DENMARK 1847

Danish Railways Through The 2nd Schleswig War

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Contents

Chapter 1

Overview

1.1 What is 18XX?

Denmark 1847 is a game based on Francis Tresham's 1829 which came out in 1974 about investing in, and operating various railways. Since then, hundreds of games inspired by this original game have come out sharing the same system and theme, all bearing the moniker "18XX". Denmark 1847 is one such game.

1.2 Visiting 1840's Denmark

The game starts off in 1840's Denmark, and follows the development of the Danish railway from 1847, through the *Second Schleswig War* in 1864, through the nationalisation of the Danish railway in 1880, and ending in the early 1900s.

Denmark's unique insular geography will require you to purchase boats as well as trains in order to expand your railway empire. Half-way through the game however, the Second Schleswig War breaks out, and sees the southern part of Denmark taken over by the Prussians. Running your companies will get more expensive, so you will need to adapt to the changing tides in order to overcome the challenges.

1.3 Goal of the Game

You play as investors buying and selling shares in real historical railway companies in 19th century Denmark. Your goal: Have the most money by the end of the game. Throughout the game you will all invest in railway companies in order to improve their net worth and hopefully fill your own pockets by the end.

1.4 For New Players

Keep reading on, the rulebook will explain everything you need to know. 18XX games are rules heavy and take quite a long time to play. That said, they often aren't very complicated to learn. They are however, quite the ordeal to master, so strap in tight!

The game is divided into two primary types of rounds: *Stock Rounds* and *Operating Rounds*

Stock Rounds In Stock Rounds, players use their *own money* to buy companies and buy shares in companies.

Operating Rounds In Operating Rounds, players use *company money* to buy trains and lay track. This is also when trains are run and dividends are paid out.

1.5 For Experienced 18XX'ers

Denmark 1847 is a game that borrows elements from *Shikoku 1889*, *1830: Railways & Robber Barons*, *18Norway*, and *Railways of the Lost Atlas*. It features ships, nationalisation, incremental capitalisation, and changing landscapes.

- 2D stock market.

- 18Norway-style nationalisation system, where you can sell a share to the Danish national railway in order to secure government funding and upgrade your company from a Minor company to a Major company.

- There are no Private companies. Instead, every Minor company will be bought through an auction at the start of every Stock Round.

- Minor companies float as soon as they are bought and they own all their own stocks (buying IPO stocks goes to the Minor not to the Bank).

- Mid-way through the game, in Phase 4, the war breaks out and everything south of the new border becomes more expensive, so keep that in mind when building your railways.

1.6   Notes About the Game

The game uses a number of abbreviations that are common across 18XX titles.

OR   Short for Operating Round. These are usually numbered like OR1, OR2, and OR3. Regardless of the number, they are all Operating Rounds.

SR   Short for Stock Round.

NR   Short for Nationalisation Round.

2T-10T   short for 2-Train up to 10-Train

2F-6F   short for 2-Ferry up to 10-Ferry

Trading

There's no trading between players.

Agreements

Agreements can be made, but are not binding.

All Information is Public

How many shares you have, how much money you have, how many trains your company has. All of it is public and may not be withheld for any reason.

1.7   Components

- 1 Map

- 1 Stock Market Track

- 1 Revenue Track

- N Track Tiles (count later)

- 48 Company Shares (8 per company)

- 6 Company Charters

- 30 Company Tokens (5 per company)

- 36 Train Cards

    - 12 2-Trains
    - 6 3-Trains
    - 3 4-Trains and 1 4*-Train
    - 3 5-Trains
    - 2 6-Trains
    - 9 D-Trains

1.7.1   Not Included

- Money tokens. Poker chips are preferred but paper money can be used in a pinch. You need 8000 worth.

- Calculators, if you need them

Chapter 2

Setting Up the Game

1. Lay the map flat on the table within reach of all the players and place the tiles and tokens somewhere within reach.

2. Shuffle the 4-Trains and the 5-Trains separately, then stack all of the train cards from low to high with the lowest on top.

3. Similarly set all the ferries up in the same order. Nothing here needs to be shuffled however.

4. Turn all the company charters to their non-nationalised sides and lay their shares nearby.

5. Take the six *President's Certificate* shares, shuffle them up, and lay them in two columns of three companies, overlapping them slightly so the bottom-most ones are *over top* of the ones behind. This forms the *Auction Matrix*.

6. Set aside 8000 Rigsdaler[1] (rd.) worth of money for the bank.

7. From the bank, give each player money according to Table 2.1.

8. Give someone the Priority Marker. This player acts first in the Operating Round.

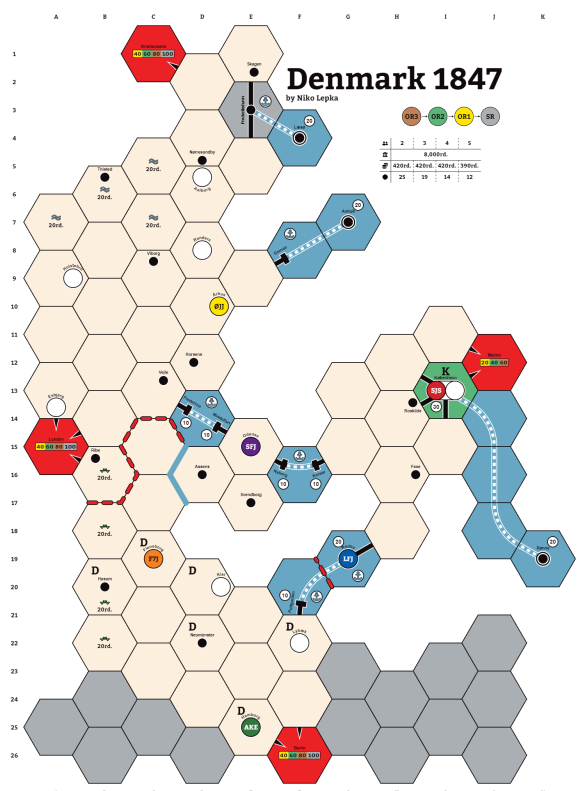| Players	2	3	4	5
Bank	8000rd.			
Money	420rd.	420rd.	420rd.	390rd.
Cert. Limit	25	19	14	12

Table 2.1: Starting Capital

Figure 2.1: The Map

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[1]Fun etymological fact: The word "daler" has the same root as "dollar", both coming from the German word "Taler". Thus, "rigsdaler" literally means "realm dollar".

Chapter 3

Playing the Game

Phase	Rust	Tiles	ORs
2	-	Yellow	1
3	-	Green	2
4	2T & 3F	Green	2
5	-	Brown	3
6	3T & 4F	Brown	3
10	4T	Grey	3

Table 3.1: Game Phases

3.1 Overview

The game is divided up into several phases. Phases are determined by the colour of the last train sold. The game starts in Phase 2 with yellow 2-Trains available for purchase. The colour of the train also indicates which tracks are available. At the start of the game it is yellow, but starting in Phase 3, green tiles become available.

Within each phase, you will play a single *Stock Round* (SR), and one or more *Operating Rounds* (OR). The number of OR is determined by the phase.

3.2 Stock Round

In the Stock Rounds, you will be buying and selling company stock. Additionally.

Starting with the player who has the priority marker, each player will do one of the following things in turn order:

- Start a Minor Company auction.

- Sell one or more shares.

- Buy one share.

- Pass.

The Stock Round continues around the table until everyone has passed in succession. Give the priority marker to the player who first passed.

3.2.1 Minor Company Auction

1. Choose one of the two topmost companies in the Auction Matrix.

2. The starting bid is 130rd. and goes up in increments of 5rd..

    - If a player passes, that player is out of the auction.

3. When the auction winner launches a Minor Company, they

    (a) Collect the President's Certificate and other shares, company charter, and company tokens.

    (b) Place the President's Certificate in front of themselves.

    (c) Place the company charter in front of themselves and place all the other shares along with the winning bid on top of the charter.

    (d) Place a company token on the Stock Market on one of the grey squares valued half the winning bid rounded down to the nearest available space. (Ex: If the winning bid was 145, place the token on 70)

    (e) Place a company token on the company's starting city (if any).

3.2.2 Buying Shares

You can only buy shares from a company that has been auctioned (one that is operational).

Shares are bought directly from a company's treasury or the bank at the current stock value.

If bought from the treasury, the money goes to the company. If bought from the bank, the money goes to the bank.

Presidential Change

If at any point a player owns more shares than the current sitting president, the role of president at the company changes hands (this can also happen when selling).

When this happens, do the following things:

1. Exchange two of your own regular shares with the president's share

2. Collect the company charter and all things owned by the company (money, trains, etc.) and put them in front of yourself

3. You now operate the company during the Operating Rounds instead of the previous president.

3.2.3 Selling Shares

A player may sell any amount of stock at the current share value to the bank in order to gain that money for themselves. After selling shares, the company's stock market marker moves down one space for each of its shares that were sold.

This comes with a few restrictions:

- You may not sell a share that would leave the company without a president.

- You may not sell shares of a company that has not yet operated.

- The bank *cannot* hold more than 50% of a company's share.

3.2.4 Passing

Once a player passes, play simply passes to the next player in turn order. Passing does not kick you out of the Stock Round.

3.2.5 End of Stock Round

If everyone passes in succession, the Stock Round ends and play moves to the Operating Round.

Reassign Priority

Give the Priority marker to the player who would act next in turn order. This player takes the first turn in the next Stock Round.

Adjust for Sold Out

Move every company who has 100% of its shares held by players up one space on the stock track.

Move on to Operating Round

After this, there is nothing left to do but to move to the Operating Round.

3.3 Operating Round

In the Operating Rounds it is not you, the player, who operates, but instead the companies. The companies operate in order of stock price, from most to least expensive.

On a company's turn, its president will lay track, run trains, and buy new trains. The following things happen in sequence:

1. Issue or Redeem one Share (optional)

2. Lay or Upgrade Track (optional)

3. Place Station Marker (optional)

4. Run Trains (mandatory)

5. Pay or Withhold Earnings (mandatory)

6. Nationalise Company (optional)

7. Buy Trains (mandatory if no trains)

3.3.1 Issue or Redeem Share

A company may issue (sell) or redeem (buy) one of its own shares. This may help the company if it's in a tight spot financially.

Issuing

To issue a share,

1. take one share from the company's treasury and put it into the bank, then

2. take the money equal to the current share price and add it to the treasury, finally

3. adjust the share price down one space in the stock market.

Redeeming

To redeem a share,

1. take one of the company's own shares from the bank and put it in the treasury, then

2. pay money equal to the current share price to the bank.

Do **NOT** adjust the share price after redeeming.

3.3.2 Laying or Upgrading Track

During this step, the company's president may either lay one new Yellow track, or upgrade an existing track to its next available tier.

Keep in mind that the track tiles are limited, and once you're out of a given tile, then that's it.

Laying Track

Lay one new Yellow track directly connected to one of the company's stations following these rules:

- A track is *connected* if you can run uninterrupted from A to B. A track is considered interrupted if

    - Track is physically disconnected,
    - The track goes through a blocked city, or
    - You need to backtrack and reuse track to make it to your desired destination.

- You **cannot** lay track with a city or town if one didn't already exist on the board.

- If a hex has a capital letter printed on it (D or K), only tiles matching that letter can be used on that hex.

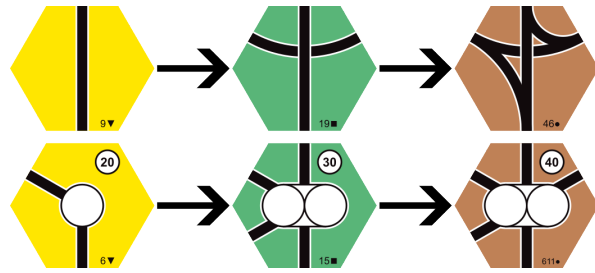- You cannot lay track into a grey (off-board) or blue (sea) hex.

Figure 3.1: Upgrade Examples

Upgrading Track

Upgrading track must first and foremost *preserve existing track features*. That is to say, if upgrading a straight track, the next tile must still contain a straight portion (see Figure 3.1).

Yellow → Green → Brown

Note The highest available colour matches the colour of the current phase.

Note København (Copenhagen) (on hex I13) is already Green . Treat this as a Green tile with respects to upgrading. The next available one in the upgrade sequence is Brown .

3.3.3 Running Trains

The company's president can run as many trains as the company has available in its treasury.

Running a train is simple: Trace an uninterrupted path from one of the company's stations through cities and towns **without reusing any track**. Track is reused if, for example you want to back-trace to go over a curve.

All trains specify the distance which they can travel. 2-Trains can run two towns/cities. 3-Trains can run up to three towns/cities, etc.

In order to cross the blue striped sections of track, you need a ferry. The train then rides the ferry to its destination and continues its trek on the other side. Both stations on the ferry route must be reachable by the train.

Note A train cannot revisit a city or town on its route.

Note 2-Trains can't take ferries because doing so would count 3 stations (home station, ferry origin, ferry destination).

Ferries

Ferries (Labelled 2F–5F) are special and act different from trains. The number on the ferry only relates to when it *rusts* (see Section 3.3.6). Instead, you need to own one ferry *for each* sea-route you wish to cross.

For example, if you want to go from Vejle to Roskilde, you'd need to cross two waterways, thus requiring two ferries.

Gaining Revenue

A train's revenue is equal to the sum of each station's revenue which it goes through (including the starting station).

A station's revenue is indicated by the little white circle on the hex. Towns are usually worth 10–20rd., while cities are worth 20–60rd.. There are also special red hexes on the board, these are called *off-board stations* and are worth a different amount of money depending on the current colour train (Yellow , Green , Brown , or Grey)

3.3.4   Paying or Withholding Earnings

After a company has collected the money for its trains, it is time for the president to decide what to do with the money. The president has two choices, they can either *pay out* the earnings, or *withhold* them.

Paying Out Earnings

When paying out the earnings of a company, you pay them out according to each shareholder's percentages. Every 10% of the stock pays out 1/10 of the earnings. The shares in the company's treasury pay to the company itself. All earnings on the tiles are listed in multiples of 10 to make the maths easy for you.

Paying out also raises the stock price for the company, moving it one space to the right on the stock track. If the stock is already on the rightmost space in its row, move it up one space instead.

Example Suppose your company earned 250rd. You have 40% of the share, Billy has 20% of the share, and the company holds the rest, then you earn 100rd., Billy earns 50rd., and the company earns the remaining 100rd.

Withholding Earnings

If the president decides instead to withhold the earnings, 100% of the revenue instead goes into the company's treasury.

Unfortunately, this displeases the investors, so the stock token moves one space to the left on the stock track.

3.3.5   Nationalisation

Starting in Phase 5, when the special 5T*-Train has been purchased, players can *nationalise* their companies. Nationalisation happens in the following steps:

1. Flip over the company charter to its other side.

2. Flip over all the shares so the icon on the shares match the icon on the charter (note that the value of each share is halved).

3. Bring in the four remaining 10% shares from the game box and put them into the company's treasury

4. Replace all the station tokens of the company with the matching ones shown on the company charter.

5. Sell one share at share value and add that money to the company's treasury.

3.3.6   Buying Trains & Ferries

In order for a company to run and generate profit, it must own trains. It is *not* a requirement that companies own any ferries.

Forced Train Purchase

If a company doesn't have any trains, it is *forced* to buy at least one, either from another company (president chooses the price, at least 1rd.), or from the bank at the listed price.

If a company cannot afford to buy a train, the president *must* use their personal money to make up the difference. If the president is unable to afford the train, they must sell shares until they can. If even after selling all their shares, the president is *still* unable to afford to buy a train, the president declares bankruptcy and the game ends.

Event: 2nd Schleswig War

When the special 4T*-Train is bought the Second Schleswig War breaks out and the bottom half of Jutland becomes more expensive to operate in for Danish companies.

- The two German companies (AKE and F7J) immediately nationalise (see Section 3.3.5 for details).

- The track tiles labelled "D" get swapped out with their red-striped counterparts.

- Crossing the dashed border incurs a tax equal to ten times the train's level. (3-Trains pay 30, 4-Trains pay 40, etc up to 10-Trains paying 100).

Event: Nationalisation

When the special 5T*-Train is bought, the Danish government decides it's time to nationalise.

From this point onward it becomes possible for Danish railway companies to nationalise.

Rusting

Rusting is a mechanism that forces players to invest in new trains and ferries.

When trains and ferries rust, all of the trains and ferries of the given rank (2, 3, 4, ..., 10) are immediately removed from play. Rustin happens in phases 4, 6, and 10 as seen on Table 3.1 on Page 9.

Appendix A

Historical Notes

A.1 The First "Danish" Railway

Although the first railway within the greater Danish Realm was the *Altona-Kiel Eisenbahn-Gesellschaft* in the dutchy of Holstein in 1844, the first railway on Danish territory was *Det Sjællandske Jernbaneselskab* which opened in 1847 with its *København-Roskilde Jernbane*. For this reason, and this reason alone, the game bears the year 1847, rather than 1844.

A.2 Use of Railways

I tried my best to only use railways from the earliest parts of the Danish railway history. Unfortunately "interesting map layout" and "total historical accuracy" don't always go hand in hand, so a few concessions had to be made, and so a few of the railways chosen came rather late in the country's history.

Lolland-Falsterske Jernbane, as an example, never opened historically. Its headquarters also weren't in Rødby. That said, it was planned to connect Rødby to Copenhagen in order to capitalise on the sea route to Germany. Hence, it makes for a more interesting company than a completely historically accurate one.

A.3 Currency

Denmark switched from *Rigsdaler* to *Kroner* in 1875. To keep things simpler, the game will not bother with the currency change and instead keep the currency as Rigsdaler throughout the entire game.

A.4 Use of Ferries

Due to Denmark's unique geography as a nation surrounded by sea on all sides, a lot of its history has revolved around boats.

In fact, the three major bridges connecting the country to the mainland—*Lillebæltsbroen*, *Storebæltsbroen*, and *Øresundsbron*—didn't open until 1935, 1998, and 1999 respectively, and thus are all unavailable during the setting of the game.

There was however at least one train ferry in operation at the time, though they likely didn't operate to the extent shown in the game. Again, interesting gameplay trumping historical accuracy.

A.5 Danish Names

I've tried to use era appropriate names wherever possible, this includes older spellings of Danish place names as well as Danish place names in Schleswig-Holstein. Lübeck is Lybæk, Hamburg is Hamborg. The ones I couldn't find translations for remained in their original German.

A.6 Tolls

After the war, Prussia imposed tolls on the border (insert source). This is the basis of doing the very same thing here. The price increasing with the size of the train is to reflect that bigger trains hauling more goods get taxed harder.