



INTEROPERABILITY UNIT

TAP TSI: ANNEX B.5

ELECTRONIC RESERVATION OF SEATS/BERTHS AND ELECTRONIC PRODUCTION OF TRAVEL DOCUMENTS - EXCHANGE OF MESSAGES

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Version	Date	Section number	Modification/description
1.1	04.05.2011	All sections	First release
1.2	01.02.2013	All sections	<ul style="list-style-type: none"> - Textual errors discovered during TAP TSI phase one - Description of element 52E changed
1.3	10.02.15	3.1	<ul style="list-style-type: none"> - Usage of the 4 defined more precisely - Usage of the element 52A defined in case of application of a reservation fee - Element 41H has to be delivered
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1 Introduction

The present document belongs to the set of Technical Documents described in Annex III 'List of Technical Documents referenced in this TSI' of the COMMISSION REGULATION (EU) No 454/2011.

Electronic reservation of seats/berths and electronic production of travel documents - Exchange of messages

Application:

With effect from 5 May 2011.

All actors of the European Union falling under the provisions of the TAP TSI.

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3 Summary

This Technical Document describes the regulations and procedures to be observed when exchanging messages between an RU that issues travel tickets and reservation tickets and the electronic system of the RU which manages the necessary data for the issue of these tickets, in particular the inventories of seats available for reservation. It is supplemented by the following two Technical Documents:

- *ERA TAP TSI Technical Document B.6* which describes the standard RCT2 that applies to all the travel documents prepared electronically
- *ERA TAP TSI Technical Document B.7* which describes the standard for home-printed tickets to be used in international carriage by train.

Additional Technical Documents are likely to be added when the open points left in the COMMISSION REGULATION (EU) No 454/2011 – “Technical specification for interoperability relating to the subsystem ‘telematics applications for passenger services’ of the trans-European rail system” will be closed.

The arrangements contained in these Technical Documents enable a RU to reserve seats from an inventory managed by another RU and to issue any travel document (in particular seat reservations and combined tickets) produced electronically from data transmitted by the electronic system of another RU.

Note: the term "seat" in this Technical Document is used to identify the group of services e.g. berth, bicycle, seats, etc. but can also be used to address a seat.

4 Overview

4.1 Coding regulations

The elements described below are always of the same length. If the information is shorter than the field length, the following rules apply:

Numerical coding (N):

The information is entered justified on the right and the left of the field is filled with zeros.

Alphanumerical coding (A) and alphanumerical coding with special character (C):

The information is entered justified on the left and the right of the field is filled with "blanks" ("spaces").

Optional elements must be coded in such a way that no elements occur containing only zeros or blanks.

4.2 List of abbreviations

Heading	ACC	Confirmation
	AD	Final listing
	AP	Partial cancellation
	APR	Provisional listing
	ASS	Seats in trains
	AT	Complete cancellation
	AUB	Car on ferry
	AUT	Car-carrying train
	CC	Couchettes in trains
	D	
	DEM	Specific seat
	DMD	Request
	ECH	Distribution Message Descriptor
	HO	Exchange
	L+C	Hotel
	MNS	Length and code
	MR	Non-solicited message
	N	Correction
	PB	Normal seat request
	PRP	Passengers on ferry
		Replacement proposal for other service
	PRR	Replacement proposal for other RS
		Replacement proposal for other train/other ferry
	REP	Reply
	RES	Reservation
	RN	Negative reply
	RP	Seats with at-seat meal in trains Adjacent seat
	V	Berths in trains
	VL	Meal in restaurant car
	VR	Hire car
VSC		

Column code	N A C	Numerical character Alphanumerical character Printable character (A+special character)
Table content	O 1 – 32 -	Obligatory element Optional element (serial number in topographical label) Element not existent

4.3 Special characters used in this Technical Document

Coding	Designation	ASCII-Code
!	Exclamation sign	X'21'
"	Quote marks	X'22'
#	Hash	X'23'
\$	Dollar sign	X'24'
%	Percent	X'25'
&	Ampersand	X'26'
'	Apostrophe	X'27'
(Left parenthesis	X'28'
)	Right parenthesis	X'29'
*	Asterisk	X'2A'
+	Plus	X'2B'
,	Comma	X'2C'
-	Minus	X'2D'
.	Dot	X'2E'
/	Slash	X'2F'
:	Colon	X'3A'
;	Semicolon	X'3B'
<	Less than	X'3C'
=	Equal to	X'3D'
>	More than	X'3E'
?	Question mark	X'3F'

5 Message structure

Chapter numbers 5.7 and 5.11 are intentionally not used.

5.1 General

The application "Seat reservation" concerns messages relating to:

- Reservation in trains,
- Reservation on ferries (if available in rail attributing system),
- Availability information,
- Tickets.

The necessary information elements are described in this Technical Document.

There is only one "918 message header" for all "918 messages" (reservation messages).

5.2 Header

The obligatory header for all messages prepared in accordance with this Technical Document is:

Number	Element	L+C
1	Receiving reservation system	2 N O
2	Sending reservation system	2 N O
3	Dialogue number	5 N O
4	Number of the day in the year	3 N O
5	Type of message	1 N O
6	Type of service	1 N O
7	Number of the requesting terminal	7 A O
8	Type of requesting office or type of protocol message	1 N O
9	Number of the application version	1 N O
10	Field at disposal	2AO
11	Test	1NO

5.3 "Application Text" prefix

This is obligatory before each application text.

An application text may be: a request, a confirmation, a negative reply, a replacement proposal, a correction message.

Number	Element	L+C
15	Service	2NO
16	Type of request or reply	1 N O
17	Serial number	2 N O
18 ^a	Type of text	2NO

a. Element 18 is only available when, in the header, element 6 has the value 8 = 918^E - message.

In these cases, at least 2 application texts are available in the message, the first of which is a DMD (see point 2.14).

5.4 Reservation requests

No.	Element	L+C	ASS			CC			VL			RP			AUT	VR
			N	D	V	N	D	V	N	D	V	N	D	V		
20A	Train number	5A	O	O	O	O	O	O	O	O	O	O	O	O	O	O
21A	Departure date	4N	O	O	O	O	O	O	O	O	O	O	O	O	O	O
22A	Boarding station	7N	O	O	O	O	O	O	O	O	O	O	O	O	O	O
22B	Destination station	7N	O	O	O	O	O	O	O	O	O	O	O	O	O	O
23A	Number of seats	2N	O	-	O	O	-	O	O	-	O	O	-	O	-	-
24	Class	1A	O	O	O	O	O	O	O	-	-	O	O	O	-	-
25A	Type and number of berths	12N	-	-	-	-	-	-	O	O	O	-	-	-	-	-
26A	Type and number of meals	6N	-	-	-	-	-	-	-	-	-	O	O	O	-	O
27	Coach number	3A	-	O	O	-	O	O	-	O	O	-	O	O	-	-
28A	Number of particular seat	3A	-	O	-	-	O	-	-	O	-	-	O	-	-	-
28B	Number of a reference seat	3A	-	-	O	-	-	O	-	-	O	-	-	O	-	-
29A	Vehicle category	1 N	-	-	-	-	-	-	-	-	-	-	-	-	O	-
30	Vehicle registration	10C	-	-	-	-	-	-	-	-	-	-	-	-	O	-
31	Number and ages of the passengers	8N	-	-	-	-	-	-	-	-	-	-	-	-	O	-
32	Journey number	1 N	-	-	-	-	-	-	-	-	-	-	-	-	O	-
33	Journey code	1 N	-	-	-	-	-	-	-	-	-	-	-	-	O	-

35	Smoking/non-smoking	1 N	1	-	-	1	-	-	-	-	-	1	-	-	-	-
36	Position of seat	4 N	2	-	-	2	-	-	1	-	-	2	-	-	-	-
37	Compartment request	6 N	3	-	-	3	-	-	2	-	-	3	-	-	-	-
38A	Position of compartment request	1 N	a	-	-	-	-	-	3	-	-	a	-	-	-	-
39	Compartment with connecting door	1 N	-	-	-	-	-	-	4	-	-	-	-	-	-	-
40	Compartment characteristics ^b	1 N	-	-	-	-	-	-	5	1	-	-	-	-	-	-
41B	Time of lunch	4N	-	-	-	-	-	-	-	-	-	4	1	1	-	1
41C	Time of dinner	4N	-	-	-	-	-	-	-	-	-	5	2	2	-	2
42A	Tariff 1	9N	4	1	1	4	1	1	6	2	1	6	3	3	a	-
42B	Tariff 2	9N	5	-	2	5	-	2	7	-	2	7	-	4	-	-
43	Individual reservation tickets requested	1 N	6	-	3	6	-	3	8	-	3	8	-	5	-	3
44	Another train acceptable	1 N	7	-	-	7	-	-	9	-	-	9	-	-	1	-
45A	Trailer category	1 N	-	-	-	-	-	-	-	-	-	-	-	-	2	-
29B	Boat category	1 N	-	-	-	-	-	-	-	-	-	-	-	-	3	-
46	Number of dogs	1 N	-	-	-	-	-	-	-	-	-	-	-	-	4	-
47A	Requesting reservation system	2N	8	2	4	8	2	4	10	3	4	10	4	6	-	4
69	Vehicle transport price only	1 N	-	-	-	-	-	-	-	-	-	-	-	-	5	-
70	Loading lower deck	1 N	-	-	-	-	-	-	-	-	-	-	-	-	6	-
71	Height	3N	-	-	-	-	-	-	-	-	-	-	-	-	7	-

76	Code of the travel agent's organisation	5 N	9	3	5	9	3	5	11	4	5	11	5	7	8	5
77	Passenger with vehicle	1 N	10	4	6	10	4	6	12	5	6	12	6	8	-	-
38A	Position of compartment! request	1 N	11	-	-	-	-	-	a	-	-	13	-	-	-	-
42A	Tariff 1	9N	a	a	a	A		a	a	a	a	a	a	a	9	-
80	Country code of requesting terminal	2A	12	5	7	11	5	7	13	6	7	14	7	9	10	6

a This element appears several times in the Table but only once in the message.

b Appears only if the number of seats does not correspond to a number of complete compartments.

5.5 Partial cancellation requests

No.	Element	L+C	ASS	CC	VL	RP	AUT	VR
20A	Train number	5 A	O	O	O	O	O	O
21A	Departure date	4 N	O	O	O	O	O	O
23A	Number of seats	2 N	O	O	O	O	-	-
25A	Type and number of berths	12N	-	-	O	-	-	-
26A	Type and number of meals	6 N	-	-	-	O	-	O
34A	Reference number of reservation ticket to be cancelled	12 N	O	O	O	O	O	O
36	Position of seat	4 N	1	1	1	1	-	-
38A	Position of compartment/request	1 N	A	-	2	a	-	-
40	Compartment characteristics ^b	1 N	-	-	3	-	-	-
42A	Tariff 1	9N	2	2	4	2	-	-
42B	Tariff 2	9N	3	3	5	3	-	-
47A	Requesting reservation system	2 N	4	4	6	4	-	1
74	Reason for cancellation	2 N	5	5	7	5	-	-
76	Code of the travel agent's organisation	5 N	6	6	8	6	-	2
38A	Position of compartment/request	1 N	7	-	a	7	-	-
80	Country code of requesting terminal	2 A	8	7	9	8	2	3

a This element appears several times in the Table but only once in the message.

b Appears only if the number of seats does not correspond to a number of complete compartments.

5.6 Complete cancellation requests

No.	Element	L+C	ASS	CC	VL	RP	AUT	VR
20A	Train number	5 A	O	O	O	O	O	O
21A	Departure date	4 N	O	O	O	O	O	O
34A	Reference number of reservation ticket to be cancelled	12 N	O	O	O	O	O	O
47A	Requesting reservation system	2 N	1	1	1	1	-	1
74	Reason for cancellation	2 N	2	2	2	2	1	-
76	Code of the travel agent's organisation	5 N	3	3	3	3	2	2
80	Country code of requesting terminal	2 A	4	4	4	4	3	3

5.7 Confirmation of reservation requests

No.	Element	L+C	ASS	CC	VL	RP	AUT	VR
20A	Train number	5 A	O	O	O	O	O	O
48	Train category	2 N	O	O	O	O	O	-
21A	Departure date	4 N	O	O	O	O	O	O
41A	Departure time	4 N	O	O	O	O	-	-
49A	Name of boarding station	30 C	O	O	O	O	-	O
49B	Name of destination station	30 C	O	O	O	O	-	O
34B	Reference number of accommodations	12 N	O	O	O	O	O	-
34C	Reference number for breakfast	12 N	-	-	-	O	-	O
34D	Reference number for lunch	12 N	-	-	-	O	-	O
34E	Reference number for dinner	12 N	-	-	-	O	-	O
27	Coach number	3 A	O	O	O	O	-	-
23A	Number of seats	2 N	O	O	O	O	-	-
50A	Accommodation allocated	32 C	O	O	O	O	-	-
24	Class	1A	O	O	O	O	-	-
51	Type of compartment allocated	6 N	O	O	O	O	-	-
26A	Type and number of meals	6 N	-	-	-	O	-	O
41 B	Time of lunch	4 N	-	-	-	O	-	O
41 C	Time of dinner	4 N	-	-	-	O	-	O
52A	Price (reservation charge, supplement)	7 N	O	O	O	O	O	-
52B	Price of breakfast	7 N	-	-	-	O	-	O
52C	Price of lunch	7N	-	-	-	O	-	O
52D	Price of dinner	7 N	-	-	-	O	-	O
49C	Name of loading station	30 C	-	-	-	-	O	-
21C	Loading date	4N	-	-	-	-	O	-
41D	Start of loading period	4 N	-	-	-	-	O	-

41 E	End of loading period	4 N	-	-	-	-	0	-
49D	Name of unloading station	30 C	-	-	-	-	0	-
21D	Unloading date	4N	-	-	-	-	0	-
41 F	Start of unloading period	4 N	-	-	-	-	0	-
41G	End of unloading period	4 N	-	-	-	-	0	-
30	Vehicle registration	10C	-	-	-	-	0	-
53	Number of the entry in loading list	3 N	-	-	-	-	0	-
32	Journey number	1 N	-	-	-	-	0	-
29A	Vehicle category	1 N	-	-	-	-	0	-
54	Price calculation code	1 N	-	-	-	-	0	-
55	Number of passengers	4 N	-	-	-	-	0	-
65	Undertaking providing the service	1 N	-	-	0	-	-	-
56	Change of train/date	1 N	1	1	1	1	1	1
57	Change of station	1 N	2	2	2	2	2	2
41 H	Arrival time	4 N	3	3	3	3	-	-
50B	Additional accommodation allocated	32 C	4	4	4	4	-	-
39	Compartment with connecting door	1 N	-	-	5	-	-	-
21 E	Date of breakfast	4 N	-	-	-	5	-	3
21F	Date of lunch	4N	-	-	-	6	-	4
21G	Date of dinner	4N	-	-	-	7	-	5
58	Number of supplements	2 N	5	5	6	8	-	-
59	Type of supplements	1 N	6	6	7	9	-	-
42A	Tariff 1	9 N	7	7	8	10	-	-
42B	Tariff 2	9 N	8	8	9	11	-	-
60	Number of night sectors	1 N	-	9	-	-	-	-
45A	Trailer category	1 N	-	-	-	-	3	-
46	Number of dogs	1 N	-	-	-	-	4	-
49E	Name of boarding station (start of journey)	30 C	-	-	-	-	5	-

49F	Name of destination station (end of journey)	30 C	-	-	-	-	6	-
29B	Boart category	1 N	-	-	-	-	7	-
41I	Start of additional loading period	4 N	-	-	-	-	8	-
41J	End of additional loading period	4 N	-	-	-	-	9	-
41K	Start of additional unloading period	4 N	-	-	-	-	10	-
41 L	End of additional unloading period	4 N	-	-	-	-	11	-
23C	Number of overbooked seats	2 N	9	-	-	-	-	-
47A	Requesting reservation system	2 N	10	10	10	12	-	-
66	Text for special offers	30 C	11	11	11	13	-	-
40	Compartment characteristics	1 N	-	-	12	-	-	-
70	Loading lower deck	1 N	-	-	-	-	12	-
71	Height	3N	-	-	-	-	13	-
67	Type of price	1 N	12	12	13	14	14	-
73A	Partial price 1	14N	13	13	14	15	-	-
73B	Partial price 2	14 N	14	14	15	16	-	-
73C	Partial price 3	14 N	15	15	16	17	-	-
21H	Arrival date	4N	16	16	17	18	15	-
77	Passenger with vehicle	1 N	17	17	18	19	-	-
38B	Position of compartment/allocation	1 N	18	-	19	20	-	-
79	List of carriers	36A	19	18	20	21	16	-
42A	Tariff 1	9N	a	a	a	a	17	-
81	Service brand information	40 C	20	19	21	22	18	-

a This element appears several times in the Table but only once in the message.

5.8 Confirmation of partial cancellation requests

No.	Element	L+C	ASS	CC	VL	RP	AUT	VR
20A	Train number	5 A	O	O	O	O	O	O
48	Train category	2 N	O	O	O	O	O	-
21A	Departure date	4 N	O	O	O	O	O	O
41A	Departure time	4 N	O	O	O	O	-	-
49A	Name of boarding station	30 C	O	O	O	O	-	O
49B	Name of destination station	30 C	O	O	O	O	-	O
34B	Reference number of accommodations	12 N	O	O	O	O	O	-
34C	Reference number for breakfast	12 N	-	-	-	O	-	O
34D	Reference number for lunch	12 N	-	-	-	O	-	O
34E	Reference number for dinner	12 N	-	-	-	O	-	O
27	Coach number	3 A	O	O	O	O	-	-
23A	Number of seats	2 N	O	O	O	O	-	-
50A	Accommodation allocated	32 C	O	O	O	O	-	-
24	Class	1A	O	O	O	O	-	-
51	Type of compartment allocated	6 N	O	O	O	O	-	-
26A	Type and number of meals	6 N	-	-	-	O	-	O
41 B	Time of lunch	4 N	-	-	-	O	-	O
41 C	Time of dinner	4 N	-	-	-	O	-	O
52A	Price (reservation charge, supplement)	7 N	O	O	O	O	O	-
52B	Price of breakfast	7 N	-	-	-	O	-	O
52C	Price of lunch	7N	-	-	-	O	-	O
52D	Price of dinner	7 N	-	-	-	O	-	O
49C	Name of loading station	30 C	-	-	-	-	O	-
21C	Loading date	4N	-	-	-	-	O	-
41D	Start of loading period	4 N	-	-	-	-	O	-

41 E	End of loading period	4 N	-	-	-	-	0	-
49D	Name of unloading station	30 C	-	-	-	-	0	-
21D	Unloading date	4N	-	-	-	-	0	-
41 F	Start of unloading period	4 N	-	-	-	-	0	-
41G	End of unloading period	4 N	-	-	-	-	0	-
30	Vehicle registration	10C	-	-	-	-	0	-
53	Number of the entry in loading list	3 N	-	-	-	-	0	-
32	Journey number	1 N	-	-	-	-	0	-
29A	Vehicle category	1 N	-	-	-	-	0	-
54	Price calculation code	1 N	-	-	-	-	0	-
55	Number of passengers	4 N	-	-	-	-	0	-
34F	Reference number of cancelled reservation	12 N	0	0	0	0	0	0
52E	Amount of refund	7 N	0	0	0	0	0	0
23B	Number of cancelled seats	2 N	0	0	-	0	-	-
25B	Type and number of cancelled berths	12 N	-	-	0	-	-	-
26B	Types and number of cancelled meals	6 N	-	-	-	0	-	0
45B	Category of the cancelled trailer	1 N	-	-	-	-	0	-
64	Date of the original reservation	5 N	0	0	0	0	0	0
65	Undertaking providing the service	1 N	-	-	0	-	-	-
57	Change of station	1 N	1	1	1	1	-	1
41 H	Arrival time	4 N	2	2	2	2	-	-
50B	Additional accommodation allocated	32 C	3	3	3	3	-	-
39	Compartment with connecting door	1 N	-	-	4	-	-	-
21 E	Date of breakfast	4 N	-	-	-	4	-	2
21F	Date of lunch	4N	-	-	-	5	-	3

21G	Date of dinner	4N	-	-	-	6	-	4
58	Number of supplements	2 N	4	4	5	7	-	-
59	Type of supplements	1 N	5	5	6	8	-	-
42A	Tariff 1	9 N	6	6	7	9	a	-
42B	Tariff 2	9 N	7	7	8	10	-	-
60	Number of night sectors	1 N	-	8	-	-	-	-
46	Number of dogs	1 N	-	-	-	-	1	-
49E	Name of boarding station (start of journey)	30 C	-	-	-	-	2	-
49F	Name of destination station (end of journey)	30 C	-	-	-	-	3	-
29B	Boat category	1 N	-	-	-	-	4	-
41I	Start of additional loading period	4 N	-	-	-	-	5	-
41J	End of additional loading period	4 N	-	-	-	-	6	-
41K	Start of additional unloading period	4 N	-	-	-	-	7	-
41 L	End of additional unloading period	4 N	-	-	-	-	8	-
23C	Number of overbooked seats	2 N	8	-	-	-	-	-
47A	Requesting reservation system	2 N	9	9	9	11	-	-
66	Text for special offers	30 C	10	10	10	12	-	-
40	Compartment characteristics	1 N	-	-	11	-	-	-
70	Loading lower deck	1 N	-	-	-	-	9	-
71	Height	3N	-	-	-	-	10	-
67	Type of price	1 N	11	11	12	13	11	-
73A	Partial price 1	14N	12	12	13	14	-	-
73B	Partial price 2	14 N	13	13	14	15	-	-
73C	Partial price 3	14 N	14	14	15	16	-	-
73D	Partial price 4	14 N	15	15	16	17	-	-
73E	Partial price 5	14N	16	16	17	18	-	-
73F	Partial price 6	14N	17	17	18	19	-	-

75	Mark of changed price	1 N	18	18	19	20	-	-
21 H	Arrival date	4 N	19	19	20	21	-	-
77	Passenger with vehicle	1 N	20	20	21	22	-	-
38B	Position of compartment/allocation	1 N	21	-	22	23	-	-
79	List of carriers	36A	22	21	23	24	12	-
42A	Tariff 1	9N	a	a	a	a	13	-
81	Service brand information	40 C	23	22	24	25	14	-
88	Original Cancellation Date	6 N	25	24	26	27	16	-
89	Requesting system of original cancellation	2 N	26	25	27	28	17	-

a This element appears several times in the Table but only once in the message.

5.9 Confirmation of complete cancellation requests

No.	Element	L+C	ASS	CC	VL	RP	AUT	VR
20A	Train number	5 A	O	O	O	O	O	O
21A	Departure date	4 N	O	O	O	O	O	O
41A	Departure time	4 N	O	O	O	O	-	-
24	Class	1A	O	O	O	O	-	-
34F	Reference number of cancelled reservation ticket	12 N	O	O	O	O	O	O
52E	Amount of refund	7 N	O	O	O	O	O	O
23B	Number of cancelled seats	2 N	O	O	-	O	-	-
25B	Type and number of cancelled berths	12 N	-	-	O	-	-	-
26B	Type and number of cancelled meals	6 N	-	-	-	O	-	O
29C	Category of cancelled vehicle	1 N	-	-	-	-	O	-
64	Date of the original reservation	5 N	O	O	O	O	O	O
65	Undertaking providing the service	1 N	-	-	O	-	-	-
45B	Category of the cancelled trailer	1 N	-	-	-	-	1	-
29D	Category of cancelled boat	1 N	-	-	-	-	2	-
60	Number of night sectors	1 N	-	1	-	-	-	-
42A	Tariff 1	9N	1	2	1	1	-	-
42B	Tariff 2	9N	2	3	2	2	-	-
58	Number of supplements	2 N	3	4	3	3	-	-
59	Type of supplements	1 N	4	5	4	4	-	-
47A	Requesting reservation system	2 N	5	6	5	5	-	-
67	Type of price	1 N	6	7	6	6	3	-
73D	Partial price 4	14 N	7	8	7	7	-	-
73E	Partial price 5	14 N	8	9	8	8	-	-

73F	Partial price 6	14 N	9	10	9	9	-	-
75	Mark of changed price	1 N	10	11	10	10	4	-
88	Original Cancellation Date	6 N	11	12	11	11	5	1
89	Requesting system of original cancellation	2 N	12	13	12	12	6	2

5.10 Replacement proposals, negative replies

No.	Element	L+C	PRP	PRT	PRR	RN
47B	Reservation system with further seat offer	2 N	-	-	0	-
20A	Train number	5 A	-	0	1	-
62	Available services	9 A	0	1	-	-
63	Reply code	3N	-	-	-	0
21A	Departure date	4 N	-	2	-	-
41A	Departure time	4 N	-	3	-	-
41 H	Arrival time	4 N	-	4	-	-
48	Train category	2 N	-	5	-	-
61	Request number	2 N	1	6	2	1
81	Service brand information	40 C	-	7	-	-

5.11 Correction messages - request/reply

Principles

1. The dialogue number allocated by the sender is quoted by the allocating system in the reply. The number differs from the message which initiated the cancellation request.
2. If a reply is not received to a cancellation request, a synchronisation message follows.
3. A correction message is not necessary for a complete cancellation.
4. The correction message may contain several application texts if the reply originally received contained several confirmations.
5. The Correction message is sent by the requester to the attributor in two cases:
 - If the answer sent by the attributor contained errors (e.g. date 30th February)
 - If the answer sent by the attributor arrived late, when the timeout at the requesting system had already expired and it had informed the remote requesting terminal that there was no answer. On receiving a correction message the attributor cancels the reservations done.

No.	Element	L+C	ASS	CC	VL	RP	AUT	VR
68	Number of the original dialogue	5 N	O	O	O	O	O	O
20A	Train number	5 A	O	O	O	O	O	O
21A	Departure date	4 N	O	O	O	O	O	O
23A	Number of seats	2 N	O	O	O	O	-	-
34B	Reference number of accommodations	12 N	O	O	O	O	O	-
34C	Reference number for breakfast	12 N	-	-	-	O	-	O
34D	Reference number for lunch	12 N	-	-	-	O	-	O
34E	Reference number for dinner	12 N	-	-	-	O	-	O
52A	Price (reservation charge, supplement)	7 N	O	O	O	O	O	-
52B	Price of breakfast	7 N	-	-	-	O	-	O
52C	Price of lunch	7N	-	-	-	O	-	O
52D	Price of dinner	7 N	-	-	-	O	-	O
47A	Requesting reservation system	2 N	O	O	O	O	-	-
80	Country code of requesting	2 A	1	1	1	1	1	1

terminal									
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5.12 Distribution message description (DMD)

No.	Element	L+C	Request	Confirmation
22C	Starting station	7 N	O	O
22D	Final station	7N	O	O
22E	Return station	7 N	O	O
33	Journey code	1 N	O	O
314	Product code	10A	O	O
307	File reference number	12A	1	1
306	Customer profile	30 C	2	2
304	Booking status	1 N	3	3
305	Currency code	3 A	4	4
310	Maximum excess price	4N	5	5
311	Number of combined messages	2 N	6	6
66A	Notices	30 C	7	7

5.13 Synchronisation request / reply

The synchronisation request and reply message include the message header only. They do not contain an application text.

The synchronisation message is used in case of lost reservation dialogs according to the error scenarios defined in Appendix A. The dialog number (Element 3) contains the dialog number of the lost dialog as described in section 3.1.3.

5.14 Enquiry about availability and reply

No.	Element	L+C	Request	Confirmation
20A	Train number	5 A	O	O
22A	Boarding station	7 N	O	-
22B	Destination station	7 N	O	-
49A	Name of boarding station	30 C	-	O
49B	Name of destination station	30 C	-	O
326A	Departure date	6N	O	O
41A	Departure time	4 N	O	O
326B	Arrival date	6 N	-	O
41 H	Arrival time	4 N	-	O
318A	Service code 1	2A	O	O
300A	Availability information 1	8A	-	O
321	Text groups - identifier	2 N	-	1
314	Product code	10A	-	2
317C	Request area	1 N	1	-
48	Train category	2 N	2	3
37	Compartment request	6 N	3	-
51	Type of compartment allocated	6 N	-	4
322A	Conditions of use	3 N	-	5
318B	Service code 2	2 A	4	-
318C	Service code 3	2 A	5	-
308A	Fare code 1	4A	6	-
308B	Fare code 2	4 A	7	-
308C	Fare code 3	4 A	8	-
300B	Availability information 2	8A	-	6
300C	Availability information 3	8A	-	7
300D	Availability information 4	8A	-	8
300E	Availability information 5	8A	-	9

300F	Availability information 6	8A	-	10
300G	Availability information 7	8 A	-	11
328	Tariff table	13 A ^a	-	12
329	Tariff table 2	26 A ^a	-	13
330	Tariff table 4	52 A ^a	-	14
331	Tariff table 8	104 A ^a	-	15
332	Tariff table 16	208 A ^a	-	16
82	Service brand code	4 N	9	
81	Service brand information	40 C		17

a. When Application Version = 1 in Element 9, these lengths are different (see individual elements).

6 Coding the message element "Reservation"

6.1 Header

1 - Receiving reservation system

Length = 2, coding = numerical

See Code List B.5.1

2 - Sending reservation system

(see element 1)

3 - Dialogue number

Length = 5, coding = numerical

Reservation:

In the dialogue operation, the dialogue number is the only information which enables the reply received to be related to the request submitted. This number is given by the requesting reservation system. The reservation system addressed quotes the number in the reply.

4 - Number of day in the year

Length = 3, coding = numerical

Within a year, the day on which the message is sent. In the response message the day is given by the allocating reservation system. (It is also the accounting date).

In case of a synchronisation request the date must be the date of the initial reservation request. In the synchronisation response message the day is given by the allocating reservation system.

5 - Type of message

Length = 1, coding = numerical

See Code List B.5.5

6 - Type of service

Length = 1, coding = numerical

See Code List B.5.6

The following table gives the possible combinations of the type of message and type of service elements:

Type of message	Type of service								
	Code	0	RES 1	AT 2	AP 3	ECH 4	MR 5	AD 6	APR 7
DEM	1	-	X	X	X	X	X	-	-

REP	2	X	X	X	X	X	X	-	-
MNS	3	-	-	-	-	-	-	X	X

7 - Number of the requesting terminal

Length = 7, coding = alphanumerical

The terminal number is made up as follows:

5 digits: main code location part as specified in *ERA TAP TSI Technical Document B.9* (see Bibliography). If this is not possible, another code is permissible.

2 digits: serial number of the terminal in the office.

For protocol messages, this element contains the value = 0000000.

8 - Type of requesting office or type of protocol message

Length = 1, coding = numerical

Reservation:

See Code List B.5.8

9 - Number of the application version

Length = 1, coding = numerical

In the operation, the same version number applies for all connected reservation systems. If it is changed, a standard first validity day must be specified for all reservation systems.

0 = Standard version

1 = Non-standard version

10 - Field at disposal

Length = 2, coding = alphanumerical

Reservation:

The field contains information from the requesting system which must be quoted back unchanged by the replying system (not with protocol messages).

With protocol messages, the following values are possible:

Reply to a synchronisation request

Code = 00

- correction of the reservation file was needed (reservation or partial cancellation request), the reservation was corrected,
- the cancellation was processed (the reservation file was already corrected),
- the complete cancellation was effected (the reservation file remains unchanged).

- Code = 20

- The receiving application cannot recover (lost dialogue). Inclusion in the litigation files by the

sending reservation system.

Code = 30

- The original request was not processed or negatively replied:
 - for cancellations, the sending reservation system includes it in the litigation file
 - for a reservation, partial or complete cancellation request, no special processing takes place.

Synchronisation requests

Code = 00

- the session was interrupted.

Code = 10

- a time-out occurred.

–

Throughput messages

Not being used for the seat reservation application for the time being.

Code 01-99

- specified throughput quota.

11 - Test

Length = 1, coding = numerical

See Code List B.5.11

6.2 Prefix "Application Text"

15 - Service

Length = 2, coding = numerical

See Code List B.5.15

16 - Type of the request or reply

Length = 1, coding = numerical

- 1 = Request for normal seat
- 2 = Request for a particular seat
- 3 = Request for adjacent seat
- 4 = Confirmation
- 5 = Replacement proposal for other service
- 6 = Replacement proposal for other train
- 7 = Replacement proposal for other reservation system

8 = Negative reply

9 = Free

The tables below give the possible combinations of the service elements and type of the request or reply.

The following combinations are possible for requests:

Service	Type of request			
	Code	N 1	D 2	V 3
ASS	01	X	X	X
CC	02	X	X	X
VL	03	X	X	X
RP	04	X	X	X
VR	05	X	-	-
AUT	06	X	-	-
AUB	30	X	-	-
PB	31	X	-	-
VSC	40	X	-	-
HO	50	X	-	-

In the event of cancellation and exchange requests, the element type of request is not significant (Coding = 0).

The following combinations are possible for replies:

Service	Type of reply					
	Code	ACC 4	PRP 5	PRT 6	PRR 7	RN 8
ASS	01	X	X	X	X	X
CC	02	X	X	X	X	X
VL	03	X	X	X	X	X
RP	04	X	X	X	X	X
VR	05	X	-	-	X	X
AUT	06	X	-	X	X	X
AUB	30	X	-	X	X	X
PB	31	X	-	X	X	X
VSC	40	X	-	-	-	X

HO	50	X	-	-	-	X
----	----	---	---	---	---	---

For replies to cancellation or exchange requests, only the codings 4 (confirmation) and 8 (negative reply) are possible for the element type of reply.

For replies to a rectification, only the codings 4 (confirmation) and 8 (negative reply) are possible.

17 - Serial number

Length = 2, coding = numerical

Application texts are transmitted together in a message, that is to say with a particular dialogue number and connected by the serial number. The numbering is done in decreasing order.

The lowest value is "01".

18 - Type of text

Length = 2, coding = numerical

See Code List B.5.18

6.3 Application text

20 - Train

Length = 5, coding = alphanumerical

20A Train number

In the requests, this is generally the number which the train has at the boarding station of the passenger or at the departure station of the car-carrying train.

In the confirmations, it is always the number which the train has at the boarding station of the passenger or the loading station of the car.

In the replacement proposals, it is the number of the proposed train.

20B Original train number

This is the train number in which the ticket to be exchanged was issued.

20C Train number for return journey

21 - Date

Length = 4, coding = numerical

2 digits for the day

2 digits for the month

21A Departure date

In the requests and in the confirmations, this is the date of departure of the train from the passenger's boarding station or the departure date of the car-carrying train. In the replacement proposals, it is the departure date of the proposed train if this differs from that of the requested train.

21B Original departure date

This is the date of departure on the ticket to be exchanged.

21C Loading date

This is the car loading date at the departure station of the car-carrying train.

21D Unloading date

This is the date on which the car is unloaded at the arrival station of the car-carrying train.

21E Date of breakfast

This is given when the date of the meal is different from the departure date at boarding station.

21F Date of lunch (see element 21 E)**21 G Date of dinner** (see element 21 E)**21H Arrival date**

This is the arrival date of the train at the destination station of the passenger.

22 - Station codes

Length = 7, coding = numerical

2 digits for country code + 5 digits for station codes (as specified in *ERA TAP TSI Technical Document B.9*)

22A Boarding station**22B Destination station****22C Starting station**

This is the first station of the journey to which the message refers.

22D Final station

This is the last station of the journey to which the message refers.

22E Return station

This is the code for the return station of a forward and return journey, if the final station is different from the starting station.

22F First intermediate station

This is the first (or only) intermediate station on the journey. It defines a stopping station or a station passed through on the train journey.

22G Second intermediate station

This is the second intermediate station in the journey. It defines a stopping station or a station passed through on the train journey.

23 - Seats (number)

Length = 2, coding = numerical

01 to 40 for VL

01 to 16 for CC1

01 to 36 for ASS and CC2

23A Number of seats

For partial cancellation, this is the number of remaining seats with following restrictions:

01 to 39 for VL

01 to 15 for CC1

01 to 35 for ASS and CC2

23B Number of cancelled seats

23C Number of overbooked seats

23D Number of smoking seats

23E Number of non-smoking seats

24 - Class

Length = 1, coding = alphanumerical

See Code List B.5.24

25 - Berths (type and number)

Length = 12, coding = numerical

1st + 2nd digits = Single (max. 18)

3rd + 4th digits = Special (max. 18)

5th + 6th digits = Double (max. 36)

7th + 8th digits = T2 (max. 36)

9th + 10th digits = T3 (max. 39)

11th + 12th digits = T4 (max.40)

Only the following combinations are possible:

1st + 2nd digits (value = 01) and 5th + 6th digit (value = 02)

1st + 2nd digits (value = 01) and 9th + 10th digit (value = 03)

5th + 6th digits (value = 02) and 9th + 10th digit (value = 03)

3rd + 4th digits (value=01) and 7th + 8th digit (value=02)

25A Type and number of berths

For partial cancellations, this is the number of remaining berths with following restrictions:

01 to 39 for VL

01 to 15 for CC1

01 to 35 for ASS and CC2

25B Type and number of cancelled berths

26 - Meals

Length = 6, coding = numerical

2 digits = Number of breakfasts

2 digits = Number of lunches

2 digits = Number of dinners

26A Type and number of meals

Refers, for partial cancellation, to the type and number of remaining meals.

26B Type and number of cancelled meals

27 - Coach number

Length = 3, coding = alphanumerical

Number of coach in which the seats are requested.

The element can be empty in some special cases:

- i.e.:
- cycle places without coach number
 - ferry places without coach number
 - bus places without coach number
 - overbooked seats

According to the general rules of the Technical Document, "empty" means filled with blanks.

28 - Seat number

Length = 3, coding = alphanumerical

28A Number of a particular seat

Number of the seat requested by the passenger.

Can also be "blank" (only in the case of berths) and then means any berth or berths in the coach in question.

28B Number of a reference seat

Number of the seat on which the allocation of the desired seats should be based; it must be the closest seat to the reference seat within the compartment concerned.

29 - Category of vehicle/boat

Length = 1, coding = numerical

See Code List B.5.29

29A Vehicle category

29B Boat category

29C Category of the cancelled vehicle

29D Category of the cancelled boat

30 - Vehicle registration

Length = 10, coding = printable characters

31 - Number and ages of the passengers

Length = 8, coding = numerical

- 1st digit = number of adults in 1st Class
- 2nd digit = number of children from 4 to 5 years old in 1st Class
- 3rd digit = number of children from 5 to 12 years old in 1st Class
- 4th digit = number of children from 12 to 15 years old in 1st Class
- 5th digit = number of adults in 2nd Class
- 6th digit = number of children from 4 to 5 years old in 2nd Class
- 7th digit = number of children from 5 to 12 years old in 2nd Class
- 8th digit = number of children from 12 to 15 years old in 2nd Class

In case of requests for a car carriage place only the element has to be filled with zeroes completely.

32 - Journey number

Length = 1, coding = numerical

Serial number, indicating the order in which successive journeys are made. In the case of single journey, the journey number will be zero.

33 - Journey code

Length = 1, coding = numerical

Shows whether the request refers to a single journey or to one of a number of sections of a journey.

See Code List B.5.33

34 - Reference number

Length = 12, coding = numerical

The seats or meals originally booked which are to be cancelled or exchanged can be identified from the reference number:

The reference number formed according to the rules of each RS must be sufficiently reliable to ensure that places cannot be erroneously released by mistyped reference numbers.

The elements from the request:

- Train number

- Travel date
- Type of service

must be checked to comply with the booking referenced by the reference number given in the cancellation and partial cancellation request.

The reference number must be unique combined with the train number and the travel date. However it is recommended to use intrinsically unique reference numbers unique for one year.

2 digits for the reservation system, having allocated the seats or responsible for the ticket, and 10 digits for the actual reference number

34A Reference number of reservation ticket to be cancelled

34B Reference number of accommodations

Concerns the reservation of seats, couchettes, berths or car places.

34C Reference number for breakfast

Concerns the allocation of breakfast in the coach with meals at seat or in the restaurant car.

34D Reference number for lunch

Concerns the allocation of lunch in the coach with meals at seat or in the restaurant car.

34E Reference number for dinner

Concerns the allocation of dinner in the coach with meals at seat or in the restaurant car.

34F Reference number of cancelled reservation ticket

34G Reference number of ticket issued

This element describes the identification number of a pre-printed ticket or a printed ticket at the time of issue.

34H Reference number of travel ticket to be cancelled

34I Reference number of cancelled ticket

35 - Smoking/non-smoking

Length = 1, coding = numerical

See Code List B.5.35

36 - Position of seat

Length = 4, coding = numerical

This field, which consists of 4 individual digits, gives the number of seats desired in the respective position (maximum 2).

Should the request for a certain seat be considered as mandatory, the digit concerned must be increased by 5. This is only used at present for "lower couchette places mandatory". 1 and 2 become 6 and 7.

The digits mean:

Number

	Seats	Couchettes	Sleeper berths
1st digit	window	upper	upper
2nd digit	middle	middle	middle
3rd digit	gangway	lower	lower
4th digit	window isolated	-	-

In the event of partial cancellation, this gives the number of the remaining seats for each place position.

37 - Compartment request

Length = 6, coding = numerical

The element consists of 3 sub-elements.

1st and 2nd positions: type of coach

See Code List B.5.37.1

3rd and 4th position: compartment with special features

See Code List B.5.37.2

5th and 6th position: special offer/allocations

See Code List B.5.37.3

The offer of the various Tour-Operators is released by agreement at various times before the date of travel depending on the particular train (e.g. 21 days or 3 days) for the general reservation service.

38 - Position of compartment

Length = 1, coding = numerical

This element indicates the desired level of the seats or the sleeping-car compartment

38A Position of compartment/request

See Code List B.5.38.1

38B Position of compartment/allocation

See Code List B.5.38.2

Concerns the level of the remaining seats or compartments in the case of partial cancellation.

39 - Compartment with connecting door

Length = 1, coding = numerical

1 = compartment with connecting door desired or allocated in the response

40 - Compartment characteristics

Length = 1, coding = numerical

See Code List B.5.40

41 - Time

Length = 4, coding = numerical

2 digits for the hour Local time in 24 hour system

2 digits for the minute

41A Departure time

This is the departure time from the station where the passenger boards.

41B Time of lunch

41C Time of dinner

41D Start of loading period

41E End of loading period

41F Start of unloading period

41G End of unloading period

41H Arrival time

This is the arrival time at the station where the passenger alights. The element 41H has to be delivered even if it is marked as optional element in the message.

41I Start of additional loading period

41J End of additional loading period

41K Start of additional unloading period

41L End of additional unloading period

41M Waiting time at first intermediate station

Length of waiting time at the first intermediate station.

41N Waiting time at second intermediate station

Length of waiting time at the second intermediate station

41O Departure time of the return journey

Departure time of the return journey

42 - Tariff

Length = 9, coding = numerical

1st and 2nd digits = 2-position reason for reduction (00 - 99)

Code as specified in Code List B.5.42

3rd, 4th, 5th and 6th digits = 4-position reason for reduction (0100 - 9999)

7th digit = Free

8th and 9th digits = Number of passengers with price reduction

Where the value "04" is shown in the 1st and 2nd digits, only the 4-position reason for reduction in digits 3 to 6 applies. If the 4-position reason for reduction is not used, digits 3 to 6 = zero.

42A Tariff 1

Marks a deviation from the normal fare. Concerns the remaining seats for partial cancellations.

42B Tariff 2

Marks a second deviation from the normal fare. Concerns the remaining seats for partial cancellations.

43 - Individual reservation tickets requested

Length = 1, coding = numerical

The allocating system should give a reservation confirmation (that is to say a reservation ticket) for each reserved seat requested.

See code list B.5.43

44 - Another train acceptable

Length = 1, coding = numerical

1 = Desired train

See code list B.5.44

The passenger accepts another train to the one requested.

45 - Trailers

Length = 1, coding = numerical

See Code List B.5.45

45A Trailer category

45B Category of the cancelled trailer

46 - Number of dogs

Length = 1, coding = numerical

47 - Reservation system

Length = 2, coding = numerical

Codes see element 1.

47A Requesting reservation system

This element describes the issuing railway coded with the reservation system code in case this railway is different from the requesting reservation system.

In case the message element is mandatory (correction message) the element should contain the issuing railway, even if it is the same as the code of the requesting reservation system.

–

47B Reservation system with further seat offer

This is the reservation system with a further seat offer to which the requesting reservation system can turn.

48 - Train category

Length = 2, coding = numerical

The element 48 (train category) shall not be processed in the messages.

49 - Station names

Length = 30, coding = printable characters

The method of writing given in *ERA TAP TSI Technical Document B.9* is used.

49A Name of boarding station

49B Name of destination station

49C Name of loading station

49D Name of unloading station

49E Name of boarding station (start of journey)

49F Name of destination station (end of journey)

Together with element 49E, this is the route of the passenger in connection with a car reservation with inclusive price calculation.

49G Name of first intermediate station

49H Name of second intermediate station

50 - Place allocation

Length = 32, coding = by characters

The field consists of a maximum of 8 sub-elements, which are sub-divided as follows:

3 digits place number (alphanumeric)

1 digit place code (by characters)

The element can be empty in some special cases:

- i.e.:
- bicycle places without place number
 - ferry places without place number
 - bus places without place number
 - overbooked seats

According to the general rules of the Technical Document “empty” means filled with blanks.

The codes are described below:

1. Seats and seats with meals at seat

See Code List B.5.50.1

2. Couchette berths

See Code List B.5.50.2

3. Berths

See Code List B.5.50.3

Codes to be used for places in compartments without separated gender. These codes are to be used only if the places have been requested by code "mixed" in element 40.

See Code List B.5.50.4

50A Accommodation allocated

50B Additional accommodation allocated

Enables the issue of further allocated seats, if all 8 sub-elements of element 50A are already filled. However no from-to number sequences may be split from element 50A into the element 50B.

51 - Type of compartment allocated

Length = 6, coding = numerical

The element consists of three sub-elements. 1st and 2nd positions: type of coach

See Code List B.5.51.1

3rd and 4th positions: compartment special features

See Code List B.5.51.2

5th and 6th positions: special offers/contingent

See Code List B.5.51.3

The offer of the various Tour-Operators is withdrawn by agreement at various times before the date of travel depending on the train (e.g. 21 days or 3 days) and then made available for the general reservations.

52 - Amount

Length = 7, coding = numerical

5 digits for the euro

2 digits for the cent

The amount is given in euro, provided no other currency is defined in the element currency code in the same application text.

52A Amount (supplement, global price IRT)

This element normally contains the total amount (supplement, IRT).

For inclusive amount calculation in car-carrying trains, the amount may also include the cost of travel tickets for the passengers.

For partial cancellations, the amount relates to the remaining seats.

Reservation fees are calculated by the issuing railway and are not included in the message exchange.

52B Amount of breakfast

For partial cancellations, the amount relates to the remaining seats.

52C Amount of lunch

For partial cancellations, the amount relates to the remaining seats.

52D Amount of dinner

For partial cancellation, the amount relates to the remaining seats.

52E Amount of refund

If the amount differs from the amount of the original reservation, element 75 is delivered. For partial cancellation, the amount is the refund of the cancelled places + the amount of remaining places.

52F Amount

This element contains the product amount in 918E replies.

52G VAT-amount

The amount of VAT.

53 - Number of the entry in loading list

Length = 3, coding = numerical

54 - Price calculation code

Length = 1, coding = numerical

This gives the rules used by the allocating reservation system for the price calculation for car-carrying traffic.

See Code List B.5.54

55 - Number of passengers

Length = 4, coding = numerical

1st digit = Number of adults in 1st Class

2nd digit = Number of children in 1st Class

3rd digit = Number of adults in 2nd Class

4th digit = Number of children in 2nd Class

56 - Change of train/date

Length = 1, coding = numerical

Note about change in the customer's wishes regarding train number and/or date of travel.

See Code List B.5.56

Only the value = 1 is possible for an exchange

57 - Change of station

Length = 1, coding = numerical

Note about change in the customer's wishes regarding stations.

See Code List B.5.57

58 - Number of supplements

Length = 2, coding = numerical

Details of the number of supplements to be paid for.

59 - Type of supplements

Length = 1, coding = numerical

See Code List B.5.59

60 - Number of night sectors

Length = 1, coding = numerical

The number of night sectors is required for the exact calculation of the price in the national currency

of the issuing reservation system.

The information only appears if the number of night sectors is greater than 1.

61 - Request number

Length = 2, coding = numerical

For combined requests, the request number enables a replacement proposal or a negative reply to be given to the appropriate request.

This element contains the serial number of the request.

62 - Available services

Length = 9, coding = alphanumerical

When the required service is sold out, this gives the services still available in the requested train or available services in an alternative train.

See Code List B.5.62

Each of the 9 positions may contain one of the above-mentioned codes. A maximum of 9 replacement proposals are possible.

63 - Reply code

Length = 3, coding = numerical

The code gives the reason for the negative reply.

See Code List B.5.63

64 - Date of the original reservation

Length = 5, coding = numerical

Display: YYDDD

Consists of the sub elements:

- Year: YY
- Day number: DDD

65 - Undertaking providing the service

Length = 1, coding = numerical

See Code List B.5.65

66 - Text for special offer

Length = 30, coding = printable characters

66A Notices

67 - Type of price

Length = 1, coding = numerical

See Code list B.5.67

68 - Number of the original dialogue

Length = 5, coding = numerical

69 - Vehicle transport price only

Length = 1, coding = numerical

1 = Vehicle transport price only

Indicates to the allocating system when making an inclusive price calculation that it must only calculate the cost for transporting the car.

70 - Loading lower deck

Length = 1, coding = numerical

See Code List B.5.70

71 - Height

Length = 3, coding = numerical

Details of vehicle height in centimetres

72 - Free**73 - Partial price**

Length = 14, coding = numerical

The element consists of 3 sub-elements and details the composition of element 52

1st-5th digit = Tariff code

6th-7th digit = Number of individual prices
(e.g. passengers, compartments, etc.)

8th-14th digit = Individual price in euro

73A Partial price 1

73B Partial price 2

73C Partial price 3

The elements 73A, 73B and 73C are used for reservation, partial cancellation and exchange confirmations.

73D Partial price 4

73E Partial price 5

73F Partial price 6

The elements 73D, 73E and 73F are used for partial cancellation and complete cancellation confirmation for the price of the original reservation.

The element 73 provides a split of the prices in element 52A and 52E per tariff and person. It can be used in currency conversion to avoid rounding errors.

local price = persons-tariff-0 * (rounded / converted price element 72 (tariff 0)) + persons-tariff-1 * (rounded / converted price element 72 (tariff 1)) + persons-tariff-2 * (rounded / converted price element 72 (tariff 2))

which is different from:

local price = total number of persons * rounded / converted total price (Element 52A)

By using the partial price the prices remain additive (e.g. two persons pay the double price also in local currency).

Elements 73A/B/C correspond to the price in 52A, Elements 73D/E/F split the price of element 52E.

Example on partial price element:

One reservation with 2 adults (Tariff 72 and 1 child (tariff 73):

- 2 x Tariff 72 (Adult) partial price 22,60 €
 - 1 x Tariff 73 (Child) partial price 15,40 €
- total price: 60,60 €

- message element: "000720200022600073010001540000000000000000"

local currency SFR: 1 : 1,20 rounding up to 0.10 SFR

- simple conversion: $60,60 * 1,20 = 72,72$
- → 72,80 SFR

- using partial price element:
 - $22,60 * 1,20 = 27,12 \rightarrow 27,20$ SFR
 - $15,40 * 1,20 = 18,48 \rightarrow 18,50$ SFR
 $\rightarrow 72,90$ SFR

74 - Reason for cancellation

Length = 2, coding = numerical

See Code List B.5.74

75 - Mark of changed price

Length = 1, coding = numerical

See Code list B.5.75

76 - Code of the travel agent's organisation

Length = 5, coding = numerical

77 - Passenger with vehicle

Length = 1, coding = numerical

See Code List B.5.77

78 - Carrier

Length = 4, coding = alphanumerical

See codes specified in ERA TAP TSI Technical Document B.8.

79 - List of carriers

Length = 36, coding = alphanumerical

The list of carriers comprises the following 9 sub-elements:

No.	Element	L + C
78	Carrier	4 A
78	Carrier	4 A
78	Carrier	4 A
78	Carrier	4 A
78	Carrier	4 A
78	Carrier	4 A
78	Carrier	4 A
78	Carrier	4 A
78	Carrier	4 A

80 - Country code of the requesting terminal

Length = 2, coding = alphanumerical

Coding in accordance with *ISO standard 3166* 2-position alphabetical code

81 – Service brand information

Length = 40, coding = printable characters

The element is composed of three sub elements:

NUM	Element	L+C
82	Service brand code	4 N
83	Abbreviation of service brand	3 C
84	Service brand name	33 C

The element 81 has to be delivered even if it is marked as optional element in the message.

81 A – Service brand information for a return train

82 – Service brand code

Length = 4, coding = numerical

See Code List B.5.82

82 A – Service brand code for a return train

83 – Service brand abbreviation

Length = 3, coding = printable characters

See Code List B.5.83

Abbreviation used for printing on RCT2 tickets.

84 – Service brand name

Length = 33, coding = printable characters

See Code List B.5.84

Full text used for printing on RCT2 tickets.

85 to 87 - Not used

88 – Original Cancellation Date

Length = 6, coding = numerical YYMMDD

In case of a cancellation request on a reservation that was already cancelled before the allocating system has two options to react. It can return a negative reply with the appropriate error code indicating that the reservation was already cancelled.

As a second option the allocating system can return the cancellation confirmation again and must then indicate the date of the original cancellation in the reply message with using this element. This option can be used to limit the impact of errors in case of time out in a cancellation message exchange.

The date is given in the time zone of the allocating system.

89 – Original Cancelling railway

Length = 1, coding = numerical

Codes from the reservation systems code list element 01.

In case of a cancellation request on a reservation that was already cancelled before the allocating system has two options to react. It can return a negative reply with the appropriate error code indicating that the reservation was already cancelled.

As a second option the allocating system can return the cancellation confirmation again and must then indicate the railway that made the original cancellation in the reply message with using this element. This option can be used to limit the impact of errors in case of time out in a cancellation message exchange.

90 to 299 - Not used

300 - Availability information

Length = 8, coding = alphanumerical

Each element of availability information consists of the following sub-elements:

No.	Element	L + C
308A	Fare code 1	4A
23D	Number of smoking seats	2 N
23E	Number of non-smoking seats	2 N

300A Availability information 1

300B Availability information 2

300C Availability information 3

300D Availability information 4

300E Availability information 5

300F Availability information 6

300G Availability information 7

302 - Details of journey segment

Length = 128, coding = printable characters

Each element of the journey segment details consists of the following sub-elements:

No	Element	L + C
20A	Train number	5 A
315	Product identifier	3N
49A	Name of boarding station	30 C
49B	Name of destination station	30 C
81	Service brand information	40 C
326A	Departure date	6N
41A	Departure time	4N
326B	Arrival date	6 N
41H	Arrival time	4N

302A Journey segment details 1

302B Journey segment details 2

302C Journey segment details 3

302D Journey segment details 4

302E Journey segment details 5

302F Journey segment details 6

305 - Currency code

Length = 3, coding = alphanumerical

This element describes the currency of a price or a price group. If this element is not given, the price is given in euro. The currency is defined using the ISO 4217 codes "*Codes for the representation of currencies and funds*".

306 - Customer profile

Length = 30, coding = printable characters

This element could be used to define a customer identification.

307 - File reference number

Length = 12, coding = alphanumerical

This element identifies a certain sales transaction in a product/sales file.

308 - Fare price code

Length = 4, coding = alphanumerical

This element can be used to give special types of price, price ranges or price stages.

The 1st + 2nd positions of this element contain a code which designates the accommodation category.

See Code List B.5.308

The 3rd and 4th position contain an arbitrary code used to provide a unique link between the availability information elements (element 300) and the tariff information element (element 328) in one application text. The code is unique within one application text only. The code has no meaning as a standalone code.

308A Fare code 1

308B Fare code 2

308C Fare code 3

311 - Number of combined messages

Length = 2, coding = numerical

This element gives the number of combined requests which belong to a special message.

314 - Product code

Length = 10, coding = alphanumerical

This element can be used to identify a certain product in a product catalogue.

315 - Product identifier

Length = 3, coding = numerical

This element can be used to identify a certain part of a product.

1st and 2nd position = service (element 15), and

3rd position = partial identifier of product from the product catalogue .

316 - Purchase conditions

Length = 3, coding = numerical .

1st digit: Booking restrictions

See code list B.5.316.1

2nd digit: Conditions for use

See code list B.5.316.2

3rd digit: Refund conditions

See code list B.5.316.3

318 - Service code

Length = 2, coding = alphanumerical

The first position contains the physical class and the second contains the service level. 1st position:

See code list B.5.318 2nd position " " or "0" = Not significant *318A Service code 1*

318B Service code 2 (not used at present)

318C Service code 3 (not used at present)

319 - Service identifier

Length = 1, coding = numerical

See Code List B.5.319

319A Catering identifier

319B Luggage identifier

319C Bicycle identifier

319D Disabled equipment identifier

319E Hotel identifier

3 19F Hire car identifier

319G Connection identifier

319H Public transport identifier

320 - Service information type

Length = 1, coding = numerical

See Code List B.5.320

321 - Text groups - identifier

Length = 2, coding = numerical

The first position contains the group number and the second position the group element.

If application texts are combined in a request or reply, this element allows the identification of a group and its elements. Each position is an independent serial number: for groups the first position, and for the application texts within the group the second position. The numbering is in descending order for both positions, and the lowest value is 1.

322 - Text - identifier

Length = 3, coding = numerical

3-position identifier for a free text format in the language of the receiver of the message.

322A Conditions of use

322B Product information

326 - Date

Length = 6, coding = numerical

2 digits for the day

2 digits for the month

2 digits for the year

326A Departure date

326B Arrival date

326C Departure date of the return journey

327 - Tariff code

Length = 2, coding = alphanumerical

Possible values: See Code List B.5.327

Different definition when Application Version = 1 in Element 9

Length = 4, coding = alphanumerical

Possible values: reserved

327A Tariff code 1

327B Tariff code 2

327C Tariff code 3

327D Tariff code 4

328 - Tariff Table

Length = 13, coding = alphanumerical

Each element in the Tariff Table consists of the following sub-elements:

No.	Element	L + C
308A	Fare code 1	4A
67	Type of price	1 N
327A	Tariff code 1	2A
327B	Tariff code 2	2 A
327C	Tariff code 3	2 A
327D	Tariff code 4	2 A

Different definition when Application Version = 1 in Element 9

Length = 21, coding = alphanumerical

Each element in the Tariff Table consists of the following sub-elements:

No.	Element	L + C
308A	Fare code 1	4A
67	Type of price	1 N
327A	Tariff code 1	4A
327B	Tariff code 2	4 A
327C	Tariff code 3	4 A
327D	Tariff code 4	4 A

329 - Tariff Table2

Length = 26, coding = alphanumerical

The element Tariff Table 2 consists of the following sub-elements:

No.	Element	L + C
328 328	Tariff Table	13 A 13 A
	Tariff Table	

Different definition when Application Version = 1 in Element 9

Length = 42, coding = alphanumerical

The element Tariff Table 2 consists of the following sub-elements:

No.	Element	L + C
328 328	Tariff Table	21 A 21 A
	Tariff Table	

330 - Tariff Table 4

Length = 52, coding = alphanumerical

The element Tariff Table 4 consists of the following sub-elements:

No.	Element	L + C
328	Tariff Table	13 A
328	Tariff Table	13 A
328	Tariff Table	13 A
328	Tariff Table	13 A

Different definition when Application Version = 1 in Element 9

Length = 84, coding = alphanumerical

The element Tariff Table 4 consists of the following sub-elements:

No.	Element	L + C
328	Tariff Table	21 A
328	Tariff Table	21 A
328	Tariff Table	21 A
328	Tariff Table	21 A

331 - Tariff Table 8

Length = 104, coding = alphanumerical

The element Tariff Table 8 consists of the following sub-elements:

No.	Element	L + C
328	Tariff Table	13 A
328	Tariff Table	13 A
328	Tariff Table	13 A
328	Tariff Table	13 A
328	Tariff Table	13 A
328	Tariff Table	13 A
328	Tariff Table	13 A
328	Tariff Table	13 A

Different definition when Application Version = 1 in Element 9

Length = 168, coding = alphanumerical

The element Tariff Table 8 consists of the following sub-elements:

No.	Element	L + C
328	Tariff Table	21 A
328	Tariff Table	21 A
328	Tariff Table	21 A
328	Tariff Table	21 A
328	Tariff Table	21 A
328	Tariff Table	21 A
328	Tariff Table	21 A
328	Tariff Table	21 A

332 - Tariff Table 16

Length = 208, coding = alphanumerical

The element Tariff Table 16 consists of the following sub-elements:

No.	Element	L + C
328	Tariff Table	13 A
328	Tariff Table	13 A
328	Tariff Table	13 A
328	Tariff Table	13 A
328	Tariff Table	13 A
328	Tariff Table	13 A
328	Tariff Table	13 A

Appendix A - Measures for communication protocols

A.1 - Principles

Rules which are to be applied by the requesting reservation system, if a message (request or reply) cannot be sent.

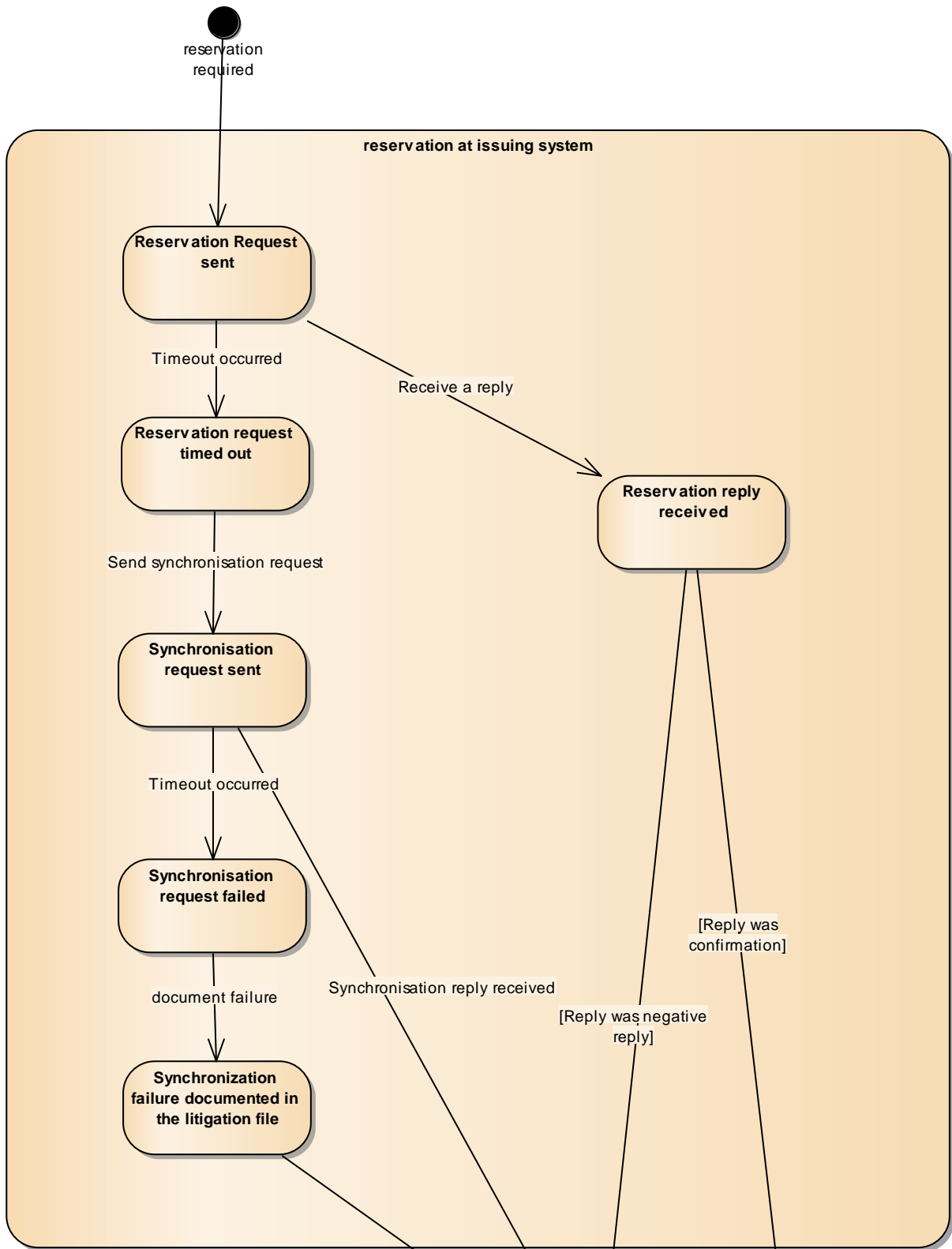
A.1.1 - Request message

- Original message = repetition of the request
- Correction = inputting into the litigation file (human readable text prepared for explanation of the problem)
- Synchronisation message = inputting of the request concerned into the litigation file.

A.1.2 - Reply message

- to an original message
 - Confirmation = internal cancellation
 - Negative reply = nothing to be done
- to a correction request = nothing needs to be done
- to a synchronisation request = nothing to be done

stm Reservation



A.2 - Exchange protocol at application level

A.2.0 - General

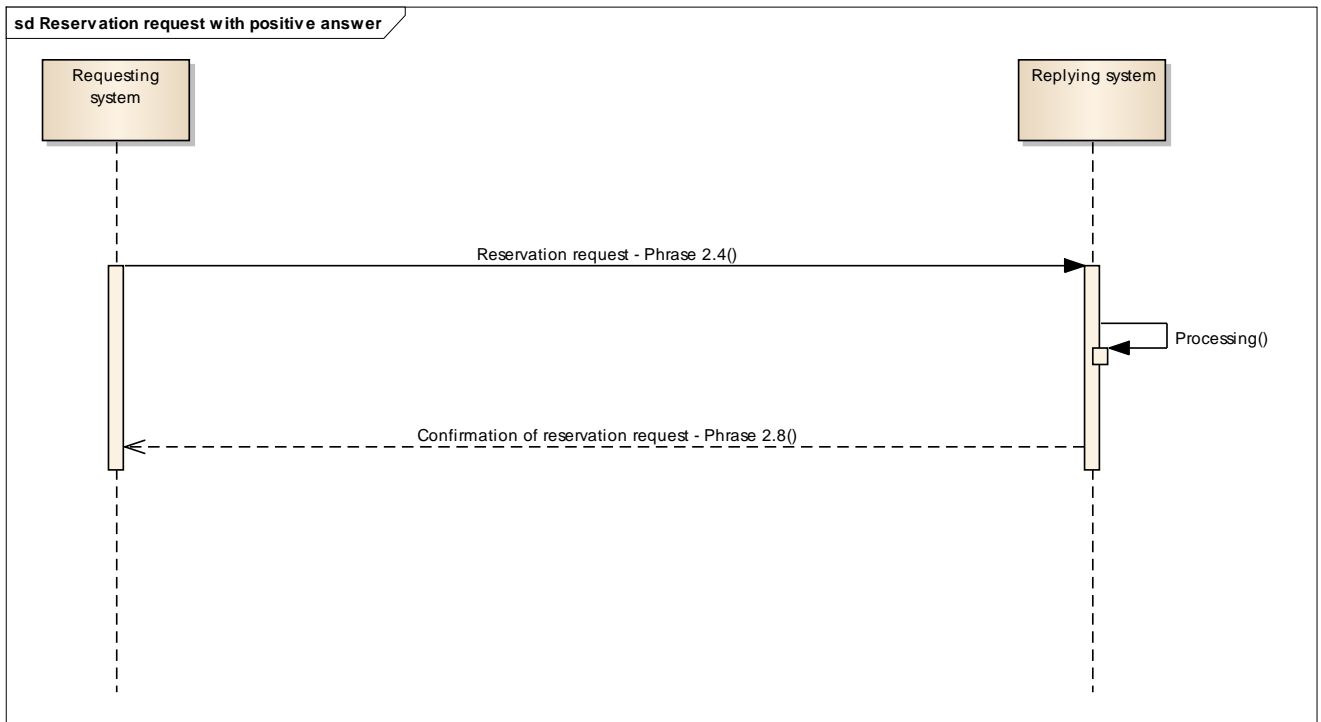
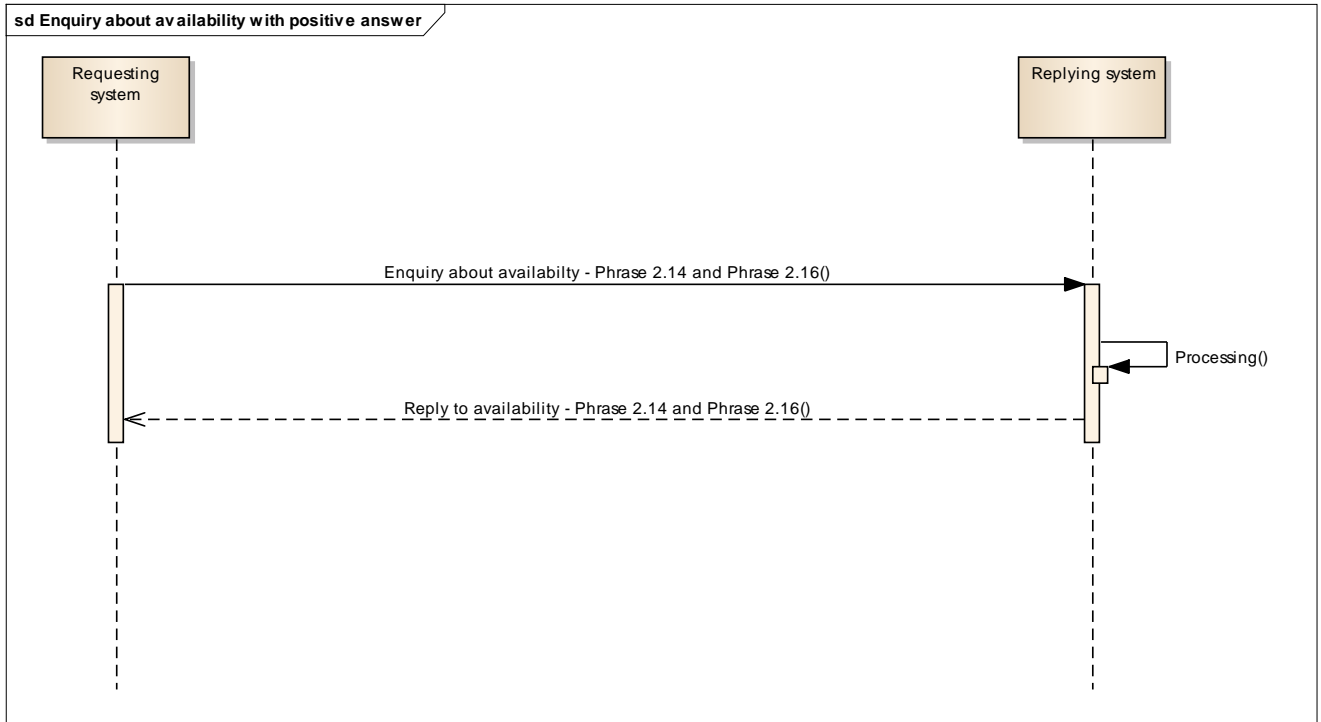
This transmission protocol can be used regardless of the transmission system used. It concerns only the requesting and replying applications.

The connection between the terminals and systems to which they are connected, are the exclusive responsibility of these systems.

A requesting system, which has sent a request to the replying system for synchronising the system, uses the rules given in point 3.1, element 10 depending on the code received in the reply.

If a replying system receives a synchronisation request before sending the reply to the request concerned, then in principle it should not reply to the original request.

A.2.1 - Normal operation



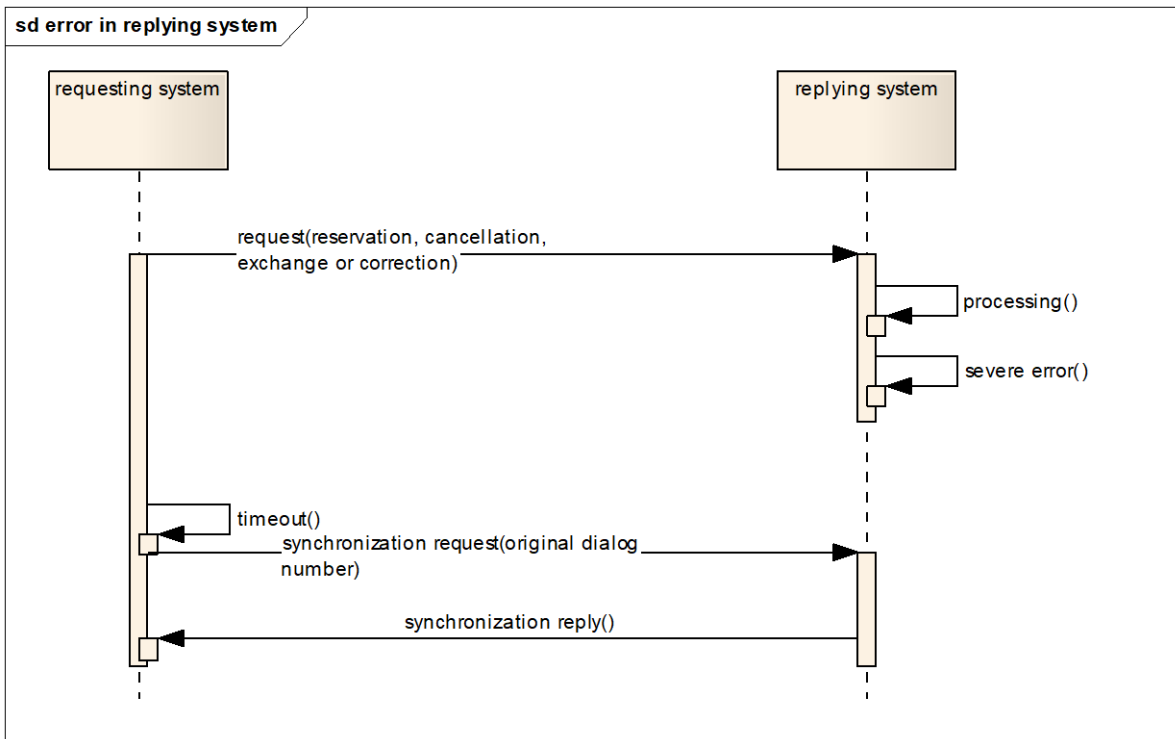


A.2.2 - Defect in replying system, before the reply can be sent

If, after sending a request, the requesting system has not received a reply (from the replying system) after a time "t", it sends a synchronising request to the replying system.

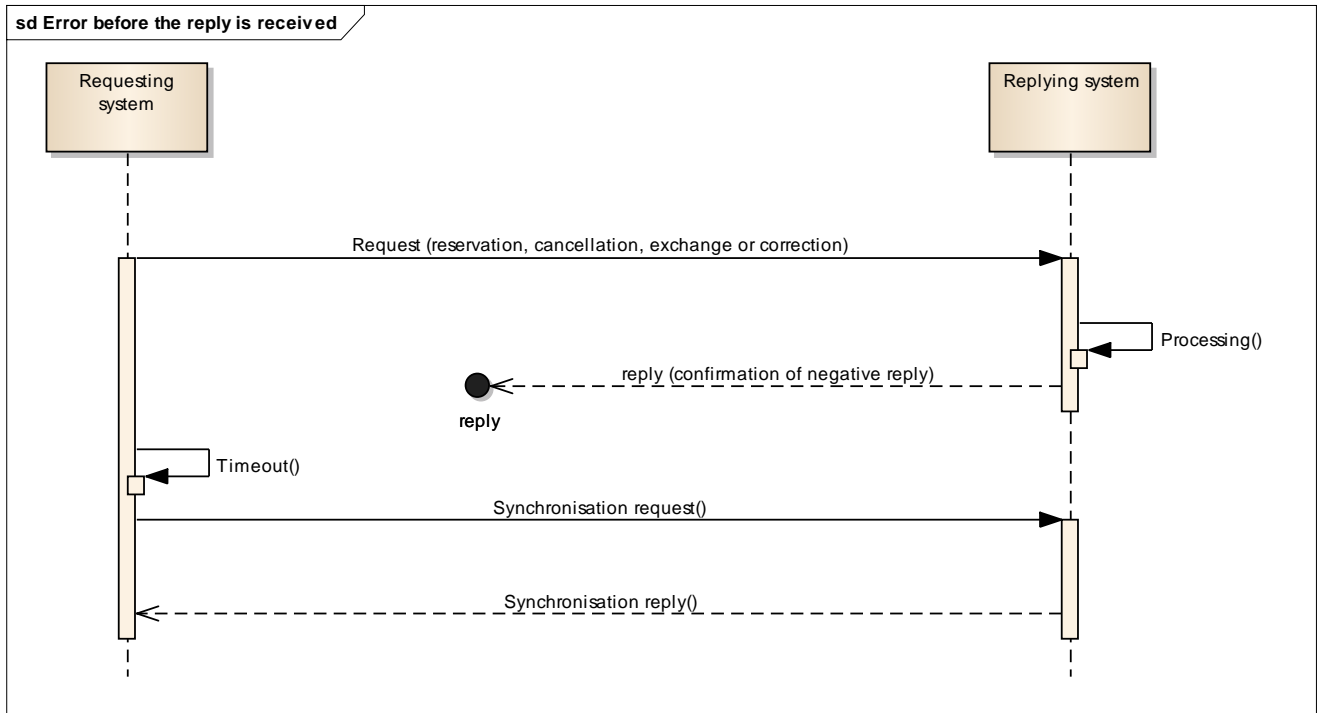
After restoration of the service, the replying system analyses the situation and addresses the reply to the synchronising request using the reply codes given in point 6.1, element 10.

No synchronising request can be given for a synchronising request.



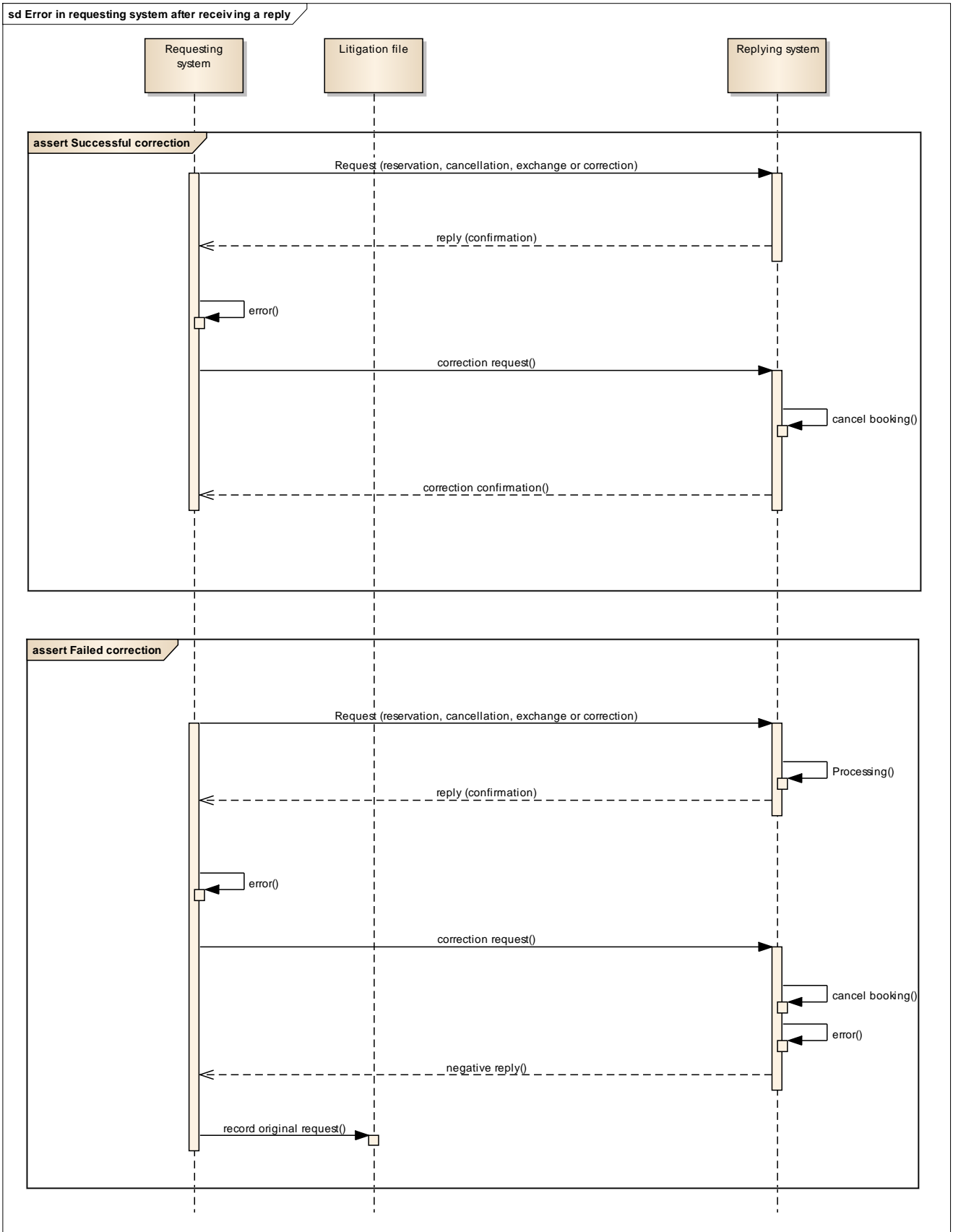
A.2.3 - Defect before the reply is received from the replying system

When service is resumed the requesting system sends a synchronising request for the dialogue concerned to the replying system.



A.2.4 - Defect in requesting system after receipt of reply from the replying system

When operation is resumed, if the reply involves a confirmation and if the document cannot be prepared, the requesting system sends a correction request to the replying system. If this request results in a negative reply from the replying system, the requesting system enters the request in the litigation file.



A.2.5 - The requesting system is unable to use the confirmation received

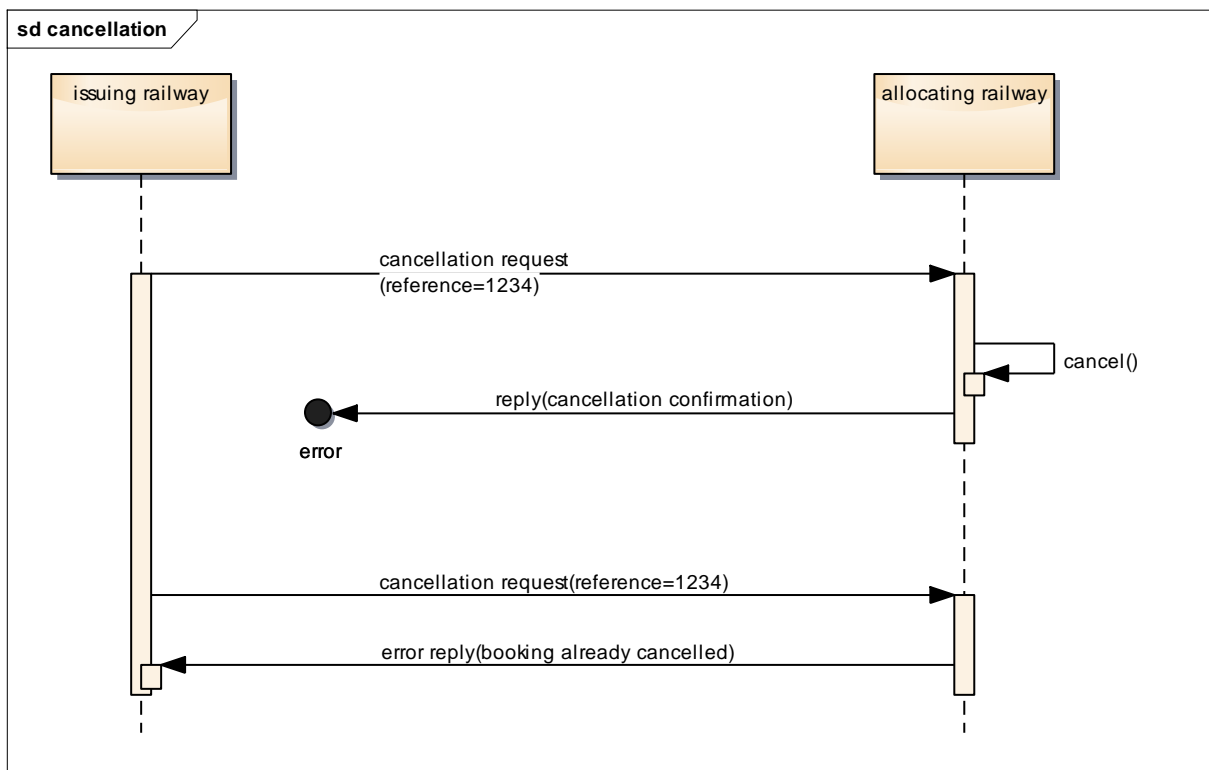
If, for any reason, the requesting system cannot send confirmation of an original request or confirmation of a partial cancellation to the requesting terminal, the requesting system sends a correction request to the replying system. In the case of a negative reply, the event shall be recorded in the litigation file.

A.2.6 - Repeated requests on Cancellation

The allocating railway can support different scenarios on repeated requests for a cancellation:

Scenario 1: Negative reply on already cancelled reservation

The allocating system returns a negative reply on a request for a reservation already cancelled.

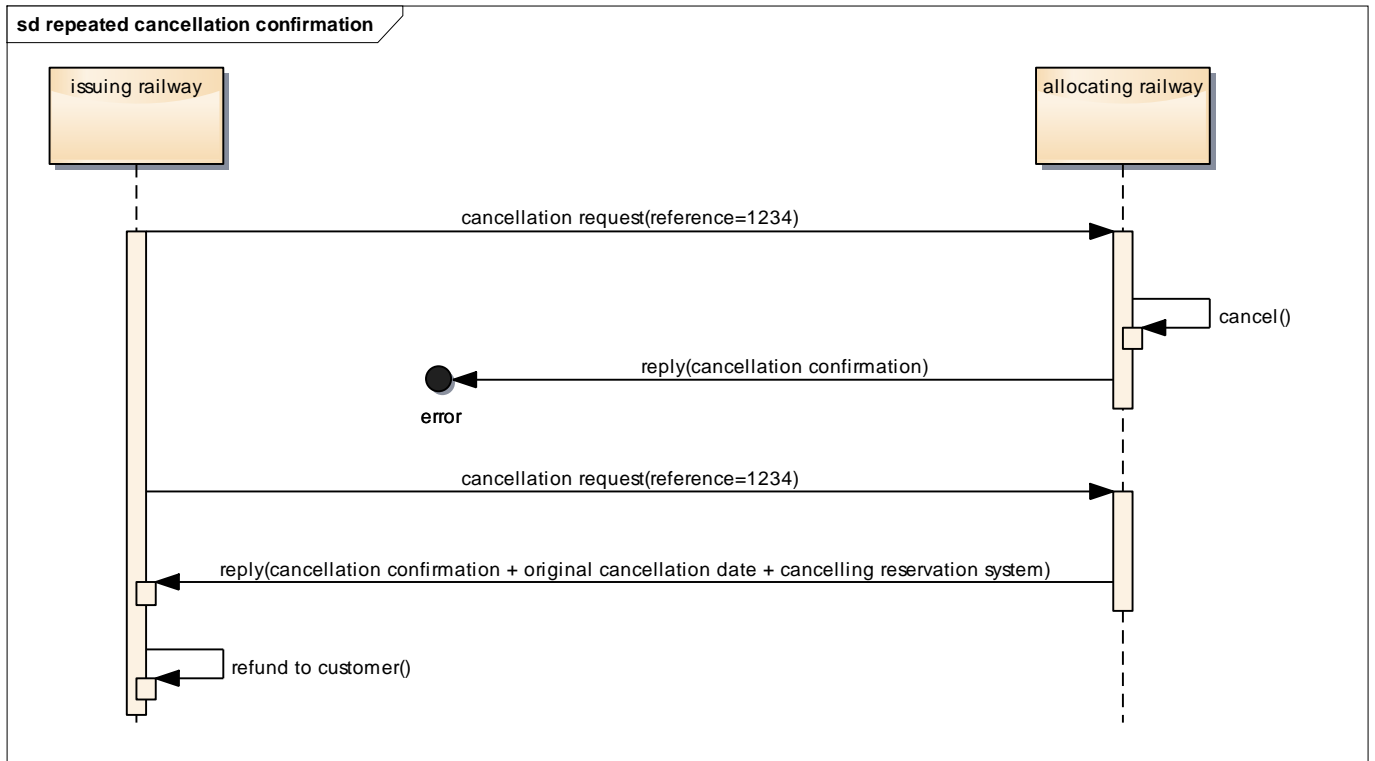


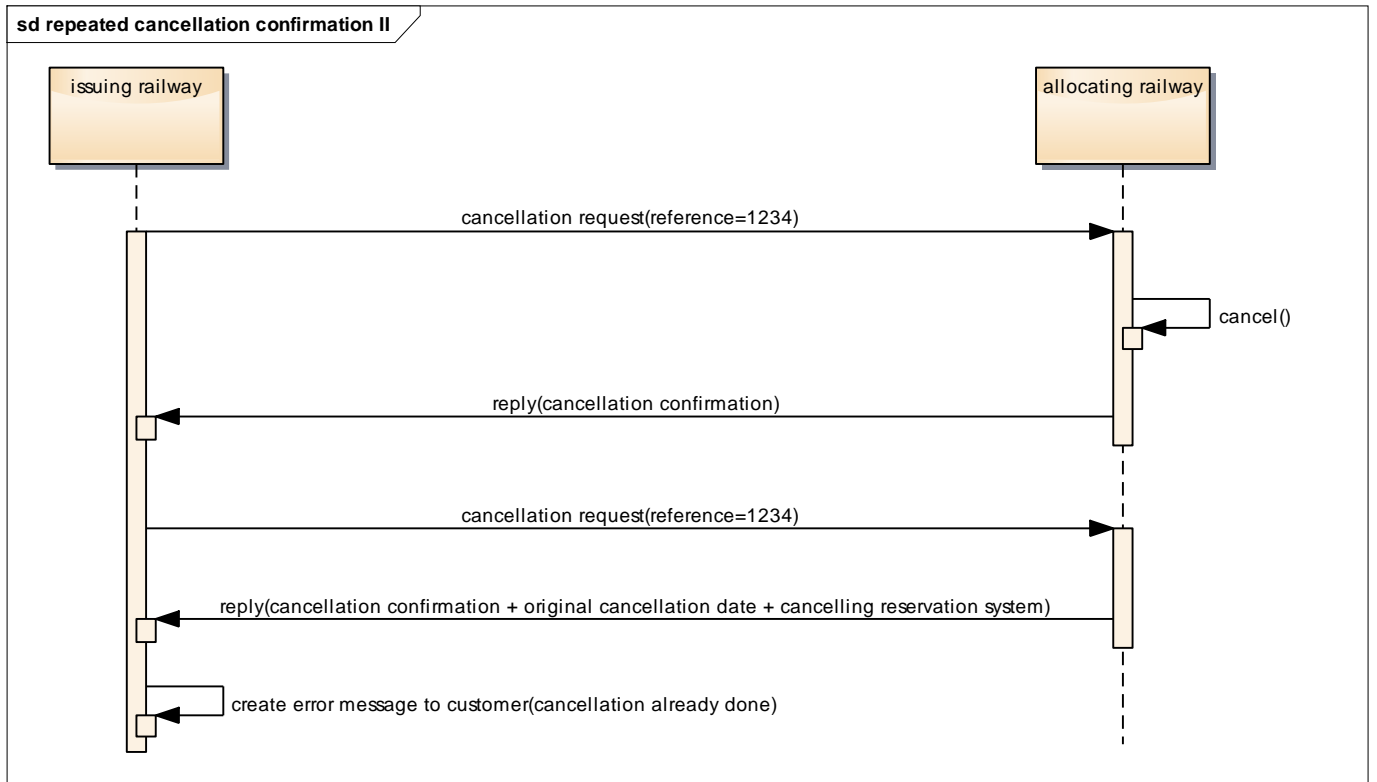
Scenario 2: Repeated reply on already cancelled reservation

The allocating system returns a repeated confirmation of the cancellation indicating the original cancelling railway and the original cancellation date to indicate that this confirmation has already been sent.

The issuing system must ensure the refund is given to the customer only one time. Thus it has to check whether the cancellation confirmation had already been forwarded to the customer or not.

In case the cancellation was originally made by another issuer no refund should be given to the customer without ensuring that there has not been a refund yet.





Appendix B – Principal **Binary** Message Structure

B.1 Definitions

B.1.1 Element

An element (basic element) is an indivisible item of data (for example, the code for a year, a station or a railway).

B.1.2 Group of elements

A group of elements is the combination of several elements to form another item of data belonging to a specific phrase (for example: the year + the month + the day, forming "the date").

B.1.3 Phrase

There are two kinds of phrase:

The standard phrase is a combination of elements and/or groups of elements forming a logical whole from the point of view of a function to be performed (for example: for charging, a phrase is formed with the general data of the consignment note, a phrase with the route data, a phrase with the wagon data for each wagon in the consignment, a phrase with the charging data for each wagon);

Each phrase has an identifier made up of 9 8-bit bytes.

An element (or group of elements) is optional when it need not necessarily be included in the phrase. Its absence is only revealed by the position zero of a bit in the topographical label. When it is absent, no position is therefore occupied by this element (or group of elements) in the sequence of data making up the phrase.

However, for applications of the "dialogue" type (for example, reservation of accommodation), where the "Response time" factor and the simultaneous processing of combined phrases are decisive factors, it may prove necessary to regard a message consisting of several phrases as the unit of data transmitted.

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

- a "Header" phrase which is mandatory
- "Application text" phrases

B.1.4 Message

A message is a form of communication which makes it possible to perform a function, and which forms part of a more or less integrated system for international freight, passenger and baggage traffic as well as documentary research.

A message may be made up of one or more phrases: since the phrase - and not the message - is the unit of data transmitted, link elements must be incorporated in the phrases to enable them to be linked together and to reassemble the message.

B.2 Messages

B.2.1 Identification of messages

Messages may consist of phrases from various sources, and it is therefore not necessary to identify the messages by specific codes. A phrase, however, is an indivisible entity, and therefore requires a strict and standardised form of identification.

B.2.2 Phrase identifier

The phrase identifier is independent of the data exchange mode and is systematically made up of 9

bytes.

It is sub-divided into 3 parts: the identity, the version code, the topographical label.

B.2.3 Identity of the phrase

The identity of the phrase consists of 4 digits. The first two digits from the left represent the application number. The application number for the reservation application is « 01 » The next two digits contain the number of the phrase within the application.

B.2.4 Version code

The version code is expressed by 1 digit. It is used to differentiate between versions of the same phrase if these versions differ only slightly from each other.

B.2.5 Topographical label

The topographical label contains information showing the difference between the content of the phrase exchanged between two computers and that of the standard phrase, since the latter contains some items of information which may be unnecessary or may not be available at the time the phrase is formed.

This label consists of 32 bits, which is equivalent to 4 bytes, and is used to indicate the presence (bit with the value 1) or absence (bit with the value 0) of a maximum of 32 optional elements (or groups of elements) in a phrase. It is therefore merely a mask indicating the composition of the phrase transmitted, and thus makes it possible to process phrases of variable length easily.

Superfluous bits systematically assume the value 0.

For free-format phrases, the 4 bytes in question indicate the length of the phrase by giving the (decimal) number of characters in the phrase.

B.2.6 Phrase structure

The structure of a phrase remains unalterable, irrespective of the destination of the phrase:

- the identifier:
 - identity ;
 - version code;
 - topographical label;

- compulsory elements and/or groups of elements;

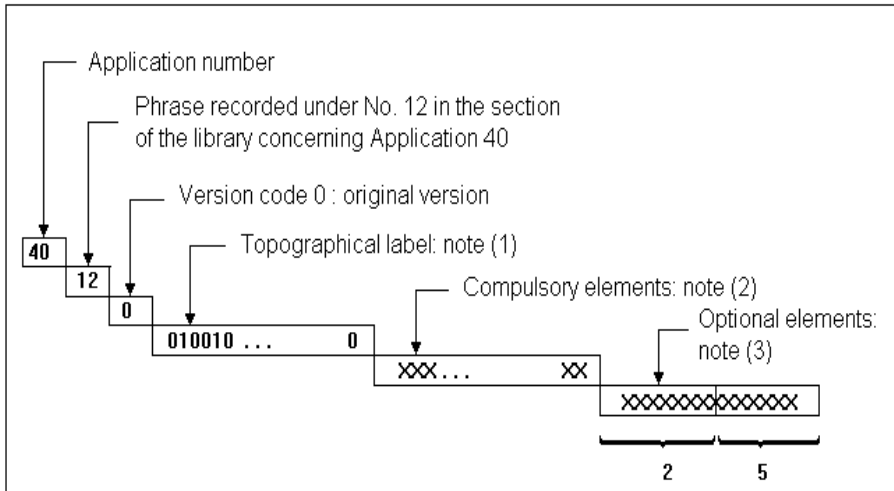
- optional elements and/or groups of elements.

This order must be strictly observed.

An element (or group of elements) is compulsory when a fixed position is reserved for it in the layout of the phrase. The absence of a value for this element (or group of elements) is therefore revealed in the phrase by a number of blank positions equal to the number of characters stipulated for it.

B.3 Example of phrases to be transmitted

B.3.1 Phrases with compulsory and optional elements



Note (1):

The topographical label indicates in binary form that for phrase no.12, only the optional elements 2 and 5 have been selected for transmission. Therefore, in the topographical label, bits 2 and 5 have the value 1 and the other 30 bits have the value 0.

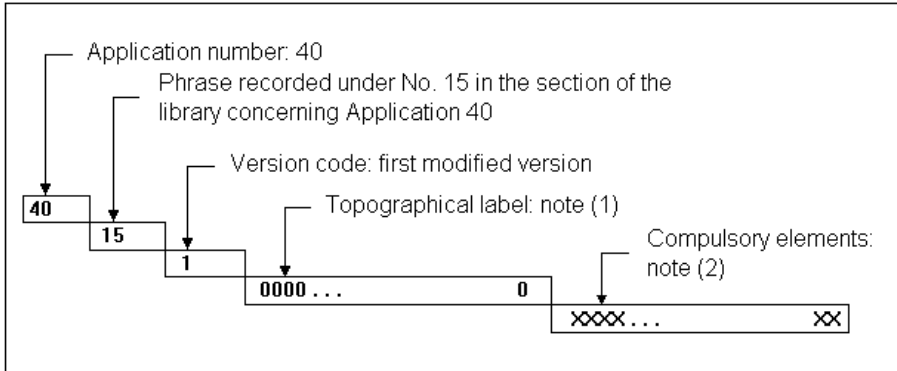
Note (2):

The compulsory elements in phrase 12 shall be transmitted in full; they are recorded in the relevant field.

Note (3)

Of the n optional elements ($n_{\max} = 32$) in phrase 12, only elements 2 and 5 are chosen for transmission, they are recorded in the relevant field in increasing order according to their serial number in the library.

B.3.2 Phrases which contain compulsory elements only



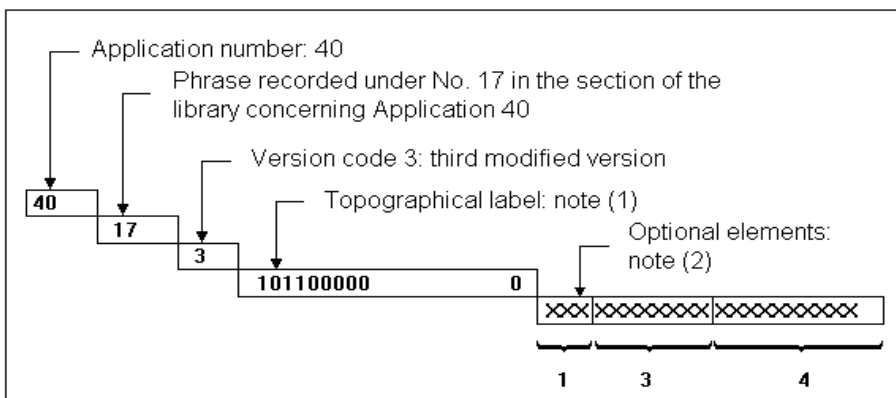
Note (1):

Since there are no optional elements available for phrase 15, the binary code in the topographical label contains only 0s.

Note (2):

The field of data contains only the compulsory elements of phrase 15.

B.3.3 Phrases which contain optional elements only



Note (1):

Phrase 17 contains only elements which are optional in the library. The topographical label indicates that only elements nos. 1, 3 and 4 are transmitted. The corresponding bits have the value 1.

Note (2):

The optional elements in phrase 17 chosen for transmission are recorded in the field of data in

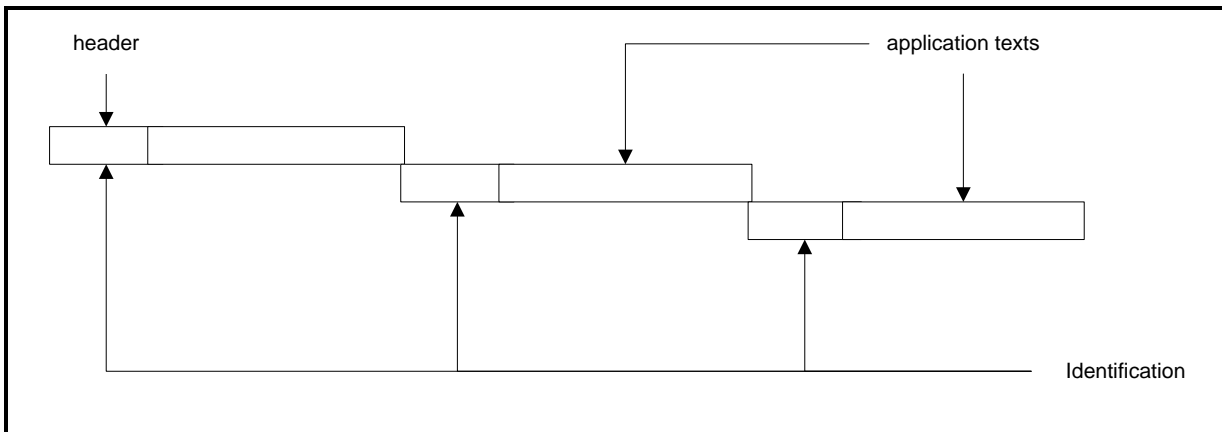
increasing order according to their serial number in the library.

B.4 Reservation messages

B.4.1 Structure

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

- a "Header" phrase which is mandatory
- "Application text" phrases



B.4.2 "Header" phrase

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

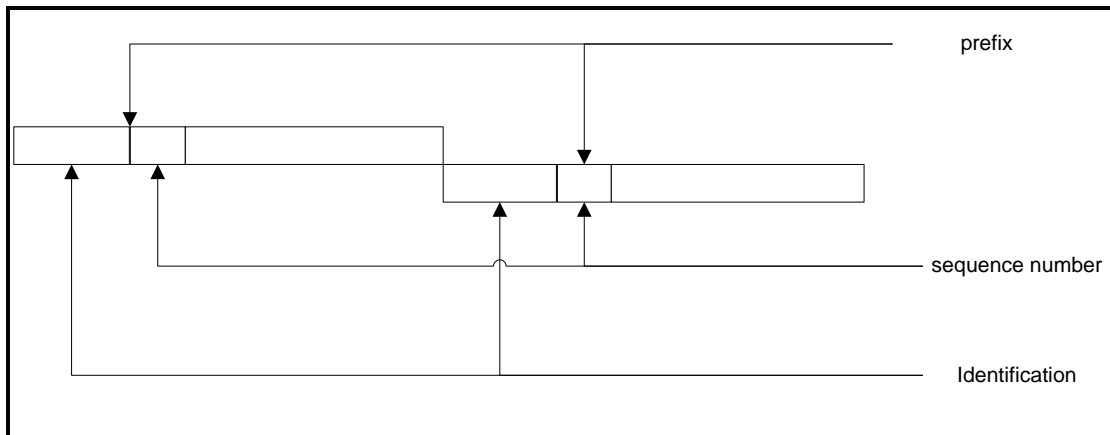
- required for the application level exchange procedure,
- denoting the function to be performed,
- clarifying whether it is an operational or test message,
- specifying the application version.

B.4.3 "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),
- correction (request and reply) of data in the allocating RS due to an anomaly during processing or transmission,
- messages in 918E format.

Each phrase is characterised by a prefix.



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

B.4.4 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.

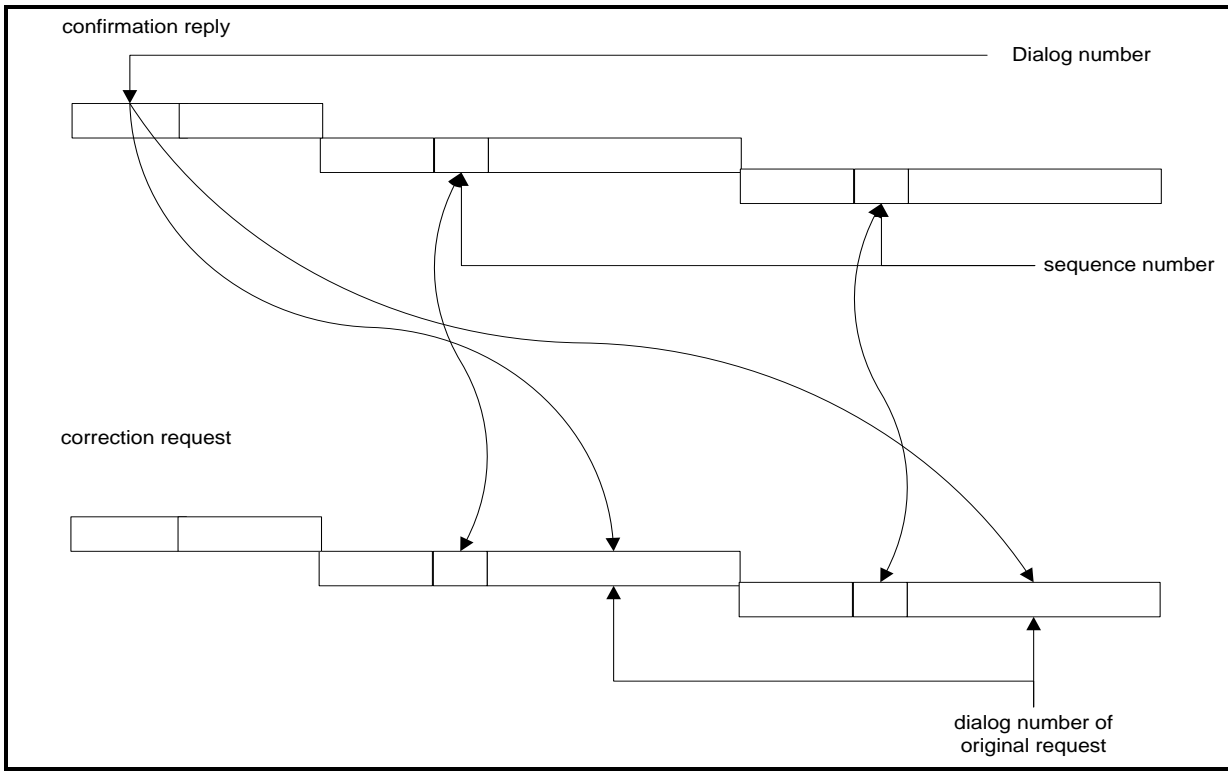
For correction messages, the initial dialogue number enable the link to be established.

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).

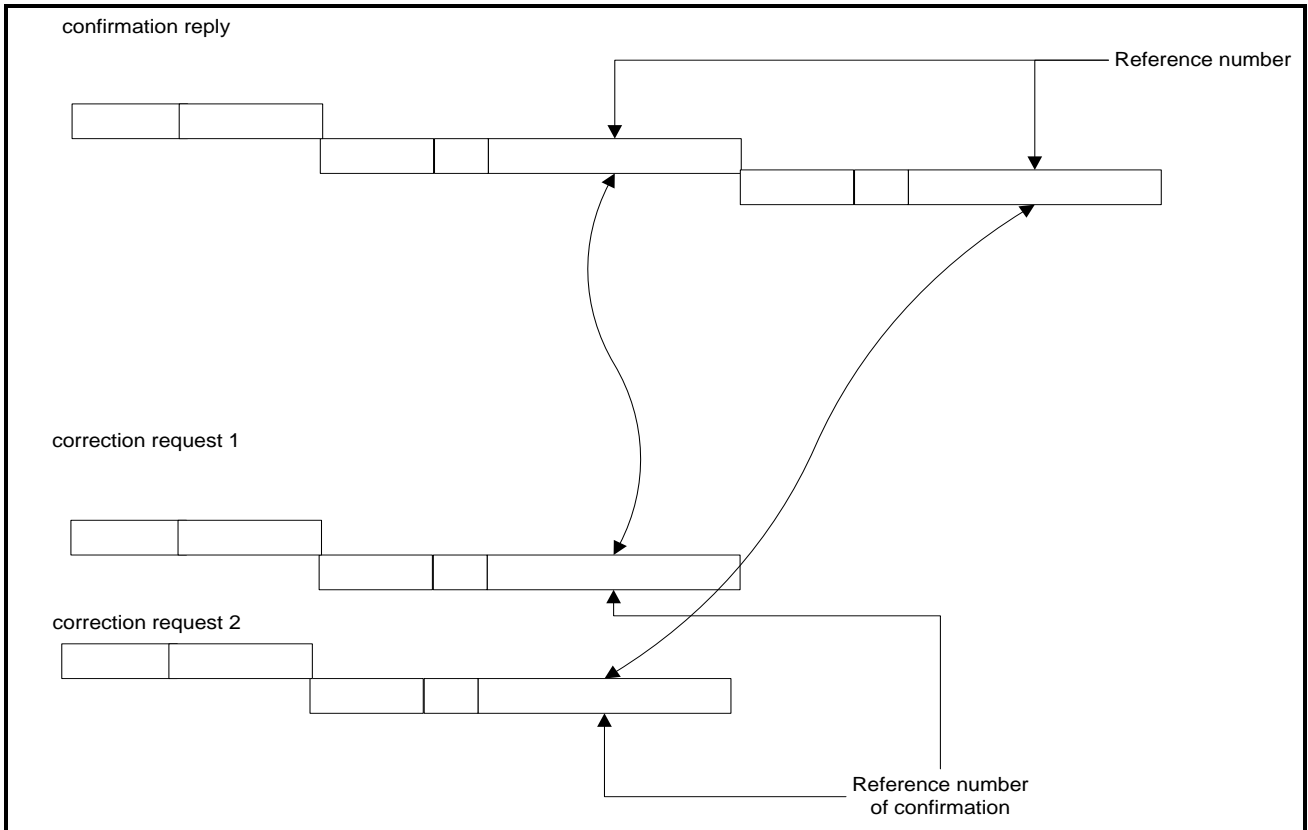
If a reply concerns the entire request message, the element "request number" is absent.

B.4.5 Sequencing request/negative reply or alternative proposal

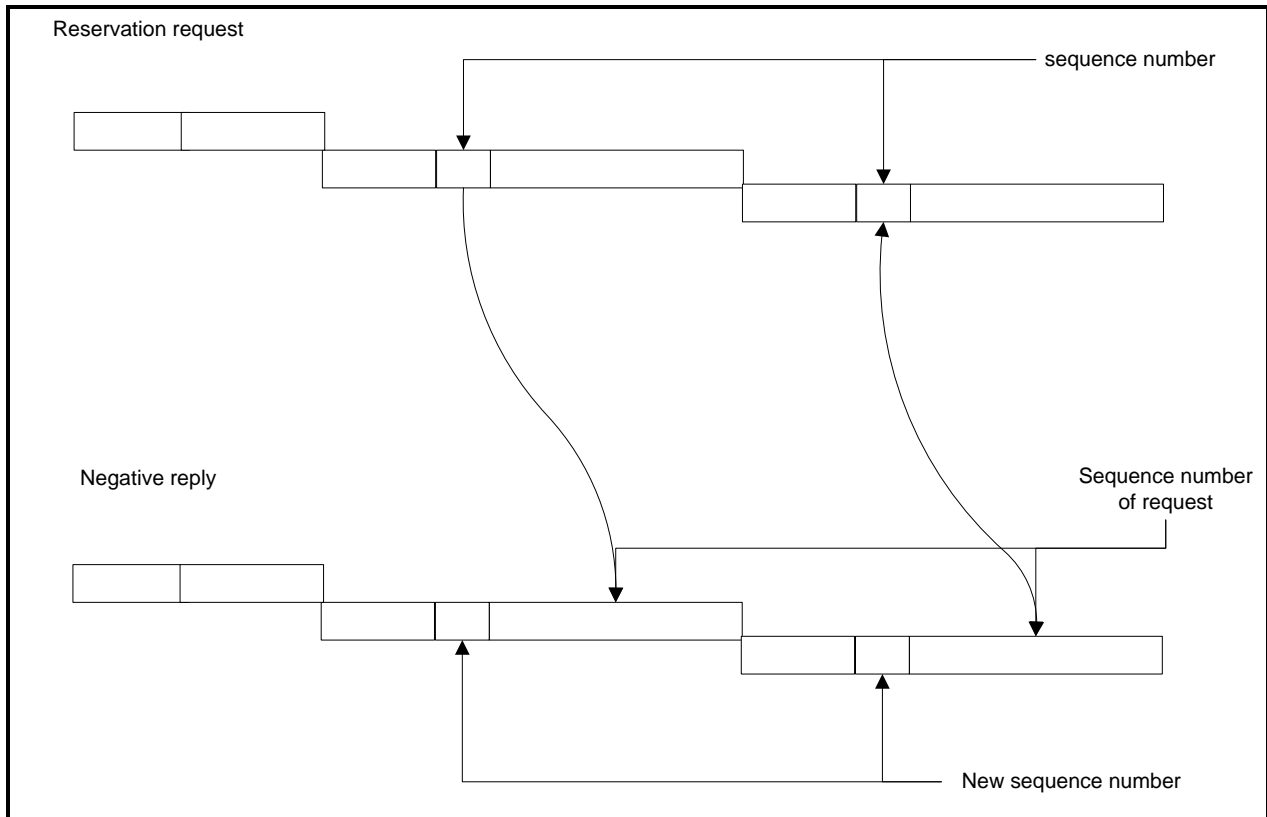
Solution 1



Solution 2:



B.4.6 Sequencing request/global negative reply



In case of a negative reply not related to a particular application text, the reply does not contain one of the old sequence numbers.

B.5 Extended reservation messages 918^E

The extended binary message definition 918^E includes an additional element 18 – “type of text“ in the prefix of each application text. This element specifies the application text provided. The 2 digit code allows to use the application texts from the old 918 binary format as well as additional application texts for availability information and the DMD.

A 918^E message contains at least 2 application texts in the message, the first of which is a DMD (see point 2.14 - page 35).

In a 918^E message all application texts must use the 918^E format.

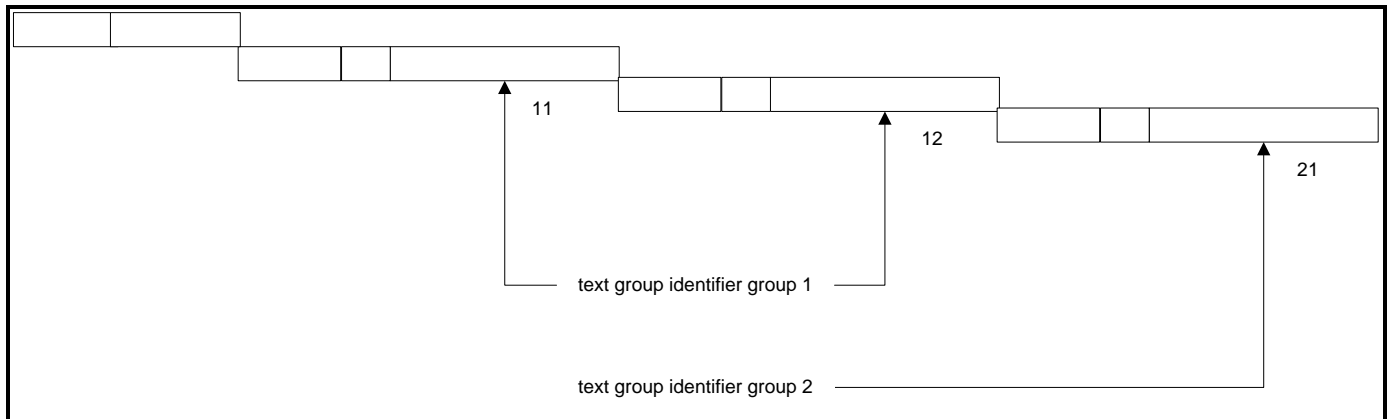
B.5.1 Identification of 918^E messages

A 918^E message is identified by the value 8 in element type of request.

In case of a 918E – message with a DMD and negative replies the type of request or reply of the DMD should also be value 8 (=negative reply).

B.5.2 Sequencing of application texts in 918^E messages

The application texts of a 918E message contain a text group identifier. It identifies a group with the first digit and numbers the application texts of the group in the second digit subsequently.



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