

Making the railway system
work better for society.

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Valenciennes, 8th May 2021

TAP TSI Compliance Results – CEF Grant Agreement INEA/CEF/TRAN/M2015/1138635

To whom it may concern,

I confirm and certify herewith that the following TAP TSI functionalities implemented by the company Železničná spoločnosť Slovensko (Slovakia), within the project “*Implementation of the technical interoperability for TAP TSI subsystem at ZSSK*”, co-financed by the Connecting Europe Facility Fund, are compliant with the appropriate provisions of the TAP-TSI Regulation 454/2011 and its Technical Documents.

Details of the Action:

Name of the Action:	Implementation of the technical interoperability for TAP TSI subsystem at ZSSK
No. of the Action:	2015-SK-TM-0321-W
No. of the Grant Agreement:	INEA/CEF/TRAN/M2015/1138635
Duration of the Action:	2019-2020
Verified Activity:	Activity 9: Master Plan Part 8 TAP-TSI - Reservations
Verified TAP TSI Functionalities:	Reservations

The detailed results of the verification process are concluded as follows:

ZSSK has sent to the European Union Agency for Railways on 30 March 2021, for verification, the following attached documents:

TAP TSI function / specification	Content description
Annex 1 reservation-msgs.zip	Annex 1 reservation-msgs.zip This file contains reservation messages, used for the reservation system according to the TAP TSI technical document B.5

Table 1 Documents for verification

ERA has verified the delivered messages against the TAP TSI technical document B.5.

For the verification the following steps have been implemented by ERA.

1. ERA selected the following messages for the test:
 - a. Availability request
 - b. Reservation request
 - c. Reservation reply
2. Transformation of the messages into the tables according to the TAP TSI technical document B.5
3. Analysis of the messages compared with the TAP TSI technical document B.5 and the TAP TSI ANNEX B.52 - RESERVATION APPLICATION GUIDE¹

Availability request:

Element	Value	Remarks
Identifier of phrase 2.2 Header		
Application number	01	Application = reservation
Number of sentence	00	
Version	0	
Topographical label	Hex 00 00 00 00	All zeroes because the Header does not have optional elements
Phrase 2.2 Header		
Receiving reservation system	56	
Sending reservation system	54	
Dialogue number	00003	
Julian date	239	
Type of message	1	
Type of service	8	This identifies a 918E message
Number of the requesting terminal	smulant	
Type of requesting office	0	
Number of the application version	0	
Field at disposal	00	
Test	0	

¹ https://www.era.europa.eu/sites/default/files/activities/docs/era_technical_document_tap_b_52_en.pdf

Identifier of phrase 2.14 DMD		
Application number	01	Application = reservation
Number of sentence	00	
Version	0	
Topographical label	Hex 00 00 00 00	
Application text prefix (DMD)		
Service	00	
Type of request or reply	1	
Serial number	02	When there are > 1 phrases in the message, the serial number is in decreasing order
Type of text	10	10 = DMD (only with service type =8)
Application text (DMD)		
Starting station	0000000	
Final station	0000000	
Return station	0000000	
Journey code	0	
Product code	10 hex '20'	
Identifier of phrase 2.16 Availability enquiry		
Application number	01	Application = reservation
Number of sentence	00	
Version	0	
Topographical label (4 bytes)	Hex 00 00 00 00	no facultative elements
Application text prefix Availability enquiry		
Service	00	
Type of request or reply	1	
Serial number	01	
Type of text	12	12 = availability req (only with service type =8)
Application text Availability enquiry		
Train number	442	
Boarding station	5613600	Košice
Destination station	5457076	Prague
Departure date	011020	
Departure time	0000	
Service code 1	00	

Reservation request:

Element	Value	Remarks
Identifier of phrase 2.2 Header		
Application number	01	Application = reservation
Number of sentence	00	
Version	0	
Topographical label	Hex 00 00 00 00	All zeroes because the Header does not have optional elements
Phrase 2.2 Header		

Receiving reservation system	56	
Sending reservation system	54	
Dialogue number	00004	
Julian date	239	
Type of message	1	
Type of service	1	Request
Number of the requesting terminal	smulant	
Type of requesting office	0	
Number of the application version	0	
Field at disposal	00	
Test	0	
Application text prefix Reservation request		
Service	01	Reservation
Type of request or reply	1	Request
Serial number	01	
Application text Reservation request		
Train number	aaaaa	
Boarding station	5613600	Košice
Destination station	5457076	Prague
Number of seats	02	
Class	2	

Element	Value	Remarks
Identifier of phrase 2.2 Header		
Application number	01	Application = reservation
Number of sentence	00	
Version	0	
Topographical label	Hex 00 00 00 00	All zeroes because the Header does not have optional elements
Phrase 2.2 Header		
Receiving reservation system	56	
Sending reservation system	54	
Dialogue number	00003	
Julian date	239	
Type of message	2	Reply
Type of service	1	
Number of the requesting terminal	smulant	
Type of requesting office	9	
Number of the application version	0	
Field at disposal	00	
Test	0	
Application text prefix Reservation reply		
Service	01	Reservation
Type of request or reply	1	Request
Serial number	01	
Application text		

Reservation request		
Train number	442	
Train category	23	
Departure date	1010	
Departure time	2207	
Boarding station	KOSICE	Košice
Destination station	PRAHA HL.N.	Prague
Reference number of accommodations	560025508636	
Coach number	370	
Number of seats	03	
Accommodation allocated	55 656 654 8	
Class	2	
Type of compartment allocated	000000	
Price (reservation charge, supplement)	0000000	
<i>Elements not identifiable</i>	075611100070	
Service brand information	EN EuroNight	

The conclusion of the analysis is:

1. The reservation messages could be verified if the message content is compliant against the technical document B.5 of the official TAP data catalogue version baseline 1.3.0 (see <https://www.era.europa.eu/content/tap-baseline-130>).

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```

00000150 62 30 35 70 5a 32 68 30 49 43 41 67 49 43 41 67 |b05pZ2h0ICAgICAg|
00000160 49 43 41 67 49 43 41 67 49 43 41 67 49 43 41 67 |ICAgICAgICAgICAg|
00000170 49 43 41 67 49 43 41 67 |ICAgICAg|
00000178

```

Message RESERVATION

Request

```
MDEwMDAAAAAANTY1NDawMDA0MjM5MTFzbxVsYW50OTAgIDEwMTAwMAAQAAAwMTEwMWFhYWZhMTAxMDU2MTM2MDA1NDU3MDC2M
DIyICA=
```

Hexadecimal

```

00000000 4d 44 45 77 4d 44 41 41 41 41 41 41 4e 54 59 31 |MDEwMDAAAAAANTY1|
00000010 4e 44 41 77 4d 44 41 30 4d 6a 4d 35 4d 54 46 7a |NDawMDA0MjM5MTFz|
00000020 62 58 56 73 59 57 35 30 4f 54 41 67 49 44 45 77 |bxVsYW50OTAgIDEw|
00000030 4d 54 41 77 4d 41 41 51 41 41 41 77 4d 54 45 77 |MTAwMAAQAAAwMTEw|
00000040 4d 57 46 68 59 57 46 68 4d 54 41 78 4d 44 55 32 |MWFhYWZhMTAxMDU2|
00000050 4d 54 4d 32 4d 44 41 31 4e 44 55 33 4d 44 63 32 |MTM2MDA1NDU3MDC2|
00000060 4d 44 49 79 49 43 41 3d |MDIyICA=|
00000068

```

Answer

```
MDEwMDAAAAAANTQ1NjAwMDAzMjM5MTFzbxVsYW50OTAgIDEwMTAwMCABEAAwMTQwMTQ0MiAgMjMxMDEwMjIwN0tPU01DRSAgI
CAGICAgICAgICAgICAgICAgIFBSQUhBIEhMLk4uICAgICAgICAgICAgICAgICAgIDU2MDAyNTUwODYzNjM3MDAzNTUgNj
U2IDY1NCA4ICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
gICAgICAgICAgICAgICAgIA==
```

Hexadecimal

```

00000000 4d 44 45 77 4d 44 41 41 41 41 41 41 4e 54 51 31 |MDEwMDAAAAAANTQ1|
00000010 4e 6a 41 77 4d 44 41 7a 4d 6a 4d 35 4d 6a 46 7a |NjAwMDAzMjM5MTFz|
00000020 62 58 56 73 59 57 35 30 4f 54 41 67 49 44 45 77 |bxVsYW50OTAgIDEw|
00000030 4d 54 41 77 4d 43 41 42 45 41 41 77 4d 54 51 77 |MTAwMCABEAAwMTQw|
00000040 4d 54 51 30 4d 69 41 67 4d 6a 4d 78 4d 44 45 77 |MTQ0MiAgMjMxMDEw|
00000050 4d 6a 49 77 4e 30 74 50 55 30 6c 44 52 53 41 67 |MjIwN0tPU01DRSAg|
00000060 49 43 41 67 49 43 41 67 49 43 41 67 49 43 41 67 |ICAgICAgICAgICAg|
00000070 49 43 41 67 49 43 41 67 49 43 41 67 49 46 42 53 |ICAgICAgICAgIFBS|
00000080 51 55 68 42 49 45 68 4d 4c 6b 34 75 49 43 41 67 |QUhBIEhMLk4uICAg|
00000090 49 43 41 67 49 43 41 67 49 43 41 67 49 43 41 67 |ICAgICAgICAgICAg|
000000a0 49 43 41 67 49 44 55 32 4d 44 41 79 4e 54 55 77 |ICAgIDU2MDAyNTUw|
000000b0 4f 44 59 7a 4e 6a 4d 33 4d 44 41 7a 4e 54 55 67 |ODYzNjM3MDAzNTUg|
000000c0 4e 6a 55 32 49 44 59 31 4e 43 41 34 49 43 41 67 |NjU2IDY1NCA4ICAg|
000000d0 49 43 41 67 49 43 41 67 49 43 41 67 49 43 41 67 |ICAgICAgICAgICAg|
000000e0 49 43 41 67 49 43 41 79 4d 44 41 77 4d 44 41 77 |ICAgICAgICAgICAg|
000000f0 4d 44 41 77 4d 44 41 77 4d 44 41 33 4e 54 59 78 |MDAwMDAwMDA3NTYx|
00000100 4d 54 45 77 4d 44 41 33 4d 45 56 4f 49 45 56 31 |MTEwMDA3MEVOIEV1|
00000110 63 6d 39 4f 61 57 64 6f 64 43 41 67 49 43 41 67 |cm90awdodCAGICAg|
00000120 49 43 41 67 49 43 41 67 49 43 41 67 49 43 41 67 |ICAgICAgICAgICAg|
00000130 49 43 41 67 49 43 41 67 49 41 3d 3d |ICAgICAgIA==|
0000013c

```

Message PARTIAL CANCEL

Request

MDEwMDAAAAANTQ1NjAwMDA1MjM5MTMwMDAwMTAxMDAgIDewMTAwMAAAAAAwMTAwMTQ0MyAgMTAxMDAyanTQwMDAwMDAwMDAx

Hexadecimal

00000000	4d	44	45	77	4d	44	41	41	41	41	41	41	41	4e	54	51	31	MDEwMDAAAAANTQ1
00000010	4e	6a	41	77	4d	44	41	31	4d	6a	4d	35	4d	54	4d	77	NjAwMDA1MjM5MTMw	
00000020	4d	44	41	77	4d	54	41	78	4d	44	41	67	49	44	45	77	MDAwMTAxMDAgIDew	
00000030	4d	54	41	77	4d	41	41	41	41	41	41	77	4d	54	41	77	MTAwMAAAAAAwMTAw	
00000040	4d	54	51	30	4d	79	41	67	4d	54	41	78	4d	44	41	79	MTQ0MyAgMTAxMDAyanTQw	
00000050	4e	54	51	77	4d	44	41	77	4d	44	41	77	4d	44	41	78	NTQwMDAwMDAwMDAx	
00000060																		

Reply

MDEwMDAAAAANTY1NDAwMDA1MjM5MjMwMDAwMTAxMDAgIDewMTAwMAAAAAAwMTQwMTQ0MyAgMDMxMDEwMDAwMFBsQUhBIEhMLk4uICAgICAgICAgICAgICAgICAgIEtPU01DRSAgICAgICAgICAgICAgICAgICAgICAgICAgIDU0MDAwMDAwMDAwMjEgIDAgYMSAgMDIgIDUgICAgICAgICAgICAgICAgICAgICAgICAgYMDAwMDAwMDAwMDAwMDU0MDAwMDAwMDAwMTAwMDAwMDAwMTIwMjM5

Hexadecimal

00000000	4d	44	45	77	4d	44	41	41	41	41	41	41	4e	54	59	31	MDEwMDAAAAANTY1	
00000010	4e	44	41	77	4d	44	41	31	4d	6a	4d	35	4d	6a	4d	77	NDAwMDA1MjM5MjMw	
00000020	4d	44	41	77	4d	54	41	78	4d	44	41	67	49	44	45	77	MDAwMTAxMDAgIDew	
00000030	4d	54	41	77	4d	41	41	41	41	41	41	77	4d	54	51	77	MTAwMAAAAAAwMTQw	
00000040	4d	54	51	30	4d	79	41	67	4d	44	4d	78	4d	44	45	77	MTQ0MyAgMDMxMDEw	
00000050	4d	44	41	77	4d	46	42	53	51	55	68	42	49	45	68	4d	MDAwMFBsQUhBIEhML	
00000060	4c	6b	34	75	49	43	41	67	49	43	41	67	49	43	41	67	Lk4uICAgICAgICAg	
00000070	49	43	41	67	49	43	41	67	49	43	41	67	49	45	74	50	ICAgICAgICAgIEtP	
00000080	55	30	6c	44	52	53	41	67	49	43	41	67	49	43	41	67	U01DRSAgICAgICAg	
00000090	49	43	41	67	49	43	41	67	49	43	41	67	49	43	41	67	ICAgICAgICAgICAg	
000000a0	49	43	41	67	49	44	55	30	4d	44	41	77	4d	44	41	77	ICAgIDU0MDAwMDAw	
000000b0	4d	44	41	77	4d	6a	45	67	49	44	41	79	4d	53	41	67	MDAwMjEgIDAgYMSAg	
000000c0	4d	44	49	67	49	44	55	67	49	43	41	67	49	43	41	67	MDIgidUgICAgICAg	
000000d0	49	43	41	67	49	43	41	67	49	43	41	67	49	43	41	67	ICAgICAgICAgICAg	
000000e0	49	43	41	67	49	43	41	79	4d	44	41	77	4d	44	41	77	ICAgICAgYMDAwMDAw	
000000f0	4d	44	41	77	4d	44	41	77	4d	44	55	30	4d	44	41	77	MDAwMDAwMDU0MDAw	
00000100	4d	44	41	77	4d	44	41	77	4d	54	41	77	4d	44	41	77	MDAwMDAwMTAwMDAw	
00000110	4d	44	41	77	4d	54	49	77	4d	6a	4d	35					MDAwMTIwMjM5	
0000011c																		

Message COMPLETE CANCEL

Request

MDEwMDAAAAANTQ1NjAwMDA3MjM5MTIwMDAwMTAxMDAgIDewMTAwMAAAAAAwMTAwMTQ0MyAgMTAxMDU0MDAwMDAwMDAwMg==

Hexadecimal


```

00000000 4d 44 45 77 4d 44 41 41 41 41 41 41 4e 54 51 31 |MDEwMDAAAAAANTQ1|
00000010 4e 6a 41 77 4d 44 41 33 4d 6a 4d 35 4d 54 49 77 |NjAwMDA3MjM5MTIw|
00000020 4d 44 41 77 4d 54 41 78 4d 44 41 67 49 44 45 77 |MDAwMTAxMDAgIDEw|
00000030 4d 54 41 77 4d 41 41 41 41 41 41 77 4d 54 41 77 |MTAwMAAAAAAwMTAw|
00000040 4d 54 51 30 4d 79 41 67 4d 54 41 78 4d 44 55 30 |MTQ0MyAgMTAxMDU0|
00000050 4d 44 41 77 4d 44 41 77 4d 44 41 77 4d 67 3d 3d |MDAwMDAwMDAwMg==|
00000060
    
```

Reply

MDEwMDAAAAAANTY1NDAwMDA3MjM5MjIwMDAwMTAxMDAgIDEwMTAwMAAAAAAwMDgwMTA4NA==

Hexadecimal

```

00000000 4d 44 45 77 4d 44 41 41 41 41 41 41 4e 54 59 31 |MDEwMDAAAAAANTY1|
00000010 4e 44 41 77 4d 44 41 33 4d 6a 4d 35 4d 6a 49 77 |NDAwMDA3MjM5MjIw|
00000020 4d 44 41 77 4d 54 41 78 4d 44 41 67 49 44 45 77 |MDAwMTAxMDAgIDEw|
00000030 4d 54 41 77 4d 41 41 41 41 41 41 77 4d 44 67 77 |MTAwMAAAAAAwMDgw|
00000040 4d 54 41 34 4e 41 3d 3d |MTA4NA==|
00000048
    
```

Message SYNCHRONIZATION

Request

MDEwMDAAAAAANTY1NDAwMDAzMjM5MTkwMDAwMDAwNzAxMDE=

Hexadecimal

```

00000000 4d 44 45 77 4d 44 41 41 41 41 41 41 4e 54 59 31 |MDEwMDAAAAAANTY1|
00000010 4e 44 41 77 4d 44 41 7a 4d 6a 4d 35 4d 54 6b 77 |NDAwMDAzMjM5MTkw|
00000020 4d 44 41 77 4d 44 41 77 4e 7a 41 78 4d 44 45 |MDAwMDAwNzAxMDE|
    
```

Reply

MDEwMDAAAAAANTQ1NjAwMDAzMjM5MjkwMDAwMDAwNzAwMDE=

Hexadecimal

```

00000000 4d 44 45 77 4d 44 41 41 41 41 41 41 4e 54 51 31 |MDEwMDAAAAAANTQ1|
00000010 4e 6a 41 77 4d 44 41 7a 4d 6a 4d 35 4d 6a 6b 77 |NjAwMDAzMjM5Mjkw|
00000020 4d 44 41 77 4d 44 41 77 4e 7a 41 77 4d 44 45 3d |MDAwMDAwNzAwMDE=|
00000030
    
```