Norwegian Train Set

for

Transport Tycoon Deluxe

and

The Patch

User Guide

v0.4

January 2006

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Introduction

This is the second release of the Norwegian Train Set. It is still a 'Taster'. It has been re-coded completely, but only for the 'Patch'. There is no new version, which is compatible with OpenTTD.

The Taster-set contains 28 vehicles (5 new ones), including steam, diesel and electric engines, multiple unit passenger trains and passenger/mail wagons spread nicely across all usage classes and years from 1920 to 2005 and beyond. It is intended for the Temperate and Arctic climates of 'Transport Tycoon Deluxe' and the 'Patch'. Together with the Transport Tycoon Deluxe (Original) freight wagons it will be playable stand alone with TTDPatch alpha 57+.

It has been developed and tested under TTDPatch alpha 67.

The following versions are included in the package (.zip file) :

- NSBsetw – v0.4a for TTDPatch alpha 57+ for Windows
- NSBsetd – NSBsetw converted for TTDPatch alpha 57+ for DOS

While playing a game with this (Mini) Norwegian Train Set (NSB) there will not be any 'Original' TT vehicles, except freight wagons, available. However, the 'MagLev' Rail System is unaffected and will become available later in a game. Further to have all vehicles of the NSB set available you should not have any other train sets activated. If you have you may miss out on NSB locomotives, trains and passenger wagons.

For the time being and because the NSB set does not yet contain any freight wagons the Transport Tycoon Deluxe (Original) freight wagons have actually been included in the 'Taster' set. This was necessary to have these wagons properly aligned horizontally in purchase, depot and train list windows. If you do wish to use a .grf file with freight wagons other than Transport Tycoon Deluxe (Original), ask for advise.

In this release, you will also find built in Snowline and New Cargo/Industries features, as well as AI management and locomotive upgrade plans.

Further, the Norwegian Train Set has been translated into Norwegian.

Requirements and How to Use

TTDPatch

Patch version :

- alpha 57+ for Windows or DOS – required
- alpha 64+ recommended (for automatic vehicle upgrade feature)
- alpha 67+ recommended (for extra 2 lines of vehicle detail information, with earlier versions some information may not be shown in full)
- alpha 69+ recommended (for enabling local settings)

Patch Flags in ttdpatch.cfg :

The following patch flags are mandatory and must be set as follows :

- **newtrains on**
- **electrifiedrailway on**
- **unifiedmaglev 1**
- **multihead 0**
- **trainrefit on**

The following patch flags are highly recommended and should be set as follows :

- **wagonspeedlimits on**, to operate trains with more appropriate speeds.
- **tracktypecostdiff on**, to have a distinct cost structure for normal, electrified and maglev track systems.
- **newcargos on**, to have additional built in cargos available.
- **newindustries on**, to have additional built in industries available.
- **tempsnowline on**, to have built in snow line height feature available.
- **startyear 1921**, recommended to use early model rolling stock.
- **morecurrencies on**, required to enable Norwegian currency (NOK)

The following patch flags are required or recommended, in order to have automatic renewal/replacement of locomotives (for a more detailed description, see later in this guide) :

- **autorenew [-mm]**, mm=number of months before end of locomotive life
- **autoreplace on**
- **enginespersist off**
- **forceautorenew off**
- **gotodepot on**
- **servint [ddd]**, ddd=number of days between servicing

Graphics File (.grf) :

- **NSBsetw.grf** (for Windows)
- **NSBsetd.grf** (for DOS)

Place graphics file (NSBsetw or NSBsetd) into ...\NEWGRF directory (sub directory of game) and add the following line at the **end** of the graphics configuration file (newgrf. cfg) found in the game directory :
...
newgrf/NSBset[**x**].grf [**n**] [**n**] [**n**]
...

Note: replace '**x**' with '**w**' for Windows version, or '**d**' for DOS version. '**n**' are optional parameters to set / change snowline in temperate and arctic climate, to have internal new cargo/industries feature activated, as well as local settings. For details see further on.

The Norwegian Train Set vs Other Sets

The Norwegian Train Set (NSBset) is not compatible with any other train set, except sets that run on the third rail system (maglev). You should place the NSBset with the highest priority (at the bottom) in the newgrf.cfg file and not have any other train sets, that run on the 1st and/or 2nd rail system, activated while using this set. You will not have any vehicles from other sets available anyway, but they could potentially interfere with the proper functioning of the NSBset.

The Norwegian Train Set and the AI

As we all know, the AI is rather stupid when it comes to building rail networks. But to help things along a bit, there is a small recipe book for the AI included in the Norwegian Train Set. It gives the AI a fair chance to build reasonable rail services.

If you have 'AutoReplace' enabled, the AI will upgrade its fleet of locomotives to more powerful and faster ones when they become available.

If you observe some rather stupid choices of rolling stock, report it and maybe better choices can then be suggested; after all the AI is a fast learner, but it needs to be told.

Liveries

There are some engines and trains, that have multiple liveries. This may be different liveries for passenger trains and freight trains (e.g. El.14, El.16); these liveries are chosen automatically and depend on the wagons attached. Some multiple unit trains do come in different liveries (e.g. BM69, BM70, BM73); these liveries are refittable. The livery options are indicated in the **Vehicle Purchase Detail Window**; e.g. :

'Livery (by cargo): passenger trains (red) or freight trains (grey)'
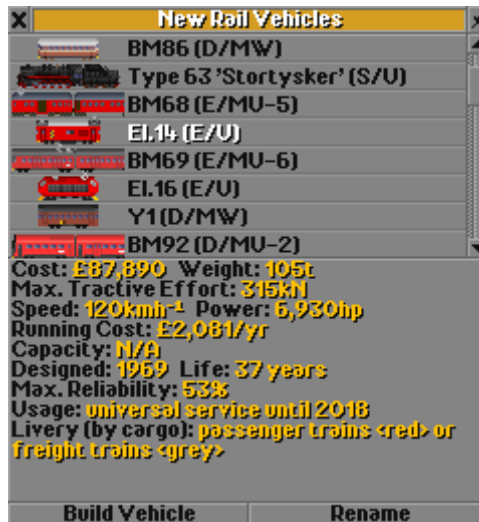
'Livery (refit to): 'Lokal' (red) or 'Melkesjokolade' (yellow)'

Vehicle Purchase List Window

The following describes the various ways vehicles are shown in the Vehicle Purchase Window:

New Rail Vehicles
Type 30a (S/U)
Type 26c (S/U)
Type 49 'Dovregubben' (S/U)
BM86 (D/MW)
Type 63 'Stortysker' (S/U)
BM68 (E/MU-5)
El.14 (E/U)
BM69 (E/MU-6)
El.16 (E/U)
Y1 (D/MW)
BM92 (D/MU-2)
El.17 'Flåmsbana' (E/P)
Rc6 (E/U)
X2000 (E/MU-[5],6,8,10)
BM70 (E/MU-6)
El.18 (E/U)
Di.8 (D/F)
BM71 (E/MU-3)
BM73 (E/MU-4)
BM72 (E/MU-4)
BM93 'Talent' (D/MU-2,3,4)
Littera: IORE (E/HF)
CD66 (D/F)
T1000 (E/MU-4)
MU-Wagon
B3 Passenger Wagon (W/P)
B5 Passenger Wagon (W/P)
B7 Passenger Wagon (W/P)
Mail Van (W/P)

Description: it consists of vehicle code (e.g. BM93), name (e.g. 'Talent'), traction type (S=steam, D=diesel, E=electric) and usage class (U=universal, P=passenger, F=freight, HF=heavy freight, MW=motorised wagon, MU=multiple unit). The number at the end of a Multiple Unit (MU-n) description indicates how many vehicles including engine(s) should or could make up a train.

Steam Engines: are purchased as a whole; i.e. engine and tender together .

Dual Headed Locomotives: these are articulated locomotives (e.g. Littera: IORE) that cannot be separated.

Motorised Wagon: these are motorised passenger carrying wagons (e.g. Y1 and BM86). Attach passenger /mail wagons or couple several motorised wagons together. Additional trains are purchased using the ctrl-key.

Multiple Unit (MU) Trains: are shown with the engine and half a wagon attached (e.g. BM69, BM70, ...), these are described on the next page.

Multiple Unit (MU) Wagon: there is only one such wagon, its purpose is to construct multiple unit trains, as described on the next page.

How to Purchase/Construct MU (Multiple Unit) Trains

The following describes how MU-Trains (Multiple Unit Trains) are purchased or constructed. The purchase of MU-Trains is much simpler now. During construction you will come across the following symbols in the Vehicle Purchase and/or Train Vehicle List Windows:

MU-Train (locomotive) – as shown in the Vehicle Purchase Window; it consists of the engine and half a wagon, both in their proper livery. All such trains (locomotives) are part of a MU-Train and require some special consideration during purchase/construction.

MU-Wagon – as shown in the Vehicle Purchase Window; its only purpose is to construct MU-Trains and it should not be attached to other (normal) trains. If you try, you will get the message: "MU-Wagon cannot be attached."

MU-Wagon – as shown in the **Train List (Depot)** window, if it is not attached to a MU-Train; such a wagon should only be attached to MU-Trains. You will get the message: "MU-Wagon cannot be attached.", if you try to attach it to other (normal) trains.

Further the Vehicle Detail Information indicate the composition of multiple unit trains; i.e. How many carriages (including the leading head) each train can/should have and how many trains can make up a consist.

### 'Consist: up to 3 trains (4 carriages each)'

To construct a multiple unit train do the following :

• purchase the leading head ('game' engine'). Additional leading heads (engines) are attached using the ctrl-key.

• attach MU-Wagons; once a train is at maximum length, as indicated in the vehicle details, you will not be able to attach any more wagons, unless you attach another leading head first and then followed by more wagons.

• Refit the consist to correct passenger capacities and livery (if applicable); if not refitted the passenger capacity for each wagon defaults to 50. Leading heads will already have the correct capacity.

Note : Other than the game engine; engine-only vehicles will have a cargo capacity of one (1) due to a game (Patch) limitation.
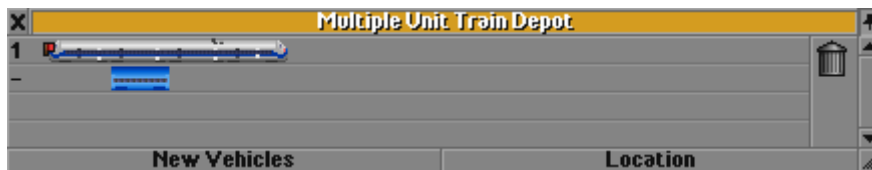
When buying a MU-Wagon, the wagon does not attach automatically : the train is already at its maximum length; attach another leading head first before attaching any more MU-Wagons.


When buying another leading head, the engine does not attach automatically : the consist is already at its maximum length; you cannot attach any more engines or wagons.
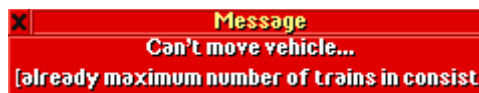

You have tried to attach a vehicle other than a MU-Wagon; you need to attach MU-Wagons to construct multiple unit trains.
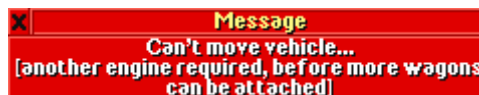
You have tried to attach a MU-wagon, but the train is already at its maximum length; in order to construct a longer train you need to attach another 'game' engine (leading head) first, thus building a consist made up of multiple trains. Following another leading head attach more MU-Wagons.
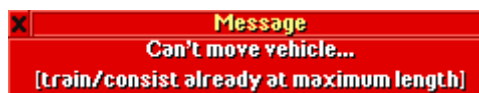
You have tried to attach a MU-Wagon to a train that is already at its maximum length and the consist already contains the maximum number of trains. You cannot make the train/consist any longer.

You have tried to attach another leading head, but the consist is already at its maximum length. You cannot make the consist any longer.

Snowline

The Norwegian Train Set has built in the ability to change the snowline in either the arctic or temperate climates to what ever level desired. No other .grf-file is required. The 'snowline' feature is deactivated by default, to activate this feature you need to do the following :

Set Patch Switch ...

in the Patch Configuration File (ttdpatch.cfg) you need to turn on the 'tempsnowline' switch :

tempsnowline on

Note : if not set to 'on' the following 'snowline' parameter will have no effect.

Set NSBset parameter [snowline] ...

in the New Graphics Configuration File (newgrf[w].cfg) you need to specify the first parameter of the NSBset[w].grf file

.   newgrf/NSBsetw.grf [**snowline**] [new cargo/industry] [local settings]

the parameter takes the following values :

   0 – no snow
   •   in temperate, there will be no snow (same as the default)
   •   in arctic, same as level 16, you will get a dusting of snow on mountain tops (you cannot really turn off snow in arctic)

   1 .. 16 – snow line, works both in temperate and arctic climates
   •   1 = snow down to sea level
   •   16 = just a dusting of snow on mountain tops
   •   other values (2 .. 15), anything in between

   255 – use the default
   •   in temperate, there will be no snow
   •   in arctic, the default snow level of 7

Note: if you wish to use other parameters (described elsewhere), you will need to either specify this parameter as desired or use '255' the default as place holder.

New Cargos/Industries

The Norwegian Train Set (NSBset) has built in the ability to have the arctic cargos of **paper** and **food** as well as the arctic industries of **paper mill**, **printing works** and **food processing plant** available in the temperate climate too. Food is accepted by the following town buildings : hotel, stadiums, shopping centre and some shops. On the other hand, the temperate cargos of **iron ore** and **steel** as well as the temperate industries of **iron ore mine**, **steel mill** and **factory** are available in the arctic climate. No other .grf-file is required. The 'new cargo/industry' feature is deactivated by default, to activate it you need to do the following :

Set Patch Switch ...

in the Patch Configuration File (ttdpatch.cfg) you need to turn on the 'newcargos' and 'newindustries' switches :

newcargos on
newindustries on

Note : if not set to 'on' the following 'newcargo/industry' parameter will have no effect.

Set NSBset parameter [new cargo/industry] ...

in the New Graphics Configuration File (newgrf[w].cfg) you need to specify the second parameter of the NSBset[w].grf file

. newgrf/NSBsetw.grf [snowline] [**new cargo/industry**] [local settings]

the parameter takes the following values :

  0 – feature deactivated (default).
      (will not interfere with other new cargos/industries defined elsewhere in other .grf's)

  1 – adds paper industry (paper, paper mill and printing works) in temperate climate.

  2 – adds food industry (food, food processing plant and town buildings accepting food) in temperate climate.

  4 – adds iron ore/steel industries (iron ore, steel, iron ore mine, steel works and factory accepting steel) in arctic climate; at the same time the factory also accepts livestock and wheat.

  8 – (adds future industry 1)

  16 – (adds future industry 2)

  If you would like to have more than one industry you need to add the parameter values together; e.g. to have paper and food, specify '3', for all industries, specify '255'.

Note: This feature is still under development and will be enhanced further. If you wish to use other parameters (described elsewhere, but not yet defined/implemented), you will need to specify this parameter as desired, use '0' the default as place holder.

Warning : You should not have any other graphics files that add/modify cargos/industries activated as they will interfere with the proper functioning of this feature. Further, if you do use other .grf's with new cargos and industries, the NSBset may not cater for those cargos and you may not be able to transport them.

Local Settings

The Norwegian Train Set has built in the ability to set some local settings, like Norwegian currency and language as well as measurement system (imperial or metric). To enable or set these local settings, you need to use TTDPatch alpha 69+ and do the following :

Set Patch Switch ...

in the Patch Configuration File (ttdpatch.cfg) you need to turn on the 'morecurrencies' switch :

morecurrencies on, to enable Norwegian currency

Note : if not set to 'on' the Norwegian currency will not be available.

Set NSBset parameter [local settings] ...

in the New Graphics Configuration File (newgrf[w].cfg) you need to specify the third parameter of the NSBset[w].grf file

. newgrf/NSBsetw.grf [snowline] [new cargo/industry] [**local settings**]

the parameter takes the following values , for multiple settings add all applicable values together :

128 - enable Norwegian language; if not specified the default language will apply. This value only enables the Norwegian language texts for the Norwegian Train Set.*****

64 – start game in metric (km) measurement system; if not specified the game starts with the imperial (miles) measurement system.

32 – enable Norwegian currency, Norwegian Krone (NOK). It replaces the Hungarian currency.

0 .. 17 - start game in any of the 18 currencies. To start the game in Norwegian currency use 6 (requires that the Norwegian currency is enabled, otherwise game starts in Hungarian currency).

Example :

If you wish to enable Norwegian language texts (128), start the game with the metric measurement system (64), use and start the game in the Norwegian currency (32 + 6) specify this parameter with a value of 230.

Note: if you wish to use other parameters (described elsewhere), you will need to either specify this parameter as desired or use '0' the default as place holder. Also, this parameter is ignored and has no effect with TTDPatch versions earlier than alpha 69.

Automatic Upgrading of Locomotives

Automatic renewal and/or upgrading of locomotives in time can be enabled. There are many ways how to configure this feature and it depends on your strategies in relation to vehicle breakdown, train servicing and automatic train renewal.

Here is one way how to enable this feature. Take the following consideration into account :

- Trains need to go to a depot for servicing on a regular basis. To achieve this you can put a depot or 2 in the order list and set the service flag. These depots should be strategically placed, good places are near station exits.

To configure this feature, the following patch switches need to be set for a working solution :

- **enginespersist off**, recommended, to remove obsolete engines from the vehicle purchase list.

- **gotodepot on**, required to add depots to the order list of trains.

- **forceautorenew [off/on]**, required, set to **off**, if depots have been added to order list; or set to **on**, if trains need to be forced to visit a depot when vehicle renewing is due.

- **servint [ddd]**, required, if trains have depots in their order list with service flag set; set service interval in number of days [ddd]. The lower the service interval the more often trains visit the depot for servicing. As a guide, set it to between 1 and 3 years (360 to 1080 days) if you have vehicle breakdown set to off otherwise a much lower interval will be required.

- **autorenew [-mm]**, required, to have this feature enabled. This switch also specifies, when automatic renewal or replacing of vehicles takes place. As a guide, set it to about twice the service interval, negative in months; or calculate it as follows service interval (servint) in days divided by 13.8 rounded to the next whole number and specify it negative in order to get the vehicles renewed/replaced before they get too old.

- **autoreplace [on/reliability]**, required, to have 'AutoReplace' enabled. If all the above switches have been set, but 'AutoReplace' is not; then automatic renewing of vehicles will still take place, but only if the locomotive in question has not become obsolete; i.e. obsolete engines will only be renewed or upgraded if 'AutoReplace' is enabled. As a guide , for the NSBset, specify 75 % reliability instead of on, which defaults to 80 %.

Sample configuration :

- **enginespersist off**
- **gotodepot on**
- **forceautorenew off**
- **servint 1080**
- **autorenew -78**
- **autoreplace 75**

Contributions

The following have contributed in many ways with the development
of the Norwegian Train set

Graphics/Art

Born Acorn
DanMack
Fire87
Hovering Teacup
Kruz
OzTransLtd
Purno
Singaporekid
ThorRune

Translations
The Person

Coding

OzTransLtd
DaleStan (retired)
Lakie (retired)

Project Management

Fire87
ThorRune

... and everybody forgotten to mention

Rolling Stock

Overview of Norwegian rolling stock [yet to be completed] :

STEAM LOCOMOTIVES

Type 30a -

ELECTRIC LOCOMOTIVES

El.14 -

DIESEL LOCOMOTIVES

Y1 -

MULTIPLE UNIT TRAINS

X2000 -

Frequently Asked Questions (FAQ)

Metro/Tram – Where is the T1000 Metro/Tram ?

Due to recent developments, the T1000 has not been implemented as tram again. Trams will be implemented once the tram feature has matured.

Known Issues and Unfinished Work

AI Management – quite a reasonable solution has been implemented, although some more tweaking will be necessary.

Auto-Renewing Vehicles – Unless you use the AutoReplace feature of the patch, locomotives that have become obsolete will not be renewed.

Auto-Replace (Upgrade) Vehicles – the AutoReplace feature of the Patch contains some serious bugs; when an engine is upgraded to a later model engine, the train variables are not set correctly. This affects the livery and in some case the next upgrade. You can execute the Reset Vehicle Cheat ('Cht: ResetVehicles') every 10 years or so, thus correcting the train variables.

The following situations are currently affected :

- Passenger trains upgraded to an El.14 or El.16 engine will get freight livery (correct that with ResetVehicles cheat). [var 82 42 18 not set after upgrade]

- Long passenger trains may upgrade to a motorised wagon, which are reserved for short [3 carriages or less] trains (prevent that with regular execution of ResetVehicles cheat). [var 82 40 10 not set after upgrade]