

NSB type 3 Henschel Rotary snowplough at Myrdal Station along Bergensbanen.

# 18Norway

Pontus Nilsson & Arne Kjell Vikhagen

# RULES OF PLAY

## 18Norway

## Pontus Nilsson & Arne Kjell Vikhagen

## Rules, January 2025

Contents			9 Nationalization Rounds 1 9.1 Nationalization procedure			
1	Introduction 1.1 Overview 1.2 For experienced 18xx players 1.3 Notes on the rules 1.4 Goal	1 1 1 2 2	10 Game End 11 Acknowledgments	12 12		
2	Components	2				
3	Setup	2				
4	Private and public companies 4.1 Private companies	<b>3</b> 3 3				
5	Game phases 5.1 Overview	<b>4</b> 4				
6	Private company auction	5				
7	Stock rounds7.1 Overview7.2 Certificate limit7.3 Selling stock7.3.1 Closed companies and their relaunch7.4 Change of presidency7.5 Buying stock7.5.1 Buying a share7.5.2 Floating a company7.6 Ending a Stock Round	5 5 6 6 6 6 7 7				
8	8.10 Buy trains and ships	<b>7</b> 7 7 7 7 8 8 8 8 9 9 9 10 11 11				

#### 1 Introduction

Make sure you are reading the latest version of the rules, you'll find it here: https://github.com/akvik/18Norway. This is a playtest pnp version of the game, and we would appreciate any comments or suggestions that you might have.

18Norway is an 18XX game based on Francis Tresham's 1829, and follows the development of the Norwegian railroad from 1854 to the mid 1990s. You will be dealing with harsh weather and difficult terrain as you build your track across mountains, through tunnels, and around the fjords. All the while, companies have to take the potential and not entirely unfavourable nationalization into account.

#### 1.1 Overview

The game begins with a private company auction. This auction occurs only once and is followed by the first ordinary Stock Round (SR) where players buy and sell company stock (see Figure 1).

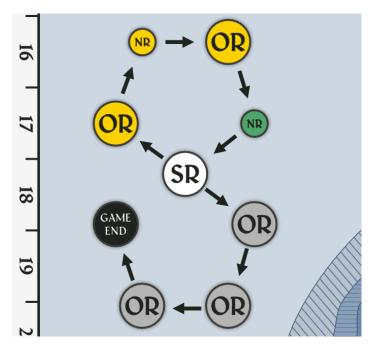


Figure 1: The round sequence from the game board. For each new phase, the Round token is moved to the next phase. The colors indicate phases, for instance, game end triggers in a grey phase, the second nationalization round (NR) is triggered from the green phase and onward.

Two Operating Rounds (OR) follow the Stock Round, where the presidents for each company act on its behalf to buy and run ships and trains, pay out dividens, issue and redeem shares, etc. Compa-

nies use their ships and trains to generate revenue for their owners. After the second OR has finished, the next SR starts. Play proceeds in this way until Game End is triggered when the first 6-train is purchased (Section 10). After the following Stock Round, a set of three Operating Rounds conclude the game.

#### 1.2 For experienced 18xx players

Here is a short list of *MacGuffins* for players that are familiar with 18xx games or for those who want a quick overview of the game:

The privates auction is a waterfall auction. An OR is held if all players pass and not all privates are sold, but the face value of the privates does not change. See Section 6.

The stock market is one-dimensional and the capitalization is partial. Double and triple jumps are possible if conditions are met. See the stock market board or Section 8.9.

At the end of each stock round, stock prices go up for companies with no stocks in either the Bank Pool or in their company treasury. Stock prices go down for each company with stocks in the Bank Pool. See game board or Section 7.6.

Bankruptcy does not end the game, but the player is out of the game.

All public companies start out as minor companies  $(40 + 3 \times 20)$  and can convert to major companies  $(20 + 8 \times 10)$  through nationalization. From Phase 6 a company nationalizes immediately when it floats. See Section 4.2.

A company can issue or redeem stocks to or from the Bank Pool when it operates. See Section 8.3.

A company can close if its share value falls below 10. Closed companies may be relaunched following standard rules for buying available President certificates. See Section 7.3.1.

Each company has a unique power. See each company charter, the game board, or Section 4.3.

There are nationalization rounds after the first OR (after each OR from Phase 3), where just one company may nationalize. See Section 9.

A nationalization converts each 40 and 20 percent certificate to a 20 and 10 percent certificate. Four new 10 percent certificates goes into the company treasury and one 10 percent certifi-

cate goes to the NSB field on the board–NSB buys it from the company at market price.

Each mountain hex has a mountain token. To lay a tile, pay the cost on the hex and keep the mountain token. A company may pay double the cost to build a tunnel and then remove the mountain token. It may build a tunnel at a later time when the tile is upgraded, paying the cost. All companies whose trains run to or through hexes with a mountain token must pay 10kr for each hex it enters, as maintenance. This does not affect revenue. See Section 8.4.1.

Companies can own ships and they can make ship runs on the sea routes if they 1) have a city token in a harbour city, or 2) if they have harbor tokens in the harbour of a city they have access to. See Section 8.6.

#### 1.3 Notes on the rules

We use the following abbreviations: **P1-P7** refers to the Private Companies, **S3-S5** refers to the ships, **2-6** and **D** refers to trains, and the letters **D**, **R**, **B**, **H**, **J**, **Ø**, **V** and **S** refers to the Public companies.

We use emphasis where we want to focus on a certain aspect, such as *may* (as opposed to must) or *the company* (as opposed to the player). As in any other 18xx game, it is crucial to know what actions are made on behalf of the player, and which are made on behalf of the company.

**Transactions** No transactions may occur between players.

**Agreements** Agreements between players are allowed, but are not binding.

**All information is public.** Each player's funds and company treasuries should be out in the open and should not require a request from any player to be revealed.

#### 1.4 Goal

At game end, players total their cash and the value of their stock shares. Company assets does not count. The player with the highest total wins.

### 2 Components

- 1 board
- 1 stock market board
- 1 phase board

- 1 tile upgrade chart
- 7 sheets with 116 track tiles
- 1 sheet with token stickers
- 52 wooden tokens (colors and sizes according to sticker sheet)
- 14 grey mountain tokens (for the tokens marked 30 & 40 on the sticker sheet)
- 8 company charters
- 72 stock certificates
- 7 Private Company certificates
- 29 train cards (6 2-trains, 5 3-trains, 4 4-trains, 3 5-trains, 3 6-trains, 8 D-trains)
- 15 ship cards (7 S3-ships, 5 S4-ships, 3 S5-ships)
- 1 rule book

#### 3 Setup

- 1. Place the game board on the table.
- 2. Place mountain tokens on each mountain symbol on the map. Place the '30' tokens on the small mountain symbols valued 30kr, and the '40' tokens on the big mountain symbols valued 40kr.
- 3. Place all Company Charters next to the game board, including their tokens (station/port, market-, and run value-tokens(s)).
- 4. Place all tiles so that they are easily accessible to all players at the table.
- 5. Form a bank of game money, preferably poker chips. As the Game end trigger is not dependent upon when the bank breaks, the size of the bank does not matter, but at least 9.000kr is preferable.
- 6. Give each player their startup capital see table 1.
- 7. Place all 20 percent share certificates at their company charter, one double share (40 percent) president's certificate and three single share (20 percent) certificates.
- 8. Place all 10 percent share certificates next to the gameboard, they will enter the game during nationalization.
- 9. Place all Train cards and ship cards at their designated places on the phase board.
- 10. Line up each Private Company in order next to the game board in preparation for the Initial Auction.
- 11. Place one single share (20 percent) certificate of Bergensbanen (B) next to P6, and the President's Certificate of Hovedbanen (H) next to P7.
- 12. Place the Round token on the Stock Round circle, and the phase token on the Phase 2 circle. Place the certificate limit token on the top most circle on the certificate limit table.
- 13. Decide who should be start player and give

them the Priority card.

Start capital		
400		
300		
240		

**Table 1:** Start capital for each player count

#### 4 Private and public companies

There are two company types in 18Norway: private companies and public companies, which can be either minor or major companies. The term company in the rules refers to public companies.

#### 4.1 Private companies

The game includes seven private companies, listed in table 2, together with their face value and revenue each Operating Round. When a private company closes, remove it from the game immediately.

Name	Face value	Revenue
P1 Rørosbanen	20	5
P2 Thunes mek.	30	5
P3 Sørumsand mek.	40	10
P4 Mellemværftet	50	10
P5 Carl Abraham Pihl	70	15
P6 Peter Jebsen	90	15
P7 Robert Stephenson	140	20

**Table 2:** Private Companies

- P1 Rørosbanen: Blocks hex (I23) until bought by a public company, or when the first 5 train is bought, which also closes the P1.
- P2 Thunes mekaniske verksted: Public company owning P2 does not need to pay for snow on tracks. Closes when first 5 train is bought.
- P3 Sørumsand mekaniske verksted: Owner of P3 receives 10kr as additional payment from the bank each time a tunnel is built. Closes when first 5 train is bought.
- **P4 Mellemværftet:** Owner of P4 receives 10kr as

- a ship is bought. Closes when first 5 train is bought.
- P5 Carl Abraham Pihl: Public company owning P5 may nationalize out of turn, i.e. 'skipping the line'. Only one company may nationalize each NR, even when P5's ability triggers. Closes when first 5 train is bought.
- **P6 Peter Jebsen:** Accompanied by a 20 percent share in Bergensbanen (B). Par value is set when its president's certificate is purchased, and B then floats immediately. Its company treasury receives funds for all three stocks when it floats. Closes when the first 5 train is bought.
- P7 Robert Stephenson: Accompanied by the 40 percent Hovedbanen's (H) President Certificate. Set market value: the maximum value is equal to the winning bid divided by two rounded down. Gets selected value times two from bank. Closes when the first 3-train is bought.

During its operating turn, a public company may buy a private company (except P7) from a player, for an agreed amount between half and one and a half its face value in Phases 3 and 4. A company that owns a private company may not sell it.

#### 4.2 Public companies

There are eight public companies in the game. They start out as 5-share minor companies, but can be transformed to 10-share major companies through the Nationalization process. Public companies all function identically: each has a president's certificate, worth 40 percent, or two shares, and three ordinary certificates each worth 20 percent, or one share. When nationalized, these certificates transform from 20 to 10 percent per share. An additional five certificates are also added to make the major 10-share company complete. The public company's charter is not a share certificate, merely a convenient place to put its assets.

#### 4.3 Company powers

Each public company has a special ability, as listed below. These take precedence over the rules as written whenever there is a conflict.

Designers' notes: During the expansion of the railways, each region of Norway had their own funding process and public debate on the expansion of the railways. How it should be funded and where it additional payment from the bank each time would go, once they decided it would be beneficial in

the first place. Intial skepticism followed by euphoric support had each region work with particular problems, depending on how far the expansion had come the time they managed to agree to go ahead with building it. We wanted to reflect this with the company powers below, which also reflects some of the particular challenges the regions had to overcome to build the rails.

**Hovedbanen (H):** Sells either 0, 1, or 2 stocks to NSB the moment it nationalizes. See Section 9.

**Dovrebanen (D):** 10 percent discount on all train purchases except when buying from another company. Its company charter has the discounted train prices printed on it.

**Bergensbanen (B):** It is not mandatory for Bergensbanen to own a train until Phase 5.

**Raumabanen** (**R**): May build tunnels for free, i.e. may remove mountain tokens without extra cost during tile lay.

**Sørlandsbanen (S):** May place two yellow tiles per OR until at least one S station is connected to Oslo.

**Jærbanen (J):** Mail contract: Additional 10/20/30 kr during revenue calculations for yellow (Phase 2), green (Phase 3) and brown (Phase 5+) phases respectively, unless revenue is zero (added to its total revenue once).

**Vestfoldbanen** (**V**): If launched before Phase 4, Vestfoldbanen receives a S3 ship for free, during the buy trains and ships phase in its OR. In other words, it cannot run the S3 ship during its first OR.

Østfoldbanen (Ø): One of its trains may run through one tokened out city each Operating Round. That city does not add to the revenue (in other words, treat that city as plain track) and it does not count against the train's limit. This does not apply to track laying.

A company has its own assets, which may consist of trains, ships, private companies, and money. The president is the player with the president's certificate, and they make all decisions on behalf of the company.

### 5 Game phases

#### 5.1 Overview

The game starts in Phase 2, as 2-trains are available from the start. The game continues through

phases 3, 4, 5, 6, and D as new types of train are purchased. Immediately after a company buys a new train type, the phase changes. Ships never trigger a new phase. Phase change may cause trains to go obsolete and ships to rust. An obsoleted train will run one more time before being removed from the game. A rusted ship will be removed from the game immediately.

#### Phase 2

Yellow track is available.

Red off-board areas count the yellow value.

Private companies can not be sold.

Companies may own no more than four trains or ships in total.

A nationalization round occurs after the first Operating Round in each set.

S3-ships are available.

#### Phase 3

Yellow and green tracks are available.

Red off-board areas count the green value, if applicable.

S4-ships are available.

Private companies available for sale, for between 50 and 150 percent of face value.

A nationalization round occurs after each Operating Round.

The Mjøsa hex is immediately upgraded to green.

#### Phase 4

2-trains goes obsolete and are eliminated after their next run.

S3-ships rust.

Companies may own no more than three trains or ships in total.

#### Phase 5

3-trains goes obsolete and are eliminated after their next run.

Yellow, green, and brown tracks are available.

Red off-board areas count the brown value, if applicable.

Companies may own no more than two trains or ships in total.

S5-ships are available.

Remaining private companies close and are removed from play.

The Mjøsa hex is immediately upgraded to brown.

#### Phase 6

S4-ships rust.

Diesel trains are available.

Yellow, green, brown, and grey tracks are available.

Red off-board areas count the grey value, if applicable.

Game end is triggered, with three operating rounds in a row after the next stock round.

Companies that float nationalize immediately

upon floating.

bidders:

#### Phase D

4-trains goes obsolete and are eliminated after their next run.

6 Private company auction

The private company auction is a waterfall auction. Sort and place the private companies so that they go from P1 to P7 in a line, from top (P1) to bottom (P7). Place the president's certificate of Hovedbanen next to P7 and a 20% share of B next to P6. Randomly choose the starting player and arrange the other players so that the turn order is fixed and stable, in clockwise direction. Make sure bids from each player are traceable to that player and that each bid is financed. A convenient method for this is to give each player tokens from a company each and place a token on top of each bid.

Players take turns until all private companies are auctioned off. On a turn, a player must either:

Buy the private at the top for face value. The waterfall then triggers: if the private next in line has one bid on it, that private is sold to the bidder. If the next private has more than one bid on it, there is an action between the

- There is now a temporary turn order between the bidders, from lowest to highest bid.
- Each new bid must be at least 5 kr higher than the previous bid, in multiples of 5. Bidders may pass (soft pass).
- Each bidder takes turns in this play order until every bidder passes. The private is then sold to the highest bidder.

Each private next in line with bid on them is either bought or actioned until there is a private without any bids. Then the turn is given to the next player in turn order.

**Place a bid on any other private**, bidding at least 5 kr more—in multiples of 5—than face value or the current bid on that private.

**Pass.** The player may choose to bid again on their next turn (soft pass).

If all players pass and there are one or more unsold privates, there is an Operating Round where revenue from the privates are payed out to their owners before the auction begins anew, starting with the next player in turn order.

Once all the privates are sold, proceed to the first stock round. The player to the left of the player who last bought a private has Priority Deal.

#### 7 Stock rounds

#### 7.1 Overview

A Stock Round consists of a series of turns, starting with the first player (the holder of the priority deal card) and proceeding clockwise.

On each turn the player may, in this order only:

- *Sell* any number of certificates as described in Section 7.3, and/or
- Buy one certificate as described in Section 7.5.

Alternatively, a player may pass (soft pass—a player may take an action again on future turns). When all players pass in a row, the Stock Round ends. The player to the left of the last player to take an action (besides passing) gets Priority Deal in the next Stock Round. After adjusting stock prices, the game proceeds to the Operating Round.

#### 7.2 Certificate limit

The **certificate limit** is the maximum number of certificates it is allowed for each player to own at any given time. One certificate is either 1) one private company, 2) one president's certificate, or 3) one company stock certificate. The certificate limit changes with the number of players and the number of nationalized companies in the game. Use the token marked **N** for the certificate limit table on the board, and check the table each time a company is nationalized.

Designer's notes: The certlimit does not change with the game phases as they usually do in 18xx games. It depends instead on the number of nationalized companies. This has to do with how the number of certificates in play depends more on the pace of nationalization than with the progression that triggers phases.

A player that has more certificates than allowed (due to a change in presidency) must resolve this at their next opportunity to sell shares in a Stock Round if they are still over the limit.

While owned by a player, a private company counts towards the number of certificates owned by that player. The certificate limit is as follows:

No player may own more than 60 percent of a public company. No player that is currently at the

Limit*	3 players	4 players	5 players	
0–2	12	9	7	
3–4	15	11	9	
5–6	17	13	10	
7–8	19	15	12	

**Table 3:** *Certificate limit.* \*)

certificate limit may buy a certificate, even if that would cause a change in presidency.

#### 7.3 Selling stock

To sell stock, the player transfers any number of share certificates from their holdings to the Bank Pool, subject to the following constraints:

- Private companies may never be sold to the Bank Pool
- Shares may not be sold in the first Stock Round
- There may never be more than 50 percent of the shares of any company in the Bank Pool
- President's certificates may never end up in the Bank Pool

When any player sells shares in a company, the company's stock price shifts one step left (one and only one even if multiple shares were sold), except if the stock price is below 50, at which point it shifts one step left only if the president sells.

Only the current president can sell the stock of a company before the company has operated (at least once), as long as it is not the first SR.

If the marker moves to a column on the Stock Market board that is already occupied by other stock price markers, it is placed furthest down in the column. If the marker remains in its original column, it retains its relative position on the stack. The player receives the original price for each of the shares sold. If the player sells shares in more than one company in a single turn, they decide in which order to sell them. This will decide the order of companies whose stock price markers drop to the same column.

Shares may be sold one at a time or in blocks of multiple shares. In either case, the player receives from the bank the current stock price for each share sold. Thus, selling shares one at a time often results in the player receiving less money than selling in one block, since each sale depresses the stock price one step.

#### 7.3.1 Closed companies and their relaunch

If the stock price drops below 10, then the company closes: remove from play all its city and harbor tokens together with its charter, its share certificates and its funds. Place its trains and ships in the Bank Pool. Then reset its shares and its charter as per initial setup as closed companies are immediately available for relaunch.

#### 7.4 Change of presidency

If a player at any point owns more shares (at least two shares) in a company than the company president, play stops and they immediately become the new president of that company. If two or more players tie for this position, the player closest to the president's left becomes the new president. The president's certificate changes hands. In exchange, the former president receives two shares from the new President, to maintain both parties' level of ownership. Play proceeds from there.

#### 7.5 Buying stock

A player may buy one stock certificate, subject to the limits below, either:

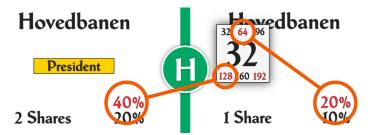
- a share from the Bank Pool, or
- a share from a company's treasury, or
- an available President certificate.

#### 7.5.1 Buying a share

To buy a share, pay the stock price of that company to the bank if you buy the share from the Bank Pool, and to the company if you buy it from the company's treasury.

The first certificate purchased in a company must be the President's Certificate (except Hovedbanen as its President's Certificate was purchased during the Private Company auction). To buy a president's certificate, take its company charter, pay twice its stock price to its treasury, and place one of its tokens on the market in the corresponding par value field. Each company has a two-sided token - use this token for the stock market, as you turn it to its other side once a company has operated. Put another token next to the revenue chart below the stock market for convenient calculation of revenue per share, and to show the last company payout to other players. Put the other company tokens in their designated spaces on the company charter. The price for each token is shown below each token,

station token.



**Figure 2:** Before the minors convert to majors through nationalization, the certificates go by the red numbers on the certificates, and its revenue follow the red numbers on the revenue chart, for convenience. Once it's a major company the black numbers apply, as a company with one 20% and eight 10% certificates.

#### 7.5.2 Floating a company

Once 60 percent of the shares in a company have been bought, the company is *floated*. It will begin operating in the next Operating Round. The president of a company is the person who owns that company's president's certificate.

During the last SR, when the Game End has been triggered, a company that floats nationalizes immediately upon floating.

#### 7.6 Ending a Stock Round

Once all players consecutively pass, give the Priority Deal card to the player sitting left of the last player to sell and/or buy stock. That player will be the first to take a turn in the next Stock Round.

Then, in stock price order, adjust each company's stock price one column left if it has any shares in the Bank Pool, and one column right if no shares are in the Bank Pool and no shares are in the company treasury. If a company token is already in the column, put the new token below the one already there, at the bottom of the column.

### 8 Operating rounds

There are two operating rounds after each Stock Round. During these rounds, each railroad operates, with its decisions being made by its President.

The companies operate in descending stock price order. If two companies share the same column on the stock chart, start with the company whose token is at the top of the column.

starting from the left space, which is a free home A newly floated company must on its first Operating Round place its home station token on its marked tile on the map, as their first order of business. No other company may place a token on a company's home tile unless there is more than one free token space on the tile. Consider putting a token on a developed home station tile as a reminder of the home station location for a company that has not had its first Operating Round.

#### 8.1 Sequence

- 1. Private Company owners receive their income from the bank.
- 2. Each company operates in descending stock price order.

#### 8.2 Operating steps

To operate, a company does all these steps (in or-

- 1. May issue or redeem shares. See Section 8.3.
- 2. May lay one tile. See Section 8.4
- 3. May place one token. See Section 8.5.
- 4. Run routes with each train and ship that it owns. See Section 8.6.
- 5. Pay, pay half, or retain its revenue and adjust its stock price. See Section 8.9.
- 6. May buy trains and/or ships. Companies must own at least one train. Ships are not mandatory to own and do not count as owning a train. See Section 8.10.

At any time during the Operating Round, a company may buy one or more Private Companies from a player for half to one-and-a-half the face value price, as well as use any Private Company abilities from companies it owns.

#### 8.3 Issue or redeem shares

A company may issue shares from its treasury to the Bank Pool, or redeem their shares from the Bank Pool and back to their treasury. A company may want to issue shares to increase its treasury on the spot, or they may want to redeem shares to improve its stock price and get future income from dividends.

#### 8.3.1 Issue shares

A company issues shares by selling stock from its treasury to the Bank Pool. Price per share issued is one step lower than its current stock price. The stock price does not change, unless it is a forced 8.4.1 Tile costs-mountain hexes train purchase, see Section 8.11.

**Restriction:** The maximum number of shares that can be issued equals the number of shares not in the company treasury, minus the number of shares in the Bank Pool.

#### 8.3.2 Redeem shares

A company redeems shares from the Bank Pool to its treasury. Price per share redeemed is one step higher than its current stock price. The stock price does not change. It may redeem any number of shares from the Bank Pool.

#### 8.4 Tile laying

A company *may* lay *or* upgrade *one* tile as long as all the following criteria are met:

- Each tile must be placed on top of a marked hex on the hex overlay on the map.
- Tracks may not run into 1) map edges, 2) fjord edges (blue borders), or 3) glacier hex edges (black borders).
- The company is permitted to run a train of any length along the new route. However, it does not have to be able to run along *all* lengths of the new tile (permissive, in other words).
- The company can afford to pay any cost marked on the map for that particular hex.
- Tiles can be upgraded by replacing a tile as long as 1) it's a legal upgrade of that tile, and 2) if the upgraded tile maintains the already existing tracks on the replaced tile.
- City tiles with a capital letter on the map can only be upgraded by tiles with the corresponding letter.
- Upgrades are allowed only one step up from the following order: yellow, green, brown, and
- The grey map tiles on the board are locked and 8.4.3 The Mjøsa hex (H15) cannot be upgraded.

Tile-laying is permissive, which means that "Some of the track on the newly-laid tile must be reachable from one of the laying company's station markers by an arbitrarily large train". For example, a company may upgrade a straight tile #8 to tile #18 ments on the upgraded tile.

Each mountain tile has a mountain token on it to remind companies to pay for maintenance each time a run uses the tile. A company must pay either 30kr or 40kr to lay a tile on a mountain hex. A company can elect to pay double-60 kr or 80 kr-to remove the token and instead build a tunnel. If they do, no more fees are required from any company that runs through that tile. If a company upgrades a tile with a mountain token on it, you may pay 30 or 40, respectively, to build a tunnel and remove the token.

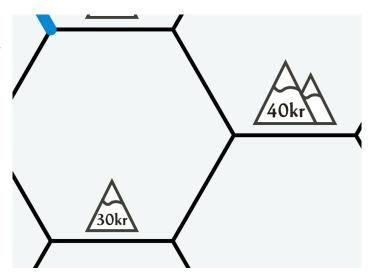


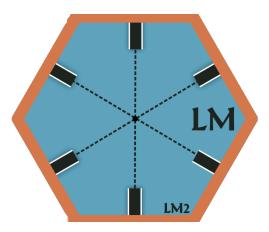
Figure 3: Examples of the two different moutain tiles. There are seven mountain hexes of each type. When a company lays track on any mountain tile, they either pay the printed price and add a mountain token on top of the tile, or pay double and lay track without the mountain token. Only when a tile is upgraded can a company pay the price on the token to remove it.

#### 8.4.2 Tile costs-water hexes

Water tiles have a wave icon on them, and to lay a tile on a water hex, the company must pay 20 kr the first time it lays a tile on that hex. There are no costs for subsequent upgrades.

The Mjøsa hex is a rule exception, as it upgrades due to phase change and not during tile laying. When Phase 3 and 5 triggers, put the respective Mjøsa hex on top of hex H15. There are no other ways to lay tiles on this hex. The Mjøsa hex shows that the company-not the player-needs to pay a even if the company cannot reach both track seg- ferry fee to run through the hex. During Phase 2 it is 10kr, phases 3-4 it is 5kr, and from Phase 5

onwards it is free. The routes on the Mjøsa hex changes with the upgrades too, see figure 4.



**Figure 4:** The brown Mjøsa tile upgrade illustrates that trains can run from tracks on any hex side, to any other track segment. The same train can even run through the hex twice as long as the train runs on four different track segments on the hex.

#### 8.5 Placing tokens

A company *may* place *one* token on a city tile as a station or on a harbor area as a port. It is then legal to run from or through that station or port. It is legal to run *to* a city without a company token.

To place a station token, the following criteria need to be met:

- The company must afford the token according to its price on the company charter.
- The city tile must be within reach of an already placed company station with a train of any length.
- There is a free space for the token on the city tile. A space dedicated to a company not yet floated (its home station) is not available, but reserved for the that company. If such a tile is upgraded, put a token on the new tile from the company that starts from that tile.
- There are no tokens from the company on the tile already.

To place a port token, the following criteria should be met:

- The company must afford the token according to its price on the company charter.
- The company can either reach the harbor area along sea routes by one of its ships from one of the stations or ports it already has, or the company can reach the harbour area's port city through a legal train route. The port can be tokened out, a company can still place a port

- token as long as it has a legal route to the port city.
- There are no tokens from the company in the harbor area already.

#### 8.6 Run trains and ships

If the company has one or more trains or ships, it runs them to establish earnings.

#### 8.6.1 Train runs

Each train runs on a separate track (black). These routes may not share any track segments, but they may meet or cross in cities or red off-board areas (see Figure 5).

#### 8.6.2 Ship runs

Each ship runs on a separate sea lane (blue-white). These routes may not share any sea lane segments, but may meet in port cities.

#### 8.7 Sea routes

Companies with tracks connected to port cities may make runs along the sea lanes that include the neigbouring ports. These ports are connected with a blue-striped line on the map. The sea lanes work excactly as tracks, but in order to make runs past occupied neighboring ports, a company needs to place one of their port tokens - each token has an anchor icon on one side. Place the token in the harbour circle of a port city to run past that city. This port token stays there throughout the game.

Designers' notes: The Hurtigruten line was established in 1893 and became vital for the transportation of transport goods and people along the Norwegian coast. Its still in operation, now mostly as a cruise line, even if it still transports cargo as well.

#### 8.8 Runs in general

The route may include no more cities (large or small) and red off-board areas than the number of the train or ship, but must include a least two. It follows that a 2-train must visit exactly two, and that a S3-ship must at least visit two and max three. Detrains may visit any number of towns, cities, and red off-board areas on a route.

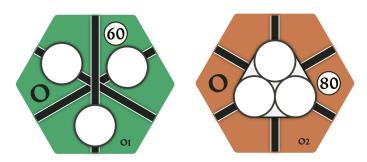
The company must pay a 10kr fee in advance from its Treasury to run a train to each and every hex

with a mountain token. This does not affect the revenue of that run.

The value of a route is equal to the sum of the values of the cities or red off-board areas it passes through and reaches.

Train routes may include city tiles that contain other companies' station markers. However, routes may not continue through a city that is completely filled with station markers of other companies (tokened out).

A route may not include the same city space more than once, but it may include different city spaces in the same hex.



**Figure 5:** For instance, with the green Oslo tile, a train may run twice or even trice through Oslo as long as the train does not use any track segment more than once, and does not visit any individual city space more than once. However, if Oslo upgrades to brown it is no longer possible to pass Oslo more than once.

Ship routes may include city tiles that contain other companies' station markers. However, routes may only continue through a city completely filled with the station markers of other companies if it has a port token in the harbor area in question.

The value of towns and cities is the number printed in the small circle, and ranges from 10 kr to 100 kr. The value of a red off-board area is one of the numbers printed in the rectangle; the lowest value in Phase 2, the second value in Phases 3 and 4, the third value in Phases 5 and 6, and the fourth value in Phase D.

#### 8.9 Payouts and stock adjustments

A company's total revenue is the sum of its revenues from the routes that its trains and ships run. It does not include any Private Company income. This revenue may either be retained in its treasury or paid out, in full or half, as dividends to its shareholders:

- Retained revenue is placed in the company treasury.
- To pay full dividends, divide revenue by 5 (or 10 if the company has been nationalized) and pay this amount per share to each shareholder.
- To pay half dividends, divide total revenue by two. Round this amount down to the nearest 10 kr and retain it in the corporate treasury. Divide the remainder by 5 (or 10 if the company has been nationalized) and pay this as dividends per share to each shareholder.

Dividends for shares in the Bank Pool are paid to the bank (nothing happens, in other words).

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

Adjust the company's token on the earnings per share chart to match the company's total revenue divided by by 5 (or 10 if the company is nationalized).

A company's stock price rises or falls based on its total payout compared to its current stock price:

- Shift its stock price one column left if either there is no payout or its payout is less than half its current stock price.
- Do not adjust its stock price if its payout is at least half and less than its current stock price (it maintains its position in the column).
- Shift its stock price one column right if its payout is at least equal to and less than double its current stock price.
- Shift its stock price two columns right if its payout is at least double its current stock price and, if its stock price is 165 kr or greater, less than three times its current stock price.
- Shift its stock price marker three columns right
  if its current stock price is 165 kr or more and
  its payout is at least equal to three times its current stock price.

Total payout includes all dividends (but not retained revenue), whether they were paid from the bank to itself for Bank Pool shares or to the company treasury for treasury shares. In its first Operating Round, a company cannot run a route (it has neither trains nor ships), so its stock price will fall. An adjusted stock price that would move past 480 kr stops at 480 kr.

#### 8.10 Buy trains and ships

A company may buy one or more trains and/or ships. A company must own a train at the end of its operation (except Bergensbanen before Phase 5 due to its company power), even if it does not have a legal route. A Company may own one or more ships, but not more than one of each type. A Company *must* own one or more trains at the end of its operating round. It may not own more trains or ships in total than the phase permits (the train limit changes with the phases).

Train	Price	No.	Obs.	Rusts
2	80kr	6	-	-
3	180kr	5	-	-
4	300kr	4	2	S3
5	450kr	3	3	-
6	630kr	3	-	S4
D	900kr	$\infty$	4	-
S3	150kr	7	-	-
S4	250kr	5	-	-
S5	400kr	3	-	_

**Table 4:** Train and ship roster. Purchased ships does not trigger any phase changes.

A company that buys a train or a ship has three options. It may:

- buy an available train or a ship from the supply at face value,
- purchase a train or a ship for 1kr and upwards from another company if both presidents agree, or
- buy a train or a ship from the Bank Pool (due to exceeding train/ship limit or closing company).

A company may not sell a train or a ship during its own Operating Round.

Obsoleted trains are removed from the game immediately after its next run after becoming obsolete. It does not count toward the train limit, and companies cannot buy an obsoleted train from another company. Obsoleted trains are removed the next run even if the company does not have a legal route and cannot be exchanged to a D-train.

A company on its train limit cannot buy another train even if a ship in its possession would rust immediately upon buying the train.

From Phase 6 onward, D-trains are available. A company may exchange a 4-,5- or 6-train with a D-train at a reduced price of 750kr instead of 900.

A new phase triggers immediately when a company buys the first of a new train type (see Game phases in Section 5).

#### 8.11 Emergency money raising

If a company obligated to purchase a train has insufficient cash in its treasury, it must fund the train purchase through the following procedure and in descending order:

- It must, if possible, issue shares in its treasury to the Bank Pool. The stock price shifts one column left for each issued share. It is therefore almost always more beneficial to issue enough shares (or avoid redeeming any) at the beginning of the turn, as this does not affect the stock price. The company may not issue shares if this makes the company close. The issuing process is otherwise identical to a regular issuing of shares; see Section 8.3.
- If additional funding is needed, the President must contribute with remaining funds, primarily with cash, and secondarily, if possible, by selling shares; see Section 7.3. The President may not sell shares if it would make the operating company close, or make the presidency of the operating company change.
- If a company still isn't able to fund a train purchase, the player who is the President goes bankrupt - see Section 8.12.

Then the company must buy the cheapest available train from the Bank Pool or the supply.

#### 8.12 Bankruptcy

A player is bankrupt when they cannot raise money through emergency money raising. At this point, the player sells all their stocks to the Bank Pool for the current stock prices, including president certificates - Bank Pool restrictions do not apply. Stock prices do not change. The bankrupt player's funds are then put in the company treasury. Selling the stocks might trigger a change in presidency for one or more companies—finish the bankruptcy procedure first before proceeding with the change of presidencies. The new presidents will have to finance a train for their new companies. (see Section 7.4).

Bankruptcy can result in a situation where a president's certificate remains in the Bank Pool. This company will do nothing but run its routes if possible and retain its revenue. If it does not own any trains or ships it can run, its stock price shifts two steps to the left at the end of the OR. This will close the company if its stock price is zero. If the company can buy the cheapest train available, it must. It does not buy any ships.

#### 9 Nationalization Rounds

After the first Operating Round per set in Phase 2, and after both operating rounds per set from Phase 3 onward, there is a nationalization round, where a company may nationalize to get more funding. Moving in reverse company order, from lowest to highest value and from bottom to top in the stock market, each minor company is offered the possibility to nationalize their company. Only one company may nationalize each Operating Round. The game proceeds to a new Operating Round or a Stock Round after the Nationalization Round has ended, after either one or no company has nationalized.

#### 11 Acknowledgments

Many 18xx games have inspired 18Norway, and we want to mention the most important ones here. 1846: The Race for the Midwest (2005) by Thomas Lehmann has been a major inspiration for many of the stock mechanisms and other central mechanisms. 18EU (2001) by David G. D. Hecht for the company powers especially. Last but not least 1830: Railways & Robber Barons (1986) by Francis Tresham is a given on this list.

#### 9.1 Nationalization procedure

During the nationalization round, a company may nationalize to get more funding.

The nationalization consists of the following steps:

- Place four 10% certificates from the supply into the company treasury.
- Place one of the 10% certificates in the NSB space on the game board. This certificate is owned by the state and cannot be bought or sold (Hovedbanen can choose to put 0, 1 or 2 certificates on the NSB space).
- NSB is paying the company for their share.
   Take the money from the bank according to share value and place it in the company treasury.
- From now on, the president's certificate is worth 20%, and each share certificate is worth 10%.

#### 10 Game End

The game end is triggered through the purchase of the first six-train, which makes the game enter Phase 6. See Section 5.

The total wealth of each player is the value of their stock, at current market prices, private companies at face value, plus their cash on hand. Company assets, including treasury and trains, count for nothing. The richest player wins.