile to be blocked from being upgraded to a brown tile because of the lack of the intervening green tile upgrade.

The general rule for both tile placement and tile upgrade is that the new track created must extend a legal route of any length for the operating Corporation or Minor Company. In the case of City tiles, the upgrade must extend or increase the dividend of a legal route for the operating Corporation or Minor Company. If a Corporation or Minor Company has no route at all, its first tile placement must be a yellow City tile on its home station.

Once placed, a tile becomes part of the Map and is only removed if it is upgraded to another tile. In addition, the following restrictions apply:

- Tiles may not be placed or upgraded in such a fashion as to cause any new track to run to a prohibited hex. A prohibited hex is defined as any impassable (dark green) hex, any ocean (light blue) hex, or any blank hexside of a dark blue (Port) hex.
- The hexes highlighted in grey that are adjacent to Minor Companies #2, #3, #7, and #10, may only have a tile placed there by either the owner of the adjacent Minor Company, or, if by another Minor Company or Corporation, with the consent of the Minor Company's owner. For the purposes of this rule, both Florence and the tile immediately north of it are considered adjacent to Minor Company #10.
- Certain hexes marked with a Town (●) or City (○) symbol, or marked with a letter ("Y" or "M"), may only have certain tiles placed on them. The tiles placed on such hexes may then only be upgraded to certain other tiles. No other tiles than those specified may be used to upgrade these hexes. The specified tiles may not be used to upgrade any other hexes.

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Mapboard hex type	Yellow Tiles Allowed	Green Tiles Allowed	Brown Tiles Allowed	Grey Tiles Allowed
Town (●)	#3, #4, or #58	#141, #142, #143 or #144	#145, #146 or #147	-
City (○)	#57	#14 or #15	#611	#513
City (○) with “Y”	#201 or #202	#576, #577, #578 or #579	#582	-
Paris	-	#580	#583	-
Berlin and Vienna	-	#581	#584	-
Mountain (“M”)	#7, #8, or #9 (costs £120)	#80, #81, #82, or #83 (costs £60) ⁽¹⁾	#544, #545, or #546	-

⁽¹⁾ The yellow hex south of Vienna is a pre-printed tile and costs £60 to upgrade.

- A City tile placed in a City adjacent to a Port (dark blue hex marked with a small anchor symbol) may connect to the Port through the hexside marked with an arrow. Ports are treated as £10 Towns, except that they never improve, and a train may run to the Port but not beyond.
- Placing yellow Mountain tiles requires the Corporation or Minor Company to expend £120 from its Treasury. Yellow Mountain tiles may be upgraded to any eligible green tile. Upgrading yellow Mountain tiles to green tiles requires the Corporation or Minor Company to expend £60 from its Treasury: when placing the yellow tile, place one of the “M” markers with the £60 side facing upward on it as a reminder. A Corporation or Minor Company may not lay or (in the case of Corporations) upgrade Mountain tiles if it cannot pay for them.
- Upgraded tiles must maintain all connections existing prior to the upgrade. The old tile is removed from the map and may subsequently be used again.
- Tile placement on Rough (light brown triangle) hexes requires the Corporation or Minor Company to expend £60 from its Treasury. A Corporation or Minor Company may not lay tiles on Rough hexes if it cannot pay for them. Upgrading a tile placed on a Rough hex is free of charge.
- When Berlin or Vienna are upgraded to green City tiles, they may be placed in one of two orientations that maintain existing connections. When Berlin and Vienna are upgraded to brown tiles, any duplicate station tokens are removed.
- The gray and white letters and numbers printed in the middle of the map are for reference purposes only, but have no direct effect on play: in particular, the clear hex (“M-8”) southeast of Munich is *not* a Mountain hex!

5 Ending The Game

The game normally ends after the end of the last Operating Round of the turn in which the Bank runs out of money. This applies whether the Bank runs out of money during the Stock Round or during an Operating Round: in either event a full set of Operating Rounds is played and players receive all revenues earned during the final set of Operating Rounds. At the conclusion of the final Operating Round, players calculate their net worth as follows:

- Calculate the total value of all shares of stock held by multiplying the final market value by the number of shares held.
- Add total cash on hand.
- Ignore all assets (cash and trains) owned by Corporations as they make no contribution to a player’s net worth.

The total is the player’s net worth. The player with the highest net worth wins the game.

If all players but one have gone bankrupt, the game ends immediately, with the sole solvent player being declared the winner.

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6 Designer's Notes

18EU is designed to be the European complement to Federico Vellani's 1827 Jr.: a relatively simple (or at least low-density) game covering a lot of ground. 18EU covers the areas of continental Europe that saw virtually the entire 19th century railroad building impetus: except for Scandinavia, practically all the track built was in this area. This project was also made far easier by the fact that each of the countries involved has had a game designed on it previously: 1835 (Germany), 1837 (Austria-Hungary), 1841 (Northern Italy), and my own 1826 (France and Belgium) and 1836 (Belgium and the Netherlands). Thus, much of the historical research had already been done when I began.

My interest was in creating a game that, unlike the other European 18xx games, showed the interactions between the various countries. Prior to this, most of the European 18xx games covered a single country and showed the others as Off-Map Areas if at all. While it was not until fairly late in the 19th century that true railroad integration across the continent became a reality, the existence of the Orient-Express as early as its 1883 inaugural run points to the increasing internationalization of railroad administration even in the 19th century. Because of the emergence of the two great power blocs and the disastrous outbreak of general war in 1914, we tend to think of 19th century Europe as a "Europe of countries," to use Charles de Gaulle's phrase. Yet arguably by 1914, there was as great or greater degree of European integration as we currently contemplate as the European Union continues its march towards "an ever more perfect Union." Certainly it was possible to travel from London to the far reaches of Eastern and Southern Europe (and on to Constantinople or Cairo) without so much as a passport.

The main challenge in designing such a game, then, was to properly reflect the transition of European railroading from a purely local phenomenon, to a tool of national integration and policy, and finally to a continent-spanning transportation infrastructure. I have attempted to do this through several design elements: the relatively sharp transition from local and regional trains (2 through 4) to long-distance trains (5 through 8), the rules for formation of Corporations, the Pullman Cars, and the "red-to-red" route bonuses.

The rules for formation of Corporations reflect the increasing national integration of railroads during the late 19th and early 20th centuries, and, to some degree, the actual nationalization of those railroads. The Austro-Hungarian railroads were actually never brought under a centralized administration prior to the breakup of the empire in 1919, but the K.K.-Bahn, formed in the 1870s, was the dominant railroad in the northern and western part of the empire. Belgium, committed to a centralized, public railway administration from the beginning, established a national railway corporation in the 1870s, which acquired its present name (the SNCB) in the 1920s. Italy's railways were nationalized in the early 1900s. The DR was not formed until the 1920s while the SNCF and NS were formed in the 1930s.

The basic mechanism (starting with 15 Minor Companies which are then used to create the Corporations) is adapted from the so-called "1835 Minor Variant" which originally appeared in the Train Gamer Gazette. The Pullman Cars are shamelessly stolen from Colin Barnhorst and Kris Marquardt's 1869 – The Golden Spike. I had originally planned to use a variant of Federico Vellani's "Prestige Items" from the as-yet-unpublished 1827 Jr., but found the Pullman Car concept far more elegant in execution. The "red-to-red" route bonuses are likewise shamelessly stolen from Mark Derrick and Chris Lawson's 1851. Both these rules attempt to give railroads an incentive to fulfill longer runs, especially including high-value Off-Map Areas. Conversely, the rules restricting Minor Companies merging with Corporations to which they are actually connected attempt to portray the transition from purely national railroads to a limited degree of internationalization while retaining some of the parochialism of the era.

7 Acknowledgments, Credits and Copyright Notices

The 18EU Integrated Game System (hereinafter referred to as "18EU") is © 1997-2004 David G.D. Hecht, who is hereby declared the Author of 18EU for all purposes. The physical systems are © 1997-2004 David G.D. Hecht, except for the tiles, which were designed by John A. Tamplin (using rendering algorithms and tile dictionaries from Marco Rocci) and are © 2004 John A. Tamplin.

The design, development, and rules checking of this and the Author's other designs have been rendered immeasurably easier by Nick Wedd's *18xx Rules Difference List* web page, the current version of which (now maintained by Keith Thomasson) is available at <http://www.fwtwr.com/18xx/rules_difference_list/index.htm>.

The members of the Yahoo 18xx Forum, who are too numerous to thank individually, have substantially aided the rules editing. However, special thanks are due to John David Galt, whose rewrite of the Minor Company Final Exchange Round is incorporated into these rules. The clarity of his expression of a difficult process is an example to us all.

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Thanks are also due to Noel Leaver, Stephen Webb, Jon Draper and the rest of the “Kentish Mob” for their substantial assistance in refining the mechanism for the initial distribution of the Minor Companies: any lack of clarity or felicity of expression of their ideas is entirely my fault. Additional thanks are due to Jeff Heuer for his valuable editorial assistance.

As ever, Steve Thomas provided detailed and substantive rules editing: his efforts have brought logic out of chaos. The tiles in the 500 series were assigned numbers from Chris Lawson’s Tile Encyclopaedia.

My thanks (and a great big “Bravo Zulu”) to John Tamplin for producing this game: without his efforts, 18EU would still be a set of downloadable PDF files.

The Author recognizes that 18EU incorporates, and, indeed, would not be possible without, numerous subsystems and concepts originally used in other Integrated Game Systems. In particular, the Author acknowledges:

- Original 1829, 1829 Northern Board, and 1853, designed by Francis Tresham and published by Hartland Trefoil Ltd.
- 1830, designed by Francis Tresham and Bruce Shelley and published by The Avalon Hill Game Company.
- 1835, designed by Michael Meier-Bachl and published by Hans-Im-Glueck-Verlag and Mayfair Games Inc.

The core mechanism of fifteen Minor Companies eventually being merged into eight Corporations was first proposed as a variant to 1835, in the article “1835 Minor Variant,” by Gary Norton, published in *Train Gamer’s Gazette*, volume 1, number 2.

- 1856 and 1870, designed by Bill Dixon and published by Mayfair Games Inc.
- 1837, designed and privately published by Leonhard Orgler.
- 1841 (formerly known as “1839”) and 1849 (formerly known as “1850”), designed and privately published by Federico Vellani and Chris Lawson.
- 1827 and 1827 Jr., designed by Federico Vellani and as yet unpublished.
- 1851, designed by Mark Derrick and Chris Lawson and published by Chris Lawson.
- 1869 – The Golden Spike, designed by Colin Barnhorst and Kris Marquardt and published by C&K.
- 1848, designed by Chris Lawson and Steve Thomas, as yet unpublished.

Additionally, the Author is indebted to Chris Lawson, publisher of the 1841, 1899, 1876, 1851 and 1826 Game Kits, for certain aspects of the physical systems design (in particular the simplified green and brown plain track tiles, the tile layout, the Corporation charter/share/token layout, as well as the Earnings Chart), and to Kris Marquardt and Colin Barnhorst for the Pullman Car concept.

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Francis Tresham and Hartland Trefoil Ltd originated the 18xx Rail Tile Game System.

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