

1889 – The History of Railroading in Shikoku

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1 Introduction to 1889: Shikoku

Cross-references within the rules are denoted by square brackets – [2.2] refers the reader to section 2.2 for additional information about the topic under discussion.

Shikoku is the smallest island of the four main islands of Japan, consisting of only four prefectures (the literal translation of Shikoku is “four provinces”). Geography is dominated by an east-west mountain range which divides the island into a northern strip fronting the Inland Sea and the southern part facing the Pacific Ocean. Before rail travel, shipping in the Inland Sea caused the ports there to be well-developed. However, the success of sea transport caused rail development in Shikoku to be confined to mostly local services in the major cities until the early 1900s. The Iyo Railway, which ran between Mitsuhamama Bay and Matsuyama, was opened in October of 1888 as the first railway in Shikoku and the third private railway in all of Japan. The following year, Sanuki Railway opened linking Marugame to Kotohira via Tadotsu, later extended to Takamatsu, and Shikoku's railroads were in full swing. In 1904, the Tosa Electric Railway opened in Kochi, and at that point all four prefectures had rail services.

All railroads in Shikoku were privately owned until 1906, when the government decided to extend the national main-line network by purchasing existing private railways. Heavy emphasis was placed on linking up local railway networks in different regions during the reign of Emperor Taisho (1912-1926). The island remained connected to the rest of Japan only by ferries (some operated by railroad companies to connect their lines) and later by air travel.

Starting in the 1960s, rail transport gradually lost much of its share of passenger and freight transportation as road networks were built up. The Great Seto Bridge network, built in 1988, linked the Shikoku rail network directly with Honshu and reversed this trend, leading to a surge in passenger traffic. Lately, the building of expressways alongside the rail lines and the express buses that run on them has caused a drop in passenger traffic, and some of the lesser-used lines now face a crisis.

1.1 Game Style

1889 is a game in the series of loosely-related games collectively known as *18xx* games, originated by Francis Tresham with 1829. (Other acknowledgments are in section 20). This game is closest in style to 1830 of those currently in print.

1.2 Beginner Game

For those new to the *18xx* series or looking for a simpler game, there are special rules for a Beginner Game. The differences are covered in detail in [16].

1.3 Game Length

The length of this game varies with the number of players and their experience, but is typically 2-4 hours.

2 Game Equipment

The game equipment consists of a map, stock display, stock market, public company certificates and charters, private company certificates, train cards, tokens, priority card, starting order cards, and the bank money [2.4].

2.1 The Map

The map of the area on which the game is played is overlaid with a hex grid. The names and boundaries are shown for information only, and have no effect on the game.

2.1.1 Certificate Limit Table

This table shows the number of certificates (not shares) that a player may hold. This varies with the number of companies in play and the number of players in the game.

2.1.2 Revenue Chart

This table is a quick reference to the earnings per share of each company, and should be updated after each run. Note that it is frequently going to be inaccurate for the next run by a given company, since the trains owned by that company and the map may be different by the next time it runs. Still, the table serves as a useful reminder to the players of the recent earnings.

2.2 Stock Display

The stock display holds the Initial Offering of all the public companies.

New trains available for purchase from the bank are also stacked in order in the Future Trains space on the stock display. Note that when the first train of a given type is sold, various effects take place [4.2].

2.3 The Stock Market

The stock market governs the buying, selling, and value of shares. The stock market is represented in the game by a large grid of four areas [5.1.1]. Each grid box has a number representing the value per share of a company whose share price token is in that box. The movement of the share price token is determined by the rules in [5.8]. Also included in the stock market are the open market that represents shares held by minority or passive interests, the par value displays which show the value of initial offering shares and reissued shares, the share price table, and the round marker.

2.4 Bank

At the start of the game, the bank consists of ¥7,000. If you did not purchase money with your game, you can use chips or money from any other game. Since one way the game ends is when the bank runs out of money, the bank must have the correct amount. This money includes the players' starting capital.

2.5 Trains

The table below summarizes the type, number, and cost of trains represented by train cards. The train cards are initially stacked in order on the Future Trains space on the Stock Display. Normally the next new train type is only available after all new trains of the previous type have been sold, but as an exception the Diesel is available as soon as the first 6-train has been purchased.

Type	Cost	Number
2	¥80	6
3	¥180	5
4	¥300	4
5	¥450	3
6	¥630	2
D	¥1100	unlimited

These trains are all the trains that will be used during the course of the game. Diesels are to be considered unlimited – if you need more, you may use 2-train cards as substitutes.

2.6 Tile List

See the tile manifest / upgrade chart [21]. Note that the additional tiles supplied are intended for use only in the beginner game, to reduce contention for common tiles – see Table 4 [18].

3 Game Setup

3.1 Physical Layout

The playing map and the stock market should be laid out on a table with sufficient room for all players, the bank, and the track tiles. The operating round marker should be placed on the stock market to indicate a stock round. Each company's shares should be placed on the Stock Display in their appropriate places with the presidential share on top along with the company's tokens. The trains should be placed on their boxes on the Available Trains Display. The bank's money should be placed near the map. The seven private companies are placed in order, A-G, in the center of the map (if there are 2 or 3 players, remove the appropriate private companies from the game [15.2, 18]).

3.2 Starting Order

Set aside any starting order cards that exceed the number of players in the game. The starting order cards are shuffled and dealt one per person. If a player volunteers to be the banker, he sits next to the bank and the other players arrange themselves in ascending order around him. Should no one volunteer to be the banker, the player with starting card #1 is designated the banker and retains his position, while the other players arrange themselves clockwise in ascending order after him. Give the priority card (which determines the first player to act in a stock round [4.1.1]) to the player with starting card #1.

3.3 Player Starting Capital

Each player receives as starting capital either ¥420 (for 2-4 players) or ¥390 (for 5-6 players). There is a table on the map if needed, as well as in [18].

3.4 Funds Disclosure

Player money are always public knowledge, while corporation money need not be disclosed.

4 Sequence of Play and Game Phases

Each complete game turn consists of a stock round followed by one, two or three operating rounds. The game progresses through six phases to simulate the changes that occurred over time in the game area. One or more phase changes may occur during an operating round.

During an operating round all operating companies operate and produce income. Private companies operate first, then public companies operate in descending share price order.

4.1 Sequence of Play

4.1.1 Stock Round

Players buy and sell shares in turn, beginning with the player holding the priority card and proceeding clockwise. The stock round ends when everybody has passed in order. The priority card is given to the person to the left of the last person to perform an action affecting the position of the priority card [5.2.2].

4.1.2 Operating Round

First, all private companies pay their owner if they are still operating.

Next, all operating corporations [5.6.2] operate in descending share price order (rightmost or topmost within a space if equal). The president of each public company performs the following actions in order on behalf of the operating company during its turn:

A. Optionally lay or upgrade track [6]

- B. Optionally place a token [7]
- C. Operate any trains and calculate revenue [8]
- D. Pay or withhold dividends [9]
- E. Adjust the company share price token on the stock market to indicate that it has operated [5.8]
- F. Buy one or more trains [10]

Once phase three has started (i.e., once a 3-train has been purchased from the bank), a company that is operating may buy a private company from any player for up to double and no less than half its printed list price at any point during its operating round. The operating company may purchase a private company even if it was the first company to buy a 3-train.

After all companies have operated, adjust the operating round marker forward to the next round. This will be either another operating round or a stock round.

4.2 Game Phases

Each game progresses through six phases to simulate the changes that occurred over time in the game region. The following describes the various phases and the changes that occur with the onset of each (see table in [18]). The purchase of a new train type triggers a new phase. The phases are named after the train which triggered that phase. Most effects from a phase change take place immediately, but a change in the number of operating rounds between stock rounds takes effect after the next stock round.

4.2.1 Phase Two

Phase two runs from the beginning of the game to the purchase of the first 3-train. During phase two the following restrictions apply:

- Only yellow tiles may be placed.
- Each public company may own up to four trains.
- Private companies may not be purchased by public companies.
- There is one operating round between stock rounds.
- Use the first value for running to red off-board areas .

4.2.2 Phase Three

Phase three starts immediately after the purchase of the first 3-train and runs until the purchase of the first 4-train. During phase three the following restrictions apply:

- Yellow tiles or green upgrades may be placed.
- Each public company may own up to four trains.
- Private companies may now be purchased by public companies [15.2].

- There is one set of two operating rounds between stock rounds.
- Use the first value for running to red off-board areas.

4.2.3 Phase Four

Phase four starts immediately after the purchase of the first 4-train and runs until the purchase of the first 5-train. During phase four the following restrictions apply:

- Yellow tiles or green upgrades may be placed.
- Each public company may own up to three trains.
- Private companies may be purchased by public companies.
- There is one set of two operating rounds between stock rounds.
- All 2-trains are scrapped as obsolete.
- Use the first value for running to red off-board areas.

4.2.4 Phase Five

Phase five starts immediately after the purchase of the first 5-train and runs until the purchase of the first 6-train. During phase five the following restrictions apply:

- Yellow tiles or green and brown upgrades may be placed.
- Each public company may own up to two trains.
- All private companies, except the Uno-Takamatsu Ferry if held by a player, close.
- There is one set of three operating rounds between stock rounds following the next stock round.
- Use the brown value for running to red off-board areas.

4.2.5 Phase Six

Phase six starts immediately after the purchase of the first 6-train and runs until the purchase of the first Diesel. During phase six the following restrictions apply:

- Yellow tiles or green and brown upgrades may be placed.
- Each public company may own up to two trains.
- All 3-trains are scrapped as obsolete.
- There is one set of three operating rounds between stock rounds.
- Use the brown value for running to red off-board areas.
- Diesel trains are immediately available for purchase.

4.2.6 Phase D

Phase D starts immediately after the purchase of the first Diesel and runs until the end of the game. During phase D the following restrictions apply:

- Yellow tiles or green and brown upgrades may be placed.
- Each public company may own up to two trains.
- All 4-trains are scrapped as obsolete.
- There is one set of three operating rounds between stock rounds.
- Use the brown value for running to red off-board areas, or the gray value if a Diesel runs there.

5 The Stock Round

A stock round normally consists of consecutive player turns in clockwise order. The stock round continues until all players have passed in seating order.

During the stock round, players buy and sell shares in operating or new companies. The initial stock round has special rules [5.7].

5.1 The Stock Market

5.1.1 Stock Market Grid

There are four areas on the stock market grid.

NORMAL AREA: All white spaces (including those in the Red Outlined area) are known as the Normal Area.

RED OUTLINED AREA: These are the places where newly formed companies place their share price tokens. The Red Outlined area has no other effect on play [5.6].

YELLOW AREA: While the share price token of a company is in this area, shares of that company do not count towards your certificate limit.

ORANGE AREA: While the share price token of a company is in this area, shares of that company do not count towards the certificate limit. Shares of companies whose tokens are in this area may be purchased in excess of the normal 60% share limits.

5.1.2 Par Value Display

The par value display indicates the par value for shares. The par value is used when purchasing new shares from the initial offering. The person who purchases a President's share sets the par value for that stock.

5.1.3 Open Market

The open market holds shares that players sell. This box is sometimes too small to hold all of the shares, so if neces-

sary, use the table space beside this box to hold the excess shares.

5.1.4 Round Marker Display

This display holds the operating round marker. This marker is adjusted at the end of each round to indicate what the next round is. It has four circles: Stock Round, 1 ORs Left, 2 ORs Left, and 3 ORs Left. The operating round circles count down the number of operating rounds remaining because the number of operating rounds between stock rounds only changes after a stock round.

5.2 Starting and Ending a Stock Round

5.2.1 Starting a Stock Round

The stock round starts with the player with the priority card. Play in the stock round proceeds from player to player in clockwise direction.

5.2.2 Ending a Stock Round

The stock round ends when all players have passed consecutively. The priority card is given to the person to the left of the last person to perform an action in the stock round.

5.2.3 Adjust For All Sold

Share price tokens of companies that have all ten shares in the hands of players at the end of the stock round are adjusted up one row for being all sold [5.8.1]. Companies are checked in share price order, with the highest valued company being checked first. If the share prices are the same, the right-most token or the top-most in the same box are checked first.

5.3 Player Actions During A Stock Round

During a player's stock round turn, a player may perform an action for himself or he may pass and do nothing. If the player acts for himself, he may buy a new share and/or sell one or more currently held shares.

5.3.1 Buying Shares

When buying a share, a player may have a choice of shares from either the initial offering or the open market.

Shares in the initial offering are available at their original issue (par) price. These shares may be 10% shares or they may be the President's Certificate of a new company [5.6].

Shares on the open market are available at their current market price.

5.3.2 Selling Shares

A player may sell a share or shares into the open market.

When a player sells a share or shares, he receives the current market price for them as indicated on the stock market when sales made by him occurred.

As shares are sold, adjust their token position on the stock market display down one level for each share sold. Multiple shares sold by the same player during their stock round turn are sold into the open market at the price indicated by the share price token when that player's stock turn began. If a player sells more than one share in a company during one stock turn, he must sell them in one block.

When a player sells shares in more than one company, he must specify in what order they are being sold.

Once a player has sold a share of a company, that player may not buy another share in that company until after the next set of operating rounds.

5.3.3 Buy/Sell Order

During each of his turns in the stock round, a player may sell as much stock as legally permitted and then buy a single certificate, or first buy a single certificate and then sell as much stock as legally permitted – possibly including the share just purchased.

5.4 Certificate Limits

5.4.1 Player Certificate Limits

A player may never exceed his certificate limit at any time during his turn in a stock round. The game certificate limit per player varies with the number of players [18]. Note that certificates of companies whose share price token is in the yellow or orange sections of the stock market do not count towards this total.

Private companies held by players always count as one certificate each. Each share certificate, regardless of how many shares it represents, counts as one certificate.

The normal share limit per player in any one company is 60%. The position of the company share price token on the stock market may allow a player to exceed this 60% limit [5.1.1].

5.4.2 Open Market

There may be no more than 50% of a particular company in the open market at any time. As a result, players may not sell shares if by doing so they exceed this 50% limit.

5.5 Change of Presidency

If a player should acquire more shares in a company than the current president, either through his buying or the president selling, that player becomes the new president and assumes all responsibility for the railway.

The president of a company must always hold at least twenty percent of the shares of that company. The president may not sell any part of his remaining twenty percent unless there is both another player with twenty percent or more of the stock in that company, and space for at least one share on the open market. Providing that both these conditions are met, the president may sell share(s) up to the open market limit to reduce his total below that of another player who becomes the new president. If two other players should hold equal numbers of shares and would both be eligible to become the new president, then the player closest to the left of the old president becomes the new president. The new president immediately trades two of his normal certificates worth 10% each with the old president for the president's certificate. A president's certificate once sold from the initial offering must always be held by a player: it may not be placed in the bank pool.

5.6 Starting A New Company

To start a company a player must first buy the president's two share (20%) certificate and set the share par value at one of the values in the red outlined area (¥65, ¥70, ¥75, ¥80, ¥90, ¥100).

5.6.1 Stock Market Tokens

A company token is placed in the appropriate par value box on the stock market display to show the cost of shares from the initial offering. Another of its tokens is placed on the appropriate par starting value box in the red outlined area on the stock market display. This token becomes the share price token and indicates the value of the shares for purchases and sales to and from the open market. If one or more share price tokens are already in this value box, this new token is placed below all the others. A third token is placed on the revenue chart and will be used to track dividends paid.

5.6.2 Initial Shares Needed to Operate

A company must have five shares sold from the initial offering for it to commence operating. If a company does not have five shares sold at the start of an operating round, it does not operate and may not perform any actions listed under [4.1.2] in the sequence of play.

If the company fails to operate, the company does not operate until its turn during the operating round in which the required number of shares have been sold from the initial offering. Shares required to commence operations may be owned by players or on the open market; they may not be in the initial offering. A non-operating company's share price token is flipped over on the stock market and is not adjusted except for sales of those shares.

5.6.3 Company Charter

When a company is started, the current holder of the president's share takes the company charter as well as the station tokens and places them in front of him. This charter is used to keep track of the various assets of the company.

The number and type of trains, any private companies owned, and number of tokens available must be easily discernible through casual visual inspection. The amount of money in the corporate treasury is secret but must be stacked on top of the company charter. The charter, with the assets, is always held by the current president of the company.

5.6.4 Public Company Starting Treasury

A new public company receives 10 times its initial par value as its initial treasury. It receives this money as soon as the fifth share is sold from the initial offering.

Monies in public companies' treasuries must be kept separate from each other and from monies in player's hands.

5.7 Initial Stock Round

The game starts with a special modified stock round during which no player may sell any certificates. Initially, the private companies are offered for sale in ascending cost order to each player, starting with the player with the priority card and proceeding clockwise around the table. While private companies are still available for sale, each player may, in turn, pass, bid on a higher value private company, or buy the lowest cost private company. Bids must always exceed the current cost or bid by at least \$5. If a player has a bid on a company, he must set the bid amount aside until that company is sold.

If a company is bought and the next company that would normally be offered for sale has one bid on it, then that company is sold to the player who bid on it at the bid price. If two or more players have bid on the next company being offered, an auction is held starting with the bidding player to the left of the player with the highest bid. Only players who initially bid on the company for auction may participate. The company for auction goes to the player with the highest bid after all other participating players have passed. If the next company offered also has bid(s) on it, the same procedure is followed for it. Normal play then resumes with the player to the left of the player who bought the company that initiated the auction(s).

Should all players pass before the last private company is sold, there is one operating round in which only the private companies run and the Takamatsu E-Railroad (A), if still available for sale, is reduced in cost by five yen. If the price of A reaches ¥0, the player with the Priority Card is required to take it for free as his/her only action that stock turn. The initial stock round then resumes, following the rules above, starting with the player to the left of the last player to buy or

bid, or with the first player in the previous stock round if no player bought or bid.

After the last private company is sold, the next player is offered his choice of the public companies as per the normal rules on starting a company [5.6]. Note that this will still be during the initial stock round, so shares bought may not be sold until the following stock round.

5.8 Stock Market Token Movement

5.8.1 Direction

If a share price token moves on the stock market, it will move in one of four directions.

UP: The token is moved up one space. If the token is in the \$350 space it stays put.

DOWN: The token is moved down one space per share sold, unless it hits a ledge. If it hits the market edge (or starts there), it stops moving regardless of how many additional spaces it would drop.

RIGHT: The token moves one space to the right. If the token starts in a space with an up arrow in it, it will move up one space.

LEFT: The token moves one space to the left. If the token starts in a space with a down arrow in it, it will move down one space.

5.8.2 Reasons for Movement

The share price token moves as indicated when any of the following events take place:

- ◆ Moved up if no shares are available in the initial offering or on the open market at the end of a stock round. I.e., all shares are in the hands of players. Tokens are checked and moved in share price order with the highest value company being checked first.
- ◆ Moved down for each share sold either during a stock round or during a forced sale by a company president.
- ◆ Moved right if during an operating round the railway pays a dividend.
- ◆ Moved left if during an operating round an operating railway pays no dividend or a dividend of ¥0.

5.8.3 Arrows

Several boxes on the stock market contain arrows. These arrows indicate the share price token's direction of movement if the token is required to move left or right and is unable to do so because of the market edge.

5.8.4 Token Ordering within a Box

If a share price token of a company is moved into a box where there are one or more tokens, the newly arriving token is placed below the other stock value tokens that are already there.

6 Laying Track

Each public company may at its option lay one yellow tile or upgrade one track tile. The company must be able to reach the hex that is being upgraded or laid but is not required to be able to run on some of the new track on the tile.

6.1 New Tiles

New track is the initial tile laid in a hex. This will usually be a yellow tile but in some cases the new track will be green or brown.

Tiles are placed in alignment with the map grid. No tile may be placed on an area of the map that does not have the grid on it. Tiles may not be placed on partial hexes along the map edges.

Yellow tiles may be placed in any empty light green hex. Companies may not lay yellow tiles in hexes the company cannot reach.

To reach the new hex being laid, the company must be able to trace an unblocked (by other company tokens) train run of any length from one of its tokens to the hex containing the new tile. The company is not required to be able to run on some of the new track on the tile in order to upgrade it.

When a company first starts operating, its home city hex may not have any track in it. The placement of this first tile by that company is a valid tile lay.

6.2 Upgrading Tiles

An upgrade is the replacing of a tile already on the map, with a new tile of the next higher color. This tile will have more complex track work on it or a higher value for a city.

- Yellow tiles are upgraded to green tiles.
- Green tiles are upgraded to brown tiles.
- Most yellow and green tiles have upgrades.
- Yellow or green track printed on the map is upgraded to a green or brown tile in the normal manner.
- Tiles may only be upgraded in the appropriate phase [4.2].

Either at least one new track segment on the new tile must form part of a legal route of the company, or a town or city on the new tile must be on a route of the company. The company need not use the new track when it operates for income.

Although upgrading a tile involves physically replacing the tile, you are actually only adding more track segments to the track existing on the tile being upgraded. To determine what the new track segments are, delete the segments existing on the tile being upgraded from the upgrading tile. Any segments that are left are the new track segments.

6.3 Tile Placement Restrictions

No tile may be placed so that any track ends against printed terrain where tiles may not be placed. Examples of such terrain include sides of printed gray hexes without track connections on them, green map edges, and the ocean.

6.4 Towns and Cities

6.4.1 Towns

Hexes with a small dot may only have yellow tiles with one town laid on them. The owner of the Mitsubishi Ferry (B) may place the special port tile on any coastal town.

6.4.2 Cities

Vacant hexes with cities shown by a large open circle may only have yellow tiles with a corresponding city placed on them (tiles #5, #6, and #57).

6.4.3 Special City Tiles

Certain cities have special tiles for them. These tiles may only be played on the specified locations and no other tile of the same color may be played there. See [21].

6.5 Terrain Costs

Certain hexes on the map contain a '¥' followed by an amount.

This cost represents difficult terrain in that hex and requires an extra expenditure to lay the first tile there. This money is paid from the company treasury and must be available there when the tile is laid. Further upgrades of tiles in these hexes do not require further expenditure, except for Kotohira which costs ¥80 for each upgrade.

6.6 Upgrade Chart

See the tile manifest/upgrade chart [21] for legal tile upgrades.

7 Tokens

Tokens represent company stations. Each company has a home station token plus zero or more additional station tokens.

7.1 Home Token

Each company has a free home station token that it must place on its starting city at the beginning of its first operating round, whether or not a tile has been placed there.

7.2 Placing Additional Tokens

Each operating round (including the first), a railway may pay to place one additional station, to the maximum number of tokens it is allowed.

7.2.1. To place a station token, the company must be able to trace a valid train route from one of its station tokens to the city in which it wishes to place the new token. The city must have space for the token. In a starting city for a railway that has not yet started, a company cannot use the last token space.

7.2.2. As token placement occurs after track upgrading, companies can place a token in a city that has just been upgraded, provided there is room.

7.2.3. Once a token is placed, it cannot be moved or removed.

7.2.4. Once a city has the final spot filled by a company token, only companies with their tokens in that city may pass through that city. Other companies may only use such tokened-out cities as a terminus of a route.

7.3 Token Cost

The cost of each token is listed on each company's charter. The first token, which is placed in its home city, is free and any other tokens are ¥40.

8 Operate Trains

If a company owns a train (or trains), it operates the train (or trains) along the track laid on the map to generate income for the company.

8.1 Routes

Routes must meet the following requirements:

- A valid route is a continuous unbranched length of track including at least one city with one of the company's station tokens.
- A valid route can include off board destinations as the beginning or end of the route, or both.
- A route may not use a specific section of track more than once, but may use different sections on the same tile. Where two track sections meet or overlap at the edge of a tile, only one of the segments may be used in a route.
- A route may run to and count a city that is full of and blocked by other railways' tokens but may not

run through it. Unstarted railway companies do not block their token slot.

- A route may not reverse at a junction (a city, town, or where two branches of track join at a hex edge).

If a railway is running more than one train, each train must conform to the above rules and may not use a section of track that another of that company's trains has used this operating round. It may, however, use and count cities used by the other train(s) as long as it uses different track segments to run to these cities.

8.2 Route Length

The length of a route is the number of towns, cities, and off-board destinations on it. A train may not run on a route longer than the number of the train type. For example, a 4-train may count up to four cities etc. A train may not run on a route shorter than length two, therefore a 2-train must run routes of exactly length two.

8.3 Route Value

The value of a train's run is equal to the total of the values of the cities, towns, and off-board areas it traces a route through or to. Diesel trains receive a higher value for off-board areas than other trains.

Where multiple trains are run, the dividend value is the total of all the trains' runs.

The president of the railway must use the set of routes which result in the highest total of all the runs. Once dividends have been paid, no player may ask for a higher-valued set of routes to be used.

9 Dividends

After a company operates its train(s), it may declare a dividend.

9.1 Dividend Type

The president decides whether to pay full dividends or withhold the company earnings in the company treasury.

9.1.1 Dividend

Each share of a company, receives 10% of this round's operating income.

Dividends for shares in the open market are paid to the company treasury.

Dividends for shares in the initial offering are paid to the bank (i.e., are lost).

9.1.2 No Dividend

If a company owns no trains, it may not pay a dividend.

If the company runs trains for income, it may retain the whole amount in the company treasury.

9.1.3 Dividend Collection

Players should receive their dividends from the bank as they are declared and are responsible for ensuring they get paid.

9.1.4 Token Adjustment

Adjust the token on the stock market right if dividends are paid, or left if dividends are retained. Companies that declare a dividend of ¥0 are considered to have retained dividends.

10 Trains

A company uses trains to earn income for the company and occasionally, the shareholders.

10.1 Requirement to Own a Train

An operating railway with a legal route of any length [8.1] must own a train and is forced to purchase one during this phase if it does not possess one. A company that does not have a valid run is not required to purchase a train.

10.2 Train Limits

A company may purchase one or more trains provided that it does not cause it to exceed the current train limits. A company may not voluntarily discard or scrap a train to make space for a new train.

10.2.1 Exceeding Train Limits

If buying a train initiates a phase change causing any railway to possess too many trains, then the excess trains from these companies are immediately discarded into the open market without compensation. The president decides which train is discarded. If the company that caused the phase change has an excess train, it discards first. Otherwise, discards are made in descending share price order.

10.3 Train Obsolescence

Early types of trains become obsolete. 2-, 3-, and 4-trains will usually become obsolete and be scrapped. When they are scrapped, they make room for new trains.

When a train is scrapped, its owner receives no compensation for it. A company may not voluntarily scrap a train to make space for a new train.

10.4 Train Sources

Trains may be purchased from the bank, the open market, or from other companies. A company is never required to buy a train from another company, no matter what price is requested.

10.4.1 Bank Trains

The Bank sells new trains, and will only sell these trains in order. 2-trains are available for sale first. After all of the 2-trains have been purchased, 3-trains are available. Similarly each new type of train is only available after all of the previous type of train been sold, except that Diesels are available for purchase as soon as the first 6-train has been purchased.

10.5 Train Cost

Trains purchased from the bank or open market are purchased at the price printed on the train card.

Trains purchased from other companies may be bought at any price mutually agreed to by the president(s) of the two companies involved. The minimum price is ¥1, and must be publicly announced.

Other trains may be traded in on a Diesel for a ¥300 credit, even a 4-train which will be made obsolete by the purchase of the first Diesel. Such trains are placed into the open market and are available for future purchase at their normal price.

10.6 Train Purchase Funds

A company normally pays for a new train with company funds. If the railway must buy a train and does not have enough money to do so, the president must make up the difference from his own cash and, if necessary, from sales of his personal stock.

Once the president contributes to the purchase price of a train, the railway must buy the cheapest train available from the open market or the bank and may not buy a train from another company.

10.6.1 Presidential Contributions

The president may only contribute towards the purchase of a train from his personal holdings if the company is forced to buy a train.

10.6.2 Presidential Stock Sales

If the president is required to sell stock, then these sales may not cause a change in ownership of any public company.

The president decides what to sell and in what order to sell them. He may only sell enough shares to buy the train. Exception: if the president is forced to sell a share in a company that he owns more than 60% of and the stock is not in the orange portion of the stock market, he must sell down to the 60% limit.

If the president cannot raise enough money through stock sales he is bankrupt and the game ends.

10.7 Last Train

A company may sell its only remaining train.

11 Purchasing Private Companies

At any time during the operating turn of a public company in phase three or four, the company may elect to purchase any private company in the hands of a player.

11.1 Private Company Sale Price

The price paid must be least half, but no more than double, the listed cost of the private company. For example, the Takamatsu E-Railroad (A), costing ¥20, could be sold to a company for a minimum of ¥10 and a maximum of ¥40.

The payment is made directly from the company's treasury into the hand of the player. The amount paid is declared to the other players at the time of purchase.

If the Uno-Takamatsu Ferry (G) is held by a player when the first 5-train is purchased, it may no longer be sold to a public company.

11.2 Private Company Benefits

Certain of these private companies confer special abilities on owning public companies. See rules section [15.2] for further information.

11.3 Private Company Income

When private companies owned by public companies operate, they pay their income into the public company treasury.

11.4 Private Company Closure

All private companies, with the exception of the Uno-Takamatsu Ferry (G) if it is held by a player, are closed by the purchase of the first 5-train.

12 Ending the Game

The game ends when any player goes bankrupt or the bank runs out of money

12.1 Player Bankruptcy

Bankruptcy occurs when the president of a public company is unable to raise sufficient funds to buy a train. The bankrupt player's net worth for victory purposes is the total value of the shares the player could not sell and the face value of any remaining private companies he may hold. A player may not voluntarily declare bankruptcy, though he may engineer it.

12.2 Bank Runs Out of Money

If the bank runs out of money during an operating round, you finish the set of operating rounds. When this happens,

you may add additional money to the bank, take back an equal amount from all players, or keep track of the last set of operating rounds on paper.

If the bank runs out of money during a stock round, you must still finish the following set of operating rounds.

The bank runs out of money when:

- It is unable to pay for stock sold by a player into the open market.
- It does not have enough money to provide a new company with its starting capital.
- It does not have enough money to pay a company its income after it has operated.

Note that even though the bank may be broken and then be refilled with money, it is still considered broken. For example if a company retained its income and then spent it all for a train, the bank would still be considered broken if it did not have enough money to pay the company its income.

13 Winning

The winner is the player with the highest combined total of cash, stock valued at market value and private companies at face value. This may be a player who is bankrupt.

14 Game Etiquette

Some player actions can speed the play of the game.

In a game of this length, players need to plan their company moves before their turn. You should plan what tile(s) you are going to lay or upgrade. Where possible you should plan your train runs in advance.

The certificates (whether private companies or public company shares) that you own should be laid out in an orderly manner.

Other players are allowed to know how much money you have and how many shares and certificates you own. They may ask any time and you should answer politely. It is permitted to ignore them temporarily if you are busy operating one of your companies.

If in later stages of the game during an operating round, you wish to count the bank, you are allowed to do so, but you may not do it while you are operating a company. You may only do so when someone else is operating a company. You are required to inform the other players of the correct total.

15 Companies

The game contains private and public companies. Private companies consist of one certificate and are owned by a player or a company. New public companies have nine share certificates.

15.1 Rules Governing Private Companies

All private companies produce revenue as indicated on their certificate, for the owner during each operating round.

Private companies A and C, while in the hands of players, prevent a public company from laying tiles in the hex the private company occupies. Private companies in the hands of other public companies do not prevent the placement of track tiles.

Private companies may be bought by public companies for half to double the initial printed cost at any time during the public company's operating round while in phase three or four..

Each private company held by a player always counts as one certificate towards his certificate limit.

Private companies, with the exception of Uno-Takamatsu Ferry (G) if held by a player, are closed at the start of phase five if not before.

Specific attributes of each private company are listed below.

15.2 Private Companies and Attributes

Takamatsu E-Railroad **A**
Cost: ¥20 Revenue: ¥5

No other attributes. Blocks Takamatsu (K4).

Mitsubishi Ferry **B**
Cost: ¥30 Revenue: ¥5

Player owner may place the port tile on a coastal town (B11, G10, I12, or J9) without a tile on it already, outside of the operating rounds of company controlled by another player. The player need not control a company or have connectivity to the placed tile from one of their companies. This does not close the company.

Ehime Railway **C**
Cost: ¥40 Revenue: ¥10

When this company is sold to a corporation, the selling player may immediately place a green tile on Ohzu (C4), in addition to any tile which it may lay during the same operating round. This does not close the company.

Sumitomo Mines Railway **D**
Cost: ¥50 Revenue: ¥15

Owning corporation may ignore building cost for mountain hexes which do not also contain rivers. This does not close the company.

Dougo Railway **E**
Cost: ¥60 Revenue: ¥15

Owning player may exchange this private company for a 10% share of Iyo Railway from the initial offering.

South Iyo Railway **F**
Cost: ¥80 Revenue: ¥20

No special abilities. Not used in a 2-player game.

Uno-Takamatsu Ferry **G**
Cost: ¥150 Revenue: ¥30/¥50

Does not close while owned by a player. If owned by a player when the first 5-train is purchased, it may no longer be sold to a public company and the revenue is increased to ¥50. Not used in a 2 or 3-player game.

15.3 Public Companies

Besides the private companies listed above, there are seven public companies, listed below:

Awa Railroad (AR)
Starting City: Tokushima
Number of Tokens: 2

Iyo Railway (IR)
Starting City: Matsuyama
Number of Tokens: 2

Sanuki Railway (SR)
Starting City: Marugame
Number of Tokens: 2

Takamatsu & Kotohira Electric Railway (KO)
Starting City: Takamatsu
Number of Tokens: 2

Tosa Electric Railway (TR)
Starting City: Kouchi
Number of Tokens: 3

Tosa Kuroshio Railway (KU)
Starting City: Kubokawa
Number of Tokens: 1

Uwajima Railway (UR)
Starting City: Uwajima
Number of Tokens: 3

The number of tokens above does not include the stock market, par value, or revenue chart tokens.

16 Beginner Game Differences

For those seeking a quicker and simpler game, here are the differences for the beginner game. Differences not mentioned below are exactly as in the standard game.

16.1 Private Companies

The back side of the Private Companies are used, which are labeled "Beg" for Beginner. The number of companies used

is equal to the number of players – see the table in [21] or on the map for which ones to use. Note that in the Beginner Game, private companies have no special abilities and only differ in their cost and revenue. Private companies may not be purchased by public companies, A and C do not block their home hexes, and all close when the first 5-train is purchased.

16.2 Tiles

Additional tiles (see Table 4 [18]) are provided.

16.3 Initial Stock Round

Do not auction off the private companies – instead, distribute them randomly, one per player. Each player pays face value for the private company from their initial capital. As soon as all private companies in play have been distributed, the player with the priority card may start a company by purchasing the president's certificate.

17 Conflicts and Errata

The official rules are this document plus any officially-published errata. In the event of conflict between the official rules and any components, the rules take precedence. Published errata may be retrieved from:

<http://www.deepthoughtgames.com/games/1889/>

For clarifications or customer support, send email to:

support@deepthoughtgames.com



18 Tables

Train Type	Train Limit	Train Price	#	Rust	# of OR
2	4	¥80	6	-	1
3	4	¥180	5	-	2
4	3	¥300	4	2	2
5	2	¥450	3	-	3
6	2	¥630	2	3	3
D	2	¥1100	∞	4	3

Table 1 - Game Phases

# Players	Cert Limit	Initial Capital	Privates Removed
2	25	¥420	F, G
3	19	¥420	G
4	14	¥420	-
5	12	¥390	-
6	11	¥390	-

Table 2 - Standard Certificate Limits / Setup

# Players	Cert Limit	Initial Capital	Privates Removed
2	25	¥420	A-D
3	19	¥420	A, B, D
4	14	¥420	A, B
5	12	¥390	A
6	11	¥390	-

Table 3 - Beginner Certificate Limits / Setup

2x#6, 1x#7, 1x#8, 1x#9, 1x#57, 1,#23, 1x#24

Table 4 - Additional tiles for Beginner Game

19 Glossary

All Sold: A company is considered to be “All Sold” when all of the company shares are held by players.

Bank: The Bank holds all of the money at the start of the game. Payments of dividends to players and companies are made from the bank. Payments for new trains and terrain costs are made to the bank. Payments for shares purchased from the initial offering or from the open market, are made to the bank.

Bankruptcy: A player is bankrupt when he cannot raise the money necessary to buy a train for one of his companies.

Broken Bank: The bank is considered broken when it runs out of money. I.e., it has zero yen or less, or it does not have enough money to make a payment for dividends or to a company (see [12.2]). Although it is possible for the bank to run out of money and then be refilled by company purchases, it is still considered broken.

Brown Tile: A brown tile contains more complex track than a green tile. A brown tile is placed as an upgrade of a green tile already on the map.

Certificate: A certificate represents either a private company or a share (or two shares if it is the president's certificate) of a public company.

Certificate Limit: The certificate limit is the number of certificates (not shares) a player may hold. These certificates include company shares and private companies

City: A large city is represented on the map by a large white circle.

Dividend: A company runs its trains for income and then may pay this money out to shareholders of that company as a dividend.

Down: A company share price token is moved 'down' on the stock market when a share or shares of it are sold. The token is moved down one space for each share sold. See [5.8.1].

Game Phase: A game phase indicates what rules are in effect. The change of phase indicates (roughly) the passage of time.

Game Turn: A game turn is a complete set of a stock round and one or more operating rounds. The game phase determines the number of operating rounds.

Green Tile: Green tiles are used to upgrade yellow tiles. Green tiles have more complex track on them than yellow tiles.

Higher Color: All tiles have a color. I.e., yellow, green, and brown. The lowest color is yellow. Green is a higher color than yellow. Similarly brown is higher than green and brown is higher than green. The next 'higher color' is the next color of the progression. E.g., for yellow tiles, green is the next higher color.

Home Station Token: This free token is placed on the company starting city at the beginning of the first turn that the company operates [7.1].

Initial Offering: All shares of all companies are placed on the stock display at the start of the game [2.2].

Left: A company share price token is moved one space left on the stock market if it pays no dividend. If it is at the left edge of the stock market, it is instead moved down one space in the direction of the arrow. See [5.8.1].

Legal Run: A legal run for a company includes a city with one of its tokens and one or more additional cities, towns, or off-board locations. See [8.1].

Open Market: This part of the stock market represents many minor non-player investors who purchase stocks that players sell.

Operating Round: The part of the game turn in which company operations occur. Depending on the game phase, there will be one, two or three operating rounds per game turn.

Operating Company: A company that has six (or more) shares sold from the initial offering.

Pass: A player action in the stock round indicating that he wished to do nothing.

Pass In Order: All players, in seating order, pass as their action.

President: The president is the player who conducts the operation of a company and is responsible for any company purchases. This player holds the presidential certificate.

Presidential Certificate, President's Certificate: The 20% share (two shares) certificate of a public company.

Priority: The holder of the priority card is the player who has the first action in the next stock round. The priority is moved during the stock round by players buying or selling shares.

Priority Card: This card shows who has the first action in the next stock round.

Private Company: A company with only one certificate. This company is initially owned by a player. In later phases of the game, private companies may be purchased by operating companies [11]. Private companies may not be sold to the open market. They are called private companies because they may have only one owner at a time [15.1], [15.2].

Public Company: A company with nine share certificates.

Right: A company share price token is moved one space 'right' on the stock market if it declares a dividend. If it is in a box with an arrow pointing up, it is instead moved up one space. See [5.8.1].

Route: The path on the track on the map that a train runs to collect income. See [8.1].

Rust: A train which is rendered obsolete by a phase change is said to "rust" (see also Scrap).

Scrap: A train which is rendered obsolete by a phase change is said to be "scrapped" (see also Rust).

Share: A share is 10% of a company.

Share Limit: The normal share limit for a player in any one company is 60%. The position of the share price token on the stock market may allow a player to exceed this limit.

Share Price Order: When something is done in 'share price order' the order is in order of price from highest to lowest. When several companies have the same price, the one in the right most box is first. When several tokens are in the same share price box, the order is from top to bottom. Share price order is determined dynamically. Player and company actions can change the position and thus the value of a companies stock market token so the order is never fixed.

Stock Round: That part of the game turn devoted to stock actions only.

Stock Turn: A single action by a player in a Stock Round.

Stock Market: The display that represents the stock market that railroad shares are traded on. This is a crude representation of a real stock market.

Terrain Costs: Certain hexes on the map contain a '¥' followed by an amount. This cost represents difficult terrain in that hex and requires an extra expenditure as indicated to lay the first tile there.

Tile: A colored (yellow, green, or brown) hexagonal piece of cardstock that companies lay on the map to represent track.

Token: A marker with the railway logo on it that represents a railroad station of that company, and are also called station tokens. On the stock market, it represents the share price of that railway. Tokens are also used to represent the par value of a company and the most recently paid dividend on the revenue chart.

Town: A town is represented by a single small dot.

Track: The black lines on the colored tiles (yellow, green, and brown) laid on the map represent the railroad track laid by the railroad companies.

Train: This is a card that represents a train. The train number represents the number of stops that the train can count for income when it runs. The price on the card is the price that must be paid when purchasing this train from the open market or the bank.

Up: When a company token is adjusted on the stock market for 'all sold', it is moved one space up. See [5.8.1].

Upgrade: Replacing a track tile on the map with a tile of the next higher color.

Yellow Tile: A yellow tile is the first type of track tile laid in a clear hex.

20 Credits

This game has been created by:

- Designer: Yasutaka Ikeda
- Developer: Hiroshi Ayukawa
- Playtesters: Yasuhiro Adachi, Akiyoshi Nomura, and people at Sakura-kai
- Rules: Written by John A. Tamplin, using Bill Dixon's rules for 1832 as a guide. Akiyoshi Nomura provided an English "rules difference" list based on Yasutaka Ikeda's original Japanese rules, as well as a translation of the beginner game rules.
- Graphics: Yasutaka Ikeda and John A. Tamplin.
- References: O. S. Nock, *Railways in their Formative Years 1851-1895*, McMillan, 1973.
O. S. Nock, *Railways in the Transition from Steam 1940-1965*, McMillan, 1974.
David Ross (ed), *The Encyclopedia of Trains and Locomotives*, Amber Books, 2003.
Yuichiro Kishi, *Japan Railway & Transport Review*, #39, http://www.jrtr.net/jrtr39/s43_kis.html, 2004.
- Proofreading: Jeanette Allen, David G.D. Hecht, Jeff Heuer, Akiyoshi Nomura
- Trademarks: 1830 is a trademark of Avalon Hill.

21 Tile Manifest / Upgrade Chart

Tile	#	Legal Upgrades	Tile	#	Legal Upgrades	Tile	#	Legal Upgrades
	map	438		437	1 <i>No further upgrades</i>		205	1 448 611
	map	7 8 9		438	1 439		206	1 448 611
	map	5 6 57		map	466		439	1 492
	map	3 58		12	1 448 611		440	1 465
	map	440		13	1 611		39	1 <i>No further upgrades</i>
	3	2 <i>No further upgrades</i>		14	1 611		40	1 <i>No further upgrades</i>
	5	2 12 14 15 205		15	3 448 611		41	1 <i>No further upgrades</i>
	6	206		16	1 <i>No further upgrades</i>		42	1 <i>No further upgrades</i>
	2	2 12 13 14 15		19	1 45 46		45	1 <i>No further upgrades</i>
	2	205 206		20	1 47		46	1 <i>No further upgrades</i>
	2	26 27 28 29		23	2 41 45 47		47	1 <i>No further upgrades</i>
	5	16 19 23 24		24	2 42 46 47		448	4 <i>No further upgrades</i>
	5	25 28 29		25	1 40 45 46		465	1 <i>No further upgrades</i>
	5	19 20 23 24		26	1 42 45		466	1 <i>No further upgrades</i>
	2	26 27		27	1 41 46		492	1 <i>No further upgrades</i>
	2	14 15		28	1 46		611	2 <i>No further upgrades</i>
	3	3 <i>No further upgrades</i>		29	1 45			

Additional tiles provided (2x#6, 1x#7, 1x#8, 1x#9, 1x#23, 1x#24) are intended for use only in the beginner game.