

HP Journey Planner Documentation

# **International File Format 4.2.4**

Format for defining timetable information



## International File Format 4.2.4: Format for defining timetable information

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### Revision History

Version	Date	Remarks
4.2.4	October 2013	More types of attributes; extended documentation of special attributes.
4.2.3	February 2010	Support for stop-dependent attributes
4.2.2	October 2009	Support for STATDIST file
4.2.1	September 2007	Support for platform information in timetbls.dat
4.2	June 2007	Added TRNSPQST file and TRNSCQST file; Both CCONNECT and CONTCONN may be used
4.1	October 2004	Added several new files and functionality
4.03	July 2004	Initial new documentation format

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# 1 International File Format

The International File Format concerns the file format that operators should use when providing timetable data. This document describes the international file format.

Each delivery consists of a number of files. The file descriptions indicate which files are compulsory and which ones are optional.

All files are plain text files, according to the ISO 8859-1 (Latin 1) character list. Each file consists of a number of records, one record per line. Each line terminated by a Carriage Return (CR) and a Line Feed (LF). Each record consists of a number of fields. Fields are separated by a comma. Every record starts with a record identifier, which is not terminated by a comma.

Every file starts with an identification record. For each optional field in a record a default value is given. If the field is not relevant, this value should be used.

The order of records in a file is illustrated by Jackson Structured Design-diagrams. The markers in these diagrams can take the following forms:

- \* Denoting an iteration of zero or more.
- + Denoting an iteration of one or more.
- o Denoting an exclusive choice.

## 2 Amendment History

### 2.1 Changes from 4.2.3 to 4.2.4

Note that version 4 . 2 . 4 is an extension to version 4 . 2 . 3, so it is backward compatible: every set that complies with version 4 . 2 . 3 automatically complies with version 4 . 2 . 4.

In this version support for non-concatenation of attributes is introduced. Documentation for extra processing codes has been extended (see [TRNSATTR](#)).

### 2.2 Changes from 4.2.2 to 4.2.3

Note that version 4 . 2 . 3 is an extension to version 4 . 2 . 2, so it is backward compatible: every set that complies with version 4 . 2 . 2 automatically complies with version 4 . 2 . 3.

In this version support for dependent attributes is introduced. This means that attributes for stations can be connected to a general attribute. Extra processing codes are introduced (see [TRNSATTR](#)).

### 2.3 Changes from 4.2.1 to 4.2.2

Note that version 4 . 2 . 2 is an extension to version 4 . 2 . 1, so it is backward compatible: every set that complies with version 4 . 2 . 1 automatically complies with version 4 . 2 . 2.

In this version support for the file [STATDIST](#) has been added. In this way one can specify the distance between stops that are not related to the coordinates. One can overrule the computation using coordinates.

### 2.4 Changes from 4.2 to 4.2.1

Note that version 4 . 2 . 1 is an extension to version 4 . 2, so it is backward compatible: every set that complies with version 4 . 2 automatically complies with version 4 . 2 . 1.

In this version support for the `platform-record` has been added. In this way information about the platform on every stop can be provided.

Note that to retrieve this information (via the API's) the API-calls will change and also new servers need to be used.

### 2.5 Changes from 4.1 to 4.2

Note that version 4 . 2 is an extension to version 4 . 1, so it is backward compatible: every set that complies with version 4 . 1 automatically complies with version 4 . 2.

The following has been changed since version 4 . 1

- The [TRNSCQST](#) file groups a number of continuous connection types in one item name that can be selected directly when using the Journey Planner. The provision of this file is optional.
- The [TRNSPQST](#) file groups a number of companies in one item name that can be selected directly when using the Journey Planner. The provision of this file is optional.
- CCONNECT and CONTCNN can be used together
- The `variant` field in the `Service number record` from the file [TIMETBLS](#) has been enlarged from size 6 to size 7. The JP software recognises both the old as the new format so that backward compatibility is guaranteed.

## 2.6 Changes from 4.03 to 4.1

Note that version 4.1 is an extension to version 4.03, so it is backward compatible: every set that complies with version 4.03 automatically complies with version 4.1.

The following has been changed since version 4.03

- The introduction of the **XFOOTNOTE**, **XCHANGES** and **XCONTCONN** files.

The **XCHANGES** file makes it possible to make exceptions to the time necessary to change trains on certain stations based on the transport mode and the company that operates the services involved.

With the **XCONTCONN** file, it is possible to further specify continuous connections.

Since these files are not directly connected to a **TIMETBLS** file they use their own means to specify the validity: **XFOOTNOTE**.

- Sometimes it is possible to change from one service to another service on several stations and it makes no difference to the total journey which station you change.

It is now possible to indicate a preference in the **CHANGES** file.

- The files **STATCONN**, **STATGRPH** and **LNDCOVER** have been moved from the **IFF Supplement Graphics** to the basic set.

This supplement was used for the graphics in the **Journey-planner** software.

The file **STATCONN** can now also be used to generate passing stations. This information can then be used to implement the **forbid backtracking** functionality.

- The file **CONNECT** has been created to add the possibility to define attributes on continuous connections. Note that this file is a successor to **CONTCNN** instead of an addition. When the presence of both files is detected an error-message will be generated and the data processing will stop.

The file **CONNMODE** has been extended so that more types (32) can be defined. This meant that the **connection type** had to go from one character to two. The JP software recognises both the old as the new format so that backward compatibility is guaranteed.

- The **variant** field in the **Service number record** from the file **TIMETBLS** has been enlarged from size 5 to size 6. The JP software recognises both the old as the new format so that backward compatibility is guaranteed.

- **TRNSMODE** has been adjusted: it can now support up to 64 transport modes.

**TRNSATTR** has been adjusted: the limit to the number of attributes has been lifted.

## 3 Compulsory Files

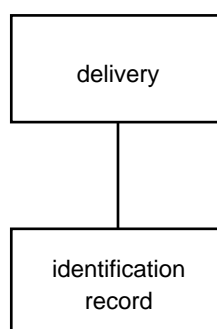
### 3.1 Delivery description : DELIVERY

The file DELIVERY identifies the data provided.

It consists of one identification record characterising the data. The provision of this file is compulsory.

The timetable may contain data of several railway companies. The identification record must contain the number of the railway company that provides the data.

A timetable can have a validity up to 800 days.



#### Identification record.

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'@'
2	4	company number	num	Company number of the company providing the data; coded as specified in chapter <a href="#">COMPANY</a>
6	13	first day	num	first day of validity of the timetable in the following format : DDMMYYYY
15	22	last day	num	last day of validity of the timetable in the following format : DDMMYYYY
24	27	version number	num	Unique identification of the version of the data
29	58	description	num	Description of the timetable

Comma's on positions 5, 14, 23, 28. Carriage return on position 59. Linefeed on position 60.

#### Example.

```
@086,28091997,23051998,0001,Vinter 97/98
```

### 3.2 Timetable data : TIMETBLS

The file TIMETBLS contains all data necessary for the description of the course of transport services. The provision of this file is compulsory.

The first record of the file is the identification record. It is followed by all timetable data, grouped per transport service. Each transport-service description consists of the sequence of one service-iden-



tification record, one or several service-number records, one or several validity records, one or more transport-mode records, optionally a number of attribute records and finally a number of stop records. The stop records are divided in:

- start record the first stop (departure) of a transport service
- continuation records the transport service departs in the same minute it arrives
- interval records the transport service has an arrival time different from the departure time at this stop
- final record the last stop (arrival) of a transport service.

The start and final records are compulsory. Any combination of continuation and interval records in between the start and final records is optional.

Transport services are uniquely identified by the service identification record. This number will be used in communication between the data supplier and EDS.

In the attribute record the fields "first stop" and "last stop" must have the same values in case of a transport attribute with processing code 5, 6 or 7 (attribute for one stop, boarding only, unboarding only). In all other cases the values of "first stop" and "last stop" are not allowed to have the same values.

"Boarding only" and "unboarding only" may also be indicated by specifying a time "9999" for arrival or departure respectively. This feature is only possible in interval-records. Only one of the values for arrival or departure may contain the value "9999" within such a record.

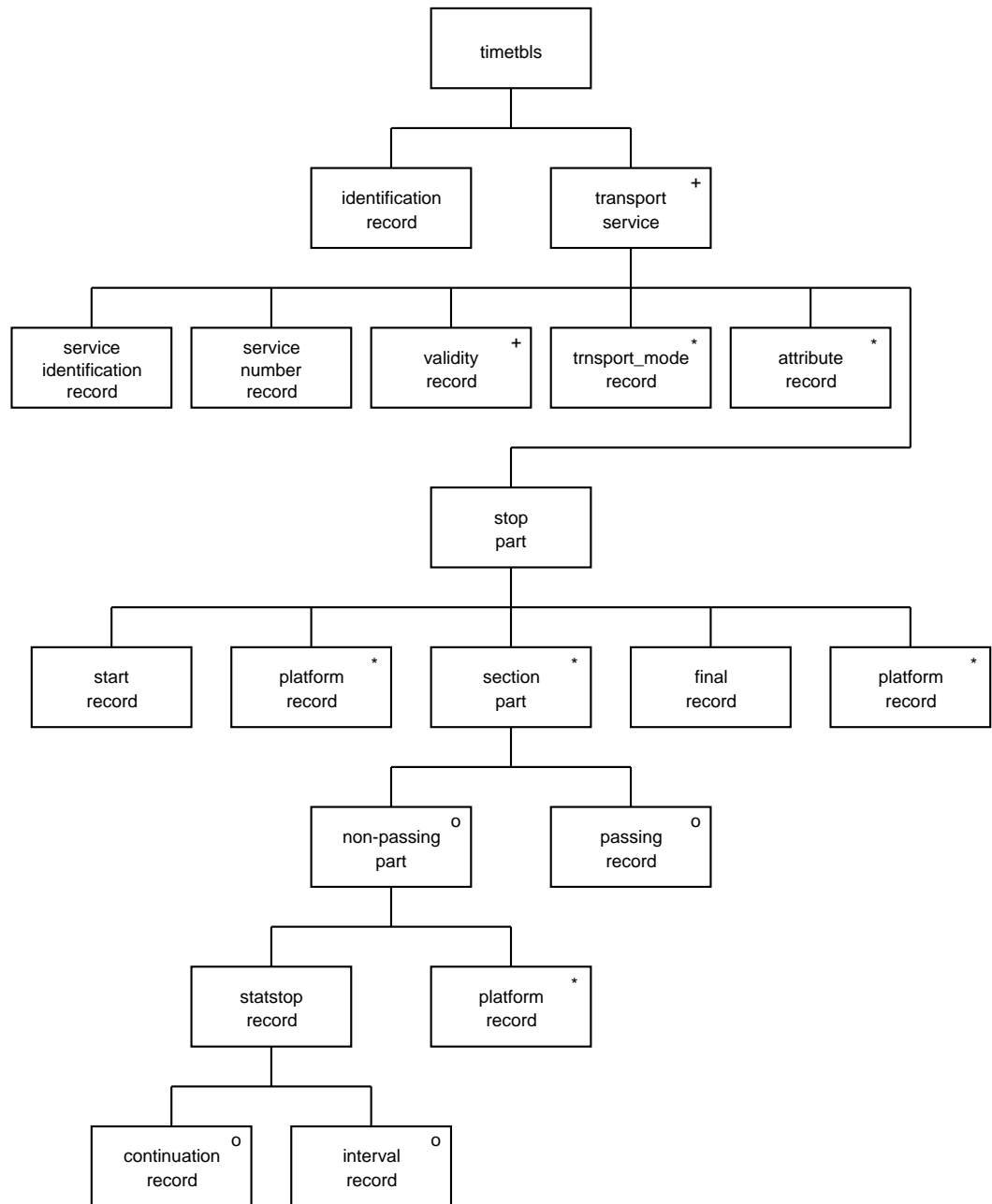
Concerning the indices of "first stop" and "last stop" the halt of the first departure gets an index of 1.

When a transport service continues past midnight, the hours after 23:59 are counted through (1:00 A.M. the next day should be written as 25:00). The day of the first departure determines the validity mentioned in the footnote.

The departure and arrival time must be recorded in local time of that station.

Service number records, validity records and transport mode records must cover the complete transport service. It is not allowed to leave gaps where one of these features is undefined or have any overlap.

Note that there is the possibility to attach a footnote to a platform-record. But the functionality has not been implemented in the JP dataprocessing. The JP dataprocessing will assume that the platform-record is always valid. It has been added to this definition to support future use.



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Service identification record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'#'
2	9	service identification	num	Unique serial number; compulsory

Carriage return on position 10. Linefeed on position 11.

**Service number record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'%'
2	4	company number	num	Number of the company responsible of the transport service; coded as specified in chapter <a href="#">COMPANY</a> .
6	10	service number	num	Identification of the service
12	18	variant	char	Variant or line code
20	22	first stop	num	Index of the first stop for which the service number is valid. Special values :  000: first stop of the service  999: last stop of the service
24	26	last stop	num	Index of the last stop for which the service number is valid. Special values :  000: first stop of the service  999: last stop of the service
28	57	service name	char	Name of the service

Comma's on positions 5, 11, 19, 23, 27. Carriage return on position 58. Linefeed on position 59.

**Validity record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'-'
2	6	footnote number	num	Footnote number; coded as specified in chapter <a href="#">FOOTNOTE</a>
8	10	first stop	num	Index of the last stop for which the service number is valid. Special values :  000: first stop of the service  999: last stop of the service
12	14	last stop	num	Index of the last stop for which the service number is valid. Special values :  000: first stop of the service  999: last stop of the service

Comma's on positions 7, 11. Carriage return on position 15. Linefeed on position 16.

**Transport mode record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'&'
2	5	Transport mode code	char	Transport mode code; coded as specified in chapter <a href="#">TRNS-MODE</a>
7	9	first stop	num	Index of the last stop for which the service number is valid. Special values :  000: first stop of the service  999: last stop of the service
11	13	last stop	num	Index of the last stop for which the service number is valid. Special values :  000: first stop of the service  999: last stop of the service

Comma's on positions 6, 10. Carriage return on position 14. Linefeed on position 15.

**Attribute record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'*'
2	5	attribute code	num	Attribute code; coded as specified in chapter <a href="#">TRNSATTR</a>
7	9	first stop	num	Index of the last stop for which the service number is valid. Special values :  000: first stop of the service  999: last stop of the service
11	13	last stop	num	Index of the last stop for which the service number is valid. Special values :  000: first stop of the service  999: last stop of the service

Comma's on positions 6, 10. Carriage return on position 14. Linefeed on position 15.

**Start record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'>'
2	8	station short name	num	Station short name; coded as specified in chapter <a href="#">STATIONS</a>
10	13	departure time	num	time of departure from this station

Comma's on positions 9. Carriage return on position 14. Linefeed on position 15.

**Continuation record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	','
2	8	station short name	num	Station short name; coded as specified in chapter <a href="#">STATIONS</a>
10	13	time	num	Arrival and departure time of the train at this station

Comma's on positions 9. Carriage return on position 14. Linefeed on position 15.

**Passing record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	','
2	8	station short name	num	Station short name; coded as specified in chapter <a href="#">STATIONS</a>

Carriage return on position 9. Linefeed on position 10.

**Interval record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'+'
2	8	station short name	num	Station short name; coded as specified in chapter <a href="#">STATIONS</a>
10	13	arrival time	num	Time of Arrival at this station
15	18	departure time	num	Time of departure from this station

Comma's on positions 9, 14. Carriage return on position 19. Linefeed on position 20.

**Platform record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'?'

first pos.	last pos.	name of field	format	description
2	6	arr platform name	char	Name of the platform on arrival of the station
8	12	dep platform time	char	Name of the platform on departure of the station
14	18	footnote number	num	Footnote number; coded as specified in chapter <a href="#">FOOTNOTE</a>

Comma on positions 7,13. Carriage return on position 19. Linefeed on position 20.

#### Final record.

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'<'
2	8	station short name	num	Station short name; coded as specified in chapter <a href="#">STATIONS</a>
10	13	arrival time	num	Time of Arrival at this station

Comma on positions 9. Carriage return on position 14. Linefeed on position 15.

#### Example.

```
@086,28091997,23051998,0001,Vinter 97/98
#00000005
%086,00006,000004,000,002,
%102,60006,600004,002,999,
-00161,000,999
&0002,000,999
*0002,001,003,00152
>8600053,0615
+8600798,0834,0835
<8600626,0848
#00000036
%010,00033,000034,000,999,
-00095,000,999
&0009,000,999
*0001,001,002,00152
*0002,001,002,00152
>1000001,1534
?2 ,2 ,00000
<2004001,2250
?3a/b ,3a/b ,00000
#00000052
%051,00042,000050,000,999,Berolina
-00055,000,999
&0015,000,999
*0001,001,004,00152
*0002,001,004,00152
>5100136,0612
+5100177,0917,0919
?14a/b,14a ,00055
+8015150,1135,1138
<8010111,1238
#00004672
%086,89411,004670,000,999,
-00125,000,999
&0014,000,999
*0002,001,007,00152
>8604824,1655
.8604825,1700
.8604821,1710
.8604813,1715
.8604815,1726
.8604826,1729
<8604816,1740
```

### 3.3 Validity description: FOOTNOTE

The file FOOTNOTE contains an entry for each footnote mentioned in the timetable and, through service. Each entry consists of a vector indicating for each day of the timetable whether the concerned transport service will take place or not. The length of the vector is specified by the first and



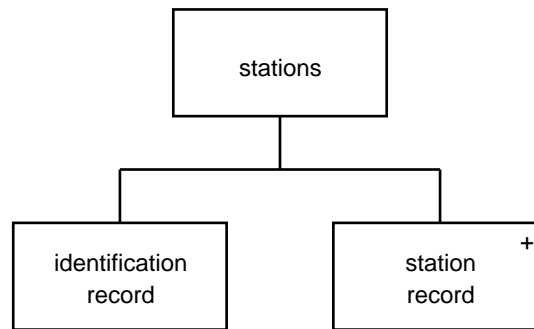
### 3.4 Station (Stop) data : STATIONS

The file STATIONS contains the data of all stations of the timetable. The provision of this file is compulsory.

The file consists of an identification record and a number of station records.

Both the "station short name" and the "station name" must be unique in the file.

The unit for the co-ordinates can be metres, decametres or hectometres.



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Station record.**

first pos.	last pos.	name of field	format	description
1	1	station of train changes	num	values: 0 = offset = no train changes 1 = junction = train changes 2 = offset = virtual station
3	9	station short name	char	station short name
11	12	time necessary to change trains	num	time specified in minutes usually necessary to change trains at this station
14	15	maximum time to change trains	num	this column is obsolete. Default value is 0
17	20	country code	num	country code; coded as specified in chapter <a href="#">COUNTRY</a>
22	25	time zone	num	time-zone number; coded as specified in chapter <a href="#">TIMEZONE</a>
27	28	attribute	num	this column is obsolete. Default value is 0
30	35	x co-ordinate	num, signed	x co-ordinate
37	42	y co-ordinate	num, signed	y co-ordinate
44	73	station name	num	complete name of the station used as the preferred name

Comma's on positions 2, 10, 13, 16, 21, 26, 29, 36, 43. Carriage return on position 74. Linefeed on position 75.

**Example.**

```

@086,28091997,23051998,0001,Vinter 97/98
1,7400001,06,02,0074,0000,00,000000,000000,Stockholm C
1,7400290,15,02,0074,0000,00,000000,000000,Helsingborg
1,7600100,06,02,0076,0000,00,000000,000000,Oslo S
1,8020400,06,02,0080,0000,00,000000,000000,Hamburg Hbf
  
```

```
1,8023721,06,02,0080,0000,00,000000,000000,Puttgarden
1,8024313,06,02,0080,0000,00,098880,343351,Flensburg
1,8500010,06,02,0085,0000,00,000000,000000,Base1 SBB
1,8600001,03,02,0086,0000,01,160670,038104,Frederikshavn
0,8600005,02,02,0086,0000,02,153240,034685,Kvissel
0,8600006,02,02,0086,0000,02,147180,033173,Tolne
0,8600007,02,02,0086,0000,02,140620,034886,Sindal
1,8600020,04,02,0086,0000,01,123180,082386,Aalborg
```

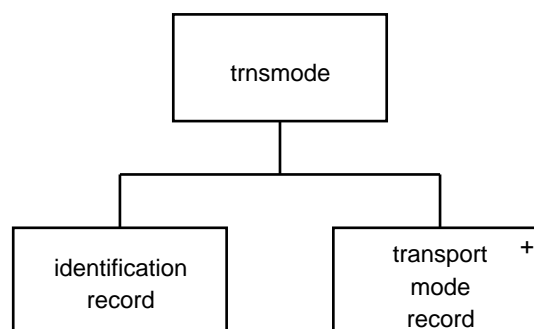
### 3.5 Transport mode data : TRNSMODE

The file TRNSMODE contains a table of all transport modes allowed.

The file consists of an identification record and a sequence of transport mode records.

Both the "transport mode code" and the "description" must be unique in the file.

It is possible to define up to 64 transport modes.



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Transport mode record.**

first pos.	last pos.	name of field	format	description
1	4	transport mode code	char	Identification code of the transport mode
6	35	description	char	Description of the transport mode

Comma on position 5. Carriage return on position 36. Linefeed on position 37.

**Example.**

```
@086,28091997,23051998,0001,vinter 97/98
0001,InterCity
0002,InterCityLyn
0004,Regionaltog
0005,Privatbane
0006,S-tog
0007,InterRegional
0008,Nattog
0009,International
0013,Bus
0014,Togbus
0015,EuroCity
0016,InterCity Express
0017,InterNord
0018,InterNord Nat
```

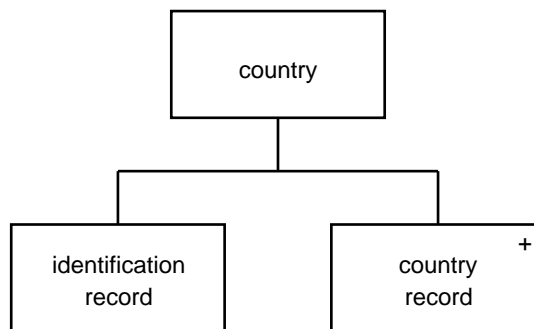
### 3.6 Country data : COUNTRY

The file COUNTRY contains a table of all countries allowed.



The file consists of an identification record and a sequence of country records.

Both the "country code" and the "country name" must be unique in the file.



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Company record.**

first pos.	last pos.	name of field	format	description
1	4	country code	char	Code of the country
6	6	inland	num	Inland indication; values: 0= foreign 1 = inland
8	37	country name	char	Complete name of the country used as the preferred name

Comma on position 5 and 7. Carriage return on position 38. Linefeed on position 39.

**Example.**

```

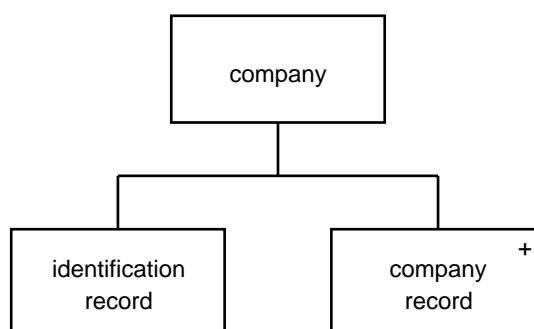
@086,28091997,23051998,0001,Vinter 97/98
0074,0,Sverige
0086,1,Danmark
  
```

### 3.7 Company data : COMPANY

The file COMPANY contains a table of all railway companies. The provision of this file is compulsory.

The file consists of an identification record and a sequence of company records.

The "company number" and the "company code" as well as the "company name" must be unique in the file.



**Identification record.** See the description of the **DELIVERY** file for this record.

**Company record.**

first pos.	last pos.	name of field	format	description
1	3	company number	num	number of the company; the number must be greater than or equal to 1.
5	14	company code	char	identification code of the company
16	45	company name	char	full name of the company
47	50	time	num	time of the turn of the day in the concerned timetable in the format HHMM (< 2400 hours)

Comma's on positions 4, 15,46. Carriage return on position 51. Linefeed on position 52.

**Example.**

```
@086,28091997,23051998,0001,Vinter 97/98
086,DSB      ,Danmark      ,0000
080,DB       ,Tyskland     ,0000
084,NS       ,Holland       ,0000
087,SNCF     ,Frankrig      ,0000
085,SBB      ,Schweiz       ,0000
083,FS       ,Italien       ,0000
055,MAV      ,Ungarn        ,0000
074,SJ       ,Sverige       ,0000
010,VR       ,Finland       ,0000
076,NSB      ,Norge         ,0000
078,BR       ,Storbritanien,0000
071,RENFE    ,Spanien       ,0000
100,Color    ,Color Line    ,0000
101,Larvik   ,Larvik Line   ,0000
102,ScandLines,ScandLines    ,0000
103,Silja    ,Silja Line    ,0000
104,Stena    ,Stena Line    ,0000
```

# 4 Refining Changes

## 4.1 Through service data : THRUSRVC

The file THRUSRVC contains the through services and the through carriages. These are the train services for which the traveller does not have to change, because the service is continued with a different train number or because the carriages are connected to another train. The provision of this file is optional.

The file consists of an identification record, alternating carriage records and corresponding validity, attribute and section records. By means of the carriage record the through service is identified. The section records describe the legs of the service. Each through service contains at least two sections.

The "carriage number" must be unique in the file.

With the "service identification" in the section record a unique transport service is referenced in the [TIMETBLS](#) file. The "footnote number" refers to a number in the [FOOTNOTE](#) file.

A through service is assumed for each two consecutive legs that run on the same day within the validity of the through service.

For example, consider a carriage that is connected to the trains A - B - C on Fridays and Saturdays, with:

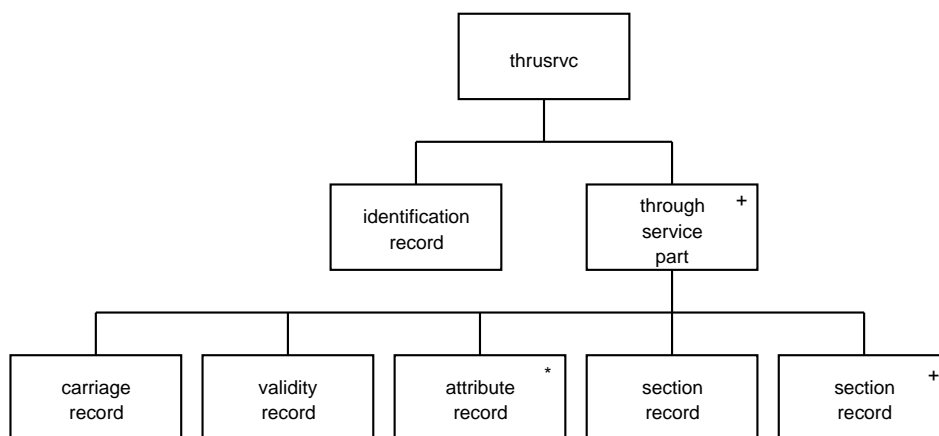
- train A running all days
- train B running all days
- train C running on weekdays

In this case the following through services are assumed:

- A through service, connected to trains A, B and C, running on Friday;
- A through service, connected to trains A and B running on Saturday;

The field "attribute inheritance" is used to manipulate the attributes of the original legs. When 'inherit' is specified, the attributes used on the original legs are copied into the through service, together with the attributes specified for the through service itself.

When 'do not inherit' is specified, only the attributes defined for the through service itself are included. The attributes defined on the original legs are not copied into the through service.



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**carriage record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'#'
2	8	carriage number	num	inheritance of the attributes of the original services. Values: 0 do not inherit 1 inherit

Comma on positions 9. Carriage return on position 11. Linefeed on position 12.

**validity record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'-'
2	6	footnote number	num	footnote number; coded as specified in chapter <a href="#">FOOTNOTE</a> .

Carriage return on position 7. Linefeed on position 8.

**Attribute record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'*'
2	5	attribute code	char	Attribute code; coded as specified in chapter <a href="#">TRNSATTR</a>
7	11	footnote number	num	footnote number; coded as specified in chapter <a href="#">FOOTNOTE</a> .

Comma's on positions 6. Carriage return on position 12. Linefeed on position 13.

**Section record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'%'
2	9	Service identification	num	Service identification of the transport service to which a carriage is connected; coded as specified in chapter <a href="#">TIMET-BLS</a> .
11	13	index 1	num	Index of the first stop of the part of the through connection assured by this train. Special value: 000: first stop of the service
15	17	last stop	num	Index of the last stop of the part of the through connection assured by this train. 999: last stop of the service

Comma's on positions 10, 14. Carriage return on position 18. Linefeed on position 19.

**Example.**

```
@086,28091997,23051998,0001,Vinter 97/98
#0000001,1
-00000
%00000467,001,005
```

```

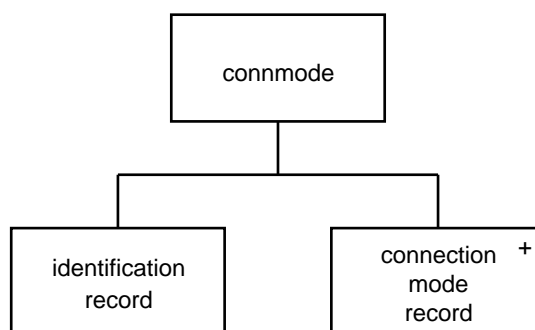
%00000002,003,005
#0000002,0
-00000
%00000556,001,006
%00000008,006,008
#0000003,0
-00000
*0021,00000
%00000230,001,002
%00000008,006,008
    
```

## 4.2 Connection mode data : CONNMODE

The file CONNMODE contains a table of all connection modes allowed.

The file consists of an identification record and a sequence of connection mode records.

The "connection mode code", the "connection type" and the "description" must be unique in the file.



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Connection mode record.**

first pos.	last pos.	name of field	format	description
1	4	connection mode code	char	connection mode code
6	7	connection type	num	connection type Value : a number between 1 and 32
9	38	description	char	Description of the connection mode

Comma's on positions 5 and 7. Carriage return on position 38. Linefeed on position 39.

**Example.**

```

@086,28091997,23051998,0001,Vinter 97/98
 1, 2,G8
0047, 1,Lokal transport Lokaltransport
    
```

## 4.3 Continuous connections : CONTCONN

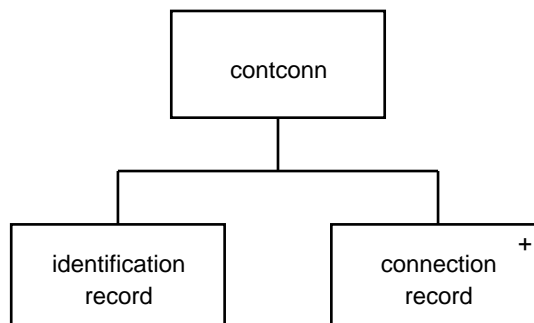
The file CONTCONN contains a table of the continuous connections. By means of a continuous connection two stations of which the timetable does not provide a direct connection, are connected to one another. This way two stations can be connected by taxi or by walk.

The file consists of an identification record and a number of connection records

The combination of "from station short name" and "to station short name" must be unique in the file.

Continuous connections are supposed to be symmetrical: if a walk from A to B takes x minutes, a walk from B to A takes x minutes too. The provision of this file is optional.

Note that it is possible to define attributes on continuous connections with the use of **CCONNECT** instead of **CONTCONN**.



**Identification record.** See the description of the **DELIVERY** file for this record.

**Connection record.**

first pos.	last pos.	name of field	format	description
1	7	from station short name	char	Station short name of the first station; coded as specified in chapter <b>STATIONS</b> .
9	15	to station short name	char	Station short name of the second station; coded as specified in chapter <b>STATIONS</b> .
17	19	connection time	num	Time (in minutes) necessary to get from the first station to the second station.
21	24	connection mode code	char	Connection mode code; coded as specified in chapter <b>CON-NMODE</b> .

Comma's on positions 8, 16, 20. Carriage return on position 25. Linefeed on position 26.

**Example.**

```

@086,28091997,23051998,0001,Vinter 97/98
8600053,8600056,030, 1
8600056,8600128,015, 1
8600056,8600129,015, 1
8600215,8600226,020, 1
8604816,8604817,015, 1
7400003,7499003,016, 1
7400001,7490001,060,0047
5100136,5100137,060,0047
8600626,8690626,006, 1
8600655,8690655,004, 1
  
```

## 4.4 Continuous Connections with attributes: **CCONNECT**

The file **CCONNECT** contains a table of the continuous connections and optional the attributes that are valid on the connection. By means of a continuous connection two stations of which the timetable does not provide a direct connection, are connected to one another. This way two stations can be connected by taxi or by walk.

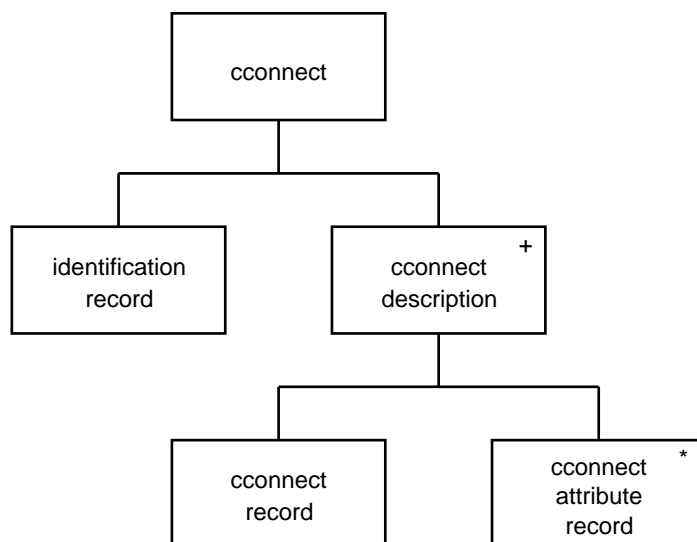
Note that this file is the successor of **CONTCONN**. With the new file more information can be defined. The JP Dataprocessing will flag an error when it encounters both files: either provide **CONTCONN** or **CCONNECT** or none but not both.

The file consists of an identification record and a number of connection records. Every connection can have a number of attributes attached to it.

The combination of "from station short name", "to station short name" and "connection mode" must be unique in the file.

Continuous connections are non-symmetrical: a connection from 'A' to 'B' does not automatically mean that also a connection exists between 'B' and 'A'. In this respect CCONNECT differs from [CONCONN](#).

The provision of this file is optional.



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Contconn record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'#'
2	8	from station short name	char	Station short name of the first station; coded as specified in chapter <a href="#">STATIONS</a> .
10	16	to station short name	char	Station short name of the second station; coded as specified in chapter <a href="#">STATIONS</a> .
18	20	connection time	num	Time (in minutes) necessary to get from the first station to the second station.
22	25	connection mode code	char	Connection mode code; coded as specified in chapter <a href="#">CON-NMODE</a> .

Comma's on positions 9, 17, 21. Carriage return on position 26. Linefeed on position 27.

**Contconn attribute record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'-'
2	5	attribute code	char	Attribute code; coded as specified in chapter <a href="#">TRNSATTR</a>

Carriage return on position 6. Linefeed on position 7.

**Example.**

```
@074,13121999,12062000,9012,ResplusGuiden-diskett
#7400001,7400622, 10,G
-walk
-44
-45
-1km2
#7400001,7400623, 12,L
-lift
-29
#7400001,7400624, 14,L
-lift
-29
#7400001,7420749, 20,G
-walk
-gang
#7400001,7401541, 16,W
-walk
-8
```

### 4.5 Exceptions concerning train changes : CHANGES

The minimum time necessary to change trains can be given for stations in the **STATIONS** file. It is also possible to specify combinations of trains on a station which are assured connections or forbidden connections. These data are assembled in the file **CHANGES**. The provision of this file is optional.

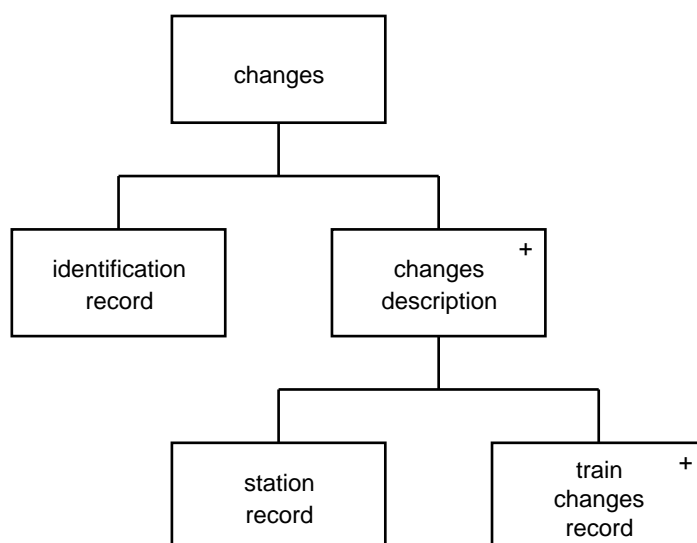
The file consists of an identification record and alternating station records and the corresponding train-changes records. The "station short name" must be unique in the file.

With the "service identification" a unique service is referenced in the **TIMETBLS** file.

The field "possibility to change trains" is used to indicate the sort of exception. Value "00" indicates that the change is not possible, value "01" indicates that a change is possible.

The value "02" indicates that when a change is possible on several stations between two services, this one has the preference. Note that the behaviour of is also dependent on the settings of the `drg1` server.

The exception is only valid on those days that both services run.



**Identification record.** See the description of the **DELIVERY** file for this record.



**Station record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'#'
2	8	station short name	num	station short name; coded as specified in chapter <a href="#">STATIONS</a>

Carriage return on position 9. Linefeed on position 10.

**Train changes record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'-'
2	9	from service identification	num	service identification of the arriving transport service; coded as specified in chapter <a href="#">TIMETBLS</a>
11	18	to service identification	num	service identification of the departing transport service; coded as specified in chapter <a href="#">TIMETBLS</a>
20	21	possibility to change trains	num	possibility to change trains. Values: 00 = impossible 01 = possible 02 = preferred change

Comma's on positions 10, 19. Carriage return on position 22. Linefeed on position 23.

**Example.**

```
@086,28091997,23051998,0001,Vinter 97/98
#8060315
-00000081,00000647,01
#8600001
-00000121,00004513,00
#8600020
-00000135,00001873,01
#8600053
-00001198,00001172,01
-00000157,00001176,01
#8600189
-00001359,00001421,01
-00001360,00001421,01
-00001817,00001407,01
-00004707,00000587,01
-00004703,00000625,01
```

**4.6 Validity description: XFOOTNOTE**

The file XFOOTNOTE contains an entry for each footnote mentioned in the [XCHANGES](#) or [XCONTCONN](#) file. Each entry consists of a vector indicating for each day of the time window whether the concerned transport change or continuous connection is valid or not. The length of the vector is specified by the first and the last day of validity; these values are given in the identification record. The provision of this file is compulsory when using [XCHANGES](#) or [XCONTCONN](#).

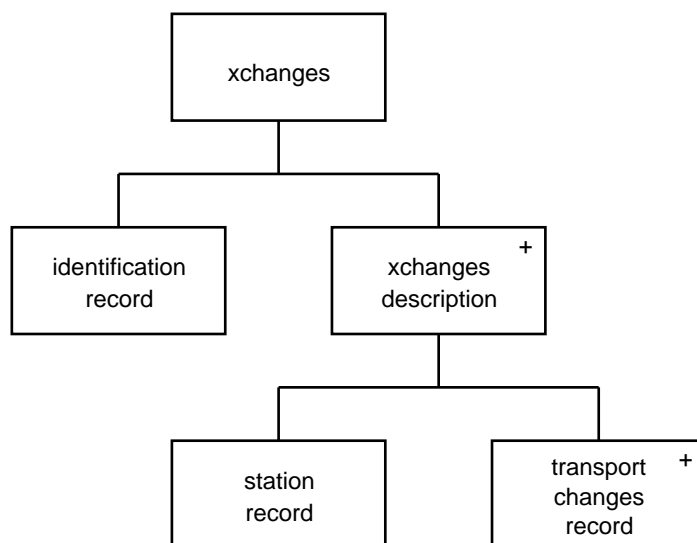
The file consists of an identification record and alternating number records and the corresponding vector records. A footnote can have a validity up to 800 days.

The field "footnote number" must be unique in this file.



The file consists of an identification record and alternating station records and the corresponding transport-changes records. The "station short name" must be unique in the file.

The exception is only valid on those days that both services run.



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Station record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'#'
2	8	station short name	num	station short name; coded as specified in chapter <a href="#">STATIONS</a>

Carriage return on position 9. Linefeed on position 10.

**Train changes record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'-'
2	4	from company number	num/wild-card	Number of the company of the arriving transport service; coded as specified in chapter <a href="#">COMPANY</a> . Special value: '*' = all companies.
6	9	from transport mode code	num/wild-card	Transport mode code of the arriving transport service; coded as specified in chapter <a href="#">TRNSMODE</a> . Special value: '*' = all transport modes.
11	13	to company number	num/wild-card	Number of the company of the departing transport service; coded as specified in chapter <a href="#">COMPANY</a> . Special value: '*' = all companies.
15	18	to transport mode code	num/wild-card	Transport mode code of the departing transport service; coded as specified in chapter <a href="#">TRNSMODE</a> . Special value: '*' = all transport modes.
20	22	time to change transport	num	Time necessary to change transport.
24	28	footnote number	num	Footnote number; coded as specified in chapter <a href="#">XFOOT-NOTE</a> .

Comma's on positions 5, 10, 14, 19 and 23. Carriage return on position 29. Linefeed on position 30.

**Example.**

```
@074,03052004,12092004,0402,JP i PETRA
#7400001
-074,B ,074,JNT ,020,00216
-074,B ,074,JIC ,020,00216
-074,JNT ,074,B ,020,00216
-074,JNT ,074,JIC ,020,00216
#7400002
-074,B ,074,JNT ,015,00000
-074,B ,074,JIC ,015,00000
-074,B ,380,J ,015,00000
-074,JNT ,074,B ,015,00000
-074,JNT ,279,SLT ,015,00000
```

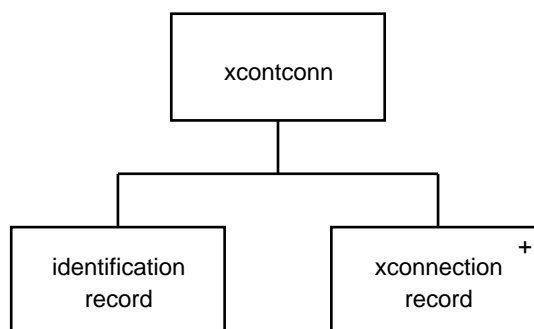
## 4.8 Exceptions concerning continuous connections : XCONTCONN

The file XCONTCONN contains a table of exceptional continuous connections. By means of a continuous connection two stations of which the timetable does not provide a direct connection, are connected to one another. This way two stations can be connected by taxi or by walk.

Exceptional continuous connection can be filtered on a number of criteria: the companies of the arriving and departing services involved, the transport modes of the arriving and departing services and a possibility to define the validity of the exceptional continuous connection.

The file consists of an identification record and a number of xconnection records. Exceptional continuous connections are not automatically symmetrical. Connections from A to B and from B to A must be defined separately.

The combination of "from station short name" and "to station short name" must be unique in the file.



**Identification record.** See the description of the **DELIVERY** file for this record.

**Xconnection record.**

first pos.	last pos.	name of field	format	description
1	7	from station short name	char	From station short name; coded as specified in chapter <b>STATIONS</b>
9	11	from company number	num/wild card	Number of the company of the arriving transport service; coded as specified in chapter <b>COMPANY</b> . Special value: '*' = all companies.
13	16	from transport mode code	num/wild card	Transport mode code of the arriving transport service; coded as specified in chapter <b>TRNSMODE</b> . Special value: '*' = all transport modes.
18	24	to station short name	char	To station short name; coded as specified in chapter <b>STATIONS</b>

first pos.	last pos.	name of field	format	description
26	28	to company number	num/wild card	Number of the company of the departing transport service; coded as specified in chapter <a href="#">COMPANY</a> . Special value: '*' = all companies.
30	33	to transport mode code	num/wild card	Transport mode code of the departing transport service; coded as specified in chapter <a href="#">TRNSMODE</a> . Special value: '*' = all transport modes.
35	37	connection time	num	Time (in minutes) necessary to get from the first station to the second station.
39	42	connection mode code	num	Connection mode code; coded as specified in chapter <a href="#">CON-NMODE</a> .
44	48	footnote number	num	Footnote number; coded as specified in chapter <a href="#">XFOOT-NOTE</a> .

Comma's on positions 8, 12, 17, 25, 29, 34, 38 and 43. Carriage return on position 49. Linefeed on position 50.

**Example.**

```
@074,03052004,12092004,0402,JP i PETRA
7420483,074,B ,7400002,074,* , 16,xlp1 ,1
7420483,279,BLT,7400002,074,* , 14,xlp2 ,1
7420483,263,BLT,7400002,074,* , 18,xlp2 ,1
7400002,074,* ,7420483,074,B , 11,xlp2 ,1
7400002,074,* ,7420483,279,BLT, 13,xlp2 ,1
7400002,074,* ,7420483,263,BLT, 15,xlp2 ,1
```

# 5 Attributes and timezones

## 5.1 Transport attribute data : TRNSATTR

The file TRNSATTR contains a table of all transport attributes allowed.

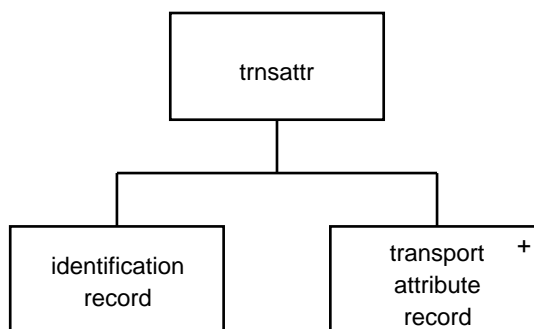
The file consists of an identification record, and a sequence of transport-attribute records.

Both the "attribute code" and the "description" must be unique in the file.

Each attribute should describe a characteristic of a transport service that does or does not hold. The validity of the attribute should be specified for each service separately in the [TIMETBLS](#) file.

The type of attribute determines how the attribute should be processed. Services with "boarding only" or "unboarding only" should be evaluated to all permitted services.

A maximum of 15 of the attributes can be defined as search attribute.



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Transport mode record.**

first pos.	last pos.	name of field	format	description
1	4	attribute code	char	Code of the attribute
6	9	processing code	num	processing information values:  0 not in use 1 search attribute 2 stretch, attribute is given when at least a part of the journey has the attribute. 3 shrink, attribute is only given when the whole journey has the attribute 4 non-search attribute 5 attribute for one stop 6 boarding only 7 unboarding only 8 non-concatenation: this attribute will not be concatenated during processing when multiple occurrences are present on a service. These separate stretches will still be available in the output journeys. Attribute is valid if journey uses only one stretch. 53 stop attribute connected to departure station

first pos.	last pos.	name of field	format	description
				54 attribute only shown if attribute arrival and departure-station have the connected attributes 55 stop attribute connected to arrival station
11	40	description	char	Description of the attribute

Comma on position 5 and 10. Carriage return on position 41. Linefeed on position 42.

### Example.

```
@086,28091997,23051998,0001,Vinter 97/98
0001, 1,Pladsbillet kræves
0002, 1,Ingen cykelmedtagning
bike, 1,Cykelmedtagning
abcd, 1,Pladsbillet kræves all classes
X , 5,Stop on passenger request only
0016, 6,Standser kun for optagning
0018, 7,Standser kun for afsætning
0021, 4,Video
0022, 4,Cinema
```

## 5.2 Time zone data : TIMEZONE

Each station is situated in a time zone. In the timetables all arrival and departure times are given in the local time for that station. To determine the travel time between stations situated in different time zones the time difference must be known. Time zones can start the summer- and wintertime at different dates. Because of this, time differences can change between time zones.

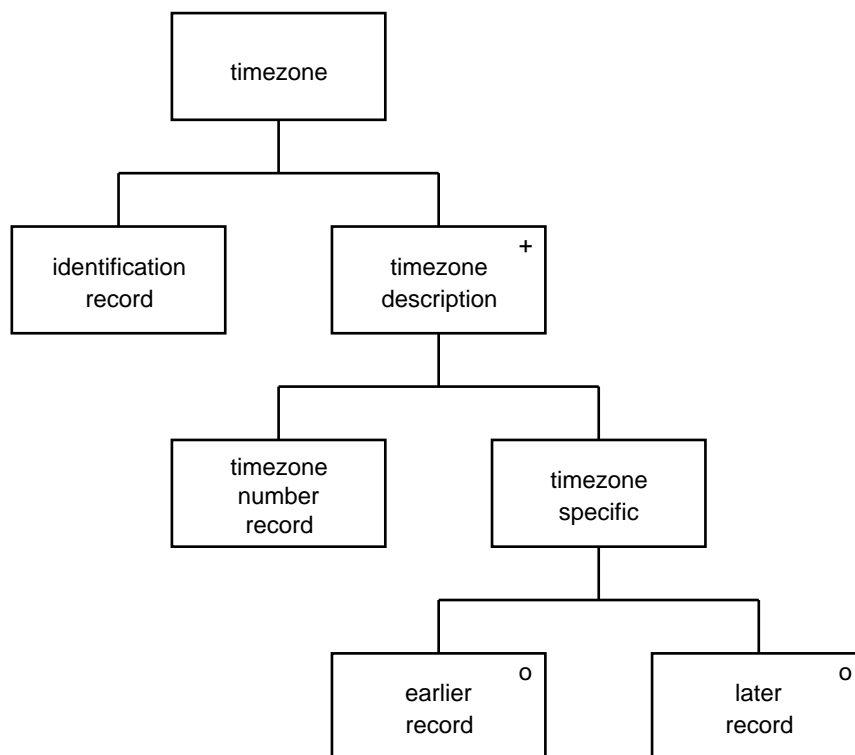
The time zone with time zone number 0 is the default time zone, used for home stations. All other time zones give their times relative to this home time zone. When summer- or winter time periods differ from the periods in the home time zone, the time zone can be divided in separated periods. Different periods of one time zone may not have any overlap and must together contain the total validity of the timetables.

If all stations of the provided timetable are situated in the home time zone, it is not necessary to provide this file.

The file consists of an identification record and alternating a number record and several time-zone records. We distinguish two time zone records, one for zones where it is earlier than the home zone and one where it is later.

The "time-zone number" must be unique in the file. The combination of footnotes in the time zone records for one time zone may not have any overlap and must together contain the total validity of the timetables.

Time zone 0 has by default one period containing the total validity of the timetables. The time difference is 0.



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Timezone number record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'#'
2	5	time zone number	num	Number of the following time zone

Carriage return on position 6. Linefeed on position 7.

**Earlier period record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'-'
2	3	time difference	Num	Time difference in hours compared to home time zone 0
5	12	first day	num	first day of validity of the period in the following format : DDMMYYYY
14	21	last day	num	last day of validity of the period in the following format : DDMMYYYY

Comma's on positions 4 and 13. Carriage return on position 22. Linefeed on position 23.

**Later period record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'+'
2	3	time difference	Num	Time difference in hours compared to home time zone 0
5	12	first day	num	first day of validity of the period in the following format : DDMMYYYY



first pos.	last pos.	name of field	format	description
14	21	last day	num	last day of validity of the period in the following format : DDMMYYYY

Comma's on positions 4 and 13. Carriage return on position 22. Linefeed on position 23.

**Example.**

```
@086,28091997,23051998,0001,Vinter 97/98
#0000
-00,01012002,31122009
#0001
-01,01012002,31122009
```

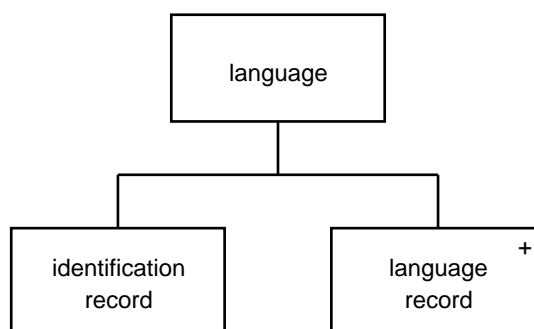
# 6 Multilingual support

## 6.1 Language data : LANGUAGE

The file LANGUAGE contains a table of all languages allowed.

The file consists of an identification record and a sequence of language records.

Both the "language code" and the "description" must be unique in the file



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Language record.**

first pos.	last pos.	name of field	format	description
1	4	language code	char	Language identification
6	35	description	char	Description of the language

Comma on positions 5. Carriage return on position 36. Linefeed on position 37.

**Example.**

```

@086,28091997,23051998,0001,Vinter 97/98
ENGL,English
F ,French
D ,German
NL ,Dutch
  
```

## 6.2 Synonym data : SYNONYM

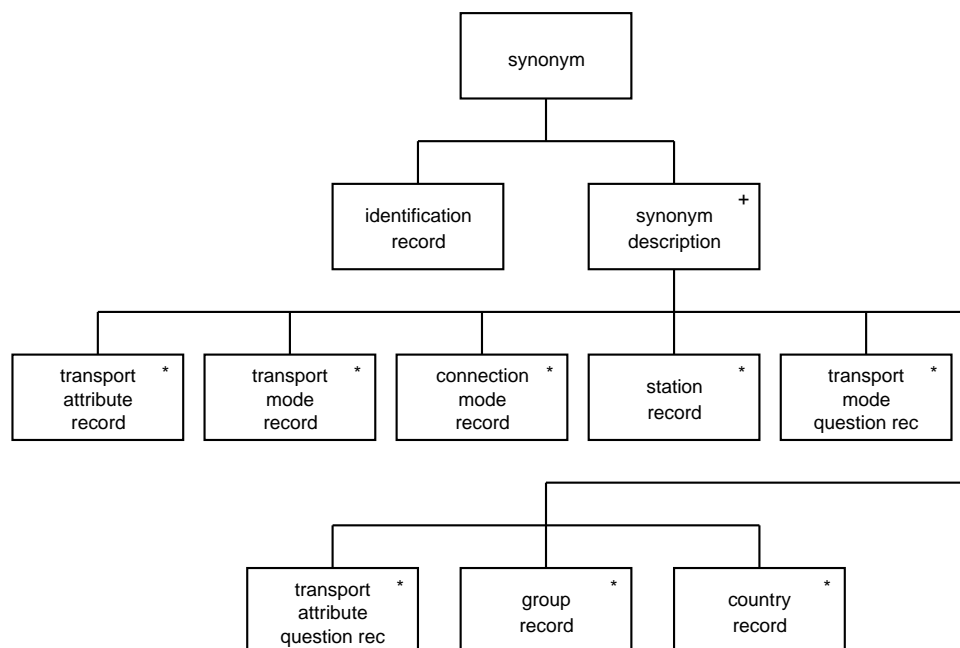
The file SYNONYM specifies the alternative descriptions of attributes, transport modes, transport groups, connection modes, stations, groups and countries. The provision of this file is optional. This file consists of an identification record and a sequence of synonym records.

Unique combinations :

- Attribute records                    language and attribute code
- Transport mode records            language and transport mode code
- Transport group records           language and transport group code
- Connection mode records          language and connection mode code
- Station records                     language and station short name

Transport mode question records	language and transport mode question code
Transport attribute question records	language and transport attribute question code
Group records	language and group short name
Country records	language and country code

The combination "language" and "description" must be unique in the in the station records and group records.



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Transport attribute record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	num	'*'
2	5	transport attribute code	char	Transport attribute code; coded as specified in chapter <a href="#">TRNSATTR</a>
7	10	language code	char	Language code; coded as specified in chapter <a href="#">LANGUAGE</a> .
12	41	description	char	Description of the transport attribute in the language specified above.

Comma's on positions 6, 11. Carriage return on position 42. Linefeed on position 43.

**Transport mode record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	num	'&'
2	5	transport mode code	char	Transport mode code; coded as specified in chapter <a href="#">TRNS-MODE</a>
7	10	language code	char	Language code; coded as specified in chapter <a href="#">LANGUAGE</a> .
12	41	description	char	Description of the transport mode in the language specified above.

Comma's on positions 6, 11. Carriage return on position 42. Linefeed on position 43.

#### Transport attribute question record.

first pos.	last pos.	name of field	format	description
1	1	record-id	num	'\$'
2	5	transport attribute question code	char	Transport attribute question code; coded as specified in chapter <a href="#">TRNSAQST</a>
7	10	language code	char	Language code; coded as specified in chapter <a href="#">LANGUAGE</a> .
12	41	description	char	Question in the language specified above.

Comma's on positions 6, 11. Carriage return on position 42. Linefeed on position 43.

#### Transport mode question record.

first pos.	last pos.	name of field	format	description
1	1	record-id	num	'#'
2	5	transport mode question code	char	Transport mode question code; coded as specified in chapter <a href="#">TRNSMQST</a>
7	10	language code	char	Language code; coded as specified in chapter <a href="#">LANGUAGE</a> .
12	41	description	char	Question in the language specified above.

Comma's on positions 6, 11. Carriage return on position 42. Linefeed on position 43.

#### Connection mode record.

first pos.	last pos.	name of field	format	description
1	1	record-id	num	'%'
2	5	connection mode code	char	Connection mode code; coded as specified in chapter <a href="#">CON-NMODE</a>
7	10	language code	char	Language code; coded as specified in chapter <a href="#">LANGUAGE</a> .
12	41	description	char	Description of the connection mode in the language specified above.

Comma's on positions 6, 11. Carriage return on position 42. Linefeed on position 43.

#### Station record.

first pos.	last pos.	name of field	format	description
1	1	record-id	num	'+'
2	8	station short name	char	Station short name; coded as specified in chapter <a href="#">STATIONS</a>
10	13	language code	char	Language code; coded as specified in chapter <a href="#">LANGUAGE</a> .
15	44	description	char	Description of the station in the language specified above.

Comma's on positions 9, 14. Carriage return on position 45. Linefeed on position 46.

#### Group record.

first pos.	last pos.	name of field	format	description
1	1	record-id	num	'-'
2	8	group short name	char	Group short name; coded as specified in chapter <a href="#">GROUP</a>
10	13	language code	char	Language code; coded as specified in chapter <a href="#">LANGUAGE</a> .
15	44	description	char	Description of the group in the language specified above.

Comma's on positions 9, 14. Carriage return on position 45. Linefeed on position 46.

#### Country record.

first pos.	last pos.	name of field	format	description
1	1	record-id	num	','
2	5	country code	char	Country code; coded as specified in chapter <a href="#">COUNTRY</a>
7	10	language code	char	Language code; coded as specified in chapter <a href="#">LANGUAGE</a> .
12	41	description	char	Description of the country in the language specified above.

Comma's on positions 6, 11. Carriage return on position 42. Linefeed on position 43.

### Example.

```
@086,28091997,23051998,0001,Vinter 97/98
*0001,ENGL,reservation essential
*0001,F ,reservation
*0002,ENGL,No bikes allowed
*0002,F ,Pas de velo !
+8800410,ENGL,Luke
+8800410,NL ,Luik
+8800410,D ,Luttich
+8800410,F ,Liege Guillemins
```

# 7 Topological information

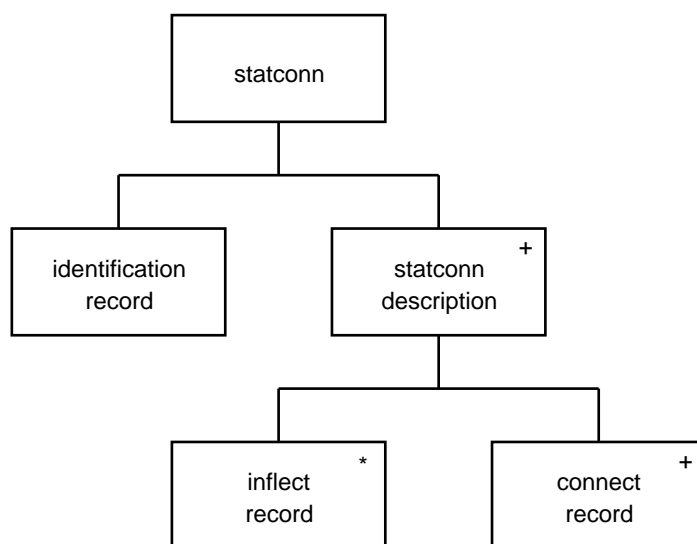
## 7.1 Connections between stations: STATCONN

The file STATCONN contains data of connections between stations. It tells which stations on a section are neighbours. When the connection is not a straight line, it is possible to give points of inflection for that connecting line. This can be used to draw lines between stations on a map.

It can also be used to generate passing stations. This information can then be used to forbid journeys which visits a station more than once (*backtracking*).

The file consists of an identification record and a number of statconn description records.

The unit for the co-ordinates can be metres, decametres or hectometres. The same unit should be used for the co-ordinates in the [STATIONS](#) file and in the [LNDCOVER](#) file.



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Connect record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'>'
2	8	from station short name	char	From station short name; coded as specified in chapter <a href="#">STATIONS</a>
10	16	to station short name	char	To station short name; coded as specified in chapter <a href="#">STATIONS</a>

Comma on position 9. Carriage return on position 17. Linefeed on position 18.

**Inflect record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'&'
2	7	x-coordinate	num, signed	X co-ordinate of the inflection point.

first pos.	last pos.	name of field	format	description
9	14	y-coordinate	num, signed	Y co-ordinate of the inflection point.

Comma on position 8. Carriage return on position 15. Linefeed on position 16.

**Example.**

```
@001,23051993,25091993,0001,Summer
>8604107,8604105
>8604105,8604102
>8604102,8604119
& 16737, 47234
& 17837, 37244
>8604119,8604111
>8604111,8604109
>8604109,8604113
>8604113,8604117
>8604117,8604104
```

## 7.2 Connections/Distances between stations: STATDIST

The file STATDIST is used instead of STATCONN, when the data supplier wants to define the distances between stations (ignoring the calculated values based on the co-ordinates of the stations). The file STATDIST contains data of connections between stations and the distances between them. It tells which stations on a section are neighbours. When the connection is not a straight line, it is possible to give points of inflection for that connecting line. This can be used to draw lines between stations on a map.

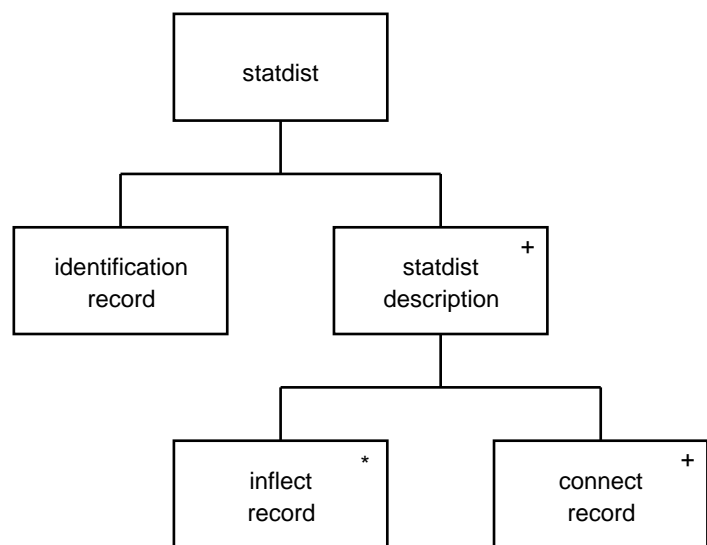
It can also be used to generate passing stations. This information can then be used to forbid journeys which visits a station more than once (*backtracking*).

Another use is to send the total distance travelled with an answer to the journey advice.

The file consists of an identification record and a number of statconn description records.

The unit for the distance is kilometres.

The unit for the co-ordinates can be metres, decametres or hectometres. The same unit should be used for the co-ordinates in the **STATIONS** file and in the **LNDCOVER** file.



**Identification record.** See the description of the **DELIVERY** file for this record.

**Connect record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'>'
2	8	from station short name	char	From station short name; coded as specified in chapter <a href="#">STATIONS</a>
10	16	to station short name	char	To station short name; coded as specified in chapter <a href="#">STATIONS</a>
18	23	distance	num, unsigned	Distance between the stations in kilometers.

Comma's on position 9 and 17. Carriage return on position 24. Linefeed on position 25.

**Inflect record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'&'
2	7	x-coordinate	num, signed	X co-ordinate of the inflection point.
9	14	y-coordinate	num, signed	Y co-ordinate of the inflection point.

Comma on position 8. Carriage return on position 15. Linefeed on position 16.

**Example.**

```
@001,09062009,09062010,1416,SUOMEN AIKATAULUT 2008
>HKI      ,PSL      ,9
>PSL     ,ILA      ,1
>ILA     ,HPL      ,1
```

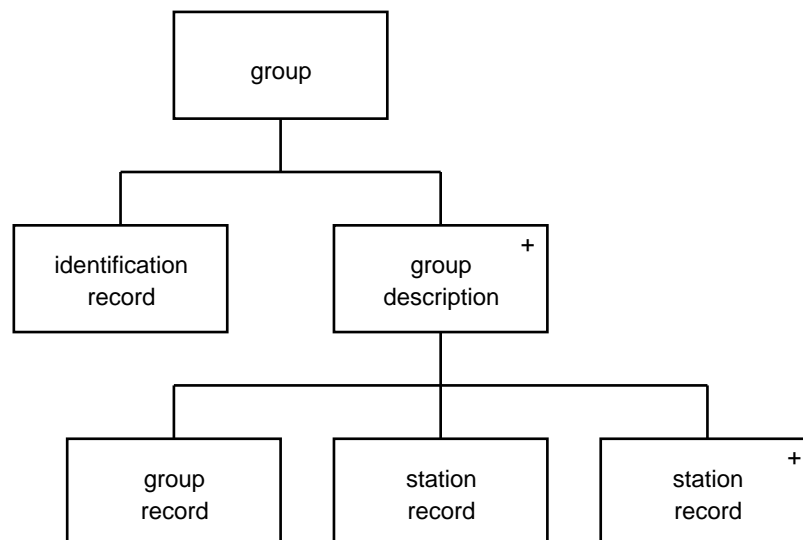


# 8 Refining Station (Stop) information

## 8.1 Station group data : GROUP

The file GROUP groups a number of stations in one single name that can be selected directly when using the Journey Planner. The group name must not correspond with a real station name. The provision of this file is optional.

The file consists of an identification record and alternating a group and a number of station records. By means of the group record the group is identified. The station records describe the stations belonging to the group. Each group contains at least two stations. Each station must appear in the file STATIONS. The "group short name" must be unique in the file GROUP and in the file STATIONS. The "group name" must be unique in the file GROUP and in the file STATIONS.



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Group record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'#'
2	8	group short name	num	Short name indicating the stations grouped.
10	39	group name	num	Complete name of the group used as the preferred name.

Comma on position 9. Carriage return on position 40. Linefeed on position 41.

**Station record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'-'
2	8	station short name	char	Short name of a station belonging to the group specified above; coded as specified in chapter <a href="#">STATIONS</a> .

Carriage return on position 9. Linefeed on position 10.

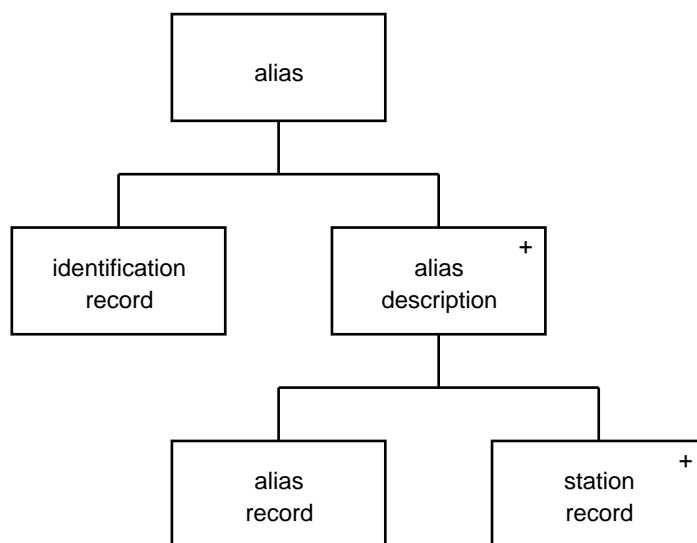
**Example.**

```
@086,28091997,23051998,0001,Vinter 97/98
#5190136,WARSZAWA
-5100136
-5100137
#5499076,PRAHA
-5457256
-5457076
#7099511,LONDON
-7000162
-7000246
-7000511
#7199170,MADRID
-7100170
-7100180
```

## 8.2 Station alias data : ALIAS

The file ALIAS translates short names to station short names in the STATIONS file. This information is essential when a company uses several short names for a station that should be presented as one station to the traveller. The provision of this file is optional.

The file consists of an identification record and alternating a station and a number of alias records. The alias records describe the short names that will be translated to the named station. Each station must appear in the file STATIONS.



**Identification record.** See the description of the DELIVERY file for this record.

**Station record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'#'
2	8	station short name	num	short name indicating the station to which the aliases should be mapped; coded as specified in chapter STATIONS

Carriage return on position 9. Linefeed on position 10.

**Alias record.**

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first pos.	last pos.	name of field	format	description
1	1	record-id	char	'-'
2	8	from service identification	char	Short name of the alias to be mapped to the station specified above.

Carriage return on position 9. Linefeed on position 10.

### Example.

```
@086,28091997,23051998,0001,vinter 97/98  
#7000162  
-7000163  
-7000164
```

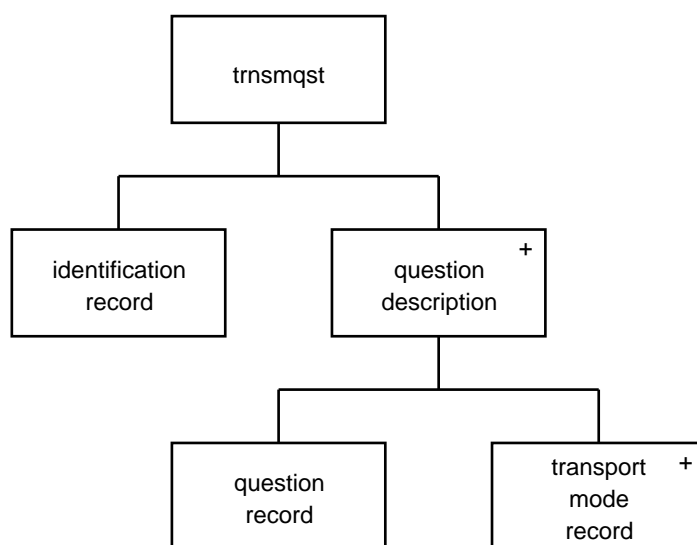
# 9 Grouping of search criteria

## 9.1 Transport mode group data : TRNSMQST

The file TRNSMQST groups a number of transport modes in one single item that can be selected directly when using the Journey Planner. The provision of this file is optional.

The file consists of an identification record and alternating a question and a number of transport mode records. By means of the group record the group is identified. The transport mode records describe the transport modes belonging to the question. Each transport mode must appear in the file [TRNSMODE](#).

Both the "transport mode question code" and "question" must be unique in the file TRNSMQST



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Question record.**

first pos.	last pos.	name of field	format	description
1	1	record id	char	'#'
2	5	question code	char	identification code of the transport mode question
7	36	question	char	Question used in user interface of the journey planner

Comma on positions 6. Carriage return on position 37. Linefeed on position 38.

**Transport mode record.**

first pos.	last pos.	name of field	format	description
1	1	record id	char	'.'
2	5	transport mode code	char	Transport mode code; coded as specified in chapter <a href="#">TRNS-MODE</a>

Carriage return on position 6. Linefeed on position 7.

**Example.**

```
@086,28091997,23051998,0001,Vinter 97/98
#high,High speed tog
```

```

-0032
-0033
-0036
#Boat,Hurtigfærge Flyvebåd Kustpilen
-0010
-0019
-0026
-0057
-0056

```

## 9.2 Transport attribute group data : TRNSAQST

The file TRNSAQST groups a number of transport attributes in one item name that can be selected directly when using the Journey Planner. The provision of this file is optional.

The file consists of an identification record and alternating a question and a number of transport attribute records. By means of the question record the question is identified. The transport attribute records describe the transport attributes belonging to the question. Each transport attribute must appear in the file [TRNSATTR](#) and must be a search attribute (processing code 1).

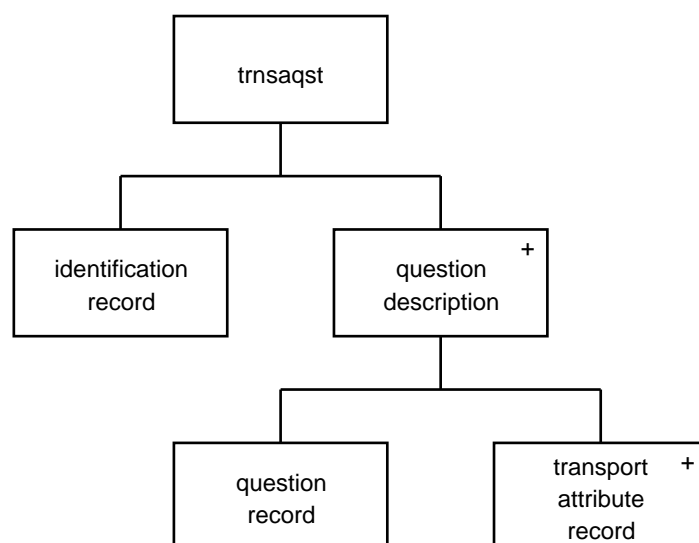
The question type determines how the Journey planner will handle the corresponding question. We distinguish two types, neutral/forbidden and neutral/demanded:

The first type, with number 0, can be used when you wish to have the possibility to ask for journeys where attributes are forbidden. For example you have two search attributes concerning compulsory seat reservation. You define a question for these attributes saying "No seat reservation in journey". Normally you do not care, but when this option is chosen, solutions with these attributes are forbidden.

The second type, with number 1, can be used when you wish to have the possibility to ask for journeys where attributes are demanded. For example you have a search attribute concerning trains and busses that have the possibility to take your bike with you. You define a question for this attribute saying "Travelling with bicycle". Normally you do not care, but when this option is chosen, solutions are only shown with services containing this search attribute.

Note that this file is intended to group only search-attributes (processing code is 1).

Both the "transport attribute question code" and "question" must be unique in the file TRNSAQST .



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Question record.**

first pos.	last pos.	name of field	format	description
1	1	record id	char	'#'
2	5	question code	char	Identification code of the trnsport attribute question
7	7	question type	num	0 or 1, see text above
9	38	question	char	Question used in user interface of the journey planner

Comma's on positions 6 and 8. Carriage return on position 39. Linefeed on position 40.

**Transport attrubute record.**

first pos.	last pos.	name of field	format	description
1	1	record id	char	'-'
2	5	transport mode code	char	Transport attribute code; coded as specified in chapter <a href="#">TRNSATTR</a>

Carriage return on position 6. Linefeed on position 7.

**Example.**

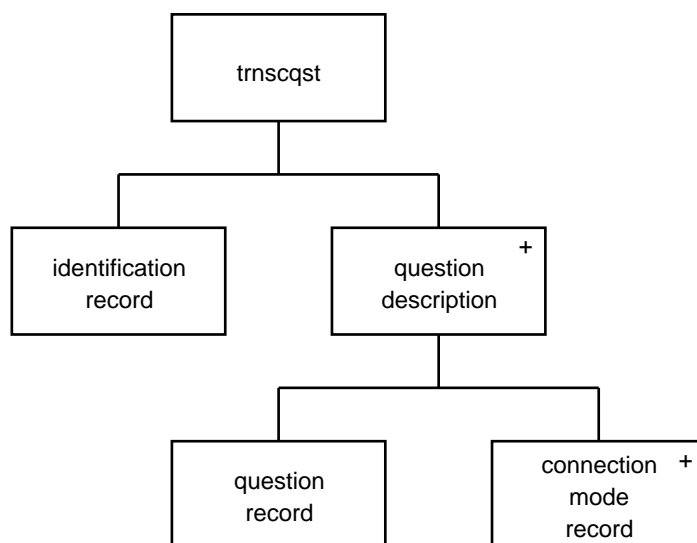
```
@086,28091997,23051998,0001,Vinter 97/98
#0001,0,No seat reservation in journey
-0001
-abcd
#0002,0,Wish to take a Bicycle
-0002
#0003,1,Cykelmedtagning
-bike
```

### 9.3 Continuous connection mode group data : TRNSCQST

The file TRNSCQST groups a number of continuous connection modes in one single item that can be selected directly when using the Journey Planner. The provision of this file is optional.

The file consists of an identification record and alternating a question and a number of continuous connection mode records. By means of the group record the group is identified. The continuous connection mode records describe the continuous connection modes belonging to the question. Each continuous connection mode must appear in the file [CONNMODE](#).

Both the "continuous connection mode question code" and "question" must be unique in the file trnscqst



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Question record.**

first pos.	last pos.	name of field	format	description
1	1	record id	char	'#'
2	5	question code	char	identification code of the continuous connection mode question
7	36	question	char	Question used in user interface of the journey planner

Comma on positions 6. Carriage return on position 37. Linefeed on position 38.

**continuous connection mode record.**

first pos.	last pos.	name of field	format	description
1	1	record id	char	'.'
2	5	continuous connection mode code	char	continuous connection mode code; coded as specified in chapter <a href="#">CONNMODE</a>

Carriage return on position 6. Linefeed on position 7.

**Example.**

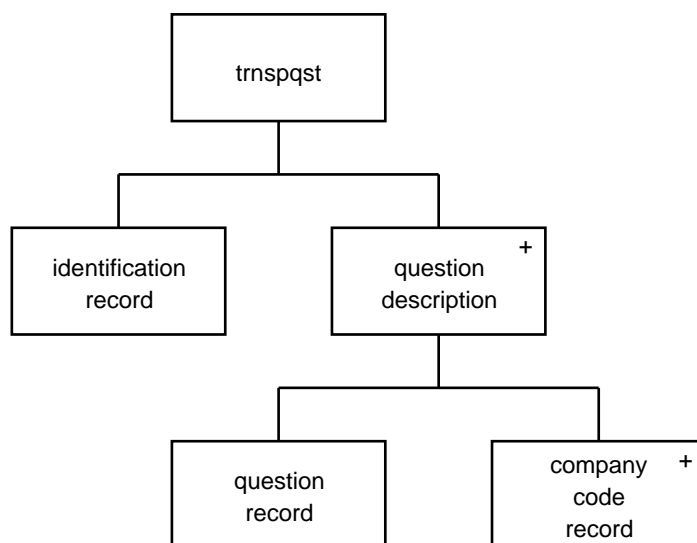
```
@074,28092006,23052007,0001,Vinter 06/07
#IUck,Check_in check_out
-Ick
-Uck
#Strs,Stairs and elevators
-Str
-Elv
```

## 9.4 Company group data : TRNSPQST

The file trnspqst groups a number of companies in one single item that can be selected directly when using the Journey Planner. The provision of this file is optional.

The file consists of an identification record and alternating a question and a number of company records. By means of the group record the group is identified. The company code records describe the company codes belonging to the question. Each company code must appear in the file [COMPANY](#).

Both the "company question code" and "question" must be unique in the file trnspqst



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Question record.**

first pos.	last pos.	name of field	format	description
1	1	record id	char	'#'
2	5	question code	char	identification code of the company question
7	36	question	char	Question used in user interface of the journey planner

Comma on positions 6. Carriage return on position 37. Linefeed on position 38.

**Transport mode record.**

first pos.	last pos.	name of field	format	description
1	1	record id	char	'.'
2	5	company code	char	Company code; coded as specified in chapter <a href="#">COMPANY</a>

Carriage return on position 6. Linefeed on position 7.

**Example.**

```
@074,28092006,23052007,0001,Vinter 06/07
#Vstt,(263/264) Vasttrafik
-263
-264
```

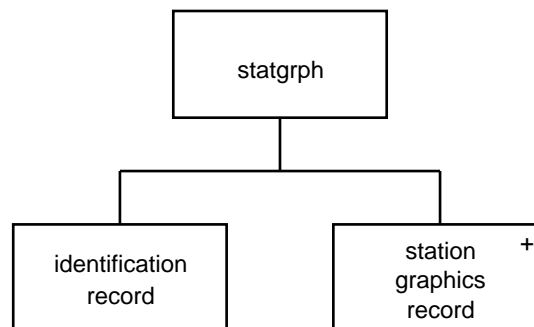


# 10 Graphical data

## 10.1 Stations graphics data: STATGRPH

The file STATGRPH contains data for drawing stations on the map.

The file consists of an identification record and a number of station graphics description records.



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Station graphics record.**

first pos.	last pos.	name of field	format	description									
1	7	station short name	char	Station short name; coded as specified in chapter <a href="#">STATIONS</a>									
9	9	position of text	num	Position of station name on the map, relative to its co-ordinate. 0 means no station name on the map, 1 means left-above, 2 mean above etc. See diagram: <table border="1" style="margin-left: 20px; margin-top: 5px;"> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>4</td> <td></td> <td>5</td> </tr> <tr> <td>6</td> <td>7</td> <td>8</td> </tr> </table>	1	2	3	4		5	6	7	8
1	2	3											
4		5											
6	7	8											
11	11	level on map	num	Level of station on map									

Comma's on positions 8 and 10. Carriage return on position 12. Linefeed on position 13.

**Example.**

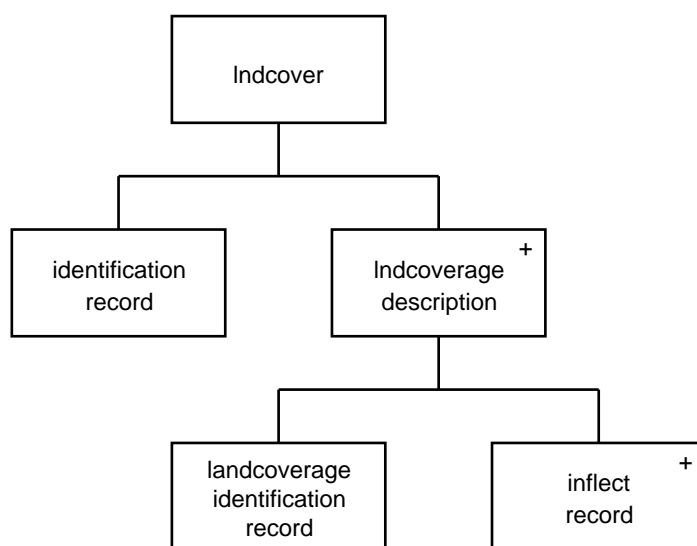
```
@001,23051993,25091993,0001,Summer
luik ,5 , 6
```

## 10.2 Land coverage data : LNDCOVER

A land piece is defined by two or more points. A start point, zero or more points of inflection and a end point. Therefore an land piece id record must be followed by at least two piece records

The unit for the co-ordinates can be metres, decametres or hectometres. The same unit should be used for the co-ordinates in the [STATIONS](#) file and in the [STATCONN](#) file

The number of the land piece must be unique in the land piece id record.



**Identification record.** See the description of the [DELIVERY](#) file for this record.

**Station record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'#'
2	8	land coverage number	num	Number of the land coverage
10	10	type	num	type of item; values: B - borderline L - land R - river S - sea W - water
12	12	colour	num	Colour of item on map
14	43	land coverage name	char	Land coverage name

Comma's on positions 9, 11 and 13. Carriage return on position 44. Linefeed on position 45.

**Inflect record.**

first pos.	last pos.	name of field	format	description
1	1	record-id	char	'-'
2	7	x-coordinate	num, signed	X co-ordinate of the inflection point.
9	14	y-coordinate	num, signed	Y co-ordinate of the inflection point.

Comma on position 8. Carriage return on position 15. Linefeed on position 16.

**Example.**

```

@074,13121999,12062000,9012,ResplusGuiden-diskett
# 1,L,1,Sverige
-188099,047331
-187776,046064
  
```