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Translation

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Electronic seat/berth reservation and electronic production of travel documents - General regulations

Réservation électronique des places et établissement électronique des documents de transport - Dispositions générales

Elektronische Platzreservierung und elektronische Ausfertigung der Beförderungsdokumente - Allgemeine Bestimmungen

Leaflet to be classified in Volume :

IX - Information technology, Miscellaneous

Application :

With effect from 1. June 2005
All members of the International Union of Railways

Record of updates

1st edition, July 2003   First issue.
This leaflet, as well as UIC leaflets 918-1 and 918-2, was obtained by dividing the former 918 leaflet (1st edition February 1977 and its 19 amendments). Reason for the division: to facilitate consulting and updating information. At this point to conform to manual M1 retyped in FrameMaker.

2nd edition, December 2005   Adaptation to 4-position company code.
Replacement of Railway Undertaking (RU) by Reservation System (RS)

The person responsible for this leaflet is named in the UIC Code

Contents

Summary

UIC Leaflet 918-0 contains the general regulations for the electronic reservation of seats/berths and the electronic production of travel documents. It is supplemented by the following two leaflets:

- *UIC Leaflet 918-1* which deals with the procedures for exchanging reservation messages,

- *UIC Leaflet 918-2* which describes the RCT2 standard applicable to all the transport documents produced electronically (only the correspondents whose names are on the list held by the UIC Passenger Department are authorised to have access to this leaflet).

The regulations contained in these leaflets enable a railway undertaking (RU) to reserve seats/berths in an inventory which is managed by another RU and to issue travel documents (in particular reservation tickets and combined tickets) produced electronically from data transmitted by the electronic system of another RU.

1 - General

1.1 - General comments on the leaflet

The UIC regulations regarding seat/berth reservation and the electronic production of travel documents consist of the following parts:

- *UIC Leaflet 918 - 0,* General regulations,

- *UIC Leaflet 918 - 1,* Exchange of messages,

- *UIC Leaflet 918 - 2,* Travel documents (RCT2 standard).

The continuous revision of each leaflet is the responsibility of the Passenger Commission and its Distribution and Systems Group.

The regulations contained in these leaflets enable a railway undertaking (RU) to reserve seats/berths in an inventory that is managed by another RU and to issue travel documents (in particular reservation tickets and combined tickets) produced electronically from data transmitted by the electronic system of another RU.

In view of the need for interoperability, these regulations must be observed by all RUs that want to connect their electronic system with that of other RUs to deal in international passenger services.

It is up to each RU to decide which services are offered in the national area.

In the international area the services offered are divided into "mandatory" and "optional" services:

- the services that are specified as mandatory must be offered on the sales terminals/terminals of all reservation systems (RS) as specified in the regulations of this leaflet, and even by members, who do not hold these services in their system;

- the services that are specified as optional are those for which the offer remains optional on the sales terminals/terminals. RSs which decide to offer the "optional" services must, however, carry them out in accordance with the requirements of this leaflet.

Moreover each RS must guarantee the transit of the messages from the other RSs which correspond to the mandatory and optional services, in accordance with the provisions specified in this leaflet.

The table below lists the current mandatory and the optional services (for seat/berth reservations).

Services that can be reserved			M/O[a]
Seats	All categories of train	Individual passengers Small groups	M M
Couchettes		Individual passengers Small groups	M M
Sleeper berths			M
Meals	At seat In dining car		O O
Accompanied car trains	Night accompanied car trains (with couchette or sleeping cars)		M
	Day accompanied car trains - Unaccompanied car service		M
Ferries	Passengers - Vehicles		M
	Vehicles		M
Further services(918^E)[b]			
Information on the available services Price information Travel documents			O O O

a. M = mandatory; O = optional.
b. The term 918 "E" (E= enhanced) refers to the new functions introduced in the leaflet in July 1996 (coinciding with amendment 18) following work carried out by the Passenger Commission ISIS project group.

1.2 - Definition of the use

1.2.1 - Definition of international traffic as far as seat/berth reservation is concerned

All reservations which are dealt with by more than one RS or which involve a journey or a settlement which affects more than one RS are considered to belong to international traffic.

1.2.2 - Travel documents

Travel documents for the domestic services of an RU (sectional coupons), tickets for the TCV (see List of abbreviations - page 47) traffic and combined tickets plus reservation involve the exchange of messages between the RSs.

2 - Reservations in trains

2.1 - Principles

2.1.1 - Trains

2.1.1.1 - Management of the seats/berths on offer

Each RS manages the full inventory of seats/berths in the trains and through coaches which begin on its territory.

If a train carries coaches which begin in the territory of different RSs, then several RSs have access to the seats/berths available in this train.

Unlike the general rule, the same RS manages the seats/berths available in accompanied car trains in both directions.

RUs can deviate from these rules by bilateral agreement, e.g. for trains which begin at frontier stations.

The description of the seats/berths available is contained in the "reservation lists" of the service-providing companies, the compilation of which is governed by *UIC Leaflet 171* (see Bibliography - page 48). The lists describe the services on offer for a given period and indicate in particular:

- the time when electronic reservation in trains is open expressed in calendar months,

- the time when the electronic reservation system closes.

2.1.1.2 - Train categories

The different categories of train are:

- EC/IC trains,

- other quality trains,

- ordinary trains,

- accompanied car trains:

  - day accompanied car trains, (TAJ),
  - night accompanied car trains,

- unaccompanied car service (SAE).

NB : accompanied car trains are those trains that carry cars.

Reservation in trains can be available, recommended or mandatory.

Each RU shall determine the trains included in the reservation procedure. All sales offices of the RUs may sell these seats/berths.

A certain number of seats/berths are not released for reservation by the sales offices if they are required for:

- service purposes,

- disabled passengers,

- VIPs,

- passengers without seat/berth reservations.

2.1.2 - Services

The electronically reservable services in trains are:

- seats,

- seats with meals at seat,

- couchettes,

- sleeper berths,

- places for vehicles,

- meals in the dining car.

2.1.3 - Number of seats/berths

2.1.3.1 - Maximum number of seats/berths

The maximum number of seats/berths per reservation request is:

- 36 seats,

- 36 seats with meals at seat,

- 16 1st class couchettes,

- 36 2nd class couchettes,

- 18 single sleeper berths,

- 18 special sleeper berths,

- 36 double sleeper berths,

- 36 T2 sleeper berths,

- 39 T3 sleeper berths,

- 40 T4 sleeper berths,

- 1 single sleeper berth and 2 double sleeper berths,

- 1 single sleeper berth and 3 T3 sleeper berths,

- 2 double sleeper berths and 3 T3 sleeper berths,

- 1 special sleeper berth and 2 T2 sleeper berths,

- 1 vehicle place with or without trailer,

- 24 meals in the dining car.

A distinction is made in the reservation procedure between individual passengers and small groups.

2.1.3.2 - Individual passengers

If a group of people travel together and their number does not exceed the capacity of a compartment, they are considered to be individual passengers:

- 1st class seats: 6,

- 2nd class seats: 6 or 8 depending on the RS,

- 1st class seats with meals at seat: 6,

- 2nd class seats with meals at seat: 6 or 8 depending on the RS,

- 1st class couchettes: 4,

- 2nd class couchettes: 6 ,

- sleeper berths: 1 single, 1 special, 2 double, 2 T2, 3 T3, 4 T4.

2.1.3.3 - Small groups

If a group of people travel together and their number exceeds the figures given above but is under the figures given in point 2.1.3.1 - page 5, they are considered to be a small group.

A distinction is made between those small groups of passengers to which regulations in *Chapter B of Appendix 1 of the TCV* (special tariff groups) apply and the others (not special tariff groups).

2.1.4 -   Customer wishes

Besides the details that are essential for a reservation, which are the mandatory elements of the request message given in *UIC Leaflet 918-1*, individual passengers can make specific requests with respect to:

- smoking/non-smoking,

- position of seat/berth in compartment (window/centre/aisle, upper/middle/lower),

- compartment position (upper/lower),

- time of the meal.

"Passengers in small groups" can express particular wishes regarding:

- connecting doors between sleeping car compartments.

The special requirements for each service are given under the optional elements in the request messages of *UIC Leaflet 918-1*.

Individual passengers can also request a certain seat or seats adjacent to a reference seat (in the same compartment) as well as individual reservation tickets.

Individual passengers and those travelling in small groups can, in addition, state in their request that they are willing to accept an allocation in a different train to the train requested.

2.1.5 - Allocation rules

The seat/berth allocation must take into account the requests of the passengers.

Some of these requests are mandatory. If they cannot be fulfilled, the requests concerned lead to negative answers or alternative proposals.

Mandatory requests are:

- the train (number and date at the boarding station) except when an allocation in another train is accepted in advance,

- the route,

- the service,

- the number of seats,

- the class,

- the type and number of berths,

- the type and number of meals,

- the characteristics of the compartment (males/females),

- the request for certain/neighbouring seats (coach number, seat number).

It is at the discretion of the RS whether a smoking/non-smoking request is considered as a mandatory request or merely a preference.

In the case of other requests, a different allocation is made if they cannot be fulfilled.

Of the requests reflecting a preference:

- the seat/berth position in the compartment (for berths, mandatorily "lower") and

- the type of compartment

shall be treated as mandatory requests, if the passenger so requests.

If passengers are prepared to accept an allocation in another train than that requested when they made their request and no allocation in the requested train is available, then an allocation can be made in the train whose departure time from the boarding station lies closest to that of the train requested.

The allocation can also deviate with respect to the boarding and alighting station providing that the other station lies in the same town.

The allocation of seats/berths must be possible from and to all the stations served by the reservable trains or through coaches.

In order to best use the seats/berths available in the trains, it should be possible to allocate the same seats/berths to several passengers one after another.

The seat allocation itself is generally done according to the rules of the individual RS. All RSs must accommodate the passengers in the smallest possible number of compartments of the same coach.

In the case of partial cancellation, the remaining seats must be part of the seats originally reserved.

2.1.6 - Alternative proposals

If an RS which cannot fulfil a request because it has no corresponding seats/berths or because it does not have sufficient seats/berths available knows of seats/berths on offer from one or more other RSs, it must send a message proposing an alternative to the requesting RS (see Glossary - page 46) by stating to which other RS the requesting RS should re-address its request.

An RS, which cannot meet a request for a "mandatory" train because there is insufficient accommodation, must send an alternative proposal back to the requesting RS, indicating other accommodation available in the train.

An RS, which cannot fulfil a request because it does not have sufficient accommodation in the "preferred" train, must, if it does not automatically allocate accommodation in another train, send an alternative proposal to the requesting RS indicating a train, if necessary with all available accommodation, to enable the requesting RS to advise its customers.

The diagram below summarises the rules on alternative proposals, when an RS has no corresponding accommodation or insufficient accommodation to meet the request.
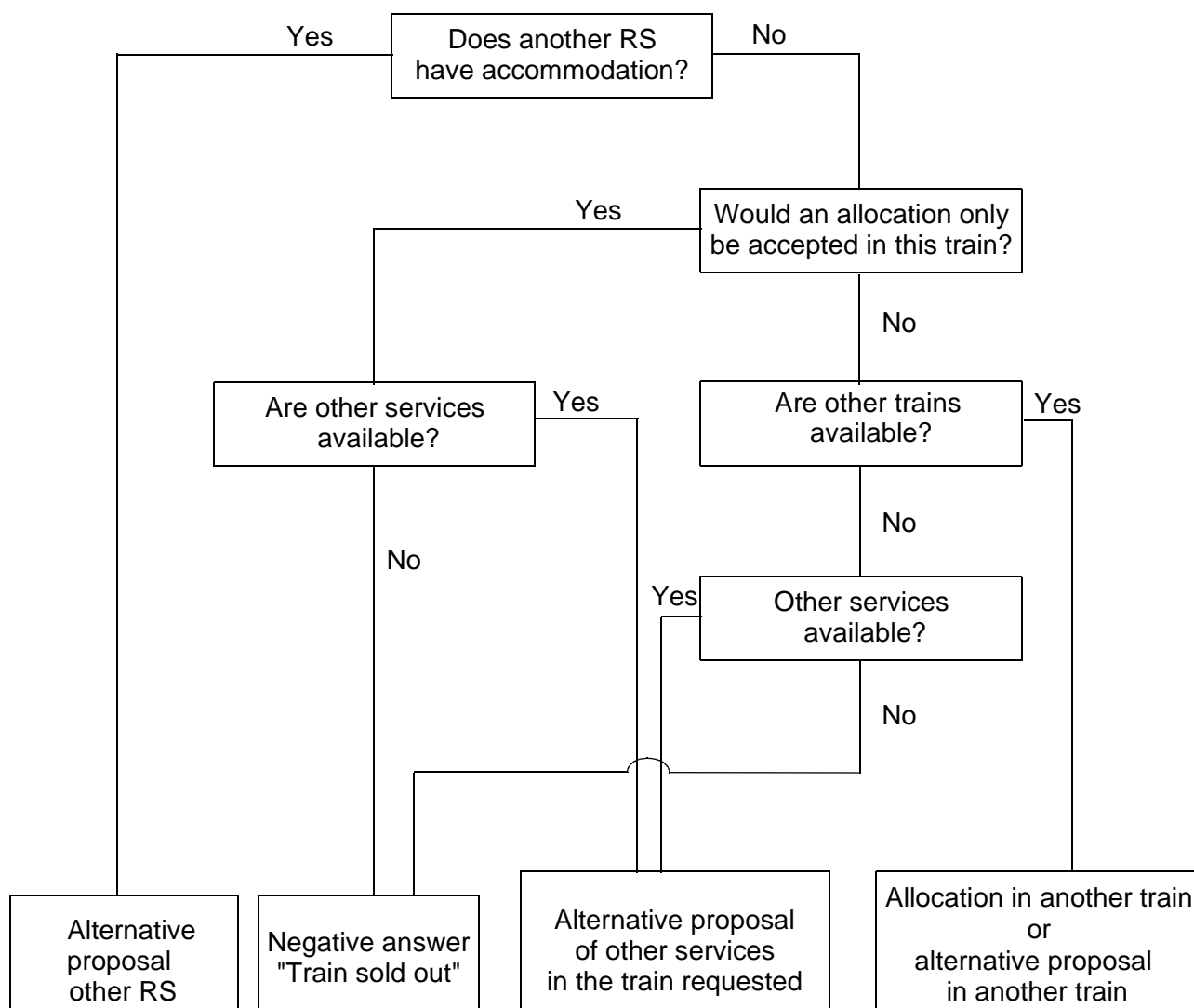
```
              Yes    ┌─────────────────┐  No
         ┌───────────┤  Does another RS ├───────────┐
         │           │ have accommodation?│          │
         │           └─────────────────┘             │
         │                                           │
         │                        Yes  ┌──────────────────────┐
         │                  ┌──────────┤ Would an allocation only│
         │                  │          │ be accepted in this train?│
         │                  │          └──────────────────────┘
         │                  │                        │ No
         │                  │                        │
         │      ┌───────────────────┐ Yes  ┌─────────────────┐ Yes
         │      │  Are other services├──────┤  Are other trains ├──────┐
         │      │     available?     │      │     available?    │      │
         │      └───────────────────┘      └─────────────────┘      │
         │                  │ No                      │ No           │
         │                  │              Yes ┌─────────────────┐   │
         │                  │          ┌───────┤  Other services   │   │
         │                  │          │       │    available?     │   │
         │                  │          │       └─────────────────┘   │
         │                  │          │                 │ No         │
         │                  │          │                 │            │
  ┌───────────┐  ┌───────────────┐  ┌───────────────────┐  ┌───────────────────┐
  │ Alternative│  │Negative answer │  │Alternative proposal│  │Allocation in another│
  │ proposal   │  │"Train sold out"│  │ of other services  │  │       train         │
  │ other RS   │  │                │  │ in the train requested│  │        or          │
  │            │  │                │  │                    │  │alternative proposal │
  │            │  │                │  │                    │  │  in another train   │
  └───────────┘  └───────────────┘  └───────────────────┘  └───────────────────┘
```

Fig. 1 - Rules on alternative proposals

If several RUs have stored their offer of seats/berths in the same RS, the above mentioned rules are only used if the demand cannot be met from any of those inventories.

2.1.7 -   Timeframes

2.1.7.1 - Seat/berth allocation

Regardless of the ordering timeframe that applies in-house at individual RSs, the allocation of seats/ berths shall be carried out by all RSs within the timeframe which is laid down in the *"Seat/Berth Reservation" Appendix to the TCV*.

Certain RSs allocate seats/berths in response to requests which have been received in writing or by telex etc., at their central reservation office, some days before the beginning of this timeframe. These RSs deal (by means of bilateral agreements) in the same way with the orders received electronically from central reservation offices of other RSs.

2.1.7.2 - End of the reservation period

The RS which manages the seat/berth allocation shall lay down the end of the reservation period for each train or set of through coaches.

2.1.7.3 - Deadlines for cancelling and exchanging seats/berths

Applications for cancellation and exchange shall be accepted until the end of the reservation period.

2.1.8 - Price calculation

Prices are calculated using the international (TCV) or national regulations.

The allocating RS (see Glossary - page 46) shall do the price calculation.

If, exceptionally, the allocating RS cannot calculate the price, it shall send a negative reply.

Contrary to this basic rule, the price calculation for special tariff small groups for seats in trains not subject to supplements shall be done by the requesting RS after receipt of the confirmation from the allocating RS.

2.1.9 - Travel documents

Travel documents comprise:

- the papers issued to passengers (see *UIC Leaflet 918-2*),

- the service documents (see *UIC Leaflet 918-1*) provided for the staff of the RS and the service companies.

If individual travel documents are asked for in a request, as many travel documents shall be issued as reserved seats/berths. Each of the travel documents shall then have a different reference number.

If the space on a travel document is not sufficient to give all the information - especially the seats/berths allocated - an additional travel document shall be issued. This travel document shall bear the same reference number as the main travel document.

A request can cause the issue of different types of travel document. The various possible combinations are given in the following table:

Type of reservation ticket	Combinations									
Reservation ticket for seat	X	X	X	-	-	-	-	-	-	-
Couchette	-	-	-	X	X	X	-	-	-	-
Sleeper berth	-	-	-	-	-	-	X	X	X	-
Meal at seat	X	-	X	X	-	X	X	-	X	X
Accompanied car train	-	X	X	-	X	X	-	X	X	X

A maximum of 8 travel documents can be issued for a request.

2.1.10 - Negative answers

Negative answers, which can be caused by:

- errors in formulating the request,

- IT errors, which are only recognised when the requests are further processed,

- the impossibility of meeting the request (insufficient seats/berths available, reservation system defective, etc.),

must be meaningful in order to allow further processing of the running transaction.

If, at the same time, several services are requested, there may not be a confirmation for one and a negative answer for the others. The service that is available therefore results in a special negative answer.

2.2 - Functions to be guaranteed

2.2.1 - Reservation

2.2.1.1 - General

The "Reservation" function covers the following sub-functions:

- checks,

- determination of the RS which allocates the seats/berths,

- seat/berth allocation,

- price calculation,

- issue of reservation tickets,

which help to deal with both simple and combined requests as well as the corresponding answers.

A simple request may involve several services (maximum three) in one and the same train. The different combination possibilities are given in the table below:

Service	Combinations										
Seat	X	X	X	-	-	-	-	-	-	-	-
Couchette	-	-	-	X	X	X	-	-	-	-	-
Sleeper berth	-	-	-	-	-	-	X	X	X	-	-
Vehicle space	X	-	X	X	-	X	X	-	X	X	X
Seat with meal at seat	-	-	-	-	-	-	-	-	-	-	X
Meal in train dining car	-	X	X	-	X	X	-	X	X	X	-

2.2.1.2 - Checks

The issuing RS shall check the syntax and the compatibility of the information before sending the message.

Upon receiving a request, the receiving RS shall check whether the service is offered, the acceptance conditions, and the stored seats/berths available.

2.2.1.3 - Determination of the system that manages the seat/berth inventory

When a request is received at one of its terminals, the RS must determine which RS is responsible for the train requested.

If it is not the managing RS itself, the RS concerned shall be determined on the basis of the boarding station. If this is in another country, then the RS in whose area this station is located shall be considered to be the managing RS.

If the boarding station is not abroad, the managing RS shall be determined on the basis of stored information.

As a result of this, each RS must know all the reservable trains that run in its area (starting trains, transit trains, terminating trains). The following should be stored:

- in the case of a train the seats/berths of which are completely or partly managed by the RS:

  • all station stops,
  • the complete train number sequence,
  • the days when the managed coaches run,
  • if applicable, the other RSs which manage the seat/berth inventory;

- in the case of a train the seats/berths of which are managed by another RS:

  • for transit trains and similar which terminate in its area (with coaches coming from various RSs and being run onwards in one and the same train), the RS with the seat/berth inventory lying "upstream" (in the sense of the direction of travel),
  • for trains which begin in its area, the RS with the seat/berth inventory lying "downstream" (in the sense of the direction of travel).

RUs which do not have their own electronic RS can let other RSs manage their trains. These special situations must be known to all RSs so that they do not direct the requests to the RS in whose area the boarding station is located, but to that which manages the seat/berth inventory of the train concerned.

An RS which receives a reservation request from another RS must inform this RS of the RS with a seat/berth inventory in this train if it has no accommodation on offer itself or its own inventory has been sold out. In order to avoid an endless circuit, in this case the issuing RS must make sure that the request is not transferred to an RS which it has already asked.
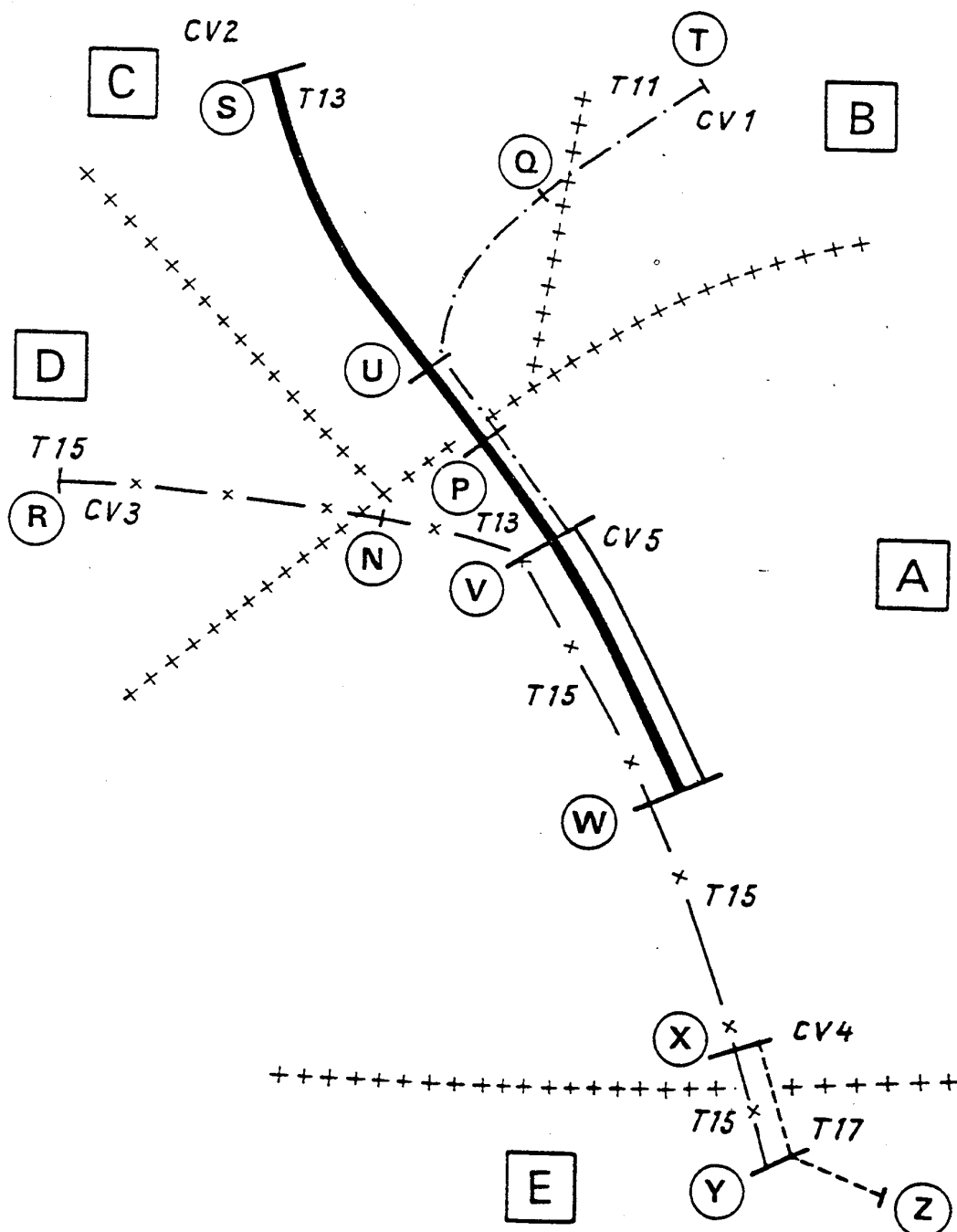
Key:

CV5: Set of through coaches 5

T11: Train number 11

(W) : Station W

D : RU D

Note: new day from station V

Fig. 2 - Example

What the RS managing the seat/berth inventory must know:

Coach run	RS offering the service	Information to be stored			
		Stations	Train number	Days on which train runs	Other RS that offer this service
CV 1	B	T → V	T11 (T → U) T13 (U → V)	J J	-
CV 2	C	S → W	T13 (S → V) T15 (V → W)	J J + 1	B -
CV 3	D	R → Y	T15 (R → Y)	J, J + 1	-
CV 4	E	X → Z	T15 (X → Y) T17 (Y → Z)	J + 1 J + 1	D -
CV 5	A	V → W	T15 (N → X)	J, J + 1	C, D, E

What the RS which does not manage the seat/berth inventory must know:

RS	Information to be stored	
	Train number	RSs that offer this service
C	T11 (Q → U)	B
A	T13 (P → V)	B, C

Determination of the seat/berth allocating RS by RS A

Request through a terminal of RS A:

Train	Date	Boarding station	Receiving RS	Answer	Other receiving RS
T11	J	T	B	Allocation or negative answer	-
T11	J	Q	C	Alternative proposal of other RS	B
T13	J	U	C	Allocation or alternative proposal of other RS	B
T13	J	P	B	Allocation or negative answer	C if answer is negative
T15	J + 1	V	-	-	C and D if no allocation by A
T15	J + 1	X	E	Allocation in T15 on the day J or negative answer	D if answer is negative

Request by other RS (E):

Train	Date	Boarding station	Answer
T13	J	P	Proposal of other RSs: B and C
T15	J + 1	V	Allocation or proposal of other RSs: C and D
T15	J + 1	W	Proposal of other RS: D

2.2.1.4 - Seat/berth allocation

The seat/berth allocation shall be done as specified in the rules laid down in point 2.1.5 - page 7. It involves issuing a specific reference number for each allocation to enable the seats to be identified and released in the event of a cancellation or an exchange. A different reference number from the original allocation reference must be issued when cancelled seats are re-allocated.

The reference number formed according to the rules of each RS must be sufficiently reliable to ensure that seats/berths cannot be erroneously released (for format, see *UIC Leaflet 918-1*).

2.2.1.5 - Price calculation

Each RS must be able to make the price calculation for a request with two tariffs (full/reduced tariff - full tariff/free - reduced/reduced).

The RS which carries out the price calculation (see point 2.1.8 - page 10) must store either the charge for the reservation or the items in the price calculation so that the issuing RS can, if necessary, calculate the amount to be refunded.

2.2.1.6 - Issue of reservation tickets

Each issuing RS shall produce the reservation tickets on the basis of the confirmation obtained from the allocating RS.

If the issuing RS cannot produce a reservation ticket on its request terminal because a syntax or compatibility check is negative or because of a defect, it shall send a cancellation message to the allocating RS.

2.2.2 - Cancellation

2.2.2.1 - General

The cancellation function covers the following sub-functions:

- checks,

- determination of the RS managing the seat/berth inventory,

- seat/berth release,

- price calculation,

- issue of reservation tickets.

With their help, partial and complete cancellation requests and the corresponding answers can be dealt with.

2.2.2.2 - Checks

The issuing RS shall check the syntax and the compatibility of the information before sending the message.

The allocating RS shall check the acceptance conditions and the seats/berths allocated when it receives the requests.

2.2.2.3 - Determination of the RS managing the seat/berth inventory

The cancellation requests shall be sent to the RS whose code is given in the reference number of the reservation ticket to be cancelled.

2.2.2.4 - Release of seats/berths

Seats/berths are released using the reference number. This concerns all the seats/berths for a full cancellation and only some of the seats/berths for a partial cancellation (the trailer for a part cancellation of a car place).

In the case of a cancellation of seats with meals at the seat, the release of the seats automatically triggers the cancellation of the associated meals.

2.2.2.5 - Price calculation

For a full cancellation, there is no price calculation. For a partial cancellation, the rules described in point 2.2.1.5 - page 15 apply in respect of the seats/berths retained.

The issuing RS shall calculate the amount to be refunded.

2.2.2.6 - Issue of reservation tickets

In the case of cancellations, based on the confirmation received from the allocating RS, the issuing RS shall produce the following on the requesting terminal:

- either a specific reservation ticket,

- or a message,

- or a cancellation note on the original reservation ticket.

For partial calculations, the rules given in point 2.2.1.6 - page 15 shall also be applied.

2.2.3 - Exchange

General

An exchange shall consist of a complete cancellation and a new reservation.

The conditions for exchange are laid down in the TCV.

2.2.4 -   Listing

General

The listing function consists of the transfer of the list data and the issue of the requisite service documents.

After the final list has been produced, no further seat/berth reservations shall be made by the system in trains for which the list data is transmitted to another system. Partial cancellations are possible.

After successful transmission, the receiving RS is alone responsible for passing the information on to the end user, including all repetitions.

The sending RS shall hold the list data until the departure time of the train for any repetitions that may be necessary. A further transmission of the list data can take place at the request of the receiving RS.

2.2.5 -   Settlement

This function is dealt with in point .

3 - Reservations on ships

3.1 - Principles

3.1.1 - Ships

3.1.1.1 - Management of the seat/berth inventory

- Each shipping company has its own seat/berth inventory.

- Shipping companies can deviate from this rule by bilateral agreement.

- The seat/berth inventory is freely available to each shipping company.

3.1.1.2 - Ferry sailing numbers

All ferry sailings on which seats/berths can be reserved are designated by a five-digit ferry sailing number.

3.1.2 - Services

3.1.2.1 - Reservable services

- People on ferries.

- Vehicles on ferries with and without driver or passengers (e.g. caravan, road coach).

3.1.2.2 - Types of seats/berths for passengers on ferries

Ship seats/berths (journey without using ancillary services):

- seats,

- reclining seats,

- cabins (couchettes, beds).

3.1.2.3 - Types of places for vehicles on ferries

- Places for vehicles and

- Types of seats/berths for passengers as specified in point 3.1.2.2.

3.1.3 - Journey reserved

The journey reserved shall be identified by:

- the boarding harbour and

- the landing harbour.

The coding of the boarding and landing harbours shall be done as specified in the rules of *UIC Leaflet 920-2* (see Bibliography - page 48) or according to the ECE Code (see List of abbreviations - page 47).

3.1.4 - Allocation rules

Allocations are made on the basis of:

- ferry sailing numbers,

- departure date,

- departure time,

- service,

- customer's requirements,

- boarding harbour,

- landing harbour.

Alternative allocation can occur, if an allocation on another ferry service was accepted in the request.

3.1.5 - Alternative proposals

A shipping company which cannot meet a request can offer as an alternative:

- another type of accommodation on the same ferry sailing,

- one of the previous or subsequent ferry sailings on the same day, on the day before or on the next day.

3.1.6 - Timeframes

3.1.6.1 - Seat/berth allocation times

The timeframe for seat/berth allocation shall run from at least two months before departure up to the close of reservations.

3.1.6.2 - Close of reservations

The shipping company which manages the seat/berth allocation lays down the time when reservations close for individual ferry sailings.

3.1.6.3 - Timeframe for cancellation of reservations

Requests for cancellation shall be accepted up to the close of reservations.

3.1.7 - Price calculation

The allocating shipping company shall calculate the price in the currency of the issuing country and in euro.

If the allocating shipping company cannot calculate the price, stars shall be transmitted in the price field.

3.1.8 - Tariff

The allocating shipping company shall apply the tariff that is most favourable for the customer.

3.1.9 - Transport documents

Reserved.

3.1.10 - Negative answers

Negative answers, which can be caused by:

- errors in the formulation of the requests,

- IT errors, which were only recognised when further processing the requests,

- requests which cannot be met (insufficient seats/berths or ferry sailing number sold out),

must be definite, in order to allow further processing of the transaction under way.

If several services are requested at the same time and confirmation cannot be given for one then a negative answer must be given for all the others. A particular negative answer must therefore be given to the services that can be provided.

3.2 - Functions to be guaranteed

3.2.1 - Reservation

3.2.1.1 - General

The reservation function contains the following sub-functions:

- checks,

- determination of which shipping company manages the seat/berth inventory,

- seat/berth allocation,

- price calculation,

- issue of reservation tickets,

which help to deal with requests and the corresponding answers.

A single request merely concerns one service on a ship.

A combined request concerns several services on one ship. The different possible combinations are given in the table below.

Service / Type of seat/berth	Combinations			
Place on ship	X	-	-	-
Seat	-	X	-	-
Reclining seat	-	-	X	-
Cabin (couchettes, beds)	-	-	-	X
Place for vehicle	X	X	X	X

3.2.1.2 - Checks

The issuing shipping company shall check the syntax and the compatibility of the information before sending the message.

The receiving shipping company shall check the services offered, the acceptance conditions and the seat/berth inventory stored when the request is received.

3.2.1.3 - Determination of which system manages the seat/berth inventory

Each shipping company must determine, on receipt of a request from one of its terminals, which shipping company is responsible for the ferry sailing.

The shipping company to be addressed shall be determined by means of the boarding harbour or by a code of the shipping company.

3.2.1.4 - Seat/berth allocation

The seat/berth allocation shall be done as specified in point 3.1.4 - page 19.

3.2.1.5 - Reference number

The reference number formed by each shipping company according to its own rules must be sufficiently reliable to ensure that reserved seats cannot be erroneously released (for format of the reference number: see *UIC Leaflet 918-1*).

3.2.1.6 - Price calculation

Each shipping company shall use the most favourable tariff in the price calculation.

The shipping company which calculates the price must store either the charge for the reservation or the items in the price calculation, in order that the issuing office can calculate the amount to be refunded if necessary.

3.2.1.7 - Issue of reservation tickets

Each issuing office shall produce reservation tickets on the basis of the confirmation received from the allocating shipping company.

If it cannot produce a reservation ticket due to a failure on its request terminal, it shall send a correction message to the allocating shipping company.

3.2.2 - Cancellation

3.2.2.1 - General

The cancellation function contains the following sub-functions:

- checks,

- determination of which system manages the seat/berth inventory,

- seat/berth release,

- price calculation,

- issue of reservation tickets,

which help to deal with partial or complete cancellation requests and the corresponding answers.

3.2.2.2 - Checks

The issuing administration shall check the syntax and the compatibility of the information before transmission of the message.

The allocating shipping company shall check the acceptance conditions and the seats/berths allocated when it receives the request.

3.2.2.3 - Determination of which system manages the seat/berth inventory

The cancellation requests shall be sent to the reservation system or the shipping company whose code is given in the request for the reservation ticket to be cancelled.

3.2.2.4 - Seat/berth release

Seats/berths are released based on the reference number, ferry sailing number and date. It concerns all seats/berths if it is a complete cancellation, and only some of the seats/berths if it is a partial cancellation.

3.2.2.5 - Price calculation

The issuing office shall calculate the amount to be refunded.

The rules set out in point 3.2.1.6 - page 21 shall be applied to the seats/berths retained.

3.2.2.6 - Issue of reservation tickets

In the case of cancellations, the issuing office shall produce the following on the requesting terminal, based on the confirmation received from the allocating system:

- either a specific reservation ticket,

- or a message,

- or a cancellation note on the original reservation ticket,

- or a new reservation ticket in the case of a partial cancellation.

4 - Accounting

The arrangements by which some of the data obtained in the course of the work of "electronic seat/berth reservation and ancillary services" must be recorded and processed for accounting purposes are given in *UIC Leaflet 301* (or provisionally *UIC Leaflet 301-0*) , which is managed by the RCF1 "Passenger Accounting and Financial Regulations" Group .

These leaflets stipulate, in particular, that the accounts shall be produced by the allocating RS from the records in its central system. The seat/berth allocating RS must be in a position to supply evidence supporting the accounts. Therefore, the system must store and process the necessary information in order to be able to deliver the requisite accounting lists.

5 - Travel documents

5.1 - General

5.1.1 - List of documents

A distinction is made between the:

- documents for services provided by the RU,

- other RU documents,

- documents for services provided outside the RU.

5.1.2 - Description of the documents

5.1.2.1 - Documents for services provided by the RU

The "documents for services provided by the RU" are basically documents which refer to railway services and are covered by *UIC Leaflet 918-2*, in particular:

- combined ticket and reservation ticket,

- travel ticket,

- reservation for seats, couchettes and sleeper berths,

- supplement,

- change of class,

- change of route,

- group tickets with countermark and additional ticket,

- EuroDomino,

- InterRail,

- accompanied car train ticket,

as well as:

- reservation ticket for meals,

- global price ticket,

- tourism documents.

The conditions for production of these documents are described below and refer only to documents which are electronically produced.

5.1.2.2 - Other RU documents

The "other RU documents" are in-house documents issued for service purposes, in particular:

- list documents:

    • reservation labels,
    • accompanying documents,

- notification documents:

    • sleeping and couchette coaches,
    • road vehicles,
    • meals,

- the loading list for vehicles,

- definitive documents for meals,

- information for passengers.

The conditions for producing the reservation labels are set out in *UIC Leaflet 918-1*.

The lists of information to be provided for the production of the other list documents are dealt with in *UIC Leaflet 918-1*.

5.1.2.3 - Documents for services provided by organisations external to the RU

"Documents for services provided by organisations external to the RU" are basically slips issued for non RU-services through terminals connected to the RU's electronic reservation system, for example reservation of hotel rooms, taxis at station, etc.

The conditions for the production of these documents have not yet been described.

5.2 - Application cases

5.2.1 - RU documents

The RU documents referred to here are described in the cases set out in the tables below:

5.2.1.1 - Travel documents (only)

Case	Issuing RU	Route	
		Departure RU	Destination RU
1	A	A	B
2	A	B	A
3	A	B	C
4	A	B	B
5	A	A	A

Case 5 only applies in the case of transit over another RU.

5.2.1.2 - Travel documents that are not travel tickets

Case	Issuing RS	Route		Allocating RU	Service-providing RU
		Departure RU	Destination RU		
1	A	A	B	any	any
2	A	B	A		
3	A	B	C		
4	A	B	B		
5	A	A	A	an RU other than A	
6	A	A	A	A	an RU other than A

Case 6 applies only to reservation tickets for sleeping and couchette cars. In this case, the RU providing the service is the RU which owns the couchette coaches or the RU which manages the sleeping cars (a pool is considered to be an RU).

5.2.2 - Further RU documents

The reservation labels, described below, are mandatory for trains which convey coaches internationally.

The other listing documents are produced as each RU sees fit in accordance with the national regulations.

Information for passengers is provided by each RU as specified in the relevant national regulations.

NB : RUs are free to use their own forms in special cases. It is nonetheless very important to bear in mind that issuing differing documents is not advantageous for passengers and staff.

5.3 - General regulations for travel documents and reservation tickets

The general regulations regarding:

- the details appearing on the documents,

- the sub-division of the printed documents,

- the centring of variable data (see also point 6.2.9 - page 31),

- the languages to be used,

- the printing of the headings and

- the cancellation of unused positions (see also point 6.2.11 - page 32),

are laid down in *UIC Leaflet 918-2*.

The general regulations regarding:

- the forms to be used (see also point 6.2.3 - page 30,)

- the colour of the ink,

- the languages to be used and

- the security background,

are laid down by the International Rail Transport Committee (CIT) in the *MDI*, or in the *PIV* (see List of abbreviations - page 47 and Bibliography - page 48).

NB : the rules regarding the languages to be used are laid down in *UIC Leaflet 918-2* and in the *PIV*.

6 - Documents for services provided by RUs

6.1 - General

Combined travel tickets of the old format (RCT1) are being withdrawn.

For RUs which still produce travel documents for:

- seats, couchettes and sleeper berths,

- single tickets,

- accompanied car train tickets,

- sea travel tickets,

- supplementary tickets,

- reservation tickets for meals,

- global price tickets,

- tourism documents,

using the old format (i.e. not RCT2), the regulations in *UIC Leaflet 918 (obsolete)* still applied up to 31.12.2003.

From 1.1.2004, only the formats given in *UIC Leaflet 918-2* (RCT2 standard) apply.

6.2 - Combined travel tickets and reservation tickets (RCT 2 standard)

6.2.1 - Line and column structure

The height is subdivided into 18 lines designated "A" to "R" of a height of 1/6". Each line contains 72 characters or positions of a width of 1/10". There is a neutral zone above the first line and below the last line of a height of 1/8".

The 1/10" space to the right of column 72 must not contain any pre-printed data or data printed by the terminal.

The *MDI* regulations apply for:

- the dimensions of the forms,

- the subdivision of the forms into columns and lines,

- the security background,

- the colour of the ink,

- the sum,

- the fonts.

6.2.2 - Grid with details of the lines and columns

Specimen grids with details of the lines and columns for RCT 2 are given in *UIC Leaflet 918-2* and for other travel documents in the *MDI*.

6.2.3 - Pre-printed stock to be used

The various documents have been designed so that they can be issued through terminals using pre-printed stock. That stock may:

- be separate cards or in continuous form,

- have the field title and field lines fully or partly printed,

- feature only the document number,

- consist of individual forms or of multi-page sets suitable for making copies.

The pre-printed form shall be set out exactly as specified in the *MDI* regulations.

6.2.4 - Security background

Irrespective of the source and constitution of the forms, they must have a security background, the colour, design and print quality of which correspond with the *MDI* regulations.

6.2.5 - Counterfoils

To facilitate their production by printers connected to computer terminals, documents issued in accordance with the regulations of this leaflet do not need counterfoils, provided the terminal stores the details of the travel documents issued in some fashion (journal strips, magnetic data carriers, etc.).

If the travel document has a counterfoil, it is always the first sheet.

6.2.6 - Data on documents

The data to be printed on the travel documents consists of unchanging titles and variable entries. The headings, which are always the same for a given category of document, contain information that can differ between documents in the same document category.

Certain information, in particular that which appears in the upper part of the document and which is intended for service use and not by passengers, is not labelled with titles.

Certain headings are always pre-printed. The others may be pre-printed or printed by the terminal. Use of paper documents carrying a pre-printed serial number only (all information being printed by the terminal) is an exception to the rule.

Since pre-printing certain details affords more freedom than printing them by terminals, there can be certain differences between pre-printed travel documents and those printed by terminals. The pre-printed characters are generally smaller than those printed by terminals. Since pre-printing certain data affords more variety, the shape and size of the characters may vary.

6.2.7 - Languages to be used (in pre-printed texts)

All field titles which can be pre-printed shall be printed in the languages specified in the *MDI*.

To differentiate between texts printed in two different languages on the same line in a field title, the issuing RU must separate them with a slash (/). It can also, if preferred, put the words of the text in the second language in brackets and, with pre-printed travel documents, use smaller and thinner letters.

6.2.8 - Restricting the printed zones

The variable data shall be printed in the specified print zones by the terminal.

The field titles pre-printed or printed by the terminal shall be placed immediately above or to the left of the details to which they refer.

For paper documents on which only the serial number is pre-printed, the printing zone covers the whole travel document.

6.2.9 - Centring the variable data

Some variable details do not fill up the full length of the space provided.

In this case, in general, the procedure should be as follows:

- the numerical data should be set to the right,

- the alphabetical data should be shifted to the left.

6.2.10 - Printing the field titles

When a field title has to be printed by a terminal in a zone and does not fill out the existing or planned positions completely, it is preferable to print the field title in the middle of the zone leaving approximately the same number of spaces free on either side.

Example:

"WE HAVE RESERVED FOR YOU / NOUS VOUS AVONS RESERVE"

If the number of characters necessary to fill a field title in a given language exceeds the number of the printing positions available, appropriate abbreviations must be used. Abbreviations should be used only when absolutely necessary so that the document produced is still understandable for the passenger. A point may be placed behind the last position to indicate that the field title has been abbreviated.

The fact that abbreviations are sometimes necessary when printing by terminals justifies the differences that can arise compared with pre-printed texts.

Field titles shall only be printed by terminals when an item of information actually needs to be provided in the corresponding field.

6.2.11 -   Cancellation of unused positions

The tariff and accounting regulations require that certain unused positions on pre-printed forms be cancelled.

It is generally sufficient to use five cancellation signs to cancel a zone.

A star (*) or the letter X should preferably be used as the cancellation sign.

The cancellation arrangements for each zone are set out in the respective point.

6.2.12 -   Layout of the documents

The areas of RU travel documents are divided into eight fields by pre-printed semi-bold lines. Some of these lines can be pre-printed (see design in MDI).

The fields show the part that is common to all documents. A specimen and a print grid are given in *UIC Leaflet 918-2*.

The field eight forms the stock of the individual documents.

7 - Specifying the printing standard

7.1 - General

The basic requirements for the layout of electronically-produced travel documents are laid down in *Appendix 4 of the MDI*.

7.2 - Other formats

Other formats are used for the production of certain documents: seat/berth reservation documents and various lists.

The dimensions of those documents must be approximately as follows:

- seat reservation labels

  - Length: 3 15/16" (100,01 mm),
  - Height: 1 1/4" (31,75 mm);

- compartment reservation labels

  - Height:
    - Compartment with 6 seats: 3 3/4" (95,25 mm),
    - Compartment with 8 seats: 5" (127,00 mm);
  - Length: 3 15/16" (100,01 mm).

8 - Print fonts

The basic requirements for the layout of electronically produced travel documents are laid down in *Appendix 4 of the MDI*.

The characters printed on seat/berth reservation documents to be displayed in trains (seat/berth reservation labels or slips) must have a minimum height of 1/6".

9 - Principles

9.1 - Definition

A message is a unit of communication exchanged between two application systems via a data transmission system.

It is variable in length, with the maximum length specified by the protocols governing the data transmission system.

9.2 - General structure

In accordance with *UIC Leaflet 912* (see Bibliography - page 48), a message consists of a logical sequence of phrases. The structure of a phrase is set out below.
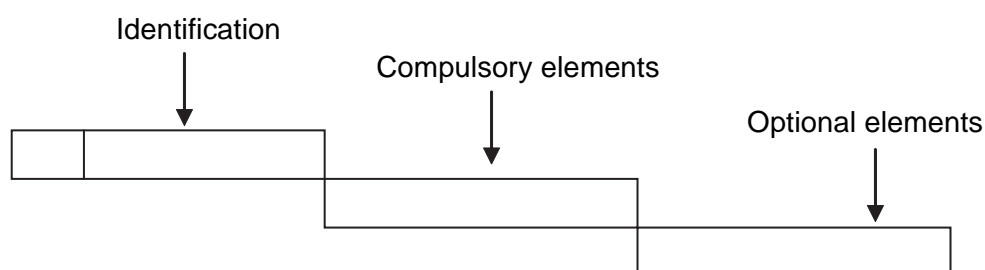
Identification includes:

- the application area,

- the phrase number (value = 0),

- the version number (value = 0),

- the topographical label, denoting the optional elements present.

A detailed description of messages is contained in *UIC Leaflet 918-1*.

9.3 - Reservation messages

9.3.1 - General remarks

According to *UIC Leaflet 912*, reservation messages belong to the domain "seat reservation".

9.3.2 - Structure

A message is made up of several phrases, consisting of two types:

- a "Header" phrase which is mandatory

- "Application text" phrases
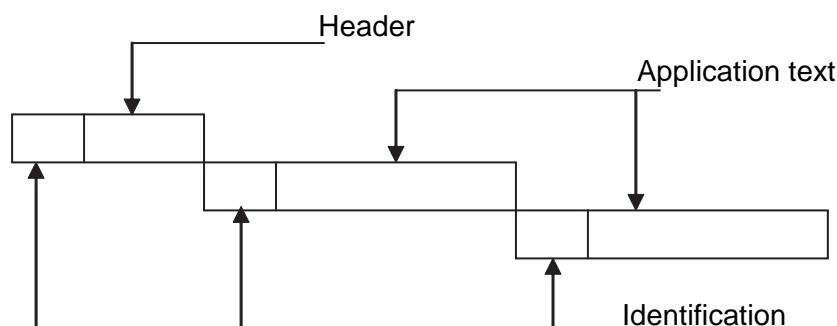
9.3.2.1 - "Header" phrase

This enables the message to be identified and contains the information:

- required for the application level exchange procedure,

- denoting the function to be performed,

- clarifying whether it is an operational or test message,

- specifying the application version.

9.3.2.2 - "Application text" phrase

This contains the information required for processing based on the type of message and service.

The types of service that can be provided by reservation messages are:

- reservation (request and reply),

- cancellation (request and reply),

- exchange (request and reply),

- correction (request and reply) of data in the allocating RS due to an anomaly during processing or transmission,

- exchange of information between operating services[1],

- messages in 918^E format.

Each phrase is characterised by a prefix.

---

1. This service type only contains one "Application text" per message

Prefix

Identification
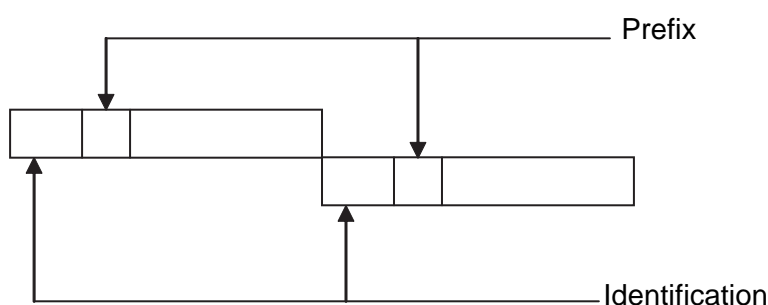
If a message contains several "Application text" phrases, they should be linked by the prefix serial number. The phrases should be numbered in decreasing order and end with 1. If there is only one "Application text" phrase, the serial number shall be 1.

Serial number
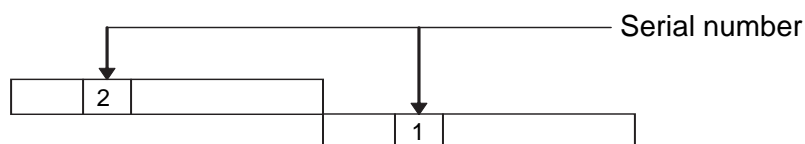
9.3.3 - List of "Application text" phrases

The different "Application text" phrases are:

- the reservation request per service for an overall number of passengers,

- the reservation request per service for a specific seat,

- the reservation request per service for seats adjacent to a specific seat,

- the full cancellation request for each reserved ticket to be cancelled[1]

- the partial cancellation request[1]

- the exchange request for each reserved ticket to be exchanged[1]

- the confirmation related to each ticket to be issued to passengers[2]

- the negative reply,

- the alternative proposal for another allocating RU,

- the alternative proposal for another train,

---

1. For the service "seats with meal at seat" only the ticket related to the "seating accommodation" service shall be taken in consideration.
2. A confirmation, covering the service "seats with at seat meals", comprises the allocation details "seat" and "meal".

- the alternative proposal for other services in the requested train,

- the correction message rejecting the reservation confirmation

- the availability request,

- the availability confirmation.

9.3.4 - Sequencing between the "Application text" phrases

It may sometimes be necessary to establish a link between the "Application text" phrases:

- for a request and the corresponding reply,

- for a reservation confirmation and the correction message.

For confirmation messages, the service indicated in the prefix is sufficient to create the link.

For correction messages, the service indicated in the prefix and the initial dialogue number enable the link to be established.

Regarding negative replies and alternative proposals, the sequencing is established by including the "serial number" value of the request in the "request number" of the reply(ies).

If a reply concerns the entire request message, the element "request number" is absent.

9.3.5 - Diagrams with different examples of sequencing

9.3.5.1 - Sequencing request/confirmation
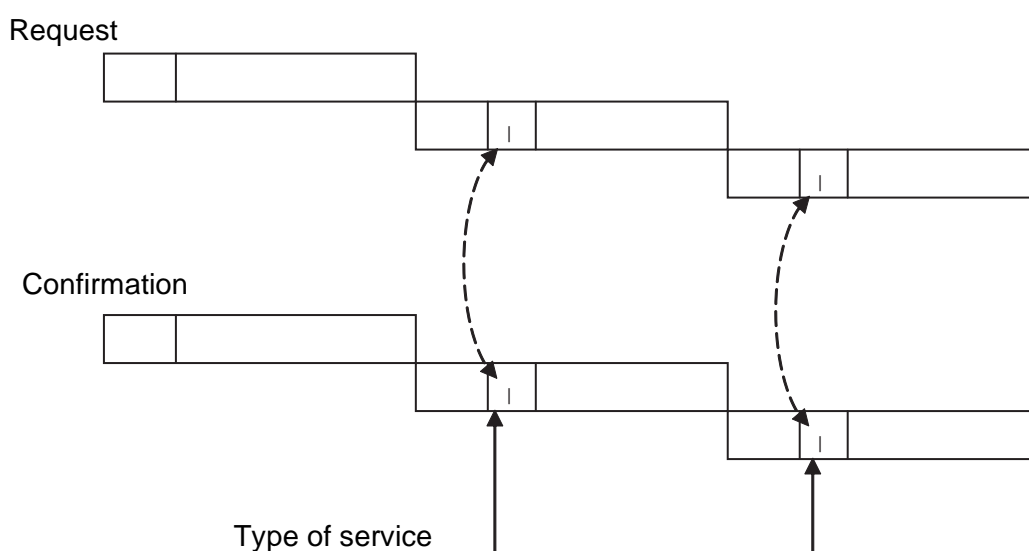
9.3.5.2 -   Sequencing confirmation/correction message

Solution 1
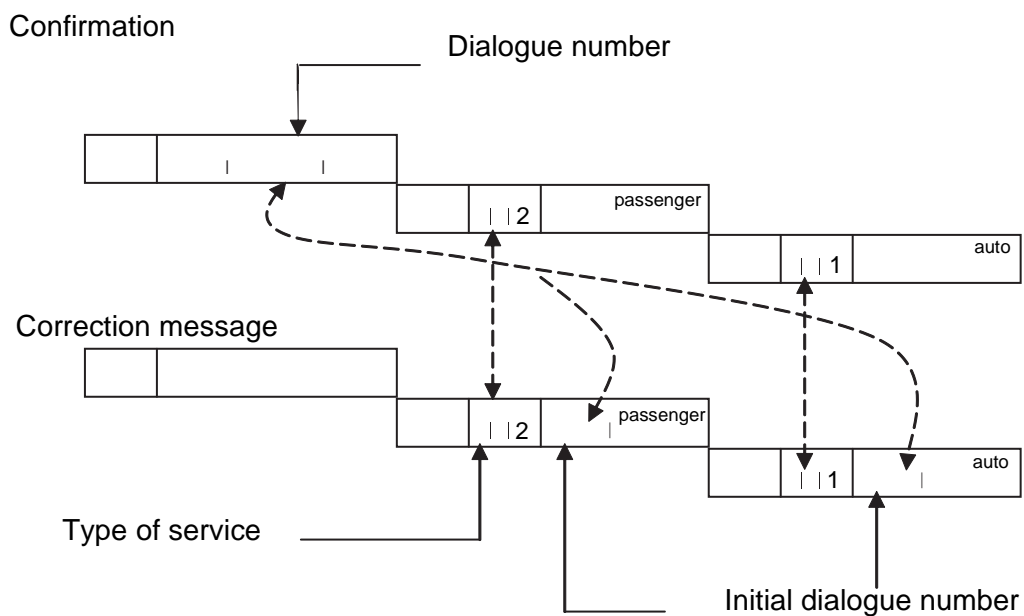
Solution 2
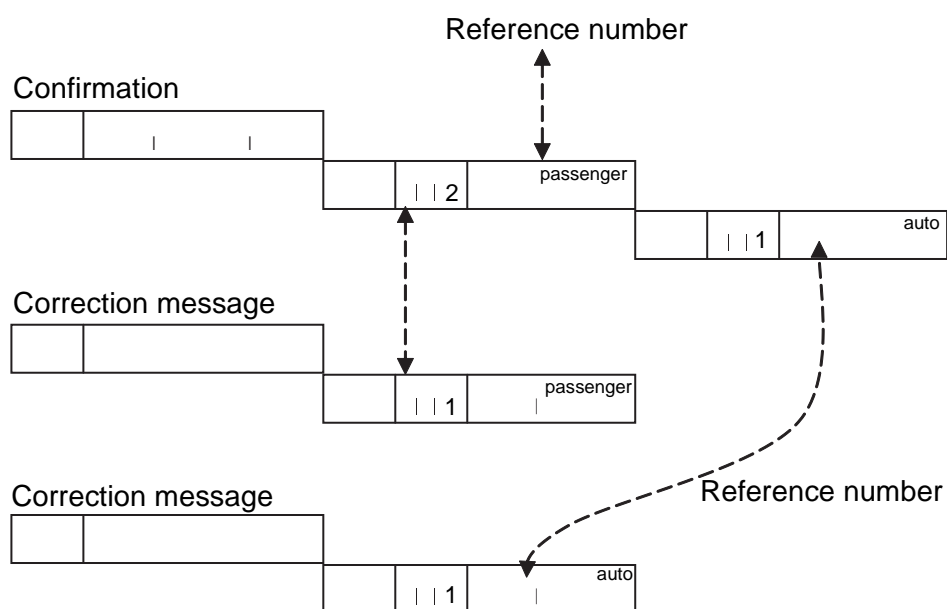
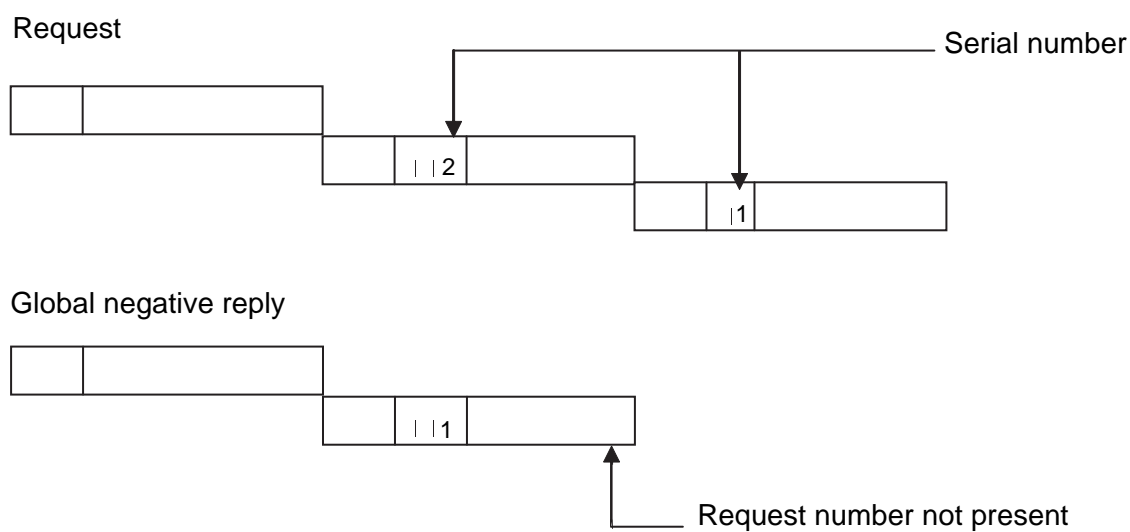### 9.3.5.3 -   Sequencing request/negative reply or alternative proposal

Solution 1
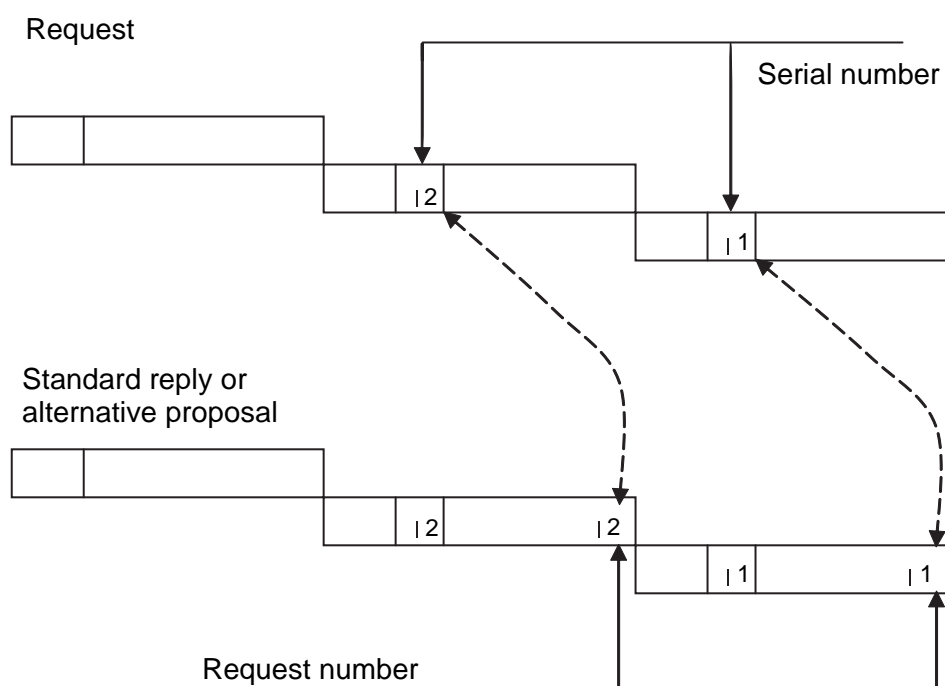
Solution 2
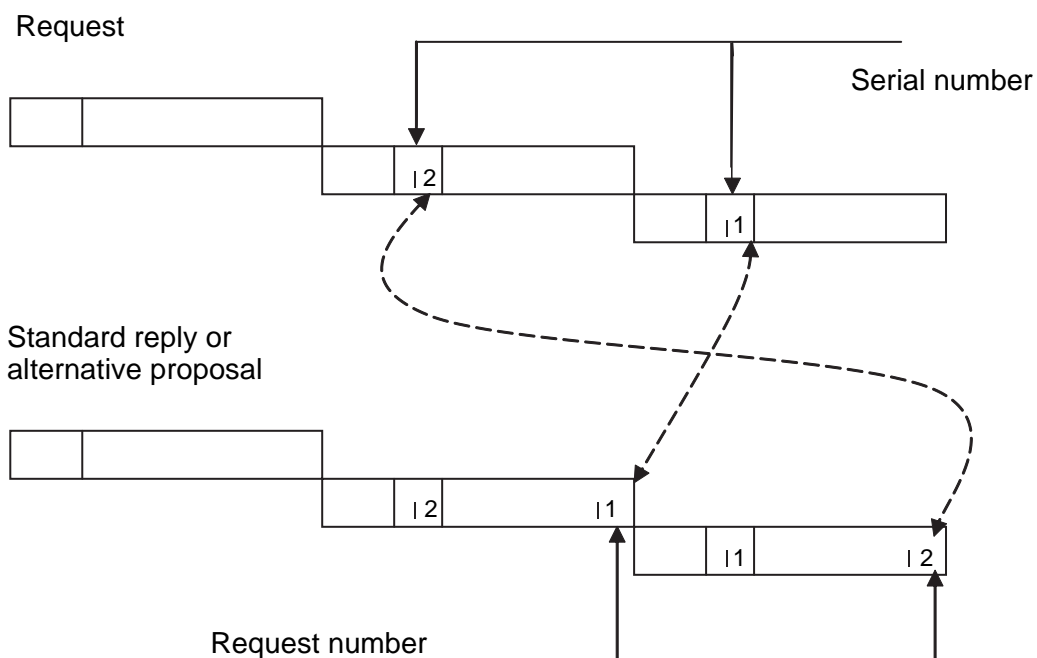
9.3.5.4 -   Sequencing request/global negative reply

Request

Serial number

| | | 2

| 1

Global negative reply

| | 1

Request number not present

9.3.5.5 -   Sequencing of application texts in 918^E

Message:

Serial number

| | | 3 | 11

| 2 | 12

| 1 | 21

Text groups
Sign group 1

Text groups
Sign group 2
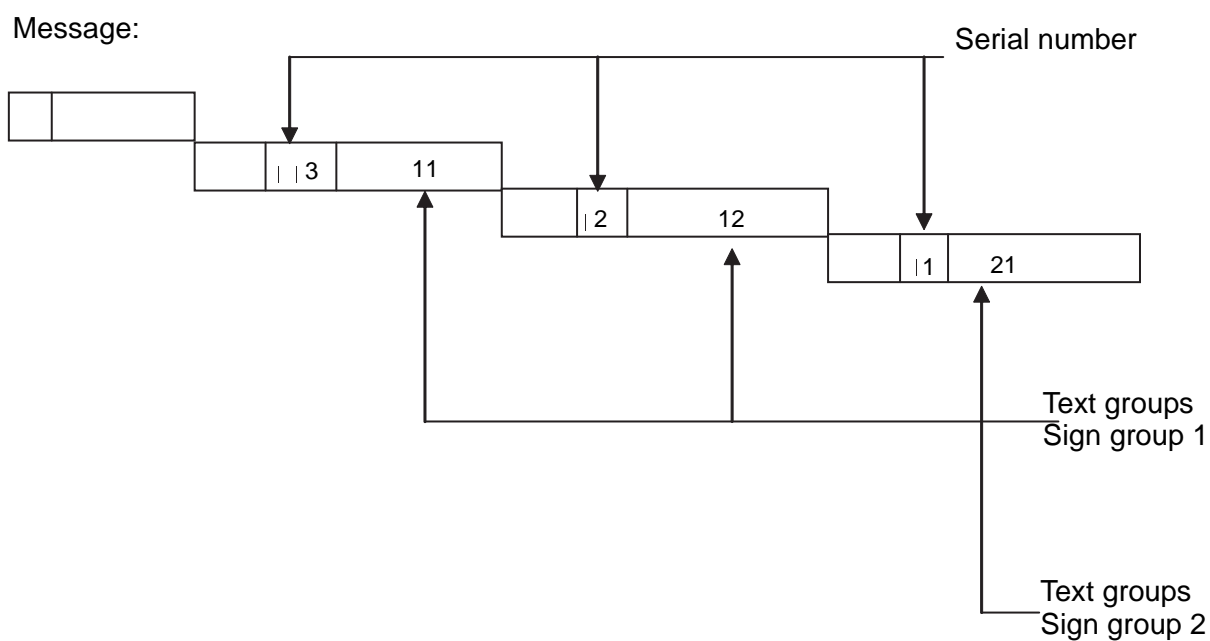
9.4 - Listing messages

9.4.1 - General remarks

According to *UIC Leaflet 912*, listing messages belong to the domain "listing"

A listing message covers one train service only.

9.4.2 - Structure

A message is made up of several phrases, consisting of two types:

- a "Header" phrase which is mandatory,

- "Application text" phrases.

It contains the information required for processing based on the type of message and service.
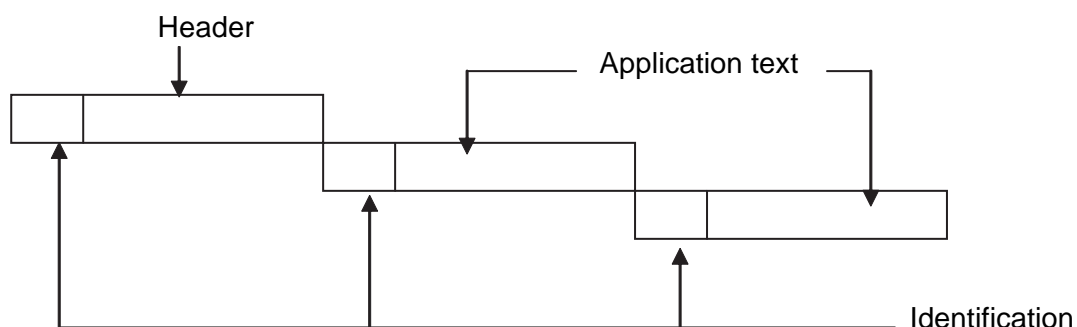
9.4.2.1 - "Header" phrase

This enables the message to be identified and contains the information:

- required for the application level exchange procedure,

- denoting the function to be performed,

- clarifying whether it is an operational or a test message,

- specifying the application version.

9.4.2.2 - "Application text" phrase

This contains the information required for the processing to be carried out.

Each phrase is characterised by a prefix.

The prefix enables the type of "application text" phrase to be identified which may be:

- a "Train" application text comprising the characteristics of the train and the classification table of stations for each listing message,

- a "Coach" application text containing the characteristics of each coach and the seats occupied. This phrase should be drawn up for each coach (even if it has no reservations),

- an application text "Meals in restaurant car",

- an application text "Loading list" for car carrying trains,

- an application text "Provisional list of meals in the restaurant car",

- an application text "Provisional loading list",
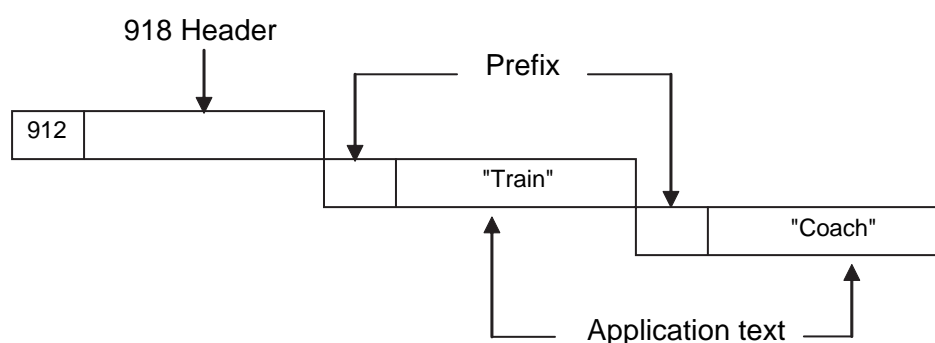
- an application text "Provisional sleeping car advice".
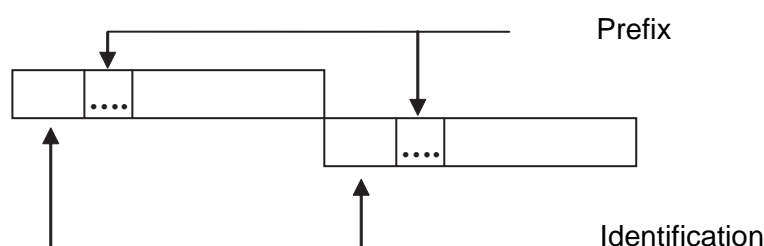
If a message contains several "Application text" phrases, the phrases should be linked by the prefix serial number. The phrases should be numbered in decreasing order and end with 1. If there is only one "Application text" phrase, the serial number is 1.
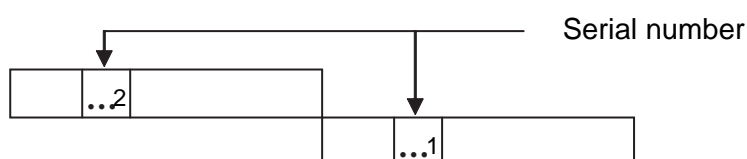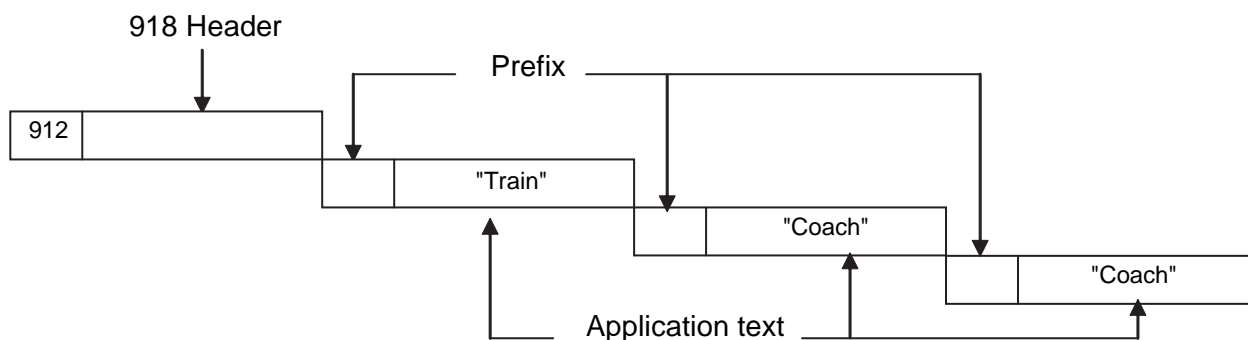
9.4.3 -   Diagrams showing different examples of listing message sequencing

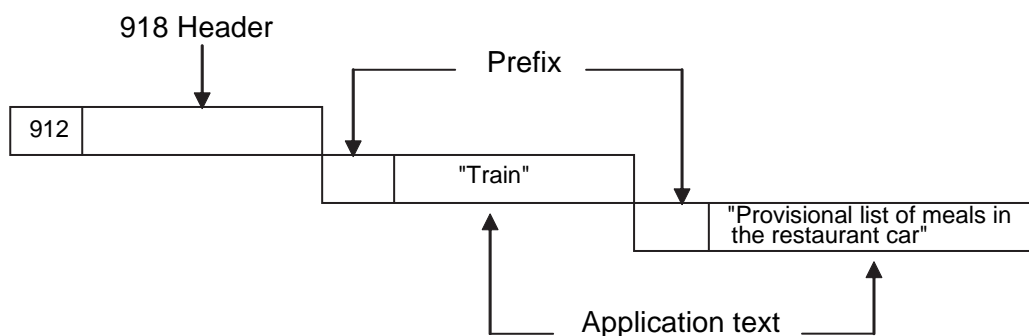**9.4.3.1 -   Listing message with one application text "train" and one application text "coach"**

9.4.3.2 - **Listing message with one application text "Train" and several application texts "Coach"**

9.4.3.3 - **Listing message with one application text "Train" and one application text "Provisional listing of meals in restaurant car"**

9.4.3.4 - **Listing message with one application text "Train" and one application text "Provisional loading list"**
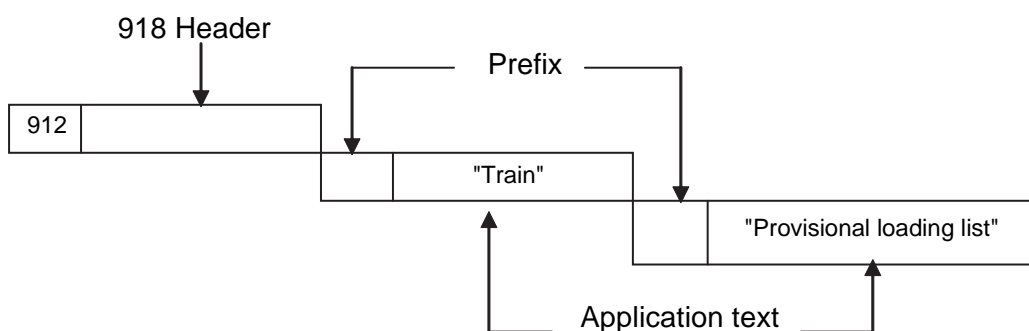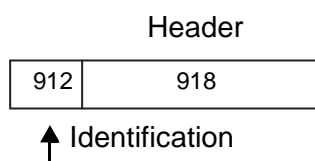
9.5 - Protocol messages (Hermes)

9.5.1 - General remarks

According to *UIC Leaflet 912*, protocol messages belong to the domain "seat reservation".

9.5.2 - Structure

Protocol messages consist solely of the "Header" phrase without the Application text phrase.

Header

912	918

↑ Identification

"Header" phrase

It enables the message to be identified and contains the information:

- for the type of protocol message,

- required for the application level exchange procedure,

- denoting the function to be performed,

- clarifying whether it is an operational or test message,

- specifying the application version.

9.5.3 - List of protocol messages

- synchronisation messages

All other protocol messages are obsolete.

Glossary

Allocating RS   Reservation system which manages the services that are to be reserved

Issuing RU   Railway undertaking managing the issuing office

Requesting RS   Reservation system requesting a reservation

List of abbreviations

CIT	International Rail Transport Committee
ECE	United Nations Economic Commission for Europe
MDI	Compendium of international transport document specimens
PIV	Regulations for international passenger traffic
RCF	Accounting and Financial Regulations (Sector of the UIC Economics, Finance and Environment)
RCF1	Accounting and Financial Regulations - Passenger Traffic Working Group
RS	Reservation system
RU	Railway Undertaking
TCV	Standard International Passenger and Baggage Tariff

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Leaflet 301: Accountancy regulations for international "Passenger" traffic, 1st edition, December 2002

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Leaflet 918-1: Electronic seat/berth reservation and electronic production of transport documents - Exchange of messages, 1st edition, January 2004

Leaflet 918-2: Electronic seat/berth reservation and electronic production of transport documents - Transport documents (RTC2 Standard), restricted distribution, September 2005

Leaflet 920-2: Standard numerical coding of locations, 4th edition of 1.1.89 including Amendments 1-4

2. International standards

International Rail Transport Committee (CIT)
MDI: Collection of international ticket specimens, Chapter A "Ticket specimens - electronically generated tickets" and Appendix 4 "Basic provisions for the layout of coupons issued electronically", 1st Ausgust 1999

PIV: Standard Regulations concerning international passenger and baggage traffic, Point 4 "Issue of travel documents", Paragraph 6 "Electronic tickets", Paragraph 9 "Group tickets" and Paragraph 12 "Electronic supplement documents", 1st August 1999

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