



ERTMS/ETCS

FFFIS STM Test cases of Functional identity 007

DMI FUNCTION: INDICATORS

Total: 32 Test cases

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Company	Technical Approval	Management approval
ALSTOM		
AZD		
CAF		
HITACHI RAIL STS		
MERMEC		
SIEMENS		
THALES		



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2.2 Indicators

2.2.1 Test Case 7b2.1

TEST CASE HEADER	
Test case identification	DMI Function
	7b2.0.1.1.1.1.3.0
	Indicator identities test for unified DMI with single indicator requests: First single indicators (with ids 1-126) are displayed with caption in a loop one after the other at the same position, the new request replacing the old indicator. Then single indicators (with ids 127-255) are displayed with caption and then deleted by display with attribute 'no display' in a loop one after the other at the same position. Then the first indicator is moved through all possible positions with text.
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.3, 13.4.1.4, 13.4.1.9, 13.4.1.10
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Unified DMI service: 7a.1.
	The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	

Starting Conditions	Value	Comments
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STM State	DA	
ETCS Mode	SN	
ETCS Level	NTC	
Train State	not relevant	
ETCS Train Data	not relevant	
Active DMI channel Connection	Established	
Other DMI channels Connections	not relevant	
TIU Connection	not relevant	
BIU Connection	not relevant	
JD Connection	not relevant	
TIU Regenerative Brake Command	not relevant	
TIU Magnetic Shoes Brake Command	not relevant	
TIU Eddy Current Brake Command for Emergency Brake	not relevant	
TIU Eddy Current Brake Command for Service Brake	not relevant	
TIU Pantograph Command	not relevant	
TIU Air Tightness Command	not relevant	
TIU Main Switch / Circuit Breaker Command	not relevant	
TIU Traction Cut Off Command	not relevant	
TIU Traction Status	not relevant	
TIU Direction Controller Position Status	not relevant	
TIU Cab Status	Cab A or B active	For the test it is not relevant, what cab is active
BIU Emergency Brake Command	not relevant	



BIU Service Brake Command	not relevant	
BIU Emergency Brake Status	not relevant	
BIU Service Brake Status	not relevant	
NTC isolation status	Not isolated for active STM. Not relevant for other STMs	

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
	Request of single indicator with replacement						
1	STM requests display of indicator 1 at position 1	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicator with caption IND1 is displayed at position 1
2	STM requests display of indicator 2 at position 1	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Indicator with caption IND2 is displayed at position 1
...
63	STM requests display of indicator 63 at position 1	PROF	T0+310s	connection of active DMI channel: Message-S63	DMI		Indicator with caption IND63 is displayed at position 1
...
124	STM requests display of indicator 124 at position 1	PROF	T0+615s	connection of active DMI channel: Message-S124	DMI		Indicator with caption IND124 is displayed at position 1
125	STM requests display of indicator 125 at position 1	PROF	T0+620s	connection of active DMI channel: Message-S125	DMI		Indicator with caption IND125 is displayed at position 1
126	STM requests display of indicator 126 at position 1	PROF	T0+625s	connection of active DMI channel: Message-S126	DMI		Indicator with caption IND126 is displayed at position 1
	Request of single indicator with deletion						



127	STM requests display of indicator 127 at position 1	PROF	T0+630s	connection of active DMI channel: Message-S127	DMI		Indicator with caption IND127 is displayed at position 1
128	STM removes indicator 127	PROF	T0+635s	connection of active DMI channel: Message-S128	DMI		No indicators are displayed
129	STM requests display of indicator 128 at position 1	PROF	T0+640s	connection of active DMI channel: Message-S129	DMI		Indicator with caption IND128 is displayed at position 1
130	STM removes indicator 128	PROF	T0+645s	connection of active DMI channel: Message-S130	DMI		No indicators are displayed
...
253	STM requests display of indicator 190 at position 1	PROF	T0+1260s	connection of active DMI channel: Message-S253	DMI		Indicator with caption IND190 is displayed at position 1
254	STM removes indicator 190	PROF	T0+1265s	connection of active DMI channel: Message-S254	DMI		No indicators are displayed
...
377	STM requests display of indicator 252 at position 1	PROF	T0+1880s	connection of active DMI channel: Message-S377	DMI		Indicator with caption IND252 is displayed at position 1
378	STM removes indicator 252	PROF	T0+1885s	connection of active DMI channel: Message-S378	DMI		No indicators are displayed
379	STM requests display of indicator 253 at position 1	PROF	T0+1890s	connection of active DMI channel: Message-S379	DMI		Indicator with caption IND253 is displayed at position 1
380	STM removes indicator 253	PROF	T0+1895s	connection of active DMI channel: Message-S380	DMI		No indicators are displayed
381	STM requests display of indicator 254 at position 1	PROF	T0+1900s	connection of active DMI channel: Message-S381	DMI		Indicator with caption IND254 is displayed at position 1
382	STM removes indicator 254	PROF	T0+1905s	connection of active DMI channel: Message-S382	DMI		No indicators are displayed
383	STM requests display of indicator 255 at position 1	PROF	T0+1910s	connection of active DMI channel: Message-S383	DMI		Indicator with caption IND255 is displayed at position 1



384	STM removes indicator 255	PROF	T0+1915s	connection of active DMI channel: Message-S384	DMI		No indicators are displayed
	Single indicator moved through all positions						
385	STM requests display of indicator 1 at position 1	PROF	T0+1920s	connection of active DMI channel: Message-S385	DMI		Indicator with caption IND1 is displayed at position 1
386	STM requests display of indicator 1 at position 2	PROF	T0+1925s	connection of active DMI channel: Message-S386	DMI		Indicator with caption IND1 is moved to position 2
387	STM requests display of indicator 1 at position 3	PROF	T0+1930s	connection of active DMI channel: Message-S387	DMI		Indicator with caption IND1 is moved to position 3
388	This test step is applicable to SK technology only! T0+1935s : STM requests display of indicator 1 at position 4	PROF	T0+1935s	connection of active DMI channel: Message-S388	DMI		Indicator with caption IND1 is moved to position 4
389	STM requests display of indicator 1 at position 5	PROF	T0+1940s	connection of active DMI channel: Message-S389	DMI		Indicator with caption IND1 is moved to position 5
...
394	STM requests display of indicator 1 at position 10	PROF	T0+1965s	connection of active DMI channel: Message-S394	DMI		Indicator with caption IND1 is moved to position 10
...
402	STM requests display of indicator 1 at position 18	PROF	T0+2005s	connection of active DMI channel: Message-S402	DMI		Indicator with caption IND1 is moved to position 18
403	STM requests display of indicator 1 at position 19	PROF	T0+2010s	connection of active DMI channel: Message-S403	DMI		Indicator with caption IND1 is moved to position 19

Message-S1: STM requests display of indicator 1 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM

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L_MESSAGE	8	17	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	95	Packet Length
N_ITER	5	1	Request for 1 indicator
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	4	Caption="IND1"
X_CAPTION(1,1)	8	"I"	
X_CAPTION(1,2)	8	"N"	
X_CAPTION(1,3)	8	"D"	
X_CAPTION(1,4)	8	"1"	

Message-S2: STM requests display of indicator 2 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=2, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND2"			



Message-S63: STM requests display of indicator 63 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	18	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=103, N=1, ID=63, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=5, T="IND63"			

Message-S124: STM requests display of indicator 124 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=124, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND124"			

Message-S125: STM requests display of indicator 125 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=125, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND125"			

Message-S126: STM requests display of indicator 126 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=126, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND126"			

Message-S127: STM requests display of indicator 127 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=127, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND127"			

Message-S128: STM removes indicator 127			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	63	Packet Length
N_ITER	5	1	Request for 1 indicator
NID_INDICATOR(1)	8	127	Indicator 127
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	



M_IND_ATTRIB(1)	10	0000000000b	No display
L_CAPTION(1)	6	0	

Message-S129: STM requests display of indicator 128 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=128, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND128"			

Message-S130: STM removes indicator 128			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=128, P=1, IC=0, MI=0000000000b, L=0			

Message-S253: STM requests display of indicator 190 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=190, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND190"			



Message-S254: STM removes indicator 190			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=190, P=1, IC=0, MI=0000000000b, L=0			

Message-S377: STM requests display of indicator 252 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=252, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND252"			

Message-S378: STM removes indicator 252			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=252, P=1, IC=0, MI=0000000000b, L=0			

Message-S379: STM requests display of indicator 253 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=253, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND253"			

Message-S380: STM removes indicator 253			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=253, P=1, IC=0, MI=0000000000b, L=0			

Message-S381: STM requests display of indicator 254 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=254, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND254"			

Message-S382: STM removes indicator 254			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=254, P=1, IC=0, MI=0000000000b, L=0			



Message-S383: STM requests display of indicator 255 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=255, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND255"			

Message-S384: STM removes indicator 255			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=255, P=1, IC=0, MI=0000000000b, L=0			

Message-S385: STM requests display of indicator 1 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=1, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			

Message-S386: STM requests display of indicator 1 at position 2			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=1, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			

Message-S387: STM requests display of indicator 1 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=1, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			

Message-S388: STM requests display of indicator 1 at position 4			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=1, P=4, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			

Message-S389: STM requests display of indicator 1 at position 5			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			



STM-35: PL=95, N=1, ID=1, P=5, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"

Message-S394: STM requests display of indicator 1 at position 10			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=1, P=10, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			

Message-S402: STM requests display of indicator 1 at position 18			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=1, P=18, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			

Message-S403: STM requests display of indicator 1 at position 19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=1, P=19, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			

End Conditions	Value	Comments
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STM State	unchanged	
ETCS Mode	unchanged	
ETCS Level	unchanged	
Train State	not relevant	
ETCS Train Data	not relevant	
Active DMI channel Connection	unchanged	
Other DMI channels Connections	not relevant	
TIU Connection	not relevant	
BIU Connection	not relevant	
JD Connection	not relevant	
TIU Regenerative Brake Command	not relevant	
TIU Magnetic Shoes Brake Command	not relevant	
TIU Eddy Current Brake Command for Emergency Brake	not relevant	
TIU Eddy Current Brake Command for Service Brake	not relevant	
TIU Pantograph Command	not relevant	
TIU Air Tightness Command	not relevant	
TIU Main Switch / Circuit Breaker Command	not relevant	
TIU Traction Cut Off Command	not relevant	
TIU Traction Status	not relevant	
TIU Direction Controller Position Status	not relevant	
TIU Cab Status	unchanged	
BIU Emergency Brake Command	not relevant	



BIU Service Brake Command	not relevant	
BIU Emergency Brake Status	not relevant	
BIU Service Brake Status	not relevant	
NTC isolation status	unchanged	

2.2.2 Test Case 7b2.2

TEST CASE HEADER	
Test case identification	DMI Function
	7b2.0.1.2.2.2.3.0
	Indicator identities test for unified DMI with requests for set of indicators: First indicators (with ids 1-126) are displayed with captions in sets of 18 indicators at once at positions 1-3, 5-19 in a loop, the new request replacing the old indicators. Then indicators (with ids 127-255) are displayed with captions in sets of 18 indicators at once at positions 1-3, 5-19 and then deleted by display with attribute 'no display' in a loop. Then the last indicators are shifted through all possible positions with text.
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.3, 13.4.1.4, 13.4.1.9, 13.4.1.10
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Unified DMI service: 7a.1. The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b2.1



ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
	Request of set of indicators with replacement						
1	STM requests display of indicators 1 - 18 at positions 1-3, 5-19	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicators with caption IND1 - IND18 are displayed at positions 1-3, 5-19
2	STM requests display of indicators 19 - 36 at positions 1-3, 5-19	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Indicators with caption IND19 - IND36 are displayed at positions 1-3, 5-19
...
4	STM requests display of indicators 55 - 72 at positions 1-3, 5-19	PROF	T0+15s	connection of active DMI channel: Message-S4	DMI		Indicators with caption IND55 - IND72 are displayed at positions 1-3, 5-19
...
6	STM requests display of indicators 91 - 108 at positions 1-3, 5-19	PROF	T0+25s	connection of active DMI channel: Message-S6	DMI		Indicators with caption IND91 - IND108 are displayed at positions 1-3, 5-19
7	STM requests display of indicators 109 - 126 at positions 1-3, 5-19	PROF	T0+30s	connection of active DMI channel: Message-S7	DMI		Indicators with caption IND109 - IND126 are displayed at positions 1-3, 5-19
	Request of set of indicators with deletion						
8	STM requests display of indicators 127 - 144 at positions 1-3, 5-19	PROF	T0+35s	connection of active DMI channel: Message-S8	DMI		Indicators with caption IND127 - IND144 are displayed at positions 1-3, 5-19
9	STM removes indicators 127 - 144	PROF	T0+40s	connection of active DMI channel: Message-S9	DMI		No indicators are displayed
10	STM requests display of indicators	PROF	T0+45s	connection of active DMI channel:	DMI		Indicators with caption IND145 -



	145 - 162 at positions 1-3, 5-19			Message-S10			IND162 are displayed at positions 1-3, 5-19
11	STM removes indicators 145 - 162	PROF	T0+50s	connection of active DMI channel: Message-S11	DMI		No indicators are displayed
...
14	STM requests display of indicators 181 - 198 at positions 1-3, 5-19	PROF	T0+65s	connection of active DMI channel: Message-S14	DMI		Indicators with caption IND181 - IND198 are displayed at positions 1-3, 5-19
15	STM removes indicators 181 - 198	PROF	T0+70s	connection of active DMI channel: Message-S15	DMI		No indicators are displayed
...
18	STM requests display of indicators 217 - 234 at positions 1-3, 5-19	PROF	T0+85s	connection of active DMI channel: Message-S18	DMI		Indicators with caption IND217 - IND234 are displayed at positions 1-3, 5-19
19	STM removes indicators 217 - 234	PROF	T0+90s	connection of active DMI channel: Message-S19	DMI		No indicators are displayed
20	STM requests display of indicators 235 - 252 at positions 1-3, 5-19	PROF	T0+95s	connection of active DMI channel: Message-S20	DMI		Indicators with caption IND235 - IND252 are displayed at positions 1-3, 5-19
21	STM removes indicators 235 - 252	PROF	T0+100s	connection of active DMI channel: Message-S21	DMI		No indicators are displayed
22	STM requests display of indicators 253 - 255 at positions 1-3	PROF	T0+105s	connection of active DMI channel: Message-S22	DMI		Indicators with caption IND253 - IND255 are displayed at positions 1-3
23	STM removes indicators 253 - 255	PROF	T0+110s	connection of active DMI channel: Message-S23	DMI		No indicators are displayed
	Set of indicators shifted through all positions						
24	STM requests display of indicators	PROF	T0+115s	connection of active DMI channel:	DMI		Indicators with caption IND238 -



	238 - 255 at positions 1-3, 5-19			Message-S24			IND255 are displayed at positions 1-3, 5-19
25	STM requests display of indicators 238 - 255 at positions 2-3, 5-19, 1	PROF	T0+120s	connection of active DMI channel: Message-S25	DMI		All indicators are moved by one position
26	STM requests display of indicators 238 - 255 at positions 3, 5-19, 1-2	PROF	T0+125s	connection of active DMI channel: Message-S26	DMI		All indicators are moved by one position
27	This test step is applicable to SK technology only! STM requests display of indicators 238 - 255 at positions 4-19, 1-2	PROF	T0+130s	connection of active DMI channel: Message-S27	DMI		Indicator 238 is moved to position 4
28	STM requests display of indicators 238 - 255 at positions 5-19, 1-3	PROF	T0+135s	connection of active DMI channel: Message-S28	DMI		All indicators are moved by one position
...
33	STM requests display of indicators 238 - 255 at positions 10-19, 1-3, 5-9	PROF	T0+160s	connection of active DMI channel: Message-S33	DMI		All indicators are moved by one position
...
41	STM requests display of indicators 238 - 255 at positions 18-19, 1-3, 5-17	PROF	T0+200s	connection of active DMI channel: Message-S41	DMI		All indicators are moved by one position
42	STM requests display of indicators 238 - 255 at positions 19, 1-3, 5-18	PROF	T0+205s	connection of active DMI channel: Message-S42	DMI		All indicators are moved by one position

Message-S1: STM requests display of indicators 1 - 18 at positions 1-3, 5-19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	173	Message Length
NID_PACKET	8	15	State report from STM (STM-15)



L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	1340	Packet Length
N_ITER	5	18	Request for 18 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	4	Caption="IND1"
X_CAPTION(1,1)	8	"I"	
X_CAPTION(1,2)	8	"N"	
X_CAPTION(1,3)	8	"D"	
X_CAPTION(1,4)	8	"1"	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000010000b	black on red, No flashing
L_CAPTION(2)	6	4	Caption="IND2"
X_CAPTION(2,1)	8	"I"	
X_CAPTION(2,2)	8	"N"	
X_CAPTION(2,3)	8	"D"	
X_CAPTION(2,4)	8	"2"	



NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000010000b	black on red, No flashing
L_CAPTION(3)	6	4	Caption="IND3"
X_CAPTION(3,1)	8	"I"	
X_CAPTION(3,2)	8	"N"	
X_CAPTION(3,3)	8	"D"	
X_CAPTION(3,4)	8	"3"	
NID_INDICATOR(4)	8	4	Indicator 4
NID_INDPOS(4)	5	5	
NID_ICON(4)	8	0	
M_IND_ATTRIB(4)	10	1000010000b	black on red, No flashing
L_CAPTION(4)	6	4	Caption="IND4"
X_CAPTION(4,1)	8	"I"	
X_CAPTION(4,2)	8	"N"	
X_CAPTION(4,3)	8	"D"	
X_CAPTION(4,4)	8	"4"	
NID_INDICATOR(5)	8	5	Indicator 5
NID_INDPOS(5)	5	6	
NID_ICON(5)	8	0	
M_IND_ATTRIB(5)	10	1000010000b	black on red, No flashing
L_CAPTION(5)	6	4	Caption="IND5"



X_CAPTION(5,1)	8	"I"	
X_CAPTION(5,2)	8	"N"	
X_CAPTION(5,3)	8	"D"	
X_CAPTION(5,4)	8	"5"	
NID_INDICATOR(6)	8	6	Indicator 6
NID_INDPOS(6)	5	7	
NID_ICON(6)	8	0	
M_IND_ATTRIB(6)	10	1000010000b	black on red, No flashing
L_CAPTION(6)	6	4	Caption="IND6"
X_CAPTION(6,1)	8	"I"	
X_CAPTION(6,2)	8	"N"	
X_CAPTION(6,3)	8	"D"	
X_CAPTION(6,4)	8	"6"	
NID_INDICATOR(7)	8	7	Indicator 7
NID_INDPOS(7)	5	8	
NID_ICON(7)	8	0	
M_IND_ATTRIB(7)	10	1000010000b	black on red, No flashing
L_CAPTION(7)	6	4	Caption="IND7"
X_CAPTION(7,1)	8	"I"	
X_CAPTION(7,2)	8	"N"	
X_CAPTION(7,3)	8	"D"	
X_CAPTION(7,4)	8	"7"	
NID_INDICATOR(8)	8	8	Indicator 8



NID_INDPOS(8)	5	9	
NID_ICON(8)	8	0	
M_IND_ATTRIB(8)	10	1000010000b	black on red, No flashing
L_CAPTION(8)	6	4	Caption="IND8"
X_CAPTION(8,1)	8	"I"	
X_CAPTION(8,2)	8	"N"	
X_CAPTION(8,3)	8	"D"	
X_CAPTION(8,4)	8	"8"	
NID_INDICATOR(9)	8	9	Indicator 9
NID_INDPOS(9)	5	10	
NID_ICON(9)	8	0	
M_IND_ATTRIB(9)	10	1000010000b	black on red, No flashing
L_CAPTION(9)	6	4	Caption="IND9"
X_CAPTION(9,1)	8	"I"	
X_CAPTION(9,2)	8	"N"	
X_CAPTION(9,3)	8	"D"	
X_CAPTION(9,4)	8	"9"	
NID_INDICATOR(10)	8	10	Indicator 10
NID_INDPOS(10)	5	11	
NID_ICON(10)	8	0	
M_IND_ATTRIB(10)	10	1000010000b	black on red, No flashing
L_CAPTION(10)	6	5	Caption="IND10"
X_CAPTION(10,1)	8	"I"	



X_CAPTION(10,2)	8	"N"	
X_CAPTION(10,3)	8	"D"	
X_CAPTION(10,4)	8	"1"	
X_CAPTION(10,5)	8	"0"	
NID_INDICATOR(11)	8	11	Indicator 11
NID_INDPOS(11)	5	12	
NID_ICON(11)	8	0	
M_IND_ATTRIB(11)	10	1000010000b	black on red, No flashing
L_CAPTION(11)	6	5	Caption="IND11"
X_CAPTION(11,1)	8	"I"	
X_CAPTION(11,2)	8	"N"	
X_CAPTION(11,3)	8	"D"	
X_CAPTION(11,4)	8	"1"	
X_CAPTION(11,5)	8	"1"	
NID_INDICATOR(12)	8	12	Indicator 12
NID_INDPOS(12)	5	13	
NID_ICON(12)	8	0	
M_IND_ATTRIB(12)	10	1000010000b	black on red, No flashing
L_CAPTION(12)	6	5	Caption="IND12"
X_CAPTION(12,1)	8	"I"	
X_CAPTION(12,2)	8	"N"	
X_CAPTION(12,3)	8	"D"	
X_CAPTION(12,4)	8	"1"	



X_CAPTION(12,5)	8	"2"	
NID_INDICATOR(13)	8	13	Indicator 13
NID_INDPOS(13)	5	14	
NID_ICON(13)	8	0	
M_IND_ATTRIB(13)	10	1000010000b	black on red, No flashing
L_CAPTION(13)	6	5	Caption="IND13"
X_CAPTION(13,1)	8	"I"	
X_CAPTION(13,2)	8	"N"	
X_CAPTION(13,3)	8	"D"	
X_CAPTION(13,4)	8	"1"	
X_CAPTION(13,5)	8	"3"	
NID_INDICATOR(14)	8	14	Indicator 14
NID_INDPOS(14)	5	15	
NID_ICON(14)	8	0	
M_IND_ATTRIB(14)	10	1000010000b	black on red, No flashing
L_CAPTION(14)	6	5	Caption="IND14"
X_CAPTION(14,1)	8	"I"	
X_CAPTION(14,2)	8	"N"	
X_CAPTION(14,3)	8	"D"	
X_CAPTION(14,4)	8	"1"	
X_CAPTION(14,5)	8	"4"	
NID_INDICATOR(15)	8	15	Indicator 15
NID_INDPOS(15)	5	16	



NID_ICON(15)	8	0	
M_IND_ATTRIB(15)	10	1000010000b	black on red, No flashing
L_CAPTION(15)	6	5	Caption="IND15"
X_CAPTION(15,1)	8	"I"	
X_CAPTION(15,2)	8	"N"	
X_CAPTION(15,3)	8	"D"	
X_CAPTION(15,4)	8	"1"	
X_CAPTION(15,5)	8	"5"	
NID_INDICATOR(16)	8	16	Indicator 16
NID_INDPOS(16)	5	17	
NID_ICON(16)	8	0	
M_IND_ATTRIB(16)	10	1000010000b	black on red, No flashing
L_CAPTION(16)	6	5	Caption="IND16"
X_CAPTION(16,1)	8	"I"	
X_CAPTION(16,2)	8	"N"	
X_CAPTION(16,3)	8	"D"	
X_CAPTION(16,4)	8	"1"	
X_CAPTION(16,5)	8	"6"	
NID_INDICATOR(17)	8	17	Indicator 17
NID_INDPOS(17)	5	18	
NID_ICON(17)	8	0	
M_IND_ATTRIB(17)	10	1000010000b	black on red, No flashing
L_CAPTION(17)	6	5	Caption="IND17"



X_CAPTION(17,1)	8	"I"	
X_CAPTION(17,2)	8	"N"	
X_CAPTION(17,3)	8	"D"	
X_CAPTION(17,4)	8	"1"	
X_CAPTION(17,5)	8	"7"	
NID_INDICATOR(18)	8	18	Indicator 18
NID_INDPOS(18)	5	19	
NID_ICON(18)	8	0	
M_IND_ATTRIB(18)	10	1000010000b	black on red, No flashing
L_CAPTION(18)	6	5	Caption="IND18"
X_CAPTION(18,1)	8	"I"	
X_CAPTION(18,2)	8	"N"	
X_CAPTION(18,3)	8	"D"	
X_CAPTION(18,4)	8	"1"	
X_CAPTION(18,5)	8	"8"	
Padding bits	3	000b	

Message-S2: STM requests display of indicators 19 - 36 at positions 1-3, 5-19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	182	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1412, N=18, ID=19, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=5, T="IND19"			



(2): ID=20, P=2, IC=0, MI=1000010000b, L=5, T="IND20"	(3): ID=21, P=3, IC=0, MI=1000010000b, L=5, T="IND21"
(4): ID=22, P=5, IC=0, MI=1000010000b, L=5, T="IND22"	(5): ID=23, P=6, IC=0, MI=1000010000b, L=5, T="IND23"
(6): ID=24, P=7, IC=0, MI=1000010000b, L=5, T="IND24"	(7): ID=25, P=8, IC=0, MI=1000010000b, L=5, T="IND25"
(8): ID=26, P=9, IC=0, MI=1000010000b, L=5, T="IND26"	(9): ID=27, P=10, IC=0, MI=1000010000b, L=5, T="IND27"
(10): ID=28, P=11, IC=0, MI=1000010000b, L=5, T="IND28"	(11): ID=29, P=12, IC=0, MI=1000010000b, L=5, T="IND29"
(12): ID=30, P=13, IC=0, MI=1000010000b, L=5, T="IND30"	(13): ID=31, P=14, IC=0, MI=1000010000b, L=5, T="IND31"
(14): ID=32, P=15, IC=0, MI=1000010000b, L=5, T="IND32"	(15): ID=33, P=16, IC=0, MI=1000010000b, L=5, T="IND33"
(16): ID=34, P=17, IC=0, MI=1000010000b, L=5, T="IND34"	(17): ID=35, P=18, IC=0, MI=1000010000b, L=5, T="IND35"
(18): ID=36, P=19, IC=0, MI=1000010000b, L=5, T="IND36"	

Message-S4: STM requests display of indicators 55 - 72 at positions 1-3, 5-19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	182	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1412, N=18, ID=55, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=5, T="IND55"			
(2): ID=56, P=2, IC=0, MI=1000010000b, L=5, T="IND56"	(3): ID=57, P=3, IC=0, MI=1000010000b, L=5, T="IND57"		
(4): ID=58, P=5, IC=0, MI=1000010000b, L=5, T="IND58"	(5): ID=59, P=6, IC=0, MI=1000010000b, L=5, T="IND59"		
(6): ID=60, P=7, IC=0, MI=1000010000b, L=5, T="IND60"	(7): ID=61, P=8, IC=0, MI=1000010000b, L=5, T="IND61"		
(8): ID=62, P=9, IC=0, MI=1000010000b, L=5, T="IND62"	(9): ID=63, P=10, IC=0, MI=1000010000b, L=5, T="IND63"		
(10): ID=64, P=11, IC=0, MI=1000010000b, L=5, T="IND64"	(11): ID=65, P=12, IC=0, MI=1000010000b, L=5, T="IND65"		
(12): ID=66, P=13, IC=0, MI=1000010000b, L=5, T="IND66"	(13): ID=67, P=14, IC=0, MI=1000010000b, L=5, T="IND67"		
(14): ID=68, P=15, IC=0, MI=1000010000b, L=5, T="IND68"	(15): ID=69, P=16, IC=0, MI=1000010000b, L=5, T="IND69"		



(16): ID=70, P=17, IC=0, MI=1000010000b, L=5, T="IND70"	(17): ID=71, P=18, IC=0, MI=1000010000b, L=5, T="IND71"
(18): ID=72, P=19, IC=0, MI=1000010000b, L=5, T="IND72"	

Message-S6: STM requests display of indicators 91 - 108 at positions 1-3, 5-19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	191	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1484, N=18, ID=91, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=5, T="IND91"			
(2): ID=92, P=2, IC=0, MI=1000010000b, L=5, T="IND92"	(3): ID=93, P=3, IC=0, MI=1000010000b, L=5, T="IND93"		
(4): ID=94, P=5, IC=0, MI=1000010000b, L=5, T="IND94"	(5): ID=95, P=6, IC=0, MI=1000010000b, L=5, T="IND95"		
(6): ID=96, P=7, IC=0, MI=1000010000b, L=5, T="IND96"	(7): ID=97, P=8, IC=0, MI=1000010000b, L=5, T="IND97"		
(8): ID=98, P=9, IC=0, MI=1000010000b, L=5, T="IND98"	(9): ID=99, P=10, IC=0, MI=1000010000b, L=5, T="IND99"		
(10): ID=100, P=11, IC=0, MI=1000010000b, L=6, T="IND100"	(11): ID=101, P=12, IC=0, MI=1000010000b, L=6, T="IND101"		
(12): ID=102, P=13, IC=0, MI=1000010000b, L=6, T="IND102"	(13): ID=103, P=14, IC=0, MI=1000010000b, L=6, T="IND103"		
(14): ID=104, P=15, IC=0, MI=1000010000b, L=6, T="IND104"	(15): ID=105, P=16, IC=0, MI=1000010000b, L=6, T="IND105"		
(16): ID=106, P=17, IC=0, MI=1000010000b, L=6, T="IND106"	(17): ID=107, P=18, IC=0, MI=1000010000b, L=6, T="IND107"		
(18): ID=108, P=19, IC=0, MI=1000010000b, L=6, T="IND108"			

Message-S7: STM requests display of indicators 109 - 126 at positions 1-3, 5-19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	200	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1556, N=18, ID=109, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND109"			
(2): ID=110, P=2, IC=0, MI=1000010000b, L=6, T="IND110"		(3): ID=111, P=3, IC=0, MI=1000010000b, L=6, T="IND111"	
(4): ID=112, P=5, IC=0, MI=1000010000b, L=6, T="IND112"		(5): ID=113, P=6, IC=0, MI=1000010000b, L=6, T="IND113"	
(6): ID=114, P=7, IC=0, MI=1000010000b, L=6, T="IND114"		(7): ID=115, P=8, IC=0, MI=1000010000b, L=6, T="IND115"	
(8): ID=116, P=9, IC=0, MI=1000010000b, L=6, T="IND116"		(9): ID=117, P=10, IC=0, MI=1000010000b, L=6, T="IND117"	
(10): ID=118, P=11, IC=0, MI=1000010000b, L=6, T="IND118"		(11): ID=119, P=12, IC=0, MI=1000010000b, L=6, T="IND119"	
(12): ID=120, P=13, IC=0, MI=1000010000b, L=6, T="IND120"		(13): ID=121, P=14, IC=0, MI=1000010000b, L=6, T="IND121"	
(14): ID=122, P=15, IC=0, MI=1000010000b, L=6, T="IND122"		(15): ID=123, P=16, IC=0, MI=1000010000b, L=6, T="IND123"	
(16): ID=124, P=17, IC=0, MI=1000010000b, L=6, T="IND124"		(17): ID=125, P=18, IC=0, MI=1000010000b, L=6, T="IND125"	
(18): ID=126, P=19, IC=0, MI=1000010000b, L=6, T="IND126"			

Message-S8: STM requests display of indicators 127 - 144 at positions 1-3, 5-19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	200	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1556, N=18, ID=127, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND127"			
(2): ID=128, P=2, IC=0, MI=1000010000b, L=6, T="IND128"		(3): ID=129, P=3, IC=0, MI=1000010000b, L=6, T="IND129"	
(4): ID=130, P=5, IC=0, MI=1000010000b, L=6, T="IND130"		(5): ID=131, P=6, IC=0, MI=1000010000b, L=6, T="IND131"	
(6): ID=132, P=7, IC=0, MI=1000010000b, L=6, T="IND132"		(7): ID=133, P=8, IC=0, MI=1000010000b, L=6, T="IND133"	
(8): ID=134, P=9, IC=0, MI=1000010000b, L=6, T="IND134"		(9): ID=135, P=10, IC=0, MI=1000010000b, L=6, T="IND135"	



(10): ID=136, P=11, IC=0, MI=1000010000b, L=6, T="IND136"	(11): ID=137, P=12, IC=0, MI=1000010000b, L=6, T="IND137"
(12): ID=138, P=13, IC=0, MI=1000010000b, L=6, T="IND138"	(13): ID=139, P=14, IC=0, MI=1000010000b, L=6, T="IND139"
(14): ID=140, P=15, IC=0, MI=1000010000b, L=6, T="IND140"	(15): ID=141, P=16, IC=0, MI=1000010000b, L=6, T="IND141"
(16): ID=142, P=17, IC=0, MI=1000010000b, L=6, T="IND142"	(17): ID=143, P=18, IC=0, MI=1000010000b, L=6, T="IND143"
(18): ID=144, P=19, IC=0, MI=1000010000b, L=6, T="IND144"	

Message-S9: STM removes indicators 127 - 144			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	92	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	692	Packet Length
N_ITER	5	18	Request for 18 indicators
NID_INDICATOR(1)	8	127	Indicator 127
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(2)	8	128	Indicator 128
NID_INDPOS(2)	5	2	



NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(3)	8	129	Indicator 129
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(4)	8	130	Indicator 130
NID_INDPOS(4)	5	5	
NID_ICON(4)	8	0	
M_IND_ATTRIB(4)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(5)	8	131	Indicator 131
NID_INDPOS(5)	5	6	
NID_ICON(5)	8	0	
M_IND_ATTRIB(5)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(6)	8	132	Indicator 132
NID_INDPOS(6)	5	7	
NID_ICON(6)	8	0	
M_IND_ATTRIB(6)	10	0000000000b	No display
L_CAPTION(1)	6	0	



NID_INDICATOR(7)	8	133	Indicator 133
NID_INDPOS(7)	5	8	
NID_ICON(7)	8	0	
M_IND_ATTRIB(7)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(8)	8	134	Indicator 134
NID_INDPOS(8)	5	9	
NID_ICON(8)	8	0	
M_IND_ATTRIB(8)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(9)	8	135	Indicator 135
NID_INDPOS(9)	5	10	
NID_ICON(9)	8	0	
M_IND_ATTRIB(9)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(10)	8	136	Indicator 136
NID_INDPOS(10)	5	11	
NID_ICON(10)	8	0	
M_IND_ATTRIB(10)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(11)	8	137	Indicator 137
NID_INDPOS(11)	5	12	
NID_ICON(11)	8	0	



M_IND_ATTRIB(11)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(12)	8	138	Indicator 138
NID_INDPOS(12)	5	13	
NID_ICON(12)	8	0	
M_IND_ATTRIB(12)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(13)	8	139	Indicator 139
NID_INDPOS(13)	5	14	
NID_ICON(13)	8	0	
M_IND_ATTRIB(13)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(14)	8	140	Indicator 140
NID_INDPOS(14)	5	15	
NID_ICON(14)	8	0	
M_IND_ATTRIB(14)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(15)	8	141	Indicator 141
NID_INDPOS(15)	5	16	
NID_ICON(15)	8	0	
M_IND_ATTRIB(15)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(16)	8	142	Indicator 142



NID_INDPOS(16)	5	17	
NID_ICON(16)	8	0	
M_IND_ATTRIB(16)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(17)	8	143	Indicator 143
NID_INDPOS(17)	5	18	
NID_ICON(17)	8	0	
M_IND_ATTRIB(17)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(18)	8	144	Indicator 144
NID_INDPOS(18)	5	19	
NID_ICON(18)	8	0	
M_IND_ATTRIB(18)	10	0000000000b	No display
L_CAPTION(1)	6	0	
Padding bits	3	000b	

Message-S10: STM requests display of indicators 145 - 162 at positions 1-3, 5-19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	200	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1556, N=18, ID=145, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND145"			
(2): ID=146, P=2, IC=0, MI=1000010000b, L=6, T="IND146"		(3): ID=147, P=3, IC=0, MI=1000010000b, L=6, T="IND147"	



(4): ID=148, P=5, IC=0, MI=1000010000b, L=6, T="IND148"	(5): ID=149, P=6, IC=0, MI=1000010000b, L=6, T="IND149"
(6): ID=150, P=7, IC=0, MI=1000010000b, L=6, T="IND150"	(7): ID=151, P=8, IC=0, MI=1000010000b, L=6, T="IND151"
(8): ID=152, P=9, IC=0, MI=1000010000b, L=6, T="IND152"	(9): ID=153, P=10, IC=0, MI=1000010000b, L=6, T="IND153"
(10): ID=154, P=11, IC=0, MI=1000010000b, L=6, T="IND154"	(11): ID=155, P=12, IC=0, MI=1000010000b, L=6, T="IND155"
(12): ID=156, P=13, IC=0, MI=1000010000b, L=6, T="IND156"	(13): ID=157, P=14, IC=0, MI=1000010000b, L=6, T="IND157"
(14): ID=158, P=15, IC=0, MI=1000010000b, L=6, T="IND158"	(15): ID=159, P=16, IC=0, MI=1000010000b, L=6, T="IND159"
(16): ID=160, P=17, IC=0, MI=1000010000b, L=6, T="IND160"	(17): ID=161, P=18, IC=0, MI=1000010000b, L=6, T="IND161"
(18): ID=162, P=19, IC=0, MI=1000010000b, L=6, T="IND162"	

Message-S11: STM removes indicators 145 - 162			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	92	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=692, N=18, ID=145, P=1, IC=0, MI=0000000000b, L=0			
(2): ID=146, P=2, IC=0, MI=0000000000b, L=0	(3): ID=147, P=3, IC=0, MI=0000000000b, L=0	(4): ID=148, P=5, IC=0, MI=0000000000b, L=0	
(5): ID=149, P=6, IC=0, MI=0000000000b, L=0	(6): ID=150, P=7, IC=0, MI=0000000000b, L=0	(7): ID=151, P=8, IC=0, MI=0000000000b, L=0	
(8): ID=152, P=9, IC=0, MI=0000000000b, L=0	(9): ID=153, P=10, IC=0, MI=0000000000b, L=0	(10): ID=154, P=11, IC=0, MI=0000000000b, L=0	
(11): ID=155, P=12, IC=0, MI=0000000000b, L=0	(12): ID=156, P=13, IC=0, MI=0000000000b, L=0	(13): ID=157, P=14, IC=0, MI=0000000000b, L=0	
(14): ID=158, P=15, IC=0, MI=0000000000b, L=0	(15): ID=159, P=16, IC=0, MI=0000000000b, L=0	(16): ID=160, P=17, IC=0, MI=0000000000b, L=0	
(17): ID=161, P=18, IC=0, MI=0000000000b, L=0	(18): ID=162, P=19, IC=0, MI=0000000000b, L=0		



Message-S14: STM requests display of indicators 181 - 198 at positions 1-3, 5-19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	200	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1556, N=18, ID=181, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND181"			
(2): ID=182, P=2, IC=0, MI=1000010000b, L=6, T="IND182"		(3): ID=183, P=3, IC=0, MI=1000010000b, L=6, T="IND183"	
(4): ID=184, P=5, IC=0, MI=1000010000b, L=6, T="IND184"		(5): ID=185, P=6, IC=0, MI=1000010000b, L=6, T="IND185"	
(6): ID=186, P=7, IC=0, MI=1000010000b, L=6, T="IND186"		(7): ID=187, P=8, IC=0, MI=1000010000b, L=6, T="IND187"	
(8): ID=188, P=9, IC=0, MI=1000010000b, L=6, T="IND188"		(9): ID=189, P=10, IC=0, MI=1000010000b, L=6, T="IND189"	
(10): ID=190, P=11, IC=0, MI=1000010000b, L=6, T="IND190"		(11): ID=191, P=12, IC=0, MI=1000010000b, L=6, T="IND191"	
(12): ID=192, P=13, IC=0, MI=1000010000b, L=6, T="IND192"		(13): ID=193, P=14, IC=0, MI=1000010000b, L=6, T="IND193"	
(14): ID=194, P=15, IC=0, MI=1000010000b, L=6, T="IND194"		(15): ID=195, P=16, IC=0, MI=1000010000b, L=6, T="IND195"	
(16): ID=196, P=17, IC=0, MI=1000010000b, L=6, T="IND196"		(17): ID=197, P=18, IC=0, MI=1000010000b, L=6, T="IND197"	
(18): ID=198, P=19, IC=0, MI=1000010000b, L=6, T="IND198"			

Message-S15: STM removes indicators 181 - 198			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	92	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=692, N=18, ID=181, P=1, IC=0, MI=0000000000b, L=0			
(2): ID=182, P=2, IC=0, MI=0000000000b, L=0		(3): ID=183, P=3, IC=0, MI=0000000000b, L=0	(4): ID=184, P=5, IC=0, MI=0000000000b, L=0

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(5): ID=185, P=6, IC=0, MI=0000000000b, L=0	(6): ID=186, P=7, IC=0, MI=0000000000b, L=0	(7): ID=187, P=8, IC=0, MI=0000000000b, L=0
(8): ID=188, P=9, IC=0, MI=0000000000b, L=0	(9): ID=189, P=10, IC=0, MI=0000000000b, L=0	(10): ID=190, P=11, IC=0, MI=0000000000b, L=0
(11): ID=191, P=12, IC=0, MI=0000000000b, L=0	(12): ID=192, P=13, IC=0, MI=0000000000b, L=0	(13): ID=193, P=14, IC=0, MI=0000000000b, L=0
(14): ID=194, P=15, IC=0, MI=0000000000b, L=0	(15): ID=195, P=16, IC=0, MI=0000000000b, L=0	(16): ID=196, P=17, IC=0, MI=0000000000b, L=0
(17): ID=197, P=18, IC=0, MI=0000000000b, L=0	(18): ID=198, P=19, IC=0, MI=0000000000b, L=0	

Message-S18: STM requests display of indicators 217 - 234 at positions 1-3, 5-19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	200	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1556, N=18, ID=217, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND217"			
(2): ID=218, P=2, IC=0, MI=1000010000b, L=6, T="IND218"		(3): ID=219, P=3, IC=0, MI=1000010000b, L=6, T="IND219"	
(4): ID=220, P=5, IC=0, MI=1000010000b, L=6, T="IND220"		(5): ID=221, P=6, IC=0, MI=1000010000b, L=6, T="IND221"	
(6): ID=222, P=7, IC=0, MI=1000010000b, L=6, T="IND222"		(7): ID=223, P=8, IC=0, MI=1000010000b, L=6, T="IND223"	
(8): ID=224, P=9, IC=0, MI=1000010000b, L=6, T="IND224"		(9): ID=225, P=10, IC=0, MI=1000010000b, L=6, T="IND225"	
(10): ID=226, P=11, IC=0, MI=1000010000b, L=6, T="IND226"		(11): ID=227, P=12, IC=0, MI=1000010000b, L=6, T="IND227"	
(12): ID=228, P=13, IC=0, MI=1000010000b, L=6, T="IND228"		(13): ID=229, P=14, IC=0, MI=1000010000b, L=6, T="IND229"	
(14): ID=230, P=15, IC=0, MI=1000010000b, L=6, T="IND230"		(15): ID=231, P=16, IC=0, MI=1000010000b, L=6, T="IND231"	
(16): ID=232, P=17, IC=0, MI=1000010000b, L=6, T="IND232"		(17): ID=233, P=18, IC=0, MI=1000010000b, L=6, T="IND233"	
(18): ID=234, P=19, IC=0, MI=1000010000b, L=6, T="IND234"			



Message-S19: STM removes indicators 217 - 234			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	92	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=692, N=18, ID=217, P=1, IC=0, MI=0000000000b, L=0			
(2): ID=218, P=2, IC=0, MI=0000000000b, L=0		(3): ID=219, P=3, IC=0, MI=0000000000b, L=0	
(5): ID=221, P=6, IC=0, MI=0000000000b, L=0		(6): ID=222, P=7, IC=0, MI=0000000000b, L=0	
(8): ID=224, P=9, IC=0, MI=0000000000b, L=0		(9): ID=225, P=10, IC=0, MI=0000000000b, L=0	
(11): ID=227, P=12, IC=0, MI=0000000000b, L=0		(12): ID=228, P=13, IC=0, MI=0000000000b, L=0	
(14): ID=230, P=15, IC=0, MI=0000000000b, L=0		(15): ID=231, P=16, IC=0, MI=0000000000b, L=0	
(17): ID=233, P=18, IC=0, MI=0000000000b, L=0		(18): ID=234, P=19, IC=0, MI=0000000000b, L=0	

Message-S20: STM requests display of indicators 235 - 252 at positions 1-3, 5-19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	200	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1556, N=18, ID=235, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND235"			
(2): ID=236, P=2, IC=0, MI=1000010000b, L=6, T="IND236"		(3): ID=237, P=3, IC=0, MI=1000010000b, L=6, T="IND237"	
(4): ID=238, P=5, IC=0, MI=1000010000b, L=6, T="IND238"		(5): ID=239, P=6, IC=0, MI=1000010000b, L=6, T="IND239"	
(6): ID=240, P=7, IC=0, MI=1000010000b, L=6, T="IND240"		(7): ID=241, P=8, IC=0, MI=1000010000b, L=6, T="IND241"	
(8): ID=242, P=9, IC=0, MI=1000010000b, L=6, T="IND242"		(9): ID=243, P=10, IC=0, MI=1000010000b, L=6, T="IND243"	



(10): ID=244, P=11, IC=0, MI=1000010000b, L=6, T="IND244"	(11): ID=245, P=12, IC=0, MI=1000010000b, L=6, T="IND245"
(12): ID=246, P=13, IC=0, MI=1000010000b, L=6, T="IND246"	(13): ID=247, P=14, IC=0, MI=1000010000b, L=6, T="IND247"
(14): ID=248, P=15, IC=0, MI=1000010000b, L=6, T="IND248"	(15): ID=249, P=16, IC=0, MI=1000010000b, L=6, T="IND249"
(16): ID=250, P=17, IC=0, MI=1000010000b, L=6, T="IND250"	(17): ID=251, P=18, IC=0, MI=1000010000b, L=6, T="IND251"
(18): ID=252, P=19, IC=0, MI=1000010000b, L=6, T="IND252"	

Message-S21: STM removes indicators 235 - 252			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	92	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=692, N=18, ID=235, P=1, IC=0, MI=0000000000b, L=0			
(2): ID=236, P=2, IC=0, MI=0000000000b, L=0	(3): ID=237, P=3, IC=0, MI=0000000000b, L=0	(4): ID=238, P=5, IC=0, MI=0000000000b, L=0	
(5): ID=239, P=6, IC=0, MI=0000000000b, L=0	(6): ID=240, P=7, IC=0, MI=0000000000b, L=0	(7): ID=241, P=8, IC=0, MI=0000000000b, L=0	
(8): ID=242, P=9, IC=0, MI=0000000000b, L=0	(9): ID=243, P=10, IC=0, MI=0000000000b, L=0	(10): ID=244, P=11, IC=0, MI=0000000000b, L=0	
(11): ID=245, P=12, IC=0, MI=0000000000b, L=0	(12): ID=246, P=13, IC=0, MI=0000000000b, L=0	(13): ID=247, P=14, IC=0, MI=0000000000b, L=0	
(14): ID=248, P=15, IC=0, MI=0000000000b, L=0	(15): ID=249, P=16, IC=0, MI=0000000000b, L=0	(16): ID=250, P=17, IC=0, MI=0000000000b, L=0	
(17): ID=251, P=18, IC=0, MI=0000000000b, L=0	(18): ID=252, P=19, IC=0, MI=0000000000b, L=0		

Message-S22: STM requests display of indicators 253 - 255 at positions 1-3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	41	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=281, N=3, ID=253, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND253"			
(2): ID=254, P=2, IC=0, MI=1000010000b, L=6, T="IND254"			(3): ID=255, P=3, IC=0, MI=1000010000b, L=6, T="IND255"

Message-S23: STM removes indicators 253 - 255			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	23	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=137, N=3, ID=253, P=1, IC=0, MI=0000000000b, L=0			
(2): ID=254, P=2, IC=0, MI=0000000000b, L=0		(3): ID=255, P=3, IC=0, MI=0000000000b, L=0	

Message-S24: STM requests display of indicators 238 - 255 at positions 1-3, 5-19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	200	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1556, N=18, ID=238, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND238"			
(2): ID=239, P=2, IC=0, MI=1000010000b, L=6, T="IND239"			(3): ID=240, P=3, IC=0, MI=1000010000b, L=6, T="IND240"
(4): ID=241, P=5, IC=0, MI=1000010000b, L=6, T="IND241"			(5): ID=242, P=6, IC=0, MI=1000010000b, L=6, T="IND242"
(6): ID=243, P=7, IC=0, MI=1000010000b, L=6, T="IND243"			(7): ID=244, P=8, IC=0, MI=1000010000b, L=6, T="IND244"



(8): ID=245, P=9, IC=0, MI=1000010000b, L=6, T="IND245"	(9): ID=246, P=10, IC=0, MI=1000010000b, L=6, T="IND246"
(10): ID=247, P=11, IC=0, MI=1000010000b, L=6, T="IND247"	(11): ID=248, P=12, IC=0, MI=1000010000b, L=6, T="IND248"
(12): ID=249, P=13, IC=0, MI=1000010000b, L=6, T="IND249"	(13): ID=250, P=14, IC=0, MI=1000010000b, L=6, T="IND250"
(14): ID=251, P=15, IC=0, MI=1000010000b, L=6, T="IND251"	(15): ID=252, P=16, IC=0, MI=1000010000b, L=6, T="IND252"
(16): ID=253, P=17, IC=0, MI=1000010000b, L=6, T="IND253"	(17): ID=254, P=18, IC=0, MI=1000010000b, L=6, T="IND254"
(18): ID=255, P=19, IC=0, MI=1000010000b, L=6, T="IND255"	

Message-S25: STM requests display of indicators 238 - 255 at positions 2-3, 5-19, 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	200	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1556, N=18, ID=238, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND238"			
(2): ID=239, P=3, IC=0, MI=1000010000b, L=6, T="IND239"	(3): ID=240, P=5, IC=0, MI=1000010000b, L=6, T="IND240"		
(4): ID=241, P=6, IC=0, MI=1000010000b, L=6, T="IND241"	(5): ID=242, P=7, IC=0, MI=1000010000b, L=6, T="IND242"		
(6): ID=243, P=8, IC=0, MI=1000010000b, L=6, T="IND243"	(7): ID=244, P=9, IC=0, MI=1000010000b, L=6, T="IND244"		
(8): ID=245, P=10, IC=0, MI=1000010000b, L=6, T="IND245"	(9): ID=246, P=11, IC=0, MI=1000010000b, L=6, T="IND246"		
(10): ID=247, P=12, IC=0, MI=1000010000b, L=6, T="IND247"	(11): ID=248, P=13, IC=0, MI=1000010000b, L=6, T="IND248"		
(12): ID=249, P=14, IC=0, MI=1000010000b, L=6, T="IND249"	(13): ID=250, P=15, IC=0, MI=1000010000b, L=6, T="IND250"		
(14): ID=251, P=16, IC=0, MI=1000010000b, L=6, T="IND251"	(15): ID=252, P=17, IC=0, MI=1000010000b, L=6, T="IND252"		
(16): ID=253, P=18, IC=0, MI=1000010000b, L=6, T="IND253"	(17): ID=254, P=19, IC=0, MI=1000010000b, L=6, T="IND254"		
(18): ID=255, P=1, IC=0, MI=1000010000b, L=6, T="IND255"			



Message-S26: STM requests display of indicators 238 - 255 at positions 3, 5-19, 1-2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	200	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1556, N=18, ID=238, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND238"			
(2): ID=239, P=5, IC=0, MI=1000010000b, L=6, T="IND239"		(3): ID=240, P=6, IC=0, MI=1000010000b, L=6, T="IND240"	
(4): ID=241, P=7, IC=0, MI=1000010000b, L=6, T="IND241"		(5): ID=242, P=8, IC=0, MI=1000010000b, L=6, T="IND242"	
(6): ID=243, P=9, IC=0, MI=1000010000b, L=6, T="IND243"		(7): ID=244, P=10, IC=0, MI=1000010000b, L=6, T="IND244"	
(8): ID=245, P=11, IC=0, MI=1000010000b, L=6, T="IND245"		(9): ID=246, P=12, IC=0, MI=1000010000b, L=6, T="IND246"	
(10): ID=247, P=13, IC=0, MI=1000010000b, L=6, T="IND247"		(11): ID=248, P=14, IC=0, MI=1000010000b, L=6, T="IND248"	
(12): ID=249, P=15, IC=0, MI=1000010000b, L=6, T="IND249"		(13): ID=250, P=16, IC=0, MI=1000010000b, L=6, T="IND250"	
(14): ID=251, P=17, IC=0, MI=1000010000b, L=6, T="IND251"		(15): ID=252, P=18, IC=0, MI=1000010000b, L=6, T="IND252"	
(16): ID=253, P=19, IC=0, MI=1000010000b, L=6, T="IND253"		(17): ID=254, P=1, IC=0, MI=1000010000b, L=6, T="IND254"	
(18): ID=255, P=2, IC=0, MI=1000010000b, L=6, T="IND255"			

Message-S27: STM requests display of indicators 238 - 255 at positions 4-19, 1-2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	200	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1556, N=18, ID=238, P=4, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND238"			



(2): ID=239, P=5, IC=0, MI=1000010000b, L=6, T="IND239"	(3): ID=240, P=6, IC=0, MI=1000010000b, L=6, T="IND240"
(4): ID=241, P=7, IC=0, MI=1000010000b, L=6, T="IND241"	(5): ID=242, P=8, IC=0, MI=1000010000b, L=6, T="IND242"
(6): ID=243, P=9, IC=0, MI=1000010000b, L=6, T="IND243"	(7): ID=244, P=10, IC=0, MI=1000010000b, L=6, T="IND244"
(8): ID=245, P=11, IC=0, MI=1000010000b, L=6, T="IND245"	(9): ID=246, P=12, IC=0, MI=1000010000b, L=6, T="IND246"
(10): ID=247, P=13, IC=0, MI=1000010000b, L=6, T="IND247"	(11): ID=248, P=14, IC=0, MI=1000010000b, L=6, T="IND248"
(12): ID=249, P=15, IC=0, MI=1000010000b, L=6, T="IND249"	(13): ID=250, P=16, IC=0, MI=1000010000b, L=6, T="IND250"
(14): ID=251, P=17, IC=0, MI=1000010000b, L=6, T="IND251"	(15): ID=252, P=18, IC=0, MI=1000010000b, L=6, T="IND252"
(16): ID=253, P=19, IC=0, MI=1000010000b, L=6, T="IND253"	(17): ID=254, P=1, IC=0, MI=1000010000b, L=6, T="IND254"
(18): ID=255, P=2, IC=0, MI=1000010000b, L=6, T="IND255"	

Message-S28: STM requests display of indicators 238 - 255 at positions 5-19,1-3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	200	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1556, N=18, ID=238, P=5, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND238"			
(2): ID=239, P=6, IC=0, MI=1000010000b, L=6, T="IND239"	(3): ID=240, P=7, IC=0, MI=1000010000b, L=6, T="IND240"		
(4): ID=241, P=8, IC=0, MI=1000010000b, L=6, T="IND241"	(5): ID=242, P=9, IC=0, MI=1000010000b, L=6, T="IND242"		
(6): ID=243, P=10, IC=0, MI=1000010000b, L=6, T="IND243"	(7): ID=244, P=11, IC=0, MI=1000010000b, L=6, T="IND244"		
(8): ID=245, P=12, IC=0, MI=1000010000b, L=6, T="IND245"	(9): ID=246, P=13, IC=0, MI=1000010000b, L=6, T="IND246"		
(10): ID=247, P=14, IC=0, MI=1000010000b, L=6, T="IND247"	(11): ID=248, P=15, IC=0, MI=1000010000b, L=6, T="IND248"		
(12): ID=249, P=16, IC=0, MI=1000010000b, L=6, T="IND249"	(13): ID=250, P=17, IC=0, MI=1000010000b, L=6, T="IND250"		
(14): ID=251, P=18, IC=0, MI=1000010000b, L=6, T="IND251"	(15): ID=252, P=19, IC=0, MI=1000010000b, L=6, T="IND252"		



(16): ID=253, P=1, IC=0, MI=1000010000b, L=6, T="IND253"	(17): ID=254, P=2, IC=0, MI=1000010000b, L=6, T="IND254"
(18): ID=255, P=3, IC=0, MI=1000010000b, L=6, T="IND255"	

Message-S33: STM requests display of indicators 238 - 255 at positions 10-19, 1-3, 5-9			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	200	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1556, N=18, ID=238, P=10, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND238"			
(2): ID=239, P=11, IC=0, MI=1000010000b, L=6, T="IND239"	(3): ID=240, P=12, IC=0, MI=1000010000b, L=6, T="IND240"		
(4): ID=241, P=13, IC=0, MI=1000010000b, L=6, T="IND241"	(5): ID=242, P=14, IC=0, MI=1000010000b, L=6, T="IND242"		
(6): ID=243, P=15, IC=0, MI=1000010000b, L=6, T="IND243"	(7): ID=244, P=16, IC=0, MI=1000010000b, L=6, T="IND244"		
(8): ID=245, P=17, IC=0, MI=1000010000b, L=6, T="IND245"	(9): ID=246, P=18, IC=0, MI=1000010000b, L=6, T="IND246"		
(10): ID=247, P=19, IC=0, MI=1000010000b, L=6, T="IND247"	(11): ID=248, P=1, IC=0, MI=1000010000b, L=6, T="IND248"		
(12): ID=249, P=2, IC=0, MI=1000010000b, L=6, T="IND249"	(13): ID=250, P=3, IC=0, MI=1000010000b, L=6, T="IND250"		
(14): ID=251, P=5, IC=0, MI=1000010000b, L=6, T="IND251"	(15): ID=252, P=6, IC=0, MI=1000010000b, L=6, T="IND252"		
(16): ID=253, P=7, IC=0, MI=1000010000b, L=6, T="IND253"	(17): ID=254, P=8, IC=0, MI=1000010000b, L=6, T="IND254"		
(18): ID=255, P=9, IC=0, MI=1000010000b, L=6, T="IND255"			

Message-S41: STM requests display of indicators 238 - 255 at positions 18-19, 1-3, 5-17			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	200	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1556, N=18, ID=238, P=18, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND238"			
(2): ID=239, P=19, IC=0, MI=1000010000b, L=6, T="IND239"		(3): ID=240, P=1, IC=0, MI=1000010000b, L=6, T="IND240"	
(4): ID=241, P=2, IC=0, MI=1000010000b, L=6, T="IND241"		(5): ID=242, P=3, IC=0, MI=1000010000b, L=6, T="IND242"	
(6): ID=243, P=5, IC=0, MI=1000010000b, L=6, T="IND243"		(7): ID=244, P=6, IC=0, MI=1000010000b, L=6, T="IND244"	
(8): ID=245, P=7, IC=0, MI=1000010000b, L=6, T="IND245"		(9): ID=246, P=8, IC=0, MI=1000010000b, L=6, T="IND246"	
(10): ID=247, P=9, IC=0, MI=1000010000b, L=6, T="IND247"		(11): ID=248, P=10, IC=0, MI=1000010000b, L=6, T="IND248"	
(12): ID=249, P=11, IC=0, MI=1000010000b, L=6, T="IND249"		(13): ID=250, P=12, IC=0, MI=1000010000b, L=6, T="IND250"	
(14): ID=251, P=13, IC=0, MI=1000010000b, L=6, T="IND251"		(15): ID=252, P=14, IC=0, MI=1000010000b, L=6, T="IND252"	
(16): ID=253, P=15, IC=0, MI=1000010000b, L=6, T="IND253"		(17): ID=254, P=16, IC=0, MI=1000010000b, L=6, T="IND254"	
(18): ID=255, P=17, IC=0, MI=1000010000b, L=6, T="IND255"			

Message-S42: STM requests display of indicators 238 - 255 at positions 19, 1-3, 5-18			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	200	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1556, N=18, ID=238, P=19, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="IND238"			
(2): ID=239, P=1, IC=0, MI=1000010000b, L=6, T="IND239"		(3): ID=240, P=2, IC=0, MI=1000010000b, L=6, T="IND240"	
(4): ID=241, P=3, IC=0, MI=1000010000b, L=6, T="IND241"		(5): ID=242, P=5, IC=0, MI=1000010000b, L=6, T="IND242"	
(6): ID=243, P=6, IC=0, MI=1000010000b, L=6, T="IND243"		(7): ID=244, P=7, IC=0, MI=1000010000b, L=6, T="IND244"	
(8): ID=245, P=8, IC=0, MI=1000010000b, L=6, T="IND245"		(9): ID=246, P=9, IC=0, MI=1000010000b, L=6, T="IND246"	



(10): ID=247, P=10, IC=0, MI=1000010000b, L=6, T="IND247"	(11): ID=248, P=11, IC=0, MI=1000010000b, L=6, T="IND248"
(12): ID=249, P=12, IC=0, MI=1000010000b, L=6, T="IND249"	(13): ID=250, P=13, IC=0, MI=1000010000b, L=6, T="IND250"
(14): ID=251, P=14, IC=0, MI=1000010000b, L=6, T="IND251"	(15): ID=252, P=15, IC=0, MI=1000010000b, L=6, T="IND252"
(16): ID=253, P=16, IC=0, MI=1000010000b, L=6, T="IND253"	(17): ID=254, P=17, IC=0, MI=1000010000b, L=6, T="IND254"
(18): ID=255, P=18, IC=0, MI=1000010000b, L=6, T="IND255"	

2.2.3 Test Case 7b2.3

TEST CASE HEADER	
Test case identification	DMI Function
	7b2.0.2.1.1.1.1.0
	Indicator identities test for configuration 7a.3 with single indicator requests: First single indicators (with ids 1-3) are displayed with caption in a loop one after the other at the same position, the new request replacing the old indicator. Then single indicators (with ids 1-3) are displayed with caption and then deleted by display with attribute 'no display' in a loop one after the other at the same position. Then the indicator 2 is moved through all possible positions with text. Then the indicator 2 is moved through all possible positions with icon 5.
	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.3, 13.4.1.4, 13.4.1.9, 13.4.1.11, 13.4.3.3
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
ERTMS/ETCS on-board requirements tested	
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board	For active STM: Customisable DMI service: 7a.3.



configuration	The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b2.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of indicator 1 at position 3	PROF	T0	connection of active DMI channel: Message-SR1	DMI		Indicator with caption IND1 is displayed at position 3
2	STM requests display of indicator 2 at position 3	PROF	T0+5s	connection of active DMI channel: Message-SR2	DMI		Indicator with caption IND2 is displayed at position 3
3	STM requests display of indicator 3 at position 3	PROF	T0+10s	connection of active DMI channel: Message-SR3	DMI		Indicator with caption IND3 is displayed at position 3
4	STM requests display of indicator 1 at position 3	PROF	T0+15s	connection of active DMI channel: Message-SR1	DMI		Indicator with caption IND1 is displayed at position 3
5	STM removes indicator 1	PROF	T0+20s	connection of active DMI channel: Message-SD1	DMI		No indicators are displayed
6	STM requests display of indicator 2 at position 3	PROF	T0+25s	connection of active DMI channel: Message-SR2	DMI		Indicator with caption IND2 is displayed at position 3
7	STM removes indicator 2	PROF	T0+30s	connection of active DMI channel: Message-SD2	DMI		No indicators are displayed
8	STM requests display of indicator 3 at position 3	PROF	T0+35s	connection of active DMI channel: Message-SR3	DMI		Indicator with caption IND3 is displayed at position 3
9	STM removes indicator 3	PROF	T0+40s	connection of active DMI channel: Message-SD3	DMI		No indicators are displayed
10	STM requests display of indicator 2 at position 3 with caption 'IND2'	PROF	T0+45s	connection of active DMI channel: Message-SR4	DMI		Indicator 2 is displayed at position 3 with caption 'IND2'
11	STM requests display of indicator 2 at position 2 with caption 'IND2'	PROF	T0+50s	connection of active DMI channel: Message-SR5	DMI		Indicator 2 is moved to position 2 with caption 'IND2'



12	STM requests display of indicator 2 at position 1 with caption 'IND2'	PROF	T0+55s	connection of active DMI channel: Message-SR6	DMI		Indicator 2 is moved to position 1 with caption 'IND2'
13	STM requests display of indicator 2 at position 3 with icon 5 (driver)	PROF	T0+60s	connection of active DMI channel: Message-SR7	DMI		Indicator 2 is displayed at position 3 with icon 5 (driver)
14	STM requests display of indicator 2 at position 2 with icon 5 (driver)	PROF	T0+65s	connection of active DMI channel: Message-SR8	DMI		Indicator 2 is moved to position 2 with icon 5 (driver)
15	STM requests display of indicator 2 at position 1 with icon 5 (driver)	PROF	T0+70s	connection of active DMI channel: Message-SR9	DMI		Indicator 2 is moved to position 1 with icon 5 (driver)

Message-SR1: STM requests display of indicator 1 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	95	Packet Length
N_ITER	5	1	Request for 1 indicator
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	3	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	4	Caption="IND1"
X_CAPTION(1,1)	8	"I"	



X_CAPTION(1,2)	8	"N"	
X_CAPTION(1,3)	8	"D"	
X_CAPTION(1,4)	8	"1"	

Message-SR2: STM requests display of indicator 2 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=2, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND2"			

Message-SR3: STM requests display of indicator 3 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=3, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND3"			

Message-SD1: STM removes indicator 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length



NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	63	Packet Length
N_ITER	5	1	Request for 1 indicator
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	3	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	0000000000b	No display
L_CAPTION(1)	6	0	

Message-SD2: STM removes indicator 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=2, P=3, IC=0, MI=0000000000b, L=0			

Message-SD3: STM removes indicator 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=3, P=3, IC=0, MI=0000000000b, L=0			



Message-SR4: STM requests display of indicator 2 at position 3 with caption 'IND2'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=2, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND2"			

Message-SR5: STM requests display of indicator 2 at position 2 with caption 'IND2'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=2, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND2"			

Message-SR6: STM requests display of indicator 2 at position 1 with caption 'IND2'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=2, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND2"			

Message-SR7: STM requests display of indicator 2 at position 3 with icon 5 (driver)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=2, P=3, IC=5, MI=1000010000b (black on red, No flashing), L=0			

Message-SR8: STM requests display of indicator 2 at position 2 with icon 5 (driver)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=2, P=2, IC=5, MI=1000010000b (black on red, No flashing), L=0			

Message-SR9: STM requests display of indicator 2 at position 1 with icon 5 (driver)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=2, P=1, IC=5, MI=1000010000b (black on red, No flashing), L=0			

2.2.4 Test Case 7b2.4

TEST CASE HEADER	
Test case identification	DMI Function
	7b2.0.2.2.2.2.0
	Indicator identities test for configuration 7a.3 with requests for set of indicators:



	<p>First all 3 indicators are displayed at once with indicator i at position i.</p> <p>Then all 3 indicators are removed.</p> <p>Then all 3 indicators are shifted through all possible positions with text.</p> <p>Then all 3 indicators are shifted through all possible positions with icons.</p>
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.3, 13.4.1.4, 13.4.1.9, 13.4.1.11, 13.4.3.3
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	<p>For active STM: Customisable DMI service: 7a.3.</p> <p>The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9</p>
Comments and constraints	Starting and end conditions as for test case 7b2.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of indicators 1-3, indicator i at position i	PROF	T0	connection of active DMI channel: Message-SR1	DMI		Indicators with caption IND1, IND2 and IND3 are displayed at positions 1,2 and 3
2	STM removes indicators 1-3	PROF	T0+5s	connection of active DMI channel: Message-SD1	DMI		No indicators are displayed
3	STM requests display of indicators 1/2/3 at positions 3/1/2 with captions 'IND1', 'IND2', 'IND3'.	PROF	T0+10s	connection of active DMI channel: Message-SR2	DMI		Indicators 1-3 are displayed at positions 3, 1 and 2 with captions 'IND1', 'IND2', 'IND3'.
4	STM requests display of indicators 1/2/3 at positions 2/3/1 with captions 'IND1', 'IND2', 'IND3'.	PROF	T0+15s	connection of active DMI channel: Message-SR3	DMI		All indicators are moved by one position backwards



5	STM requests display of indicators 1/2/3 at positions 1/2/3 with captions 'IND1', 'IND2', 'IND3'.	PROF	T0+20s	connection of active DMI channel: Message-SR4	DMI		All indicators are moved by one position backwards
6	STM requests display of indicators 1/2/3 at positions 3/1/2 with icons 4(tools), 5(driver), 6(box).	PROF	T0+25s	connection of active DMI channel: Message-SR5	DMI		Indicators 1-3 are displayed at positions 3, 1 and 2 with icons 4(tools), 5(driver), 6(box).
7	STM requests display of indicators 1/2/3 at positions 2/3/1 with icons 4(tools), 5(driver), 6(box).	PROF	T0+30s	connection of active DMI channel: Message-SR6	DMI		All indicators are moved by one position backwards
8	STM requests display of indicators 1/2/3 at positions 1/2/3 with icons 4(tools), 5(driver), 6(box).	PROF	T0+35s	connection of active DMI channel: Message-SR7	DMI		All indicators are moved by one position backwards

Message-SR1: STM requests display of indicators 1-3, indicator i at position i			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	35	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	233	Packet Length
N_ITER	5	3	Request for 3 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	



M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	4	Caption="IND1"
X_CAPTION(1,1)	8	"I"	
X_CAPTION(1,2)	8	"N"	
X_CAPTION(1,3)	8	"D"	
X_CAPTION(1,4)	8	"1"	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000010000b	black on red, No flashing
L_CAPTION(2)	6	4	Caption="IND2"
X_CAPTION(2,1)	8	"I"	
X_CAPTION(2,2)	8	"N"	
X_CAPTION(2,3)	8	"D"	
X_CAPTION(2,4)	8	"2"	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000010000b	black on red, No flashing
L_CAPTION(3)	6	4	Caption="IND3"
X_CAPTION(3,1)	8	"I"	
X_CAPTION(3,2)	8	"N"	
X_CAPTION(3,3)	8	"D"	



X_CAPTION(3,4)	8	"3"	
Padding bits	6	000000b	

Message-SD1: STM removes indicators 1-3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	23	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	137	Packet Length
N_ITER	5	3	Request for 3 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	0000000000b	No display
L_CAPTION(1)	6	0	



NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	0000000000b	No display
L_CAPTION(1)	6	0	
Padding bits	6	000000b	

Message-SR2: STM requests display of indicators 1/2/3 at positions 3/1/2 with captions 'IND1', 'IND2', 'IND3'.			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	35	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=233, N=3, ID=1, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			
(2): ID=2, P=1, IC=0, MI=1000010000b, L=4, T="IND2"			
(3): ID=3, P=2, IC=0, MI=1000010000b, L=4, T="IND3"			

Message-SR3: STM requests display of indicators 1/2/3 at positions 2/3/1 with captions 'IND1', 'IND2', 'IND3'.			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	35	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=233, N=3, ID=1, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			
(2): ID=2, P=3, IC=0, MI=1000010000b, L=4, T="IND2"			
(3): ID=3, P=1, IC=0, MI=1000010000b, L=4, T="IND3"			



Message-SR4: STM requests display of indicators 1/2/3 at positions 1/2/3 with captions 'IND1', 'IND2', 'IND3'.			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	35	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=233, N=3, ID=1, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			
(2): ID=2, P=2, IC=0, MI=1000010000b, L=4, T="IND2"			
(3): ID=3, P=3, IC=0, MI=1000010000b, L=4, T="IND3"			

Message-SR5: STM requests display of indicators 1/2/3 at positions 3/1/2 with icons 4(tools), 5(driver), 6(box).			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	23	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=137, N=3, ID=1, P=3, IC=4, MI=1000010000b (black on red, No flashing), L=0			
(2): ID=2, P=1, IC=5, MI=1000010000b, L=0			
(3): ID=3, P=2, IC=6, MI=1000010000b, L=0			

Message-SR6: STM requests display of indicators 1/2/3 at positions 2/3/1 with icons 4(tools), 5(driver), 6(box).			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	23	Message Length
STM-15: PL=25, ST=7, (State DA)			



STM-35: PL=137, N=3, ID=1, P=2, IC=4, MI=1000010000b (black on red, No flashing), L=0
(2): ID=2, P=3, IC=5, MI=1000010000b, L=0
(3): ID=3, P=1, IC=6, MI=1000010000b, L=0

Message-SR7: STM requests display of indicators 1/2/3 at positions 1/2/3 with icons 4(tools), 5(driver), 6(box).			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	23	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=137, N=3, ID=1, P=1, IC=4, MI=1000010000b (black on red, No flashing), L=0			
(2): ID=2, P=2, IC=5, MI=1000010000b, L=0			
(3): ID=3, P=3, IC=6, MI=1000010000b, L=0			

2.2.5 Test Case 7b2.5

TEST CASE HEADER	
Test case identification	DMI Function
	7b2.0.2.1.1.1.3.0
	Indicator identities test for configuration 7a.4 with single indicator requests: First single indicators (with ids 1-10) are displayed with caption in a loop one after the other at the same position, the new request replacing the old indicator. Then single indicators (with ids 11-20) are displayed with caption and then deleted by display with attribute 'no display' in a loop one after the other at the same position. Then the first indicator is moved through all possible positions with text.
ERTMS/ETCS on-board	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.3, 13.4.1.4, 13.4.1.9, 13.4.1.11



requirements tested	
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service: 7a.4. The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b2.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
	Request of single indicator with replacement						
1	STM requests display of indicator 1 at position 1	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicator with caption IND1 is displayed at position 1
2	STM requests display of indicator 2 at position 1	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Indicator with caption IND2 is displayed at position 1
...
5	STM requests display of indicator 5 at position 1	PROF	T0+20s	connection of active DMI channel: Message-S5	DMI		Indicator with caption IND5 is displayed at position 1
...
8	STM requests display of indicator 8 at position 1	PROF	T0+35s	connection of active DMI channel: Message-S8	DMI		Indicator with caption IND8 is displayed at position 1
9	STM requests display of indicator 9 at position 1	PROF	T0+40s	connection of active DMI channel: Message-S9	DMI		Indicator with caption IND9 is displayed at position 1
10	STM requests display of indicator	PROF	T0+45s	connection of active DMI channel:	DMI		Indicator with caption IND10 is



	10 at position 1			Message-S10			displayed at position 1
	Request of single indicator with deletion						
11	STM requests display of indicator 11 at position 1	PROF	T0+50s	connection of active DMI channel: Message-S11	DMI		Indicator with caption IND11 is displayed at position 1
12	STM removes indicator 11	PROF	T0+55s	connection of active DMI channel: Message-S12	DMI		No indicators are displayed
13	STM requests display of indicator 12 at position 1	PROF	T0+60s	connection of active DMI channel: Message-S13	DMI		Indicator with caption IND12 is displayed at position 1
14	STM removes indicator 12	PROF	T0+65s	connection of active DMI channel: Message-S14	DMI		No indicators are displayed
...
19	STM requests display of indicator 15 at position 1	PROF	T0+90s	connection of active DMI channel: Message-S19	DMI		Indicator with caption IND15 is displayed at position 1
20	STM removes indicator 15	PROF	T0+95s	connection of active DMI channel: Message-S20	DMI		No indicators are displayed
...
25	STM requests display of indicator 18 at position 1	PROF	T0+120s	connection of active DMI channel: Message-S25	DMI		Indicator with caption IND18 is displayed at position 1
26	STM removes indicator 18	PROF	T0+125s	connection of active DMI channel: Message-S26	DMI		No indicators are displayed
27	STM requests display of indicator 19 at position 1	PROF	T0+130s	connection of active DMI channel: Message-S27	DMI		Indicator with caption IND19 is displayed at position 1
28	STM removes indicator 19	PROF	T0+135s	connection of active DMI channel: Message-S28	DMI		No indicators are displayed
29	STM requests display of indicator 20 at position 1	PROF	T0+140s	connection of active DMI channel: Message-S29	DMI		Indicator with caption IND20 is displayed at position 1
30	STM removes indicator 20	PROF	T0+145s	connection of active DMI channel:	DMI		No indicators are displayed



				Message-S30			
	Moving single indicator through positions						
31	STM requests display of indicator 1 at position 1	PROF	T0+150s	connection of active DMI channel: Message-S31	DMI		Indicator with caption IND1 is displayed at position 1
32	STM requests display of indicator 1 at position 2	PROF	T0+155s	connection of active DMI channel: Message-S32	DMI		Indicator with caption IND1 is moved to position 2
33	STM requests display of indicator 1 at position 3	PROF	T0+160s	connection of active DMI channel: Message-S33	DMI		Indicator with caption IND1 is moved to position 3
34	This test step is applicable to SK technology only! STM requests display of indicator 1 at position 4	PROF	T0+165s	connection of active DMI channel: Message-S34	DMI		Indicator with caption IND1 is moved to position 4
35	STM requests display of indicator 1 at position 5	PROF	T0+170s	connection of active DMI channel: Message-S35	DMI		Indicator with caption IND1 is moved to position 5
...
40	STM requests display of indicator 1 at position 10	PROF	T0+195s	connection of active DMI channel: Message-S40	DMI		Indicator with caption IND1 is moved to position 10
...
48	STM requests display of indicator 1 at position 18	PROF	T0+235s	connection of active DMI channel: Message-S48	DMI		Indicator with caption IND1 is moved to position 18
49	STM requests display of indicator 1 at position 19	PROF	T0+240s	connection of active DMI channel: Message-S49	DMI		Indicator with caption IND1 is moved to position 19

Message-S1: STM requests display of indicator 1 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length



NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	95	Packet Length
N_ITER	5	1	Request for 1 indicator
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	4	Caption="IND1"
X_CAPTION(1,1)	8	"I"	
X_CAPTION(1,2)	8	"N"	
X_CAPTION(1,3)	8	"D"	
X_CAPTION(1,4)	8	"1"	

Message-S2: STM requests display of indicator 2 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=2, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND2"			

Message-S5: STM requests display of indicator 5 at position 1			
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VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=5, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND5"			

Message-S8: STM requests display of indicator 8 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=8, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND8"			

Message-S9: STM requests display of indicator 9 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=9, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND9"			

Message-S10: STM requests display of indicator 10 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	18	Message Length



STM-15: PL=25, ST=7, (State DA)
STM-35: PL=103, N=1, ID=10, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=5, T="IND10"

Message-S11: STM requests display of indicator 11 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	18	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=103, N=1, ID=11, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=5, T="IND11"			

Message-S12: STM removes indicator 11			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	63	Packet Length
N_ITER	5	1	Request for 1 indicator
NID_INDICATOR(1)	8	11	Indicator 11
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	0000000000b	No display



L_CAPTION(1)	6	0	
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Message-S13: STM requests display of indicator 12 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	18	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=103, N=1, ID=12, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=5, T="IND12"			

Message-S14: STM removes indicator 12			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=12, P=1, IC=0, MI=0000000000b, L=0			

Message-S19: STM requests display of indicator 15 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	18	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=103, N=1, ID=15, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=5, T="IND15"			

Message-S20: STM removes indicator 15			
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VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=15, P=1, IC=0, MI=0000000000b, L=0			

Message-S25: STM requests display of indicator 18 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	18	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=103, N=1, ID=18, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=5, T="IND18"			

Message-S26: STM removes indicator 18			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=18, P=1, IC=0, MI=0000000000b, L=0			

Message-S27: STM requests display of indicator 19 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	18	Message Length



STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=103, N=1, ID=19, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=5, T="IND19"			
Message-S28: STM removes indicator 19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=19, P=1, IC=0, MI=0000000000b, L=0			
Message-S29: STM requests display of indicator 20 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	18	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=103, N=1, ID=20, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=5, T="IND20"			
Message-S30: STM removes indicator 20			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=20, P=1, IC=0, MI=0000000000b, L=0			



Message-S31: STM requests display of indicator 1 at position 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=1, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			

Message-S32: STM requests display of indicator 1 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=1, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			

Message-S33: STM requests display of indicator 1 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=1, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			

Message-S34: STM requests display of indicator 1 at position 4			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=1, P=4, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			

Message-S35: STM requests display of indicator 1 at position 5			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=1, P=5, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			

Message-S40: STM requests display of indicator 1 at position 10			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=1, P=10, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			

Message-S48: STM requests display of indicator 1 at position 18			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=1, P=18, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			



Message-S49: STM requests display of indicator 1 at position 19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	17	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=95, N=1, ID=1, P=19, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			

2.2.6 Test Case 7b2.6

TEST CASE HEADER	
Test case identification	DMI Function
	7b2.0.2.2.2.2.3.0
	Indicator identities test for configuration 7a.4 with requests for set of indicators: First indicators are displayed with captions in 2 sets of 10 indicators at once at positions 1-3, 5-11 in a loop, the new request replacing the old indicators. Then indicators are displayed with captions in 2 sets of 10 indicators at once at positions 10-19 and then deleted by display with attribute 'no display' in a loop. Then the last indicators are shifted through all possible positions with text.
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.3, 13.4.1.4, 13.4.1.9, 13.4.1.11
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board	For active STM: Customisable DMI service: 7a.4.



configuration	The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b2.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
	Request of set of indicators with replacement						
1	STM requests display of indicators 1 - 10 at positions 1-3, 5-11	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicators with caption IND1 - IND10 are displayed at positions 1-3, 5-11
2	STM requests display of indicators 11 - 20 at positions 1-3, 5-11	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Indicators with caption IND11 - IND20 are displayed at positions 1-3, 5-11
	Request of set of indicators with deletion						
3	STM requests display of indicators 11 - 20 at positions 10-19	PROF	T0+10s	connection of active DMI channel: Message-S3	DMI		Indicators with caption IND11 - IND20 are displayed at positions 10-19
4	STM removes indicators 11 - 20	PROF	T0+15s	connection of active DMI channel: Message-S4	DMI		No indicators are displayed
5	STM requests display of indicators 1 - 10 at positions 10-19	PROF	T0+20s	connection of active DMI channel: Message-S5	DMI		Indicators with caption IND1 - IND10 are displayed at positions 10-19
6	STM removes indicators 1 - 10	PROF	T0+25s	connection of active DMI channel: Message-S6	DMI		No indicators are displayed
	Shifting set of indicators through positions						
7	STM requests display of indicators 3 - 20 at positions 1-3, 5-19	PROF	T0+30s	connection of active DMI channel: Message-S7	DMI		Indicators with caption IND3 - IND20 are displayed at positions 1-3, 5-19
8	STM requests display of indicators	PROF	T0+35s	connection of active DMI channel:	DMI		All indicators are moved by one

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	3 - 20 at positions 2-3, 5-19, 1			Message-S8			position
9	STM requests display of indicators 3 - 20 at positions 3, 5-19, 1-2	PROF	T0+40s	connection of active DMI channel: Message-S9	DMI		All indicators are moved by one position
10	This test step is applicable to SK technology only! STM requests display of indicators 3 - 20 at positions 4-19, 1-2	PROF	T0+45s	connection of active DMI channel: Message-S10	DMI		Indicator 3 is moved to position 4
11	STM requests display of indicators 3 - 20 at positions 5-19,1-3	PROF	T0+50s	connection of active DMI channel: Message-S11	DMI		All indicators are moved by one position
...
16	STM requests display of indicators 3 - 20 at positions 10-19, 1-3, 5-9	PROF	T0+75s	connection of active DMI channel: Message-S16	DMI		All indicators are moved by one position
...
24	STM requests display of indicators 3 - 20 at positions 18-19, 1-3, 5-17	PROF	T0+115s	connection of active DMI channel: Message-S24	DMI		All indicators are moved by one position
25	STM requests display of indicators 3 - 20 at positions 19, 1-3, 5-18	PROF	T0+120s	connection of active DMI channel: Message-S25	DMI		All indicators are moved by one position

Message-S1: STM requests display of indicators 1 - 10 at positions 1-3, 5-11			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	96	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)



L_PACKET	13	724	Packet Length
N_ITER	5	10	Request for 10 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	4	Caption="IND1"
X_CAPTION(1,1)	8	"I"	
X_CAPTION(1,2)	8	"N"	
X_CAPTION(1,3)	8	"D"	
X_CAPTION(1,4)	8	"1"	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000010000b	black on red, No flashing
L_CAPTION(2)	6	4	Caption="IND2"
X_CAPTION(2,1)	8	"I"	
X_CAPTION(2,2)	8	"N"	
X_CAPTION(2,3)	8	"D"	
X_CAPTION(2,4)	8	"2"	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	



M_IND_ATTRIB(3)	10	1000010000b	black on red, No flashing
L_CAPTION(3)	6	4	Caption="IND3"
X_CAPTION(3,1)	8	"I"	
X_CAPTION(3,2)	8	"N"	
X_CAPTION(3,3)	8	"D"	
X_CAPTION(3,4)	8	"3"	
NID_INDICATOR(4)	8	4	Indicator 4
NID_INDPOS(4)	5	5	
NID_ICON(4)	8	0	
M_IND_ATTRIB(4)	10	1000010000b	black on red, No flashing
L_CAPTION(4)	6	4	Caption="IND4"
X_CAPTION(4,1)	8	"I"	
X_CAPTION(4,2)	8	"N"	
X_CAPTION(4,3)	8	"D"	
X_CAPTION(4,4)	8	"4"	
NID_INDICATOR(5)	8	5	Indicator 5
NID_INDPOS(5)	5	6	
NID_ICON(5)	8	0	
M_IND_ATTRIB(5)	10	1000010000b	black on red, No flashing
L_CAPTION(5)	6	4	Caption="IND5"
X_CAPTION(5,1)	8	"I"	
X_CAPTION(5,2)	8	"N"	
X_CAPTION(5,3)	8	"D"	



X_CAPTION(5,4)	8	"5"	
NID_INDICATOR(6)	8	6	Indicator 6
NID_INDPOS(6)	5	7	
NID_ICON(6)	8	0	
M_IND_ATTRIB(6)	10	1000010000b	black on red, No flashing
L_CAPTION(6)	6	4	Caption="IND6"
X_CAPTION(6,1)	8	"I"	
X_CAPTION(6,2)	8	"N"	
X_CAPTION(6,3)	8	"D"	
X_CAPTION(6,4)	8	"6"	
NID_INDICATOR(7)	8	7	Indicator 7
NID_INDPOS(7)	5	8	
NID_ICON(7)	8	0	
M_IND_ATTRIB(7)	10	1000010000b	black on red, No flashing
L_CAPTION(7)	6	4	Caption="IND7"
X_CAPTION(7,1)	8	"I"	
X_CAPTION(7,2)	8	"N"	
X_CAPTION(7,3)	8	"D"	
X_CAPTION(7,4)	8	"7"	
NID_INDICATOR(8)	8	8	Indicator 8
NID_INDPOS(8)	5	9	
NID_ICON(8)	8	0	
M_IND_ATTRIB(8)	10	1000010000b	black on red, No flashing



L_CAPTION(8)	6	4	Caption="IND8"
X_CAPTION(8,1)	8	"I"	
X_CAPTION(8,2)	8	"N"	
X_CAPTION(8,3)	8	"D"	
X_CAPTION(8,4)	8	"8"	
NID_INDICATOR(9)	8	9	Indicator 9
NID_INDPOS(9)	5	10	
NID_ICON(9)	8	0	
M_IND_ATTRIB(9)	10	1000010000b	black on red, No flashing
L_CAPTION(9)	6	4	Caption="IND9"
X_CAPTION(9,1)	8	"I"	
X_CAPTION(9,2)	8	"N"	
X_CAPTION(9,3)	8	"D"	
X_CAPTION(9,4)	8	"9"	
NID_INDICATOR(10)	8	10	Indicator 10
NID_INDPOS(10)	5	11	
NID_ICON(10)	8	0	
M_IND_ATTRIB(10)	10	1000010000b	black on red, No flashing
L_CAPTION(10)	6	5	Caption="IND10"
X_CAPTION(10,1)	8	"I"	
X_CAPTION(10,2)	8	"N"	
X_CAPTION(10,3)	8	"D"	
X_CAPTION(10,4)	8	"1"	



X_CAPTION(10,5)	8	"0"	
Padding bits	3	000b	

Message-S2: STM requests display of indicators 11 - 20 at positions 1-3, 5-11			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	105	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=796, N=10, ID=11, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=5, T="IND11"			
(2): ID=12, P=2, IC=0, MI=1000010000b, L=5, T="IND12"		(3): ID=13, P=3, IC=0, MI=1000010000b, L=5, T="IND13"	
(4): ID=14, P=5, IC=0, MI=1000010000b, L=5, T="IND14"		(5): ID=15, P=6, IC=0, MI=1000010000b, L=5, T="IND15"	
(6): ID=16, P=7, IC=0, MI=1000010000b, L=5, T="IND16"		(7): ID=17, P=8, IC=0, MI=1000010000b, L=5, T="IND17"	
(8): ID=18, P=9, IC=0, MI=1000010000b, L=5, T="IND18"		(9): ID=19, P=10, IC=0, MI=1000010000b, L=5, T="IND19"	
(10): ID=20, P=11, IC=0, MI=1000010000b, L=5, T="IND20"			

Message-S3: STM requests display of indicators 11 - 20 at positions 10-19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	105	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=796, N=10, ID=11, P=10, IC=0, MI=1000010000b (black on red, No flashing), L=5, T="IND11"			
(2): ID=12, P=11, IC=0, MI=1000010000b, L=5, T="IND12"		(3): ID=13, P=12, IC=0, MI=1000010000b, L=5, T="IND13"	
(4): ID=14, P=13, IC=0, MI=1000010000b, L=5, T="IND14"		(5): ID=15, P=14, IC=0, MI=1000010000b, L=5, T="IND15"	



(6): ID=16, P=15, IC=0, MI=1000010000b, L=5, T="IND16"	(7): ID=17, P=16, IC=0, MI=1000010000b, L=5, T="IND17"
(8): ID=18, P=17, IC=0, MI=1000010000b, L=5, T="IND18"	(9): ID=19, P=18, IC=0, MI=1000010000b, L=5, T="IND19"
(10): ID=20, P=19, IC=0, MI=1000010000b, L=5, T="IND20"	

Message-S4: STM removes indicators 11 - 20			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	55	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	396	Packet Length
N_ITER	5	10	Request for 10 indicators
NID_INDICATOR(1)	8	11	Indicator 11
NID_INDPOS(1)	5	10	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(2)	8	12	Indicator 12
NID_INDPOS(2)	5	11	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	0000000000b	No display

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L_CAPTION(1)	6	0	
NID_INDICATOR(3)	8	13	Indicator 13
NID_INDPOS(3)	5	12	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(4)	8	14	Indicator 14
NID_INDPOS(4)	5	13	
NID_ICON(4)	8	0	
M_IND_ATTRIB(4)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(5)	8	15	Indicator 15
NID_INDPOS(5)	5	14	
NID_ICON(5)	8	0	
M_IND_ATTRIB(5)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(6)	8	16	Indicator 16
NID_INDPOS(6)	5	15	
NID_ICON(6)	8	0	
M_IND_ATTRIB(6)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(7)	8	17	Indicator 17
NID_INDPOS(7)	5	16	



NID_ICON(7)	8	0	
M_IND_ATTRIB(7)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(8)	8	18	Indicator 18
NID_INDPOS(8)	5	17	
NID_ICON(8)	8	0	
M_IND_ATTRIB(8)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(9)	8	19	Indicator 19
NID_INDPOS(9)	5	18	
NID_ICON(9)	8	0	
M_IND_ATTRIB(9)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(10)	8	20	Indicator 20
NID_INDPOS(10)	5	19	
NID_ICON(10)	8	0	
M_IND_ATTRIB(10)	10	0000000000b	No display
L_CAPTION(1)	6	0	
Padding bits	3	000b	

Message-S5: STM requests display of indicators 1 - 10 at positions 10-19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	96	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=724, N=10, ID=1, P=10, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND1"			
(2): ID=2, P=11, IC=0, MI=1000010000b, L=4, T="IND2"		(3): ID=3, P=12, IC=0, MI=1000010000b, L=4, T="IND3"	
(4): ID=4, P=13, IC=0, MI=1000010000b, L=4, T="IND4"		(5): ID=5, P=14, IC=0, MI=1000010000b, L=4, T="IND5"	
(6): ID=6, P=15, IC=0, MI=1000010000b, L=4, T="IND6"		(7): ID=7, P=16, IC=0, MI=1000010000b, L=4, T="IND7"	
(8): ID=8, P=17, IC=0, MI=1000010000b, L=4, T="IND8"		(9): ID=9, P=18, IC=0, MI=1000010000b, L=4, T="IND9"	
(10): ID=10, P=19, IC=0, MI=1000010000b, L=5, T="IND10"			

Message-S6: STM removes indicators 1 - 10			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	55	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=396, N=10, ID=1, P=10, IC=0, MI=0000000000b, L=0			
(2): ID=2, P=11, IC=0, MI=0000000000b, L=0		(3): ID=3, P=12, IC=0, MI=0000000000b, L=0	(4): ID=4, P=13, IC=0, MI=0000000000b, L=0
(5): ID=5, P=14, IC=0, MI=0000000000b, L=0		(6): ID=6, P=15, IC=0, MI=0000000000b, L=0	(7): ID=7, P=16, IC=0, MI=0000000000b, L=0
(8): ID=8, P=17, IC=0, MI=0000000000b, L=0		(9): ID=9, P=18, IC=0, MI=0000000000b, L=0	(10): ID=10, P=19, IC=0, MI=0000000000b, L=0

Message-S7: STM requests display of indicators 3 - 20 at positions 1-3, 5-19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	175	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1356, N=18, ID=3, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND3"			
(2): ID=4, P=2, IC=0, MI=1000010000b, L=4, T="IND4"		(3): ID=5, P=3, IC=0, MI=1000010000b, L=4, T="IND5"	
(4): ID=6, P=5, IC=0, MI=1000010000b, L=4, T="IND6"		(5): ID=7, P=6, IC=0, MI=1000010000b, L=4, T="IND7"	
(6): ID=8, P=7, IC=0, MI=1000010000b, L=4, T="IND8"		(7): ID=9, P=8, IC=0, MI=1000010000b, L=4, T="IND9"	
(8): ID=10, P=9, IC=0, MI=1000010000b, L=5, T="IND10"		(9): ID=11, P=10, IC=0, MI=1000010000b, L=5, T="IND11"	
(10): ID=12, P=11, IC=0, MI=1000010000b, L=5, T="IND12"		(11): ID=13, P=12, IC=0, MI=1000010000b, L=5, T="IND13"	
(12): ID=14, P=13, IC=0, MI=1000010000b, L=5, T="IND14"		(13): ID=15, P=14, IC=0, MI=1000010000b, L=5, T="IND15"	
(14): ID=16, P=15, IC=0, MI=1000010000b, L=5, T="IND16"		(15): ID=17, P=16, IC=0, MI=1000010000b, L=5, T="IND17"	
(16): ID=18, P=17, IC=0, MI=1000010000b, L=5, T="IND18"		(17): ID=19, P=18, IC=0, MI=1000010000b, L=5, T="IND19"	
(18): ID=20, P=19, IC=0, MI=1000010000b, L=5, T="IND20"			

Message-S8: STM requests display of indicators 3 - 20 at positions 2-3, 5-19, 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	175	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1356, N=18, ID=3, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND3"			
(2): ID=4, P=3, IC=0, MI=1000010000b, L=4, T="IND4"		(3): ID=5, P=5, IC=0, MI=1000010000b, L=4, T="IND5"	
(4): ID=6, P=6, IC=0, MI=1000010000b, L=4, T="IND6"		(5): ID=7, P=7, IC=0, MI=1000010000b, L=4, T="IND7"	
(6): ID=8, P=8, IC=0, MI=1000010000b, L=4, T="IND8"		(7): ID=9, P=9, IC=0, MI=1000010000b, L=4, T="IND9"	
(8): ID=10, P=10, IC=0, MI=1000010000b, L=5, T="IND10"		(9): ID=11, P=11, IC=0, MI=1000010000b, L=5, T="IND11"	



(10): ID=12, P=12, IC=0, MI=1000010000b, L=5, T="IND12"	(11): ID=13, P=13, IC=0, MI=1000010000b, L=5, T="IND13"
(12): ID=14, P=14, IC=0, MI=1000010000b, L=5, T="IND14"	(13): ID=15, P=15, IC=0, MI=1000010000b, L=5, T="IND15"
(14): ID=16, P=16, IC=0, MI=1000010000b, L=5, T="IND16"	(15): ID=17, P=17, IC=0, MI=1000010000b, L=5, T="IND17"
(16): ID=18, P=18, IC=0, MI=1000010000b, L=5, T="IND18"	(17): ID=19, P=19, IC=0, MI=1000010000b, L=5, T="IND19"
(18): ID=20, P=1, IC=0, MI=1000010000b, L=5, T="IND20"	

Message-S9: STM requests display of indicators 3 - 20 at positions 3, 5-19, 1-2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	175	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1356, N=18, ID=3, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND3"			
(2): ID=4, P=5, IC=0, MI=1000010000b, L=4, T="IND4"	(3): ID=5, P=6, IC=0, MI=1000010000b, L=4, T="IND5"		
(4): ID=6, P=7, IC=0, MI=1000010000b, L=4, T="IND6"	(5): ID=7, P=8, IC=0, MI=1000010000b, L=4, T="IND7"		
(6): ID=8, P=9, IC=0, MI=1000010000b, L=4, T="IND8"	(7): ID=9, P=10, IC=0, MI=1000010000b, L=4, T="IND9"		
(8): ID=10, P=11, IC=0, MI=1000010000b, L=5, T="IND10"	(9): ID=11, P=12, IC=0, MI=1000010000b, L=5, T="IND11"		
(10): ID=12, P=13, IC=0, MI=1000010000b, L=5, T="IND12"	(11): ID=13, P=14, IC=0, MI=1000010000b, L=5, T="IND13"		
(12): ID=14, P=15, IC=0, MI=1000010000b, L=5, T="IND14"	(13): ID=15, P=16, IC=0, MI=1000010000b, L=5, T="IND15"		
(14): ID=16, P=17, IC=0, MI=1000010000b, L=5, T="IND16"	(15): ID=17, P=18, IC=0, MI=1000010000b, L=5, T="IND17"		
(16): ID=18, P=19, IC=0, MI=1000010000b, L=5, T="IND18"	(17): ID=19, P=1, IC=0, MI=1000010000b, L=5, T="IND19"		
(18): ID=20, P=2, IC=0, MI=1000010000b, L=5, T="IND20"			



Message-S10: STM requests display of indicators 3 - 20 at positions 4-19, 1-2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	175	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1356, N=18, ID=3, P=4, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND3"			
(2): ID=4, P=5, IC=0, MI=1000010000b, L=4, T="IND4"		(3): ID=5, P=6, IC=0, MI=1000010000b, L=4, T="IND5"	
(4): ID=6, P=7, IC=0, MI=1000010000b, L=4, T="IND6"		(5): ID=7, P=8, IC=0, MI=1000010000b, L=4, T="IND7"	
(6): ID=8, P=9, IC=0, MI=1000010000b, L=4, T="IND8"		(7): ID=9, P=10, IC=0, MI=1000010000b, L=4, T="IND9"	
(8): ID=10, P=11, IC=0, MI=1000010000b, L=5, T="IND10"		(9): ID=11, P=12, IC=0, MI=1000010000b, L=5, T="IND11"	
(10): ID=12, P=13, IC=0, MI=1000010000b, L=5, T="IND12"		(11): ID=13, P=14, IC=0, MI=1000010000b, L=5, T="IND13"	
(12): ID=14, P=15, IC=0, MI=1000010000b, L=5, T="IND14"		(13): ID=15, P=16, IC=0, MI=1000010000b, L=5, T="IND15"	
(14): ID=16, P=17, IC=0, MI=1000010000b, L=5, T="IND16"		(15): ID=17, P=18, IC=0, MI=1000010000b, L=5, T="IND17"	
(16): ID=18, P=19, IC=0, MI=1000010000b, L=5, T="IND18"		(17): ID=19, P=1, IC=0, MI=1000010000b, L=5, T="IND19"	
(18): ID=20, P=2, IC=0, MI=1000010000b, L=5, T="IND20"			

Message-S11: STM requests display of indicators 3 - 20 at positions 5-19,1-3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	175	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1356, N=18, ID=3, P=5, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND3"			
(2): ID=4, P=6, IC=0, MI=1000010000b, L=4, T="IND4"		(3): ID=5, P=7, IC=0, MI=1000010000b, L=4, T="IND5"	



(4): ID=6, P=8, IC=0, MI=1000010000b, L=4, T="IND6"	(5): ID=7, P=9, IC=0, MI=1000010000b, L=4, T="IND7"
(6): ID=8, P=10, IC=0, MI=1000010000b, L=4, T="IND8"	(7): ID=9, P=11, IC=0, MI=1000010000b, L=4, T="IND9"
(8): ID=10, P=12, IC=0, MI=1000010000b, L=5, T="IND10"	(9): ID=11, P=13, IC=0, MI=1000010000b, L=5, T="IND11"
(10): ID=12, P=14, IC=0, MI=1000010000b, L=5, T="IND12"	(11): ID=13, P=15, IC=0, MI=1000010000b, L=5, T="IND13"
(12): ID=14, P=16, IC=0, MI=1000010000b, L=5, T="IND14"	(13): ID=15, P=17, IC=0, MI=1000010000b, L=5, T="IND15"
(14): ID=16, P=18, IC=0, MI=1000010000b, L=5, T="IND16"	(15): ID=17, P=19, IC=0, MI=1000010000b, L=5, T="IND17"
(16): ID=18, P=1, IC=0, MI=1000010000b, L=5, T="IND18"	(17): ID=19, P=2, IC=0, MI=1000010000b, L=5, T="IND19"
(18): ID=20, P=3, IC=0, MI=1000010000b, L=5, T="IND20"	

Message-S16: STM requests display of indicators 3 - 20 at positions 10-19, 1-3, 5-9			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	175	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1356, N=18, ID=3, P=10, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND3"			
(2): ID=4, P=11, IC=0, MI=1000010000b, L=4, T="IND4"	(3): ID=5, P=12, IC=0, MI=1000010000b, L=4, T="IND5"		
(4): ID=6, P=13, IC=0, MI=1000010000b, L=4, T="IND6"	(5): ID=7, P=14, IC=0, MI=1000010000b, L=4, T="IND7"		
(6): ID=8, P=15, IC=0, MI=1000010000b, L=4, T="IND8"	(7): ID=9, P=16, IC=0, MI=1000010000b, L=4, T="IND9"		
(8): ID=10, P=17, IC=0, MI=1000010000b, L=5, T="IND10"	(9): ID=11, P=18, IC=0, MI=1000010000b, L=5, T="IND11"		
(10): ID=12, P=19, IC=0, MI=1000010000b, L=5, T="IND12"	(11): ID=13, P=1, IC=0, MI=1000010000b, L=5, T="IND13"		
(12): ID=14, P=2, IC=0, MI=1000010000b, L=5, T="IND14"	(13): ID=15, P=3, IC=0, MI=1000010000b, L=5, T="IND15"		
(14): ID=16, P=5, IC=0, MI=1000010000b, L=5, T="IND16"	(15): ID=17, P=6, IC=0, MI=1000010000b, L=5, T="IND17"		
(16): ID=18, P=7, IC=0, MI=1000010000b, L=5, T="IND18"	(17): ID=19, P=8, IC=0, MI=1000010000b, L=5, T="IND19"		



(18): ID=20, P=9, IC=0, MI=1000010000b, L=5, T="IND20"	
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Message-S24: STM requests display of indicators 3 - 20 at positions 18-19, 1-3, 5-17			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	175	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1356, N=18, ID=3, P=18, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND3"			
(2): ID=4, P=19, IC=0, MI=1000010000b, L=4, T="IND4"	(3): ID=5, P=1, IC=0, MI=1000010000b, L=4, T="IND5"		
(4): ID=6, P=2, IC=0, MI=1000010000b, L=4, T="IND6"	(5): ID=7, P=3, IC=0, MI=1000010000b, L=4, T="IND7"		
(6): ID=8, P=5, IC=0, MI=1000010000b, L=4, T="IND8"	(7): ID=9, P=6, IC=0, MI=1000010000b, L=4, T="IND9"		
(8): ID=10, P=7, IC=0, MI=1000010000b, L=5, T="IND10"	(9): ID=11, P=8, IC=0, MI=1000010000b, L=5, T="IND11"		
(10): ID=12, P=9, IC=0, MI=1000010000b, L=5, T="IND12"	(11): ID=13, P=10, IC=0, MI=1000010000b, L=5, T="IND13"		
(12): ID=14, P=11, IC=0, MI=1000010000b, L=5, T="IND14"	(13): ID=15, P=12, IC=0, MI=1000010000b, L=5, T="IND15"		
(14): ID=16, P=13, IC=0, MI=1000010000b, L=5, T="IND16"	(15): ID=17, P=14, IC=0, MI=1000010000b, L=5, T="IND17"		
(16): ID=18, P=15, IC=0, MI=1000010000b, L=5, T="IND18"	(17): ID=19, P=16, IC=0, MI=1000010000b, L=5, T="IND19"		
(18): ID=20, P=17, IC=0, MI=1000010000b, L=5, T="IND20"			

Message-S25: STM requests display of indicators 3 - 20 at positions 19, 1-3, 5-18			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	175	Message Length



STM-15: PL=25, ST=7, (State DA)	
STM-35: PL=1356, N=18, ID=3, P=19, IC=0, MI=1000010000b (black on red, No flashing), L=4, T="IND3"	
(2): ID=4, P=1, IC=0, MI=1000010000b, L=4, T="IND4"	(3): ID=5, P=2, IC=0, MI=1000010000b, L=4, T="IND5"
(4): ID=6, P=3, IC=0, MI=1000010000b, L=4, T="IND6"	(5): ID=7, P=5, IC=0, MI=1000010000b, L=4, T="IND7"
(6): ID=8, P=6, IC=0, MI=1000010000b, L=4, T="IND8"	(7): ID=9, P=7, IC=0, MI=1000010000b, L=4, T="IND9"
(8): ID=10, P=8, IC=0, MI=1000010000b, L=5, T="IND10"	(9): ID=11, P=9, IC=0, MI=1000010000b, L=5, T="IND11"
(10): ID=12, P=10, IC=0, MI=1000010000b, L=5, T="IND12"	(11): ID=13, P=11, IC=0, MI=1000010000b, L=5, T="IND13"
(12): ID=14, P=12, IC=0, MI=1000010000b, L=5, T="IND14"	(13): ID=15, P=13, IC=0, MI=1000010000b, L=5, T="IND15"
(14): ID=16, P=14, IC=0, MI=1000010000b, L=5, T="IND16"	(15): ID=17, P=15, IC=0, MI=1000010000b, L=5, T="IND17"
(16): ID=18, P=16, IC=0, MI=1000010000b, L=5, T="IND18"	(17): ID=19, P=17, IC=0, MI=1000010000b, L=5, T="IND19"
(18): ID=20, P=18, IC=0, MI=1000010000b, L=5, T="IND20"	

2.2.7 Test Case 7b2.7

TEST CASE HEADER	
Test case identification	DMI Function
	7b2.0.2.1.1.1.0
	Indicator identities test for configurations 7a.5, 7a.6 and 7a.7 with single indicator requests: First indicators (with ids 1 -8) are displayed with caption in a loop one after the other at the same position, the new request replacing the old indicator. Then indicators (with ids 9-16) are displayed with caption and then deleted by display with attribute 'no display' in a loop one after the other at the same position. Then the indicator 16 is moved through all possible positions with text. Then the indicator 16 is moved through all possible positions with icon 2.
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.3, 13.4.1.4, 13.4.1.9, 13.4.1.11, 13.4.3.3



	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service: 7a.5, 7a.6 or 7a.7 (one configuration shall be chosen for test). The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b2.1 The caption of an indicator in the test case indicates the alignment, the font size and the indicator id. The caption has the format <horizontal alignment><vertical alignment><Indicator id in hex-format> with <horizontal alignment> = L, C or R for left, centred or right horizontal alignment, <vertical alignment> = L, C or U for lower part, centred or upper part vertical alignment. example: caption = 'CL4010' for indicator 16 with font size 40, centred horizontal, lower part vertical alignment.

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
	Request of single indicator with replacement						
1	STM requests display of indicator 1 at position 3	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicator with caption LU1001 is displayed at position 3 with font size 10 horizontal alignment L and vertical alignment U
2	STM requests display of indicator 2 at position 3	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Indicator with caption LC1202 is displayed at position 3 with font size 12 horizontal alignment L and vertical alignment C
3	STM requests display of indicator 3	PROF	T0+10s	connection of active DMI channel:	DMI		Indicator with caption LL1403 is



	at position 3			Message-S3			displayed at position 3 with font size 14 horizontal alignment L and vertical alignment L
4	STM requests display of indicator 4 at position 3	PROF	T0+15s	connection of active DMI channel: Message-S4	DMI		Indicator with caption CC0804 is displayed at position 3 with font size 08 horizontal alignment C and vertical alignment C
5	STM requests display of indicator 5 at position 3	PROF	T0+20s	connection of active DMI channel: Message-S5	DMI		Indicator with caption RU1005 is displayed at position 3 with font size 10 horizontal alignment R and vertical alignment U
6	STM requests display of indicator 6 at position 3	PROF	T0+25s	connection of active DMI channel: Message-S6	DMI		Indicator with caption RC1206 is displayed at position 3 with font size 12 horizontal alignment R and vertical alignment C
7	STM requests display of indicator 7 at position 3	PROF	T0+30s	connection of active DMI channel: Message-S7	DMI		Indicator with caption RL1407 is displayed at position 3 with font size 14 horizontal alignment R and vertical alignment L
8	STM requests display of indicator 8 at position 3	PROF	T0+35s	connection of active DMI channel: Message-S8	DMI		Indicator with caption CU1008 is displayed at position 3 with font size 10 horizontal alignment C and vertical alignment U
	Request of single indicator with deletion						
9	STM requests display of indicator 9 at position 3	PROF	T0+40s	connection of active DMI channel: Message-S9	DMI		Indicator with caption CC1209 is displayed at position 3 with font size 12 horizontal alignment C and vertical alignment C
10	STM removes indicator 9	PROF	T0+45s	connection of active DMI channel: Message-S10	DMI		No indicators are displayed
11	STM requests display of indicator	PROF	T0+50s	connection of active DMI channel:	DMI		Indicator with caption CL140A is



	10 at position 3			Message-S11			displayed at position 3 with font size 14 horizontal alignment C and vertical alignment L
12	STM removes indicator 10	PROF	T0+55s	connection of active DMI channel: Message-S12	DMI		No indicators are displayed
13	STM requests display of indicator 11 at position 3	PROF	T0+60s	connection of active DMI channel: Message-S13	DMI		Indicator with caption LC200B is displayed at position 3 with font size 20 horizontal alignment L and vertical alignment C
14	STM removes indicator 11	PROF	T0+65s	connection of active DMI channel: Message-S14	DMI		No indicators are displayed
15	STM requests display of indicator 12 at position 3	PROF	T0+70s	connection of active DMI channel: Message-S15	DMI		Indicator with caption RC200C is displayed at position 3 with font size 20 horizontal alignment R and vertical alignment C
16	STM removes indicator 12	PROF	T0+75s	connection of active DMI channel: Message-S16	DMI		No indicators are displayed
17	STM requests display of indicator 13 at position 3	PROF	T0+80s	connection of active DMI channel: Message-S17	DMI		Indicator with caption CC200D is displayed at position 3 with font size 20 horizontal alignment C and vertical alignment C
18	STM removes indicator 13	PROF	T0+85s	connection of active DMI channel: Message-S18	DMI		No indicators are displayed
19	STM requests display of indicator 14 at position 3	PROF	T0+90s	connection of active DMI channel: Message-S19	DMI		Indicator with caption LC400E is displayed at position 3 with font size 40 horizontal alignment L and vertical alignment C
20	STM removes indicator 14	PROF	T0+95s	connection of active DMI channel: Message-S20	DMI		No indicators are displayed
21	STM requests display of indicator 15 at position 3	PROF	T0+100s	connection of active DMI channel: Message-S21	DMI		Indicator with caption RC400F is displayed at position 3 with font size



							40 horizontal alignment R and vertical alignment C
22	STM removes indicator 15	PROF	T0+105s	connection of active DMI channel: Message-S22	DMI		No indicators are displayed
23	STM requests display of indicator 16 at position 3	PROF	T0+110s	connection of active DMI channel: Message-S23	DMI		Indicator with caption CC4010 is displayed at position 3 with font size 40 horizontal alignment C and vertical alignment C
24	STM removes indicator 16	PROF	T0+115s	connection of active DMI channel: Message-S24	DMI		No indicators are displayed
	Moving single indicator through positions with caption						
25	STM requests display of indicator 16 at position 1 with caption 'CC4010'	PROF	T0+120s	connection of active DMI channel: Message-S25	DMI		Indicator is displayed at position 1 with caption 'CC4010' with font size and alignment according to caption
26	STM requests display of indicator 16 at position 2 with caption 'CC4010'	PROF	T0+125s	connection of active DMI channel: Message-S26	DMI		Indicator is moved to position 2 with caption 'CC4010' with font size and alignment according to caption
27	STM requests display of indicator 16 at position 3 with caption 'CC4010'	PROF	T0+130s	connection of active DMI channel: Message-S27	DMI		Indicator is moved to position 3 with caption 'CC4010' with font size and alignment according to caption
28	STM requests display of indicator 16 at position 4 with caption 'CC4010'	PROF	T0+135s	connection of active DMI channel: Message-S28	DMI		Indicator is moved to position 4 with caption 'CC4010' with font size and alignment according to caption
29	STM requests display of indicator 16 at position 5 with caption 'CC4010'	PROF	T0+140s	connection of active DMI channel: Message-S29	DMI		Indicator is moved to position 5 with caption 'CC4010' with font size and alignment according to caption
30	STM requests display of indicator 16 at position 6 with caption 'CC4010'	PROF	T0+145s	connection of active DMI channel: Message-S30	DMI		Indicator is moved to position 6 with caption 'CC4010' with font size and alignment according to caption
31	STM requests display of indicator	PROF	T0+150s	connection of active DMI channel:	DMI		Indicator is moved to position 7 with



	16 at position 7 with caption 'CC4010'			Message-S31			caption 'CC4010' with font size and alignment according to caption
32	STM requests display of indicator 16 at position 8 with caption 'CC4010'	PROF	T0+155s	connection of active DMI channel: Message-S32	DMI		Indicator is moved to position 8 with caption 'CC4010' with font size and alignment according to caption
	Moving single indicator through positions with icon						
33	STM requests display of indicator 16 at position 1 with icon 2 (radiation red).	PROF	T0+160s	connection of active DMI channel: Message-S33	DMI		Indicator is displayed at position 1 with icon 2 (radiation red).
34	STM requests display of indicator 16 at position 2 with icon 2 (radiation red).	PROF	T0+165s	connection of active DMI channel: Message-S34	DMI		Indicator is moved to position 2 with icon 2 (radiation red).
35	STM requests display of indicator 16 at position 3 with icon 2 (radiation red).	PROF	T0+170s	connection of active DMI channel: Message-S35	DMI		Indicator is moved to position 3 with icon 2 (radiation red).
36	STM requests display of indicator 16 at position 4 with icon 2 (radiation red).	PROF	T0+175s	connection of active DMI channel: Message-S36	DMI		Indicator is moved to position 4 with icon 2 (radiation red).
37	STM requests display of indicator 16 at position 5 with icon 2 (radiation red).	PROF	T0+180s	connection of active DMI channel: Message-S37	DMI		Indicator is moved to position 5 with icon 2 (radiation red).
38	STM requests display of indicator 16 at position 6 with icon 2 (radiation red).	PROF	T0+185s	connection of active DMI channel: Message-S38	DMI		Indicator is moved to position 6 with icon 2 (radiation red).
39	STM requests display of indicator 16 at position 7 with icon 2 (radiation red).	PROF	T0+190s	connection of active DMI channel: Message-S39	DMI		Indicator is moved to position 7 with icon 2 (radiation red).
40	STM requests display of indicator 16 at position 8 with icon 2 (radiation red).	PROF	T0+195s	connection of active DMI channel: Message-S40	DMI		Indicator is moved to position 8 with icon 2 (radiation red).



Message-S1: STM requests display of indicator 1 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	111	Packet Length
N_ITER	5	1	Request for 1 indicator
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	3	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	6	Caption="LU1001"
X_CAPTION(1,1)	8	"L"	
X_CAPTION(1,2)	8	"U"	
X_CAPTION(1,3)	8	"1"	
X_CAPTION(1,4)	8	"0"	
X_CAPTION(1,5)	8	"0"	
X_CAPTION(1,6)	8	"1"	
Message-S2: STM requests display of indicator 2 at position 3			



VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=2, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC1202"			

Message-S3: STM requests display of indicator 3 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=3, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LL1403"			

Message-S4: STM requests display of indicator 4 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=4, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC0804"			

Message-S5: STM requests display of indicator 5 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length



STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=5, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU1005"			
Message-S6: STM requests display of indicator 6 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=6, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RC1206"			
Message-S7: STM requests display of indicator 7 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=7, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RL1407"			
Message-S8: STM requests display of indicator 8 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=8, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CU1008"			



Message-S9: STM requests display of indicator 9 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=9, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC1209"			

Message-S10: STM removes indicator 9			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	63	Packet Length
N_ITER	5	1	Request for 1 indicator
NID_INDICATOR(1)	8	9	Indicator 9
NID_INDPOS(1)	5	3	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	0000000000b	No display
L_CAPTION(1)	6	0	

Message-S11: STM requests display of indicator 10 at position 3



VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=10, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CL140A"			

Message-S12: STM removes indicator 10			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=10, P=3, IC=0, MI=0000000000b, L=0			

Message-S13: STM requests display of indicator 11 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=11, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC200B"			

Message-S14: STM removes indicator 11			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length



STM-15: PL=25, ST=7, (State DA)

STM-35: PL=63, N=1, ID=11, P=3, IC=0, MI=0000000000b, L=0

Message-S15: STM requests display of indicator 12 at position 3

VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length

STM-15: PL=25, ST=7, (State DA)

STM-35: PL=111, N=1, ID=12, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RC200C"

Message-S16: STM removes indicator 12

VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length

STM-15: PL=25, ST=7, (State DA)

STM-35: PL=63, N=1, ID=12, P=3, IC=0, MI=0000000000b, L=0

Message-S17: STM requests display of indicator 13 at position 3

VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length

STM-15: PL=25, ST=7, (State DA)

STM-35: PL=111, N=1, ID=13, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC200D"



Message-S18: STM removes indicator 13			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=13, P=3, IC=0, MI=0000000000b, L=0			

Message-S19: STM requests display of indicator 14 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=14, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC400E"			

Message-S20: STM removes indicator 14			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=14, P=3, IC=0, MI=0000000000b, L=0			

Message-S21: STM requests display of indicator 15 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=15, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RC400F"			

Message-S22: STM removes indicator 15			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=15, P=3, IC=0, MI=0000000000b, L=0			

Message-S23: STM requests display of indicator 16 at position 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=16, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC4010"			

Message-S24: STM removes indicator 16			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=3, IC=0, MI=0000000000b, L=0			



Message-S25: STM requests display of indicator 16 at position 1 with caption 'CC4010'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=16, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC4010"			

Message-S26: STM requests display of indicator 16 at position 2 with caption 'CC4010'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=16, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC4010"			

Message-S27: STM requests display of indicator 16 at position 3 with caption 'CC4010'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=16, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC4010"			

Message-S28: STM requests display of indicator 16 at position 4 with caption 'CC4010'			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=16, P=4, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC4010"			

Message-S29: STM requests display of indicator 16 at position 5 with caption 'CC4010'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=16, P=5, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC4010"			

Message-S30: STM requests display of indicator 16 at position 6 with caption 'CC4010'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=16, P=6, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC4010"			

Message-S31: STM requests display of indicator 16 at position 7 with caption 'CC4010'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			



STM-35: PL=111, N=1, ID=16, P=7, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC4010"

Message-S32: STM requests display of indicator 16 at position 8 with caption 'CC4010'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=16, P=8, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC4010"			

Message-S33: STM requests display of indicator 16 at position 1 with icon 2 (radiation red).			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=1, IC=2, MI=1000010000b (black on red, No flashing), L=0			

Message-S34: STM requests display of indicator 16 at position 2 with icon 2 (radiation red).			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=2, IC=2, MI=1000010000b (black on red, No flashing), L=0			

Message-S35: STM requests display of indicator 16 at position 3 with icon 2 (radiation red).			
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VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=3, IC=2, MI=1000010000b (black on red, No flashing), L=0			

Message-S36: STM requests display of indicator 16 at position 4 with icon 2 (radiation red).			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=4, IC=2, MI=1000010000b (black on red, No flashing), L=0			

Message-S37: STM requests display of indicator 16 at position 5 with icon 2 (radiation red).			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=5, IC=2, MI=1000010000b (black on red, No flashing), L=0			

Message-S38: STM requests display of indicator 16 at position 6 with icon 2 (radiation red).			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length



STM-15: PL=25, ST=7, (State DA)

STM-35: PL=63, N=1, ID=16, P=6, IC=2, MI=1000010000b (black on red, No flashing), L=0

Message-S39: STM requests display of indicator 16 at position 7 with icon 2 (radiation red).

VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length

STM-15: PL=25, ST=7, (State DA)

STM-35: PL=63, N=1, ID=16, P=7, IC=2, MI=1000010000b (black on red, No flashing), L=0

Message-S40: STM requests display of indicator 16 at position 8 with icon 2 (radiation red).

VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length

STM-15: PL=25, ST=7, (State DA)

STM-35: PL=63, N=1, ID=16, P=8, IC=2, MI=1000010000b (black on red, No flashing), L=0

2.2.8 Test Case 7b2.8

TEST CASE HEADER	
Test case identification	DMI Function
	7b2.0.2.2.2.2.0
	Indicator identities test for configurations 7a.5, 7a.6 and 7a.7 requests for set of indicators: First indicators are displayed with captions in sets of 8 indicators at once at positions 1-8 in a loop until all are displayed, the new request replacing the old indicators. Then indicators are displayed with captions in sets of 8 indicators at once at positions 1-8 and

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	then deleted by display with attribute 'no display' in a loop until all are displayed. Then the indicators 2, 4, ..16 are shifted through all possible positions with text. Then the indicators 2, 4, ..16 are shifted through all possible positions with icons.
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.3, 13.4.1.4, 13.4.1.9, 13.4.1.11, 13.4.3.3
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service: 7a.5, 7a.6 or 7a.7 (one configuration shall be chosen for test). The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b2.1 The caption of an indicator in the test case indicates the alignment, the font size and the indicator id. The caption has the format <horizontal alignment><vertical alignment><Indicator id in hex-format> with <horizontal alignment> = L, C or R for left, centred or right horizontal alignment, <vertical alignment> = L, C or U for lower part, centred or upper part vertical alignment. example: caption = 'CL4010' for indicator 16 with font size 40, centred horizontal, lower part vertical alignment.

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
	Request of set of indicators with replacement						
1	STM requests display of indicators 1 - 8 at positions 1-8	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicators 1 - 8 are displayed at positions 1-8 with font size and alignment according to caption
2	STM requests display of indicators 9 - 16 at positions 1-8	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Indicators 9 - 16 are displayed at positions 1-8 with font size and



							alignment according to caption
	Request of set of indicators with deletion						
3	STM removes indicators 9 - 16	PROF	T0+10s	connection of active DMI channel: Message-S3	DMI		No indicators are displayed
4	STM requests display of indicators 1 - 8 at positions 1-8	PROF	T0+15s	connection of active DMI channel: Message-S4	DMI		Indicators 1 - 8 are displayed at positions 1-8 with font size and alignment according to caption
5	STM removes indicators 1 - 8	PROF	T0+20s	connection of active DMI channel: Message-S5	DMI		No indicators are displayed
	Shifting set of indicators through positions with caption						
6	STM requests display of indicators 2,4, ...16 at positions 1-8 with captions	PROF	T0+25s	connection of active DMI channel: Message-S6	DMI		8 Indicators are displayed at positions 1-8 with captions with font size and alignment according to caption
7	STM requests display of indicators 2,4, ...16 at positions 2-8, 1	PROF	T0+30s	connection of active DMI channel: Message-S7	DMI		All indicators are moved by one position with font size and alignment according to caption
8	STM requests display of indicators 2,4, ...16 at positions 3-8, 1-2	PROF	T0+35s	connection of active DMI channel: Message-S8	DMI		All indicators are moved by one position with font size and alignment according to caption
9	STM requests display of indicators 2,4, ...16 at positions 4-8, 1-3	PROF	T0+40s	connection of active DMI channel: Message-S9	DMI		All indicators are moved by one position with font size and alignment according to caption
10	STM requests display of indicators 2,4, ...16 at positions 5-8, 1-4	PROF	T0+45s	connection of active DMI channel: Message-S10	DMI		All indicators are moved by one position with font size and alignment according to caption
11	STM requests display of indicators 2,4, ...16 at positions 6-8, 1-5	PROF	T0+50s	connection of active DMI channel: Message-S11	DMI		All indicators are moved by one position with font size and alignment according to caption



12	STM requests display of indicators 2,4, ...16 at positions 7-8, 1-6	PROF	T0+55s	connection of active DMI channel: Message-S12	DMI		All indicators are moved by one position with font size and alignment according to caption
13	STM requests display of indicators 2,4, ...16 at positions 8, 1-7	PROF	T0+60s	connection of active DMI channel: Message-S13	DMI		All indicators are moved by one position with font size and alignment according to caption
	Shifting set of indicators through positions with icons						
14	STM requests display of indicators 2,4, ...16 at positions 1-8 with icons.	PROF	T0+65s	connection of active DMI channel: Message-S14	DMI		8 Indicators are displayed at positions 1-8 with icons.
15	STM requests display of indicators 2,4, ...16 at positions 2-8, 1	PROF	T0+70s	connection of active DMI channel: Message-S15	DMI		All indicators are moved by one position
16	STM requests display of indicators 2,4, ...16 at positions 3-8, 1-2	PROF	T0+75s	connection of active DMI channel: Message-S16	DMI		All indicators are moved by one position
17	STM requests display of indicators 2,4, ...16 at positions 4-8, 1-3	PROF	T0+80s	connection of active DMI channel: Message-S17	DMI		All indicators are moved by one position
18	STM requests display of indicators 2,4, ...16 at positions 5-8, 1-4	PROF	T0+85s	connection of active DMI channel: Message-S18	DMI		All indicators are moved by one position
19	STM requests display of indicators 2,4, ...16 at positions 6-8, 1-5	PROF	T0+90s	connection of active DMI channel: Message-S19	DMI		All indicators are moved by one position
20	STM requests display of indicators 2,4, ...16 at positions 7-8, 1-6	PROF	T0+95s	connection of active DMI channel: Message-S20	DMI		All indicators are moved by one position
21	STM requests display of indicators 2,4, ...16 at positions 8, 1-7	PROF	T0+100s	connection of active DMI channel: Message-S21	DMI		All indicators are moved by one position

Message-S1: STM requests display of indicators 1 - 8 at positions 1-8			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	94	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	706	Packet Length
N_ITER	5	8	Request for 8 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	6	Caption="LU1001"
X_CAPTION(1,1)	8	"L"	
X_CAPTION(1,2)	8	"U"	
X_CAPTION(1,3)	8	"1"	
X_CAPTION(1,4)	8	"0"	
X_CAPTION(1,5)	8	"0"	
X_CAPTION(1,6)	8	"1"	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000010000b	black on red, No flashing
L_CAPTION(2)	6	6	Caption="LC1202"



X_CAPTION(2,1)	8	"L"	
X_CAPTION(2,2)	8	"C"	
X_CAPTION(2,3)	8	"1"	
X_CAPTION(2,4)	8	"2"	
X_CAPTION(2,5)	8	"0"	
X_CAPTION(2,6)	8	"2"	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000010000b	black on red, No flashing
L_CAPTION(3)	6	6	Caption="LL1403"
X_CAPTION(3,1)	8	"L"	
X_CAPTION(3,2)	8	"L"	
X_CAPTION(3,3)	8	"1"	
X_CAPTION(3,4)	8	"4"	
X_CAPTION(3,5)	8	"0"	
X_CAPTION(3,6)	8	"3"	
NID_INDICATOR(4)	8	4	Indicator 4
NID_INDPOS(4)	5	4	
NID_ICON(4)	8	0	
M_IND_ATTRIB(4)	10	1000010000b	black on red, No flashing
L_CAPTION(4)	6	6	Caption="CC0804"
X_CAPTION(4,1)	8	"C"	



X_CAPTION(4,2)	8	"C"	
X_CAPTION(4,3)	8	"0"	
X_CAPTION(4,4)	8	"8"	
X_CAPTION(4,5)	8	"0"	
X_CAPTION(4,6)	8	"4"	
NID_INDICATOR(5)	8	5	Indicator 5
NID_INDPOS(5)	5	5	
NID_ICON(5)	8	0	
M_IND_ATTRIB(5)	10	1000010000b	black on red, No flashing
L_CAPTION(5)	6	6	Caption="RU1005"
X_CAPTION(5,1)	8	"R"	
X_CAPTION(5,2)	8	"U"	
X_CAPTION(5,3)	8	"1"	
X_CAPTION(5,4)	8	"0"	
X_CAPTION(5,5)	8	"0"	
X_CAPTION(5,6)	8	"5"	
NID_INDICATOR(6)	8	6	Indicator 6
NID_INDPOS(6)	5	6	
NID_ICON(6)	8	0	
M_IND_ATTRIB(6)	10	1000010000b	black on red, No flashing
L_CAPTION(6)	6	6	Caption="RC1206"
X_CAPTION(6,1)	8	"R"	
X_CAPTION(6,2)	8	"C"	



X_CAPTION(6,3)	8	"1"	
X_CAPTION(6,4)	8	"2"	
X_CAPTION(6,5)	8	"0"	
X_CAPTION(6,6)	8	"6"	
NID_INDICATOR(7)	8	7	Indicator 7
NID_INDPOS(7)	5	7	
NID_ICON(7)	8	0	
M_IND_ATTRIB(7)	10	1000010000b	black on red, No flashing
L_CAPTION(7)	6	6	Caption="RL1407"
X_CAPTION(7,1)	8	"R"	
X_CAPTION(7,2)	8	"L"	
X_CAPTION(7,3)	8	"1"	
X_CAPTION(7,4)	8	"4"	
X_CAPTION(7,5)	8	"0"	
X_CAPTION(7,6)	8	"7"	
NID_INDICATOR(8)	8	8	Indicator 8
NID_INDPOS(8)	5	8	
NID_ICON(8)	8	0	
M_IND_ATTRIB(8)	10	1000010000b	black on red, No flashing
L_CAPTION(8)	6	6	Caption="CU1008"
X_CAPTION(8,1)	8	"C"	
X_CAPTION(8,2)	8	"U"	
X_CAPTION(8,3)	8	"1"	



X_CAPTION(8,4)	8	"0"	
X_CAPTION(8,5)	8	"0"	
X_CAPTION(8,6)	8	"8"	
Padding bits	5	00000b	

Message-S2: STM requests display of indicators 9 - 16 at positions 1-8			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	94	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=706, N=8, ID=9, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC1209"			
(2): ID=10, P=2, IC=0, MI=1000010000b, L=6, T="CL140A"		(3): ID=11, P=3, IC=0, MI=1000010000b, L=6, T="LC200B"	
(4): ID=12, P=4, IC=0, MI=1000010000b, L=6, T="RC200C"		(5): ID=13, P=5, IC=0, MI=1000010000b, L=6, T="CC200D"	
(6): ID=14, P=6, IC=0, MI=1000010000b, L=6, T="LC400E"		(7): ID=15, P=7, IC=0, MI=1000010000b, L=6, T="RC400F"	
(8): ID=16, P=8, IC=0, MI=1000010000b, L=6, T="CC4010"			

Message-S3: STM removes indicators 9 - 16			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA



NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	322	Packet Length
N_ITER	5	8	Request for 8 indicators
NID_INDICATOR(1)	8	9	Indicator 9
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(2)	8	10	Indicator 10
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(3)	8	11	Indicator 11
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(4)	8	12	Indicator 12
NID_INDPOS(4)	5	4	
NID_ICON(4)	8	0	
M_IND_ATTRIB(4)	10	0000000000b	No display
L_CAPTION(1)	6	0	



NID_INDICATOR(5)	8	13	Indicator 13
NID_INDPOS(5)	5	5	
NID_ICON(5)	8	0	
M_IND_ATTRIB(5)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(6)	8	14	Indicator 14
NID_INDPOS(6)	5	6	
NID_ICON(6)	8	0	
M_IND_ATTRIB(6)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(7)	8	15	Indicator 15
NID_INDPOS(7)	5	7	
NID_ICON(7)	8	0	
M_IND_ATTRIB(7)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(8)	8	16	Indicator 16
NID_INDPOS(8)	5	8	
NID_ICON(8)	8	0	
M_IND_ATTRIB(8)	10	0000000000b	No display
L_CAPTION(1)	6	0	
Padding bits	5	00000b	

Message-S4: STM requests display of indicators 1 - 8 at positions 1-8



VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	94	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=706, N=8, ID=1, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU1001"			
(2): ID=2, P=2, IC=0, MI=1000010000b, L=6, T="LC1202"		(3): ID=3, P=3, IC=0, MI=1000010000b, L=6, T="LL1403"	
(4): ID=4, P=4, IC=0, MI=1000010000b, L=6, T="CC0804"		(5): ID=5, P=5, IC=0, MI=1000010000b, L=6, T="RU1005"	
(6): ID=6, P=6, IC=0, MI=1000010000b, L=6, T="RC1206"		(7): ID=7, P=7, IC=0, MI=1000010000b, L=6, T="RL1407"	
(8): ID=8, P=8, IC=0, MI=1000010000b, L=6, T="CU1008"			

Message-S5: STM removes indicators 1 - 8			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=322, N=8, ID=1, P=1, IC=0, MI=0000000000b, L=0			
(2): ID=2, P=2, IC=0, MI=0000000000b, L=0		(3): ID=3, P=3, IC=0, MI=0000000000b, L=0	(4): ID=4, P=4, IC=0, MI=0000000000b, L=0
(5): ID=5, P=5, IC=0, MI=0000000000b, L=0		(6): ID=6, P=6, IC=0, MI=0000000000b, L=0	(7): ID=7, P=7, IC=0, MI=0000000000b, L=0
(8): ID=8, P=8, IC=0, MI=0000000000b, L=0			

Message-S6: STM requests display of indicators 2, 4, ...16 at positions 1-8 with captions			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	94	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=706, N=8, ID=2, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC1202"			
(2): ID=4, P=2, IC=0, MI=1000010000b, L=6, T="CC0804"		(3): ID=6, P=3, IC=0, MI=1000010000b, L=6, T="RC1206"	
(4): ID=8, P=4, IC=0, MI=1000010000b, L=6, T="CU1008"		(5): ID=10, P=5, IC=0, MI=1000010000b, L=6, T="CL140A"	
(6): ID=12, P=6, IC=0, MI=1000010000b, L=6, T="RC200C"		(7): ID=14, P=7, IC=0, MI=1000010000b, L=6, T="LC400E"	
(8): ID=16, P=8, IC=0, MI=1000010000b, L=6, T="CC4010"			

Message-S7: STM requests display of indicators 2, 4, ...16 at positions 2-8, 1 with captions			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	94	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=706, N=8, ID=2, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC1202"			
(2): ID=4, P=3, IC=0, MI=1000010000b, L=6, T="CC0804"		(3): ID=6, P=4, IC=0, MI=1000010000b, L=6, T="RC1206"	
(4): ID=8, P=5, IC=0, MI=1000010000b, L=6, T="CU1008"		(5): ID=10, P=6, IC=0, MI=1000010000b, L=6, T="CL140A"	
(6): ID=12, P=7, IC=0, MI=1000010000b, L=6, T="RC200C"		(7): ID=14, P=8, IC=0, MI=1000010000b, L=6, T="LC400E"	
(8): ID=16, P=1, IC=0, MI=1000010000b, L=6, T="CC4010"			

Message-S8: STM requests display of indicators 2, 4, ...16 at positions 3-8, 1-2 with captions			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	94	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=706, N=8, ID=2, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC1202"			
(2): ID=4, P=4, IC=0, MI=1000010000b, L=6, T="CC0804"		(3): ID=6, P=5, IC=0, MI=1000010000b, L=6, T="RC1206"	
(4): ID=8, P=6, IC=0, MI=1000010000b, L=6, T="CU1008"		(5): ID=10, P=7, IC=0, MI=1000010000b, L=6, T="CL140A"	
(6): ID=12, P=8, IC=0, MI=1000010000b, L=6, T="RC200C"		(7): ID=14, P=1, IC=0, MI=1000010000b, L=6, T="LC400E"	
(8): ID=16, P=2, IC=0, MI=1000010000b, L=6, T="CC4010"			

Message-S9: STM requests display of indicators 2, 4, ...16 at positions 4-8, 1-3 with captions			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	94	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=706, N=8, ID=2, P=4, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC1202"			
(2): ID=4, P=5, IC=0, MI=1000010000b, L=6, T="CC0804"		(3): ID=6, P=6, IC=0, MI=1000010000b, L=6, T="RC1206"	
(4): ID=8, P=7, IC=0, MI=1000010000b, L=6, T="CU1008"		(5): ID=10, P=8, IC=0, MI=1000010000b, L=6, T="CL140A"	
(6): ID=12, P=1, IC=0, MI=1000010000b, L=6, T="RC200C"		(7): ID=14, P=2, IC=0, MI=1000010000b, L=6, T="LC400E"	
(8): ID=16, P=3, IC=0, MI=1000010000b, L=6, T="CC4010"			

Message-S10: STM requests display of indicators 2, 4, ...16 at positions 5-8, 1-4 with captions			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	94	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=706, N=8, ID=2, P=5, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC1202"			
(2): ID=4, P=6, IC=0, MI=1000010000b, L=6, T="CC0804"		(3): ID=6, P=7, IC=0, MI=1000010000b, L=6, T="RC1206"	
(4): ID=8, P=8, IC=0, MI=1000010000b, L=6, T="CU1008"		(5): ID=10, P=1, IC=0, MI=1000010000b, L=6, T="CL140A"	
(6): ID=12, P=2, IC=0, MI=1000010000b, L=6, T="RC200C"		(7): ID=14, P=3, IC=0, MI=1000010000b, L=6, T="LC400E"	
(8): ID=16, P=4, IC=0, MI=1000010000b, L=6, T="CC4010"			

Message-S11: STM requests display of indicators 2, 4, ...16 at positions 6-8, 1-5 with captions			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	94	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=706, N=8, ID=2, P=6, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC1202"			
(2): ID=4, P=7, IC=0, MI=1000010000b, L=6, T="CC0804"		(3): ID=6, P=8, IC=0, MI=1000010000b, L=6, T="RC1206"	
(4): ID=8, P=1, IC=0, MI=1000010000b, L=6, T="CU1008"		(5): ID=10, P=2, IC=0, MI=1000010000b, L=6, T="CL140A"	
(6): ID=12, P=3, IC=0, MI=1000010000b, L=6, T="RC200C"		(7): ID=14, P=4, IC=0, MI=1000010000b, L=6, T="LC400E"	
(8): ID=16, P=5, IC=0, MI=1000010000b, L=6, T="CC4010"			

Message-S12: STM requests display of indicators 2, 4, ...16 at positions 7-8, 1-6 with captions			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	94	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=706, N=8, ID=2, P=7, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC1202"			
(2): ID=4, P=8, IC=0, MI=1000010000b, L=6, T="CC0804"		(3): ID=6, P=1, IC=0, MI=1000010000b, L=6, T="RC1206"	
(4): ID=8, P=2, IC=0, MI=1000010000b, L=6, T="CU1008"		(5): ID=10, P=3, IC=0, MI=1000010000b, L=6, T="CL140A"	
(6): ID=12, P=4, IC=0, MI=1000010000b, L=6, T="RC200C"		(7): ID=14, P=5, IC=0, MI=1000010000b, L=6, T="LC400E"	
(8): ID=16, P=6, IC=0, MI=1000010000b, L=6, T="CC4010"			

Message-S13: STM requests display of indicators 2, 4, ...16 at positions 8, 1-7 with captions			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	94	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=706, N=8, ID=2, P=8, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC1202"			
(2): ID=4, P=1, IC=0, MI=1000010000b, L=6, T="CC0804"		(3): ID=6, P=2, IC=0, MI=1000010000b, L=6, T="RC1206"	
(4): ID=8, P=3, IC=0, MI=1000010000b, L=6, T="CU1008"		(5): ID=10, P=4, IC=0, MI=1000010000b, L=6, T="CL140A"	
(6): ID=12, P=5, IC=0, MI=1000010000b, L=6, T="RC200C"		(7): ID=14, P=6, IC=0, MI=1000010000b, L=6, T="LC400E"	
(8): ID=16, P=7, IC=0, MI=1000010000b, L=6, T="CC4010"			

Message-S14: STM requests display of indicators 2, 4, ...16 at positions 1-8 with icons.			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=322, N=8, ID=2, P=1, IC=1, MI=1000010000b (black on red, No flashing), L=0			
(2): ID=4, P=2, IC=2, MI=1000010000b, L=0		(3): ID=6, P=3, IC=10, MI=1000010000b, L=0	
(4): ID=8, P=4, IC=11, MI=1000010000b, L=0		(5): ID=10, P=5, IC=12, MI=1000010000b, L=0	
(6): ID=12, P=6, IC=13, MI=1000010000b, L=0		(7): ID=14, P=7, IC=20, MI=1000010000b, L=0	
(8): ID=16, P=8, IC=21, MI=1000010000b, L=0			

Message-S15: STM requests display of indicators 2, 4, ...16 at positions 2-8, 1 with icons.			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=322, N=8, ID=2, P=2, IC=1, MI=1000010000b (black on red, No flashing), L=0			
(2): ID=4, P=3, IC=2, MI=1000010000b, L=0		(3): ID=6, P=4, IC=10, MI=1000010000b, L=0	
(4): ID=8, P=5, IC=11, MI=1000010000b, L=0		(5): ID=10, P=6, IC=12, MI=1000010000b, L=0	
(6): ID=12, P=7, IC=13, MI=1000010000b, L=0		(7): ID=14, P=8, IC=20, MI=1000010000b, L=0	
(8): ID=16, P=1, IC=21, MI=1000010000b, L=0			

Message-S16: STM requests display of indicators 2, 4, ...16 at positions 3-8, 1-2 with icons.			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=322, N=8, ID=2, P=3, IC=1, MI=1000010000b (black on red, No flashing), L=0			
(2): ID=4, P=4, IC=2, MI=1000010000b, L=0		(3): ID=6, P=5, IC=10, MI=1000010000b, L=0	
(4): ID=8, P=6, IC=11, MI=1000010000b, L=0		(5): ID=10, P=7, IC=12, MI=1000010000b, L=0	
(6): ID=12, P=8, IC=13, MI=1000010000b, L=0		(7): ID=14, P=1, IC=20, MI=1000010000b, L=0	
(8): ID=16, P=2, IC=21, MI=1000010000b, L=0			

Message-S17: STM requests display of indicators 2, 4, ...16 at positions 4-8, 1-3 with icons.			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=322, N=8, ID=2, P=4, IC=1, MI=1000010000b (black on red, No flashing), L=0			
(2): ID=4, P=5, IC=2, MI=1000010000b, L=0		(3): ID=6, P=6, IC=10, MI=1000010000b, L=0	
(4): ID=8, P=7, IC=11, MI=1000010000b, L=0		(5): ID=10, P=8, IC=12, MI=1000010000b, L=0	
(6): ID=12, P=1, IC=13, MI=1000010000b, L=0		(7): ID=14, P=2, IC=20, MI=1000010000b, L=0	
(8): ID=16, P=3, IC=21, MI=1000010000b, L=0			

Message-S18: STM requests display of indicators 2, 4, ...16 at positions 5-8, 1-4 with icons.			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=322, N=8, ID=2, P=5, IC=1, MI=1000010000b (black on red, No flashing), L=0			
(2): ID=4, P=6, IC=2, MI=1000010000b, L=0		(3): ID=6, P=7, IC=10, MI=1000010000b, L=0	
(4): ID=8, P=8, IC=11, MI=1000010000b, L=0		(5): ID=10, P=1, IC=12, MI=1000010000b, L=0	
(6): ID=12, P=2, IC=13, MI=1000010000b, L=0		(7): ID=14, P=3, IC=20, MI=1000010000b, L=0	
(8): ID=16, P=4, IC=21, MI=1000010000b, L=0			

Message-S19: STM requests display of indicators 2, 4, ...16 at positions 6-8, 1-5 with icons.			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=322, N=8, ID=2, P=6, IC=1, MI=1000010000b (black on red, No flashing), L=0			
(2): ID=4, P=7, IC=2, MI=1000010000b, L=0		(3): ID=6, P=8, IC=10, MI=1000010000b, L=0	
(4): ID=8, P=1, IC=11, MI=1000010000b, L=0		(5): ID=10, P=2, IC=12, MI=1000010000b, L=0	
(6): ID=12, P=3, IC=13, MI=1000010000b, L=0		(7): ID=14, P=4, IC=20, MI=1000010000b, L=0	
(8): ID=16, P=5, IC=21, MI=1000010000b, L=0			

Message-S20: STM requests display of indicators 2, 4, ...16 at positions 7-8, 1-6 with icons.			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=322, N=8, ID=2, P=7, IC=1, MI=1000010000b (black on red, No flashing), L=0			
(2): ID=4, P=8, IC=2, MI=1000010000b, L=0		(3): ID=6, P=1, IC=10, MI=1000010000b, L=0	
(4): ID=8, P=2, IC=11, MI=1000010000b, L=0		(5): ID=10, P=3, IC=12, MI=1000010000b, L=0	
(6): ID=12, P=4, IC=13, MI=1000010000b, L=0		(7): ID=14, P=5, IC=20, MI=1000010000b, L=0	
(8): ID=16, P=6, IC=21, MI=1000010000b, L=0			

Message-S21: STM requests display of indicators 2, 4, ...16 at positions 8, 1-7 with icons.			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=322, N=8, ID=2, P=8, IC=1, MI=1000010000b (black on red, No flashing), L=0			
(2): ID=4, P=1, IC=2, MI=1000010000b, L=0		(3): ID=6, P=2, IC=10, MI=1000010000b, L=0	
(4): ID=8, P=3, IC=11, MI=1000010000b, L=0		(5): ID=10, P=4, IC=12, MI=1000010000b, L=0	
(6): ID=12, P=5, IC=13, MI=1000010000b, L=0		(7): ID=14, P=6, IC=20, MI=1000010000b, L=0	
(8): ID=16, P=7, IC=21, MI=1000010000b, L=0			

2.2.9 Test Case 7b2.9

TEST CASE HEADER



Test case identification	DMI Function
	7b2.0.2.1.1.1.3.0
	Indicator identities test for configuration 7a.8 with single indicator requests: First indicators (with ids 1 -8) are displayed with caption in a loop one after the other at the same position, the new request replacing the old indicator. Then indicators (with ids 9-16) are displayed with caption and then deleted by display with attribute 'no display' in a loop one after the other at the same position. Then the first indicator is moved through positions 9-13 with text.
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.3, 13.4.1.4, 13.4.1.9, 13.4.1.11
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service: 7a.8. The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b2.1 The caption of indicators in the test case indicates the alignment, the font size and the indicator id. The caption has the format <horizontal alignment><vertical alignment><Indicator id in hex-format> with <horizontal alignment> = L, C or R for left, centred or right horizontal alignment, <vertical alignment> = L, C or U for lower part, centred or upper part vertical alignment. example: caption = 'CL4010' for indicator 16 with font size 40, centred horizontal, lower part vertical alignment.

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
	Request of single indicator with replacement						



1	STM requests display of indicator 1 at position 2	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicator with caption LU1001 is displayed at position 2 with font size 10 horizontal alignment L and vertical alignment U
2	STM requests display of indicator 2 at position 2	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Indicator with caption LC1202 is displayed at position 2 with font size 12 horizontal alignment L and vertical alignment C
3	STM requests display of indicator 3 at position 2	PROF	T0+10s	connection of active DMI channel: Message-S3	DMI		Indicator with caption LL1403 is displayed at position 2 with font size 14 horizontal alignment L and vertical alignment L
4	STM requests display of indicator 4 at position 2	PROF	T0+15s	connection of active DMI channel: Message-S4	DMI		Indicator with caption CC0804 is displayed at position 2 with font size 08 horizontal alignment C and vertical alignment C
5	STM requests display of indicator 5 at position 2	PROF	T0+20s	connection of active DMI channel: Message-S5	DMI		Indicator with caption RU1005 is displayed at position 2 with font size 10 horizontal alignment R and vertical alignment U
6	STM requests display of indicator 6 at position 2	PROF	T0+25s	connection of active DMI channel: Message-S6	DMI		Indicator with caption RC1206 is displayed at position 2 with font size 12 horizontal alignment R and vertical alignment C
7	STM requests display of indicator 7 at position 2	PROF	T0+30s	connection of active DMI channel: Message-S7	DMI		Indicator with caption RL1407 is displayed at position 2 with font size 14 horizontal alignment R and vertical alignment L
8	STM requests display of indicator 8 at position 2	PROF	T0+35s	connection of active DMI channel: Message-S8	DMI		Indicator with caption CU1008 is displayed at position 2 with font size 10 horizontal alignment C and vertical alignment U



	Request of single indicator with deletion						
9	STM requests display of indicator 9 at position 2	PROF	T0+40s	connection of active DMI channel: Message-S9	DMI		Indicator with caption CC1209 is displayed at position 2 with font size 12 horizontal alignment C and vertical alignment C
10	STM removes indicator 9	PROF	T0+45s	connection of active DMI channel: Message-S10	DMI		No indicators are displayed
11	STM requests display of indicator 10 at position 2	PROF	T0+50s	connection of active DMI channel: Message-S11	DMI		Indicator with caption CL140A is displayed at position 2 with font size 14 horizontal alignment C and vertical alignment L
12	STM removes indicator 10	PROF	T0+55s	connection of active DMI channel: Message-S12	DMI		No indicators are displayed
13	STM requests display of indicator 11 at position 2	PROF	T0+60s	connection of active DMI channel: Message-S13	DMI		Indicator with caption LC200B is displayed at position 2 with font size 20 horizontal alignment L and vertical alignment C
14	STM removes indicator 11	PROF	T0+65s	connection of active DMI channel: Message-S14	DMI		No indicators are displayed
15	STM requests display of indicator 12 at position 2	PROF	T0+70s	connection of active DMI channel: Message-S15	DMI		Indicator with caption RC200C is displayed at position 2 with font size 20 horizontal alignment R and vertical alignment C
16	STM removes indicator 12	PROF	T0+75s	connection of active DMI channel: Message-S16	DMI		No indicators are displayed
17	STM requests display of indicator 13 at position 2	PROF	T0+80s	connection of active DMI channel: Message-S17	DMI		Indicator with caption CC200D is displayed at position 2 with font size 20 horizontal alignment C and vertical alignment C
18	STM removes indicator 13	PROF	T0+85s	connection of active DMI channel:	DMI		No indicators are displayed



				Message-S18			
19	STM requests display of indicator 14 at position 2	PROF	T0+90s	connection of active DMI channel: Message-S19	DMI		Indicator with caption LC400E is displayed at position 2 with font size 40 horizontal alignment L and vertical alignment C
20	STM removes indicator 14	PROF	T0+95s	connection of active DMI channel: Message-S20	DMI		No indicators are displayed
21	STM requests display of indicator 15 at position 2	PROF	T0+100s	connection of active DMI channel: Message-S21	DMI		Indicator with caption RC400F is displayed at position 2 with font size 40 horizontal alignment R and vertical alignment C
22	STM removes indicator 15	PROF	T0+105s	connection of active DMI channel: Message-S22	DMI		No indicators are displayed
23	STM requests display of indicator 16 at position 2	PROF	T0+110s	connection of active DMI channel: Message-S23	DMI		Indicator with caption CC4010 is displayed at position 2 with font size 40 horizontal alignment C and vertical alignment C
24	STM removes indicator 16	PROF	T0+115s	connection of active DMI channel: Message-S24	DMI		No indicators are displayed
	Moving single indicator through positions with caption						
25	STM requests display of indicator 1 at position 9	PROF	T0+120s	connection of active DMI channel: Message-S25	DMI		Indicator 1 is displayed at position 9 with caption LU1001 with font size and alignment according to caption
26	STM requests display of indicator 1 at position 10	PROF	T0+125s	connection of active DMI channel: Message-S26	DMI		Indicator 1 is displayed at position 10 with caption LU1001 with font size and alignment according to caption
27	STM requests display of indicator 1 at position 11	PROF	T0+130s	connection of active DMI channel: Message-S27	DMI		Indicator 1 is displayed at position 11 with caption LU1001 with font size and alignment according to



							caption
28	STM requests display of indicator 1 at position 12	PROF	T0+135s	connection of active DMI channel: Message-S28	DMI		Indicator 1 is displayed at position 12 with caption LU1001 with font size and alignment according to caption
29	STM requests display of indicator 1 at position 13	PROF	T0+140s	connection of active DMI channel: Message-S29	DMI		Indicator 1 is displayed at position 13 with caption LU1001 with font size and alignment according to caption

Message-S1: STM requests display of indicator 1 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	111	Packet Length
N_ITER	5	1	Request for 1 indicator
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	2	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	6	Caption="LU1001"
X_CAPTION(1,1)	8	"L"	



X_CAPTION(1,2)	8	"U"	
X_CAPTION(1,3)	8	"1"	
X_CAPTION(1,4)	8	"0"	
X_CAPTION(1,5)	8	"0"	
X_CAPTION(1,6)	8	"1"	

Message-S2: STM requests display of indicator 2 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=2, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC1202"			

Message-S3: STM requests display of indicator 3 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=3, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LL1403"			

Message-S4: STM requests display of indicator 4 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length



STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=4, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC0804"			
Message-S5: STM requests display of indicator 5 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=5, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU1005"			
Message-S6: STM requests display of indicator 6 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=6, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RC1206"			
Message-S7: STM requests display of indicator 7 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=7, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RL1407"			



Message-S8: STM requests display of indicator 8 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=8, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CU1008"			

Message-S9: STM requests display of indicator 9 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=9, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC1209"			

Message-S10: STM removes indicator 9			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	63	Packet Length
N_ITER	5	1	Request for 1 indicator



NID_INDICATOR(1)	8	9	Indicator 9
NID_INDPOS(1)	5	2	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	0000000000b	No display
L_CAPTION(1)	6	0	

Message-S11: STM requests display of indicator 10 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=10, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CL140A"			

Message-S12: STM removes indicator 10			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=10, P=2, IC=0, MI=0000000000b, L=0			

Message-S13: STM requests display of indicator 11 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length



STM-15: PL=25, ST=7, (State DA)

STM-35: PL=111, N=1, ID=11, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC200B"

Message-S14: STM removes indicator 11

VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length

STM-15: PL=25, ST=7, (State DA)

STM-35: PL=63, N=1, ID=11, P=2, IC=0, MI=0000000000b, L=0

Message-S15: STM requests display of indicator 12 at position 2

VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length

STM-15: PL=25, ST=7, (State DA)

STM-35: PL=111, N=1, ID=12, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RC200C"

Message-S16: STM removes indicator 12

VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length

STM-15: PL=25, ST=7, (State DA)

STM-35: PL=63, N=1, ID=12, P=2, IC=0, MI=0000000000b, L=0



Message-S17: STM requests display of indicator 13 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=13, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC200D"			

Message-S18: STM removes indicator 13			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=13, P=2, IC=0, MI=0000000000b, L=0			

Message-S19: STM requests display of indicator 14 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=14, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC400E"			

Message-S20: STM removes indicator 14			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=14, P=2, IC=0, MI=0000000000b, L=0			

Message-S21: STM requests display of indicator 15 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=15, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RC400F"			

Message-S22: STM removes indicator 15			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=15, P=2, IC=0, MI=0000000000b, L=0			

Message-S23: STM requests display of indicator 16 at position 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=16, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC4010"			



Message-S24: STM removes indicator 16			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=2, IC=0, MI=0000000000b, L=0			

Message-S25: STM requests display of indicator 1 at position 9			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=1, P=9, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU1001"			

Message-S26: STM requests display of indicator 1 at position 10			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=1, P=10, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU1001"			

Message-S27: STM requests display of indicator 1 at position 11			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=1, P=11, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU1001"			

Message-S28: STM requests display of indicator 1 at position 12			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=1, P=12, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU1001"			

Message-S29: STM requests display of indicator 1 at position 13			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=1, P=13, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU1001"			

2.2.10 Test Case 7b2.10

TEST CASE HEADER	
Test case identification	DMI Function
	7b2.0.2.2.2.2.3.0



	<p>Indicator identities test for configuration 7a.8 requests for set of indicators:</p> <p>First indicators are displayed with captions in sets of 8 indicators at once at positions 1-8 in a loop until all are displayed, the new request replacing the old indicators. Then indicators are displayed with captions in sets of 8 indicators at once at positions 14-21 and then deleted by display with attribute 'no display' in a loop until all are displayed. Then all 16 indicators are shifted through 7 positions with text.</p>
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.3, 13.4.1.4, 13.4.1.9, 13.4.1.11
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	<p>For active STM: Customisable DMI service: 7a.8.</p> <p>The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9</p>
Comments and constraints	<p>Starting and end conditions as for test case 7b2.1</p> <p>The caption of indicators in the test case indicates the alignment, the font size and the indicator id.</p> <p>The caption has the format <horizontal alignment><vertical alignment><Indicator id in hex-format> with</p> <p><horizontal alignment> = L, C or R for left, centred or right horizontal alignment,</p> <p><vertical alignment> = L, C or U for lower part, centred or upper part vertical alignment.</p> <p>example: caption = 'CL4010' for indicator 16 with font size 40, centred horizontal, lower part vertical alignment.</p>

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
	Request of set of indicators with replacement						
1	STM requests display of indicators 1 - 8 at positions 1-8	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicators 1 - 8 are displayed at positions 1-8 with text and font size

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							and alignment according to caption.
2	STM requests display of indicators 9 - 16 at positions 1-8	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Indicators 9 - 16 are displayed at positions 1-8 with text and font size and alignment according to caption.
	Request of set of indicators with deletion						
3	STM requests display of indicators 9 - 16 at positions 14-21	PROF	T0+10s	connection of active DMI channel: Message-S3	DMI		Indicators 9 - 16 are displayed at positions 14-21 with text and font size and alignment according to caption.
4	STM removes indicators 9 - 16	PROF	T0+15s	connection of active DMI channel: Message-S4	DMI		No indicators are displayed
5	STM requests display of indicators 1 - 8 at positions 14-21	PROF	T0+20s	connection of active DMI channel: Message-S5	DMI		Indicators 1 - 8 are displayed at positions 14-21 with text and font size and alignment according to caption.
6	STM removes indicators 1 - 8	PROF	T0+25s	connection of active DMI channel: Message-S6	DMI		No indicators are displayed
	Shifting set of indicators through positions with caption						
7	STM requests display of indicators 1 - 16 at positions 6-21	PROF	T0+30s	connection of active DMI channel: Message-S7	DMI		All 16 Indicators are displayed at positions 6-21 with text and font size and alignment according to caption
8	STM requests display of indicators 1 - 16 at positions 5-20	PROF	T0+35s	connection of active DMI channel: Message-S8	DMI		All 16 Indicators are displayed at positions 5-20 with text and font size and alignment according to caption
9	STM requests display of indicators 1 - 16 at positions 4-19	PROF	T0+40s	connection of active DMI channel: Message-S9	DMI		All 16 Indicators are displayed at positions 4-19 with text and font size and alignment according to



							caption
10	STM requests display of indicators 1 - 16 at positions 3-18	PROF	T0+45s	connection of active DMI channel: Message-S10	DMI		All 16 Indicators are displayed at positions 3-18 with text and font size and alignment according to caption
11	STM requests display of indicators 1 - 16 at positions 2-17	PROF	T0+50s	connection of active DMI channel: Message-S11	DMI		All 16 Indicators are displayed at positions 2-17 with text and font size and alignment according to caption
12	STM requests display of indicators 1 - 16 at positions 1-16	PROF	T0+55s	connection of active DMI channel: Message-S12	DMI		All 16 Indicators are displayed at positions 1-16 with text and font size and alignment according to caption

Message-S1: STM requests display of indicators 1 - 8 at positions 1-8			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	94	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	706	Packet Length
N_ITER	5	8	Request for 8 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	



M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	6	Caption="LU1001"
X_CAPTION(1,1)	8	"L"	
X_CAPTION(1,2)	8	"U"	
X_CAPTION(1,3)	8	"1"	
X_CAPTION(1,4)	8	"0"	
X_CAPTION(1,5)	8	"0"	
X_CAPTION(1,6)	8	"1"	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000010000b	black on red, No flashing
L_CAPTION(2)	6	6	Caption="LC1202"
X_CAPTION(2,1)	8	"L"	
X_CAPTION(2,2)	8	"C"	
X_CAPTION(2,3)	8	"1"	
X_CAPTION(2,4)	8	"2"	
X_CAPTION(2,5)	8	"0"	
X_CAPTION(2,6)	8	"2"	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000010000b	black on red, No flashing



L_CAPTION(3)	6	6	Caption="LL1403"
X_CAPTION(3,1)	8	"L"	
X_CAPTION(3,2)	8	"L"	
X_CAPTION(3,3)	8	"1"	
X_CAPTION(3,4)	8	"4"	
X_CAPTION(3,5)	8	"0"	
X_CAPTION(3,6)	8	"3"	
NID_INDICATOR(4)	8	4	Indicator 4
NID_INDPOS(4)	5	4	
NID_ICON(4)	8	0	
M_IND_ATTRIB(4)	10	1000010000b	black on red, No flashing
L_CAPTION(4)	6	6	Caption="CC0804"
X_CAPTION(4,1)	8	"C"	
X_CAPTION(4,2)	8	"C"	
X_CAPTION(4,3)	8	"0"	
X_CAPTION(4,4)	8	"8"	
X_CAPTION(4,5)	8	"0"	
X_CAPTION(4,6)	8	"4"	
NID_INDICATOR(5)	8	5	Indicator 5
NID_INDPOS(5)	5	5	
NID_ICON(5)	8	0	
M_IND_ATTRIB(5)	10	1000010000b	black on red, No flashing
L_CAPTION(5)	6	6	Caption="RU1005"



X_CAPTION(5,1)	8	"R"	
X_CAPTION(5,2)	8	"U"	
X_CAPTION(5,3)	8	"1"	
X_CAPTION(5,4)	8	"0"	
X_CAPTION(5,5)	8	"0"	
X_CAPTION(5,6)	8	"5"	
NID_INDICATOR(6)	8	6	Indicator 6
NID_INDPOS(6)	5	6	
NID_ICON(6)	8	0	
M_IND_ATTRIB(6)	10	1000010000b	black on red, No flashing
L_CAPTION(6)	6	6	Caption="RC1206"
X_CAPTION(6,1)	8	"R"	
X_CAPTION(6,2)	8	"C"	
X_CAPTION(6,3)	8	"1"	
X_CAPTION(6,4)	8	"2"	
X_CAPTION(6,5)	8	"0"	
X_CAPTION(6,6)	8	"6"	
NID_INDICATOR(7)	8	7	Indicator 7
NID_INDPOS(7)	5	7	
NID_ICON(7)	8	0	
M_IND_ATTRIB(7)	10	1000010000b	black on red, No flashing
L_CAPTION(7)	6	6	Caption="RL1407"
X_CAPTION(7,1)	8	"R"	



X_CAPTION(7,2)	8	"L"	
X_CAPTION(7,3)	8	"1"	
X_CAPTION(7,4)	8	"4"	
X_CAPTION(7,5)	8	"0"	
X_CAPTION(7,6)	8	"7"	
NID_INDICATOR(8)	8	8	Indicator 8
NID_INDPOS(8)	5	8	
NID_ICON(8)	8	0	
M_IND_ATTRIB(8)	10	1000010000b	black on red, No flashing
L_CAPTION(8)	6	6	Caption="CU1008"
X_CAPTION(8,1)	8	"C"	
X_CAPTION(8,2)	8	"U"	
X_CAPTION(8,3)	8	"1"	
X_CAPTION(8,4)	8	"0"	
X_CAPTION(8,5)	8	"0"	
X_CAPTION(8,6)	8	"8"	
Padding bits	5	00000b	

Message-S2: STM requests display of indicators 9 - 16 at positions 1-8			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	94	Message Length
STM-15: PL=25, ST=7, (State DA)			



STM-35: PL=706, N=8, ID=9, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC1209"	
(2): ID=10, P=2, IC=0, MI=1000010000b, L=6, T="CL140A"	(3): ID=11, P=3, IC=0, MI=1000010000b, L=6, T="LC200B"
(4): ID=12, P=4, IC=0, MI=1000010000b, L=6, T="RC200C"	(5): ID=13, P=5, IC=0, MI=1000010000b, L=6, T="CC200D"
(6): ID=14, P=6, IC=0, MI=1000010000b, L=6, T="LC400E"	(7): ID=15, P=7, IC=0, MI=1000010000b, L=6, T="RC400F"
(8): ID=16, P=8, IC=0, MI=1000010000b, L=6, T="CC4010"	

Message-S3: STM requests display of indicators 9 - 16 at positions 14-21			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	94	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=706, N=8, ID=9, P=14, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC1209"			
(2): ID=10, P=15, IC=0, MI=1000010000b, L=6, T="CL140A"	(3): ID=11, P=16, IC=0, MI=1000010000b, L=6, T="LC200B"		
(4): ID=12, P=17, IC=0, MI=1000010000b, L=6, T="RC200C"	(5): ID=13, P=18, IC=0, MI=1000010000b, L=6, T="CC200D"		
(6): ID=14, P=19, IC=0, MI=1000010000b, L=6, T="LC400E"	(7): ID=15, P=20, IC=0, MI=1000010000b, L=6, T="RC400F"		
(8): ID=16, P=21, IC=0, MI=1000010000b, L=6, T="CC4010"			

Message-S4: STM removes indicators 9 - 16			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
NID_PACKET	8	15	State report from STM (STM-15)



L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	322	Packet Length
N_ITER	5	8	Request for 8 indicators
NID_INDICATOR(1)	8	9	Indicator 9
NID_INDPOS(1)	5	14	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(2)	8	10	Indicator 10
NID_INDPOS(2)	5	15	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(3)	8	11	Indicator 11
NID_INDPOS(3)	5	16	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(4)	8	12	Indicator 12
NID_INDPOS(4)	5	17	
NID_ICON(4)	8	0	



M_IND_ATTRIB(4)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(5)	8	13	Indicator 13
NID_INDPOS(5)	5	18	
NID_ICON(5)	8	0	
M_IND_ATTRIB(5)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(6)	8	14	Indicator 14
NID_INDPOS(6)	5	19	
NID_ICON(6)	8	0	
M_IND_ATTRIB(6)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(7)	8	15	Indicator 15
NID_INDPOS(7)	5	20	
NID_ICON(7)	8	0	
M_IND_ATTRIB(7)	10	0000000000b	No display
L_CAPTION(1)	6	0	
NID_INDICATOR(8)	8	16	Indicator 16
NID_INDPOS(8)	5	21	
NID_ICON(8)	8	0	
M_IND_ATTRIB(8)	10	0000000000b	No display
L_CAPTION(1)	6	0	
Padding bits	5	00000b	



Message-S5: STM requests display of indicators 1 - 8 at positions 14-21			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	94	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=706, N=8, ID=1, P=14, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU1001"			
(2): ID=2, P=15, IC=0, MI=1000010000b, L=6, T="LC1202"		(3): ID=3, P=16, IC=0, MI=1000010000b, L=6, T="LL1403"	
(4): ID=4, P=17, IC=0, MI=1000010000b, L=6, T="CC0804"		(5): ID=5, P=18, IC=0, MI=1000010000b, L=6, T="RU1005"	
(6): ID=6, P=19, IC=0, MI=1000010000b, L=6, T="RC1206"		(7): ID=7, P=20, IC=0, MI=1000010000b, L=6, T="RL1407"	
(8): ID=8, P=21, IC=0, MI=1000010000b, L=6, T="CU1008"			

Message-S6: STM removes indicators 1 - 8			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=322, N=8, ID=1, P=14, IC=0, MI=0000000000b, L=0			
(2): ID=2, P=15, IC=0, MI=0000000000b, L=0		(3): ID=3, P=16, IC=0, MI=0000000000b, L=0	(4): ID=4, P=17, IC=0, MI=0000000000b, L=0
(5): ID=5, P=18, IC=0, MI=0000000000b, L=0		(6): ID=6, P=19, IC=0, MI=0000000000b, L=0	(7): ID=7, P=20, IC=0, MI=0000000000b, L=0
(8): ID=8, P=21, IC=0, MI=0000000000b, L=0			

Message-S7: STM requests display of indicators 1 - 16 at positions 6-21



VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	179	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1386, N=16, ID=1, P=6, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU1001"			
(2): ID=2, P=7, IC=0, MI=1000010000b, L=6, T="LC1202"		(3): ID=3, P=8, IC=0, MI=1000010000b, L=6, T="LL1403"	
(4): ID=4, P=9, IC=0, MI=1000010000b, L=6, T="CC0804"		(5): ID=5, P=10, IC=0, MI=1000010000b, L=6, T="RU1005"	
(6): ID=6, P=11, IC=0, MI=1000010000b, L=6, T="RC1206"		(7): ID=7, P=12, IC=0, MI=1000010000b, L=6, T="RL1407"	
(8): ID=8, P=13, IC=0, MI=1000010000b, L=6, T="CU1008"		(9): ID=9, P=14, IC=0, MI=1000010000b, L=6, T="CC1209"	
(10): ID=10, P=15, IC=0, MI=1000010000b, L=6, T="CL140A"		(11): ID=11, P=16, IC=0, MI=1000010000b, L=6, T="LC200B"	
(12): ID=12, P=17, IC=0, MI=1000010000b, L=6, T="RC200C"		(13): ID=13, P=18, IC=0, MI=1000010000b, L=6, T="CC200D"	
(14): ID=14, P=19, IC=0, MI=1000010000b, L=6, T="LC400E"		(15): ID=15, P=20, IC=0, MI=1000010000b, L=6, T="RC400F"	
(16): ID=16, P=21, IC=0, MI=1000010000b, L=6, T="CC4010"			

Message-S8: STM requests display of indicators 1 - 16 at positions 5-20			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	179	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1386, N=16, ID=1, P=5, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU1001"			
(2): ID=2, P=6, IC=0, MI=1000010000b, L=6, T="LC1202"		(3): ID=3, P=7, IC=0, MI=1000010000b, L=6, T="LL1403"	
(4): ID=4, P=8, IC=0, MI=1000010000b, L=6, T="CC0804"		(5): ID=5, P=9, IC=0, MI=1000010000b, L=6, T="RU1005"	
(6): ID=6, P=10, IC=0, MI=1000010000b, L=6, T="RC1206"		(7): ID=7, P=11, IC=0, MI=1000010000b, L=6, T="RL1407"	



(8): ID=8, P=12, IC=0, MI=1000010000b, L=6, T="CU1008"	(9): ID=9, P=13, IC=0, MI=1000010000b, L=6, T="CC1209"
(10): ID=10, P=14, IC=0, MI=1000010000b, L=6, T="CL140A"	(11): ID=11, P=15, IC=0, MI=1000010000b, L=6, T="LC200B"
(12): ID=12, P=16, IC=0, MI=1000010000b, L=6, T="RC200C"	(13): ID=13, P=17, IC=0, MI=1000010000b, L=6, T="CC200D"
(14): ID=14, P=18, IC=0, MI=1000010000b, L=6, T="LC400E"	(15): ID=15, P=19, IC=0, MI=1000010000b, L=6, T="RC400F"
(16): ID=16, P=20, IC=0, MI=1000010000b, L=6, T="CC4010"	

Message-S9: STM requests display of indicators 1 - 16 at positions 4-19			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	179	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1386, N=16, ID=1, P=4, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU1001"			
(2): ID=2, P=5, IC=0, MI=1000010000b, L=6, T="LC1202"	(3): ID=3, P=6, IC=0, MI=1000010000b, L=6, T="LL1403"		
(4): ID=4, P=7, IC=0, MI=1000010000b, L=6, T="CC0804"	(5): ID=5, P=8, IC=0, MI=1000010000b, L=6, T="RU1005"		
(6): ID=6, P=9, IC=0, MI=1000010000b, L=6, T="RC1206"	(7): ID=7, P=10, IC=0, MI=1000010000b, L=6, T="RL1407"		
(8): ID=8, P=11, IC=0, MI=1000010000b, L=6, T="CU1008"	(9): ID=9, P=12, IC=0, MI=1000010000b, L=6, T="CC1209"		
(10): ID=10, P=13, IC=0, MI=1000010000b, L=6, T="CL140A"	(11): ID=11, P=14, IC=0, MI=1000010000b, L=6, T="LC200B"		
(12): ID=12, P=15, IC=0, MI=1000010000b, L=6, T="RC200C"	(13): ID=13, P=16, IC=0, MI=1000010000b, L=6, T="CC200D"		
(14): ID=14, P=17, IC=0, MI=1000010000b, L=6, T="LC400E"	(15): ID=15, P=18, IC=0, MI=1000010000b, L=6, T="RC400F"		
(16): ID=16, P=19, IC=0, MI=1000010000b, L=6, T="CC4010"			

Message-S10: STM requests display of indicators 1 - 16 at positions 3-18
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VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	179	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1386, N=16, ID=1, P=3, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU1001"			
(2): ID=2, P=4, IC=0, MI=1000010000b, L=6, T="LC1202"		(3): ID=3, P=5, IC=0, MI=1000010000b, L=6, T="LL1403"	
(4): ID=4, P=6, IC=0, MI=1000010000b, L=6, T="CC0804"		(5): ID=5, P=7, IC=0, MI=1000010000b, L=6, T="RU1005"	
(6): ID=6, P=8, IC=0, MI=1000010000b, L=6, T="RC1206"		(7): ID=7, P=9, IC=0, MI=1000010000b, L=6, T="RL1407"	
(8): ID=8, P=10, IC=0, MI=1000010000b, L=6, T="CU1008"		(9): ID=9, P=11, IC=0, MI=1000010000b, L=6, T="CC1209"	
(10): ID=10, P=12, IC=0, MI=1000010000b, L=6, T="CL140A"		(11): ID=11, P=13, IC=0, MI=1000010000b, L=6, T="LC200B"	
(12): ID=12, P=14, IC=0, MI=1000010000b, L=6, T="RC200C"		(13): ID=13, P=15, IC=0, MI=1000010000b, L=6, T="CC200D"	
(14): ID=14, P=16, IC=0, MI=1000010000b, L=6, T="LC400E"		(15): ID=15, P=17, IC=0, MI=1000010000b, L=6, T="RC400F"	
(16): ID=16, P=18, IC=0, MI=1000010000b, L=6, T="CC4010"			

Message-S11: STM requests display of indicators 1 - 16 at positions 2-17			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	179	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1386, N=16, ID=1, P=2, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU1001"			
(2): ID=2, P=3, IC=0, MI=1000010000b, L=6, T="LC1202"		(3): ID=3, P=4, IC=0, MI=1000010000b, L=6, T="LL1403"	
(4): ID=4, P=5, IC=0, MI=1000010000b, L=6, T="CC0804"		(5): ID=5, P=6, IC=0, MI=1000010000b, L=6, T="RU1005"	
(6): ID=6, P=7, IC=0, MI=1000010000b, L=6, T="RC1206"		(7): ID=7, P=8, IC=0, MI=1000010000b, L=6, T="RL1407"	



(8): ID=8, P=9, IC=0, MI=1000010000b, L=6, T="CU1008"	(9): ID=9, P=10, IC=0, MI=1000010000b, L=6, T="CC1209"
(10): ID=10, P=11, IC=0, MI=1000010000b, L=6, T="CL140A"	(11): ID=11, P=12, IC=0, MI=1000010000b, L=6, T="LC200B"
(12): ID=12, P=13, IC=0, MI=1000010000b, L=6, T="RC200C"	(13): ID=13, P=14, IC=0, MI=1000010000b, L=6, T="CC200D"
(14): ID=14, P=15, IC=0, MI=1000010000b, L=6, T="LC400E"	(15): ID=15, P=16, IC=0, MI=1000010000b, L=6, T="RC400F"
(16): ID=16, P=17, IC=0, MI=1000010000b, L=6, T="CC4010"	

Message-S12: STM requests display of indicators 1 - 16 at positions 1-16			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	179	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1386, N=16, ID=1, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU1001"			
(2): ID=2, P=2, IC=0, MI=1000010000b, L=6, T="LC1202"		(3): ID=3, P=3, IC=0, MI=1000010000b, L=6, T="LL1403"	
(4): ID=4, P=4, IC=0, MI=1000010000b, L=6, T="CC0804"		(5): ID=5, P=5, IC=0, MI=1000010000b, L=6, T="RU1005"	
(6): ID=6, P=6, IC=0, MI=1000010000b, L=6, T="RC1206"		(7): ID=7, P=7, IC=0, MI=1000010000b, L=6, T="RL1407"	
(8): ID=8, P=8, IC=0, MI=1000010000b, L=6, T="CU1008"		(9): ID=9, P=9, IC=0, MI=1000010000b, L=6, T="CC1209"	
(10): ID=10, P=10, IC=0, MI=1000010000b, L=6, T="CL140A"		(11): ID=11, P=11, IC=0, MI=1000010000b, L=6, T="LC200B"	
(12): ID=12, P=12, IC=0, MI=1000010000b, L=6, T="RC200C"		(13): ID=13, P=13, IC=0, MI=1000010000b, L=6, T="CC200D"	
(14): ID=14, P=14, IC=0, MI=1000010000b, L=6, T="LC400E"		(15): ID=15, P=15, IC=0, MI=1000010000b, L=6, T="RC400F"	
(16): ID=16, P=16, IC=0, MI=1000010000b, L=6, T="CC4010"			



2.2.11 Test Case 7b2.11

TEST CASE HEADER	
Test case identification	DMI Function
	7b2.0.2.1.1.1.1.0
	Indicator identities test for configuration 7a.9 with single indicator requests: First indicators (with ids 1, 27, ... 105) are displayed with caption in a loop one after the other at the same position, the new request replacing the old indicator. Then indicators (with ids 131, 183, ... 235) are displayed with caption and then deleted by display with attribute 'no display' in a loop one after the other at the same position. Then the indicator 194 is moved through positions 1,5, ... 21 with text. Then the indicator 8 is moved through positions 1, 7, 8, 19 with icon 41.
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.3, 13.4.1.4, 13.4.1.9, 13.4.1.11, 13.4.3.3
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service: 7a.9. The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b2.1 The caption of indicators in the test case indicates the alignment, the font size and the indicator id. The caption has the format <horizontal alignment><vertical alignment><Indicator id in hex-format> with <horizontal alignment> = L, C or R for left, centred or right horizontal alignment, <vertical alignment> = L, C or U for lower part, centred or upper part vertical alignment. example: caption = 'RU0810' for indicator 16 with font size 8, right horizontal, upper part vertical alignment. Indicators are configured in sets of 24 indicators matching the 24 available positions. All indicators of one set have the same horizontal and vertical alignment. The font size increases set by set.



ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
	Request of single indicator with replacement						
1	STM requests display of indicator 1 at position 21	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicator with caption RU0801 is displayed at position 21 with font size 08 horizontal alignment R and vertical alignment U
2	STM requests display of indicator 27 at position 21	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Indicator with caption RL091B is displayed at position 21 with font size 09 horizontal alignment R and vertical alignment L
3	STM requests display of indicator 53 at position 21	PROF	T0+10s	connection of active DMI channel: Message-S3	DMI		Indicator with caption RC1035 is displayed at position 21 with font size 10 horizontal alignment R and vertical alignment C
4	STM requests display of indicator 79 at position 21	PROF	T0+15s	connection of active DMI channel: Message-S4	DMI		Indicator with caption LU144F is displayed at position 21 with font size 14 horizontal alignment L and vertical alignment U
5	STM requests display of indicator 105 at position 21	PROF	T0+20s	connection of active DMI channel: Message-S5	DMI		Indicator with caption LL1669 is displayed at position 21 with font size 16 horizontal alignment L and vertical alignment L
	Request of single indicator with deletion						
6	STM requests display of indicator 131 at position 21	PROF	T0+25s	connection of active DMI channel: Message-S6	DMI		Indicator with caption LC2883 is displayed at position 21 with font size 28 horizontal alignment L and vertical alignment C

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7	STM removes indicator 131	PROF	T0+30s	connection of active DMI channel: Message-S7	DMI		No indicators are displayed
8	STM requests display of indicator 157 at position 21	PROF	T0+35s	connection of active DMI channel: Message-S8	DMI		Indicator with caption CU209D is displayed at position 21 with font size 20 horizontal alignment C and vertical alignment U
9	STM removes indicator 157	PROF	T0+40s	connection of active DMI channel: Message-S9	DMI		No indicators are displayed
10	STM requests display of indicator 183 at position 21	PROF	T0+45s	connection of active DMI channel: Message-S10	DMI		Indicator with caption CL36B7 is displayed at position 21 with font size 36 horizontal alignment C and vertical alignment L
11	STM removes indicator 183	PROF	T0+50s	connection of active DMI channel: Message-S11	DMI		No indicators are displayed
12	STM requests display of indicator 209 at position 21	PROF	T0+55s	connection of active DMI channel: Message-S12	DMI		Indicator with caption CC40D1 is displayed at position 21 with font size 40 horizontal alignment C and vertical alignment C
13	STM removes indicator 209	PROF	T0+60s	connection of active DMI channel: Message-S13	DMI		No indicators are displayed
14	STM requests display of indicator 235 at position 21	PROF	T0+65s	connection of active DMI channel: Message-S14	DMI		Indicator with caption RU26EB is displayed at position 21 with font size 26 horizontal alignment R and vertical alignment U
15	STM removes indicator 235	PROF	T0+70s	connection of active DMI channel: Message-S15	DMI		No indicators are displayed
	Moving single indicator through positions with caption						
16	STM requests display of indicator 194 at position 1 with caption 'CC16C2'	PROF	T0+75s	connection of active DMI channel: Message-S16	DMI		Indicator is displayed at position 1 with caption 'CC16C2' with font size and alignment according to caption



17	STM requests display of indicator 194 at position 5 with caption 'CC16C2'	PROF	T0+80s	connection of active DMI channel: Message-S17	DMI		Indicator is moved to position 5 with caption 'CC16C2' with font size and alignment according to caption
18	STM requests display of indicator 194 at position 9 with caption 'CC16C2'	PROF	T0+85s	connection of active DMI channel: Message-S18	DMI		Indicator is moved to position 9 with caption 'CC16C2' with font size and alignment according to caption
19	STM requests display of indicator 194 at position 13 with caption 'CC16C2'	PROF	T0+90s	connection of active DMI channel: Message-S19	DMI		Indicator is moved to position 13 with caption 'CC16C2' with font size and alignment according to caption
20	STM requests display of indicator 194 at position 17 with caption 'CC16C2'	PROF	T0+95s	connection of active DMI channel: Message-S20	DMI		Indicator is moved to position 17 with caption 'CC16C2' with font size and alignment according to caption
21	STM requests display of indicator 194 at position 21 with caption 'CC16C2'	PROF	T0+100s	connection of active DMI channel: Message-S21	DMI		Indicator is moved to position 21 with caption 'CC16C2' with font size and alignment according to caption
	Moving single indicator through positions with icon						
22	STM requests display of indicator 8 at position 1 with icon 41 (oil can red).	PROF	T0+105s	connection of active DMI channel: Message-S22	DMI		Indicator is displayed at position 1 with icon 41 (oil can red).
23	STM requests display of indicator 8 at position 7 with icon 41 (oil can red).	PROF	T0+110s	connection of active DMI channel: Message-S23	DMI		Indicator is moved to position 7
24	STM requests display of indicator 8 at position 8 with icon 41 (oil can red).	PROF	T0+115s	connection of active DMI channel: Message-S24	DMI		Indicator is moved to position 8
25	STM requests display of indicator 8 at position 19 with icon 41 (oil can red).	PROF	T0+120s	connection of active DMI channel: Message-S25	DMI		Indicator is moved to position 19

Message-S1: STM requests display of indicator 1 at position 21

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VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	111	Packet Length
N_ITER	5	1	Request for 1 indicator
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	21	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	6	Caption="RU0801"
X_CAPTION(1,1)	8	"R"	
X_CAPTION(1,2)	8	"U"	
X_CAPTION(1,3)	8	"0"	
X_CAPTION(1,4)	8	"8"	
X_CAPTION(1,5)	8	"0"	
X_CAPTION(1,6)	8	"1"	

Message-S2: STM requests display of indicator 27 at position 21

VARIABLE	Length	VALUE	COMMENT
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NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=27, P=21, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RL091B"			

Message-S3: STM requests display of indicator 53 at position 21			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=53, P=21, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RC1035"			

Message-S4: STM requests display of indicator 79 at position 21			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=79, P=21, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU144F"			

Message-S5: STM requests display of indicator 105 at position 21			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			



STM-35: PL=111, N=1, ID=105, P=21, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LL1669"

Message-S6: STM requests display of indicator 131 at position 21

VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length

STM-15: PL=25, ST=7, (State DA)

STM-35: PL=111, N=1, ID=131, P=21, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC2883"

Message-S7: STM removes indicator 131

VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length

STM-15: PL=25, ST=7, (State DA)

STM-35: PL=63, N=1, ID=131, P=21, IC=0, MI=0000000000b, L=0

Message-S8: STM requests display of indicator 157 at position 21

VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length

STM-15: PL=25, ST=7, (State DA)

STM-35: PL=111, N=1, ID=157, P=21, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CU209D"

Message-S9: STM removes indicator 157



VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=157, P=21, IC=0, MI=0000000000b, L=0			

Message-S10: STM requests display of indicator 183 at position 21			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=183, P=21, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CL36B7"			

Message-S11: STM removes indicator 183			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=183, P=21, IC=0, MI=0000000000b, L=0			

Message-S12: STM requests display of indicator 209 at position 21			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length



STM-15: PL=25, ST=7, (State DA)

STM-35: PL=111, N=1, ID=209, P=21, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC40D1"

Message-S13: STM removes indicator 209

VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length

STM-15: PL=25, ST=7, (State DA)

STM-35: PL=63, N=1, ID=209, P=21, IC=0, MI=0000000000b, L=0

Message-S14: STM requests display of indicator 235 at position 21

VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length

STM-15: PL=25, ST=7, (State DA)

STM-35: PL=111, N=1, ID=235, P=21, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU26EB"

Message-S15: STM removes indicator 235

VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length

STM-15: PL=25, ST=7, (State DA)

STM-35: PL=63, N=1, ID=235, P=21, IC=0, MI=0000000000b, L=0



Message-S16: STM requests display of indicator 194 at position 1 with caption 'CC16C2'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=194, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC16C2"			

Message-S17: STM requests display of indicator 194 at position 5 with caption 'CC16C2'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=194, P=5, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC16C2"			

Message-S18: STM requests display of indicator 194 at position 9 with caption 'CC16C2'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=194, P=9, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC16C2"			

Message-S19: STM requests display of indicator 194 at position 13 with caption 'CC16C2'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=194, P=13, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC16C2"			

Message-S20: STM requests display of indicator 194 at position 17 with caption 'CC16C2'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=194, P=17, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC16C2"			

Message-S21: STM requests display of indicator 194 at position 21 with caption 'CC16C2'			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	19	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=111, N=1, ID=194, P=21, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC16C2"			

Message-S22: STM requests display of indicator 8 at position 1 with icon 41 (oil can red).			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=8, P=1, IC=41, MI=1000010000b (black on red, No flashing), L=0			



Message-S23: STM requests display of indicator 8 at position 7 with icon 41 (oil can red).			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=8, P=7, IC=41, MI=1000010000b (black on red, No flashing), L=0			

Message-S24: STM requests display of indicator 8 at position 8 with icon 41 (oil can red).			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=8, P=8, IC=41, MI=1000010000b (black on red, No flashing), L=0			

Message-S25: STM requests display of indicator 8 at position 19 with icon 41 (oil can red).			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=8, P=19, IC=41, MI=1000010000b (black on red, No flashing), L=0			



2.2.12 Test Case 7b2.12

TEST CASE HEADER	
Test case identification	DMI Function
	7b2.0.2.2.2.2.0
	Indicator identities test for configuration 7a.9 requests for set of indicators: First indicators are displayed with captions in sets of 24 indicators at once at positions 1-24 in a loop, the new request replacing the old indicators. Then indicators are displayed with captions in sets of 24 indicators at once at positions 1-24 and then deleted by display with attribute 'no display' in a loop. Then the indicators 1-24 are shifted with text. Then some indicators with icons are moved to an alternative position.
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.3, 13.4.1.4, 13.4.1.9, 13.4.1.11, 13.4.3.3
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service: 7a.9. The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b2.1 The caption of indicators in the test case indicates the alignment, the font size and the indicator id. The caption has the format <horizontal alignment><vertical alignment><Indicator id in hex-format> with <horizontal alignment> = L, C or R for left, centred or right horizontal alignment, <vertical alignment> = L, C or U for lower part, centred or upper part vertical alignment. example: caption = 'RU0810' for indicator 16 with font size 8, right horizontal, upper part vertical alignment. Indicators are configured in sets of 24 indicators matching the 24 available positions. All indicators of one set have the same horizontal and vertical alignment. The font size increases set by set.



ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
	Request of set of indicators with replacement						
1	STM requests display of indicators 1 - 12 at positions 1-12	PROF	T0	connection of active DMI channel: Message-S1	DMI		
2	STM requests display of indicators 13 - 24 at positions 13-24	PROF	T0	connection of active DMI channel: Message-S2	DMI		Indicators 1 - 24 are displayed at positions 1-24 with font size according to caption and horizontal alignment R and vertical alignment U
3	STM requests display of indicators 25 - 36 at positions 1-12	PROF	T0+5s	connection of active DMI channel: Message-S3	DMI		
4	STM requests display of indicators 37 - 48 at positions 13-24	PROF	T0+5s	connection of active DMI channel: Message-S4	DMI		Indicators 25 - 48 are displayed at positions 1-24 with font size according to caption and horizontal alignment R and vertical alignment L
5	STM requests display of indicators 49 - 60 at positions 1-12	PROF	T0+10s	connection of active DMI channel: Message-S5	DMI		
6	STM requests display of indicators 61 - 72 at positions 13-24	PROF	T0+10s	connection of active DMI channel: Message-S6	DMI		Indicators 49 - 72 are displayed at positions 1-24 with font size according to caption and horizontal alignment R and vertical alignment C
7	STM requests display of indicators 73 - 84 at positions 1-12	PROF	T0+15s	connection of active DMI channel: Message-S7	DMI		
8	STM requests display of indicators 85 - 96 at positions 13-24	PROF	T0+15s	connection of active DMI channel: Message-S8	DMI		Indicators 73 - 96 are displayed at positions 1-24 with font size according to caption and horizontal



							alignment L and vertical alignment U
9	STM requests display of indicators 97 - 108 at positions 1-12	PROF	T0+20s	connection of active DMI channel: Message-S9	DMI		
10	STM requests display of indicators 109 - 120 at positions 13-24	PROF	T0+20s	connection of active DMI channel: Message-S10	DMI		Indicators 97 - 120 are displayed at positions 1-24 with font size according to caption and horizontal alignment L and vertical alignment L
11	STM requests display of indicators 121 - 132 at positions 1-12	PROF	T0+25s	connection of active DMI channel: Message-S11	DMI		
12	STM requests display of indicators 133 - 144 at positions 13-24	PROF	T0+25s	connection of active DMI channel: Message-S12	DMI		Indicators 121 - 144 are displayed at positions 1-24 with font size according to caption and horizontal alignment L and vertical alignment C
	Request of set of indicators with deletion						
13	STM requests display of indicators 145 - 156 at positions 1-12	PROF	T0+30s	connection of active DMI channel: Message-S13	DMI		
14	STM requests display of indicators 157 - 168 at positions 13-24	PROF	T0+30s	connection of active DMI channel: Message-S14	DMI		Indicators 145 - 168 are displayed at positions 1-24 with font size according to caption and horizontal alignment C and vertical alignment U
15	STM removes indicators 145 - 168	PROF	T0+35s	connection of active DMI channel: Message-S15	DMI		No indicators are displayed
16	STM requests display of indicators 169 - 180 at positions 1-12	PROF	T0+40s	connection of active DMI channel: Message-S16	DMI		
17	STM requests display of indicators 181 - 192 at positions 13-24	PROF	T0+40s	connection of active DMI channel: Message-S17	DMI		Indicators 169 - 192 are displayed at positions 1-24 with font size according to caption and horizontal alignment C and vertical alignment L
18	STM removes indicators 169 - 192	PROF	T0+45s	connection of active DMI channel:	DMI		No indicators are displayed

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				Message-S18			
19	STM requests display of indicators 193 - 204 at positions 1-12	PROF	T0+50s	connection of active DMI channel: Message-S19	DMI		
20	STM requests display of indicators 205 - 216 at positions 13-24	PROF	T0+50s	connection of active DMI channel: Message-S20	DMI		Indicators 193 - 216 are displayed at positions 1-24 with font size according to caption and horizontal alignment C and vertical alignment C
21	STM removes indicators 193 - 216	PROF	T0+55s	connection of active DMI channel: Message-S21	DMI		No indicators are displayed
22	STM requests display of indicators 217 - 228 at positions 1-12	PROF	T0+60s	connection of active DMI channel: Message-S22	DMI		
23	STM requests display of indicators 229 - 240 at positions 13-24	PROF	T0+60s	connection of active DMI channel: Message-S23	DMI		Indicators 217 - 240 are displayed at positions 1-24 with font size according to caption and horizontal alignment R and vertical alignment U
24	STM removes indicators 217 - 240	PROF	T0+65s	connection of active DMI channel: Message-S24	DMI		No indicators are displayed
25	STM requests display of indicators 241 - 252 at positions 1-12	PROF	T0+70s	connection of active DMI channel: Message-S25	DMI		
26	STM requests display of indicators 253 - 255 at positions 13-15	PROF	T0+70s	connection of active DMI channel: Message-S26	DMI		Indicators 241 - 255 are displayed at positions 1-15 with font size according to caption and horizontal alignment C and vertical alignment C
27	STM removes indicators 241 - 255	PROF	T0+75s	connection of active DMI channel: Message-S27	DMI		No indicators are displayed
	Shifting set of indicators through positions with caption						
28	STM requests display of indicators	PROF	T0+80s	connection of active DMI channel:	DMI		



	1-12 at positions 1-12 with captions			Message-S28			
29	STM requests display of indicators 13-24 at positions 13-24 with captions	PROF	T0+80s	connection of active DMI channel: Message-S29	DMI		24 Indicators are displayed at positions 1-24 with captions with font size and alignment according to caption
30	STM requests display of indicators 1-12 at positions 5-16	PROF	T0+85s	connection of active DMI channel: Message-S30	DMI		
31	STM requests display of indicators 13-24 at positions 17-24, 1-4	PROF	T0+85s	connection of active DMI channel: Message-S31	DMI		All indicators are moved by 4 positions with font size and alignment according to caption
32	STM requests display of indicators 1-12 at positions 9-20	PROF	T0+90s	connection of active DMI channel: Message-S32	DMI		
33	STM requests display of indicators 13-24 at positions 21-24, 1-8	PROF	T0+90s	connection of active DMI channel: Message-S33	DMI		All indicators are moved by 4 positions with font size and alignment according to caption
34	STM requests display of indicators 1-12 at positions 13-24	PROF	T0+95s	connection of active DMI channel: Message-S34	DMI		
35	STM requests display of indicators 13-24 at positions 1-12	PROF	T0+95s	connection of active DMI channel: Message-S35	DMI		All indicators are moved by 4 positions with font size and alignment according to caption
36	STM requests display of indicators 1-12 at positions 17-24, 1-4	PROF	T0+100s	connection of active DMI channel: Message-S36	DMI		
37	STM requests display of indicators 13-24 at positions 5-16	PROF	T0+100s	connection of active DMI channel: Message-S37	DMI		All indicators are moved by 4 positions with font size and alignment according to caption
38	STM requests display of indicators 1-12 at positions 21-24, 1-8	PROF	T0+105s	connection of active DMI channel: Message-S38	DMI		
39	STM requests display of indicators 13-24 at positions 9-20	PROF	T0+105s	connection of active DMI channel: Message-S39	DMI		All indicators are moved by 4 positions with font size and alignment according to caption



	Shifting set of indicators through positions with icons						
40	STM requests display of indicators 2,4,7,13,15,23 at positions 2,4,7,13,15,23 with icons.	PROF	T0+110s	connection of active DMI channel: Message-S40	DMI		6 Indicators are displayed at positions 2,4,7,13,15,23 with icons.
41	STM requests display of indicators 2,4,7,13,15,23 at positions 3,5,8,14,16,24 with icons.	PROF	T0+115s	connection of active DMI channel: Message-S41	DMI		All 6 indicators are moved to alternative position with icons.

Message-S1: STM requests display of indicators 1 - 12 at positions 1-12			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	1046	Packet Length
N_ITER	5	12	Request for 12 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	6	Caption="RU0801"
X_CAPTION(1,1)	8	"R"	



X_CAPTION(1,2)	8	"U"	
X_CAPTION(1,3)	8	"0"	
X_CAPTION(1,4)	8	"8"	
X_CAPTION(1,5)	8	"0"	
X_CAPTION(1,6)	8	"1"	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000010000b	black on red, No flashing
L_CAPTION(2)	6	6	Caption="RU0802"
X_CAPTION(2,1)	8	"R"	
X_CAPTION(2,2)	8	"U"	
X_CAPTION(2,3)	8	"0"	
X_CAPTION(2,4)	8	"8"	
X_CAPTION(2,5)	8	"0"	
X_CAPTION(2,6)	8	"2"	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000010000b	black on red, No flashing
L_CAPTION(3)	6	6	Caption="RU0803"
X_CAPTION(3,1)	8	"R"	
X_CAPTION(3,2)	8	"U"	



X_CAPTION(3,3)	8	"0"	
X_CAPTION(3,4)	8	"8"	
X_CAPTION(3,5)	8	"0"	
X_CAPTION(3,6)	8	"3"	
NID_INDICATOR(4)	8	4	Indicator 4
NID_INDPOS(4)	5	4	
NID_ICON(4)	8	0	
M_IND_ATTRIB(4)	10	1000010000b	black on red, No flashing
L_CAPTION(4)	6	6	Caption="RU0804"
X_CAPTION(4,1)	8	"R"	
X_CAPTION(4,2)	8	"U"	
X_CAPTION(4,3)	8	"0"	
X_CAPTION(4,4)	8	"8"	
X_CAPTION(4,5)	8	"0"	
X_CAPTION(4,6)	8	"4"	
NID_INDICATOR(5)	8	5	Indicator 5
NID_INDPOS(5)	5	5	
NID_ICON(5)	8	0	
M_IND_ATTRIB(5)	10	1000010000b	black on red, No flashing
L_CAPTION(5)	6	6	Caption="RU0805"
X_CAPTION(5,1)	8	"R"	
X_CAPTION(5,2)	8	"U"	
X_CAPTION(5,3)	8	"0"	



X_CAPTION(5,4)	8	"8"	
X_CAPTION(5,5)	8	"0"	
X_CAPTION(5,6)	8	"5"	
NID_INDICATOR(6)	8	6	Indicator 6
NID_INDPOS(6)	5	6	
NID_ICON(6)	8	0	
M_IND_ATTRIB(6)	10	1000010000b	black on red, No flashing
L_CAPTION(6)	6	6	Caption="RU0806"
X_CAPTION(6,1)	8	"R"	
X_CAPTION(6,2)	8	"U"	
X_CAPTION(6,3)	8	"0"	
X_CAPTION(6,4)	8	"8"	
X_CAPTION(6,5)	8	"0"	
X_CAPTION(6,6)	8	"6"	
NID_INDICATOR(7)	8	7	Indicator 7
NID_INDPOS(7)	5	7	
NID_ICON(7)	8	0	
M_IND_ATTRIB(7)	10	1000010000b	black on red, No flashing
L_CAPTION(7)	6	6	Caption="RU0807"
X_CAPTION(7,1)	8	"R"	
X_CAPTION(7,2)	8	"U"	
X_CAPTION(7,3)	8	"0"	
X_CAPTION(7,4)	8	"8"	



X_CAPTION(7,5)	8	"0"	
X_CAPTION(7,6)	8	"7"	
NID_INDICATOR(8)	8	8	Indicator 8
NID_INDPOS(8)	5	8	
NID_ICON(8)	8	0	
M_IND_ATTRIB(8)	10	1000010000b	black on red, No flashing
L_CAPTION(8)	6	6	Caption="RU0808"
X_CAPTION(8,1)	8	"R"	
X_CAPTION(8,2)	8	"U"	
X_CAPTION(8,3)	8	"0"	
X_CAPTION(8,4)	8	"8"	
X_CAPTION(8,5)	8	"0"	
X_CAPTION(8,6)	8	"8"	
NID_INDICATOR(9)	8	9	Indicator 9
NID_INDPOS(9)	5	9	
NID_ICON(9)	8	0	
M_IND_ATTRIB(9)	10	1000010000b	black on red, No flashing
L_CAPTION(9)	6	6	Caption="RU0809"
X_CAPTION(9,1)	8	"R"	
X_CAPTION(9,2)	8	"U"	
X_CAPTION(9,3)	8	"0"	
X_CAPTION(9,4)	8	"8"	
X_CAPTION(9,5)	8	"0"	



X_CAPTION(9,6)	8	"g"	
NID_INDICATOR(10)	8	10	Indicator 10
NID_INDPOS(10)	5	10	
NID_ICON(10)	8	0	
M_IND_ATTRIB(10)	10	1000010000b	black on red, No flashing
L_CAPTION(10)	6	6	Caption="RU080A"
X_CAPTION(10,1)	8	"R"	
X_CAPTION(10,2)	8	"U"	
X_CAPTION(10,3)	8	"0"	
X_CAPTION(10,4)	8	"8"	
X_CAPTION(10,5)	8	"0"	
X_CAPTION(10,6)	8	"A"	
NID_INDICATOR(11)	8	11	Indicator 11
NID_INDPOS(11)	5	11	
NID_ICON(11)	8	0	
M_IND_ATTRIB(11)	10	1000010000b	black on red, No flashing
L_CAPTION(11)	6	6	Caption="RU080B"
X_CAPTION(11,1)	8	"R"	
X_CAPTION(11,2)	8	"U"	
X_CAPTION(11,3)	8	"0"	
X_CAPTION(11,4)	8	"8"	
X_CAPTION(11,5)	8	"0"	
X_CAPTION(11,6)	8	"B"	



NID_INDICATOR(12)	8	12	Indicator 12
NID_INDPOS(12)	5	12	
NID_ICON(12)	8	0	
M_IND_ATTRIB(12)	10	1000010000b	black on red, No flashing
L_CAPTION(12)	6	6	Caption="RU080C"
X_CAPTION(12,1)	8	"R"	
X_CAPTION(12,2)	8	"U"	
X_CAPTION(12,3)	8	"0"	
X_CAPTION(12,4)	8	"8"	
X_CAPTION(12,5)	8	"0"	
X_CAPTION(12,6)	8	"C"	
Padding bits	1	0b	

Message-S2: STM requests display of indicators 13 - 24 at positions 13-24			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=13, P=13, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU080D"			
(2): ID=14, P=14, IC=0, MI=1000010000b, L=6, T="RU080E"		(3): ID=15, P=15, IC=0, MI=1000010000b, L=6, T="RU080F"	
(4): ID=16, P=16, IC=0, MI=1000010000b, L=6, T="RU0810"		(5): ID=17, P=17, IC=0, MI=1000010000b, L=6, T="RU0811"	
(6): ID=18, P=18, IC=0, MI=1000010000b, L=6, T="RU0812"		(7): ID=19, P=19, IC=0, MI=1000010000b, L=6, T="RU0813"	
(8): ID=20, P=20, IC=0, MI=1000010000b, L=6, T="RU0814"		(9): ID=21, P=21, IC=0, MI=1000010000b, L=6, T="RU0815"	



(10): ID=22, P=22, IC=0, MI=1000010000b, L=6, T="RU0816"	(11): ID=23, P=23, IC=0, MI=1000010000b, L=6, T="RU0817"
(12): ID=24, P=24, IC=0, MI=1000010000b, L=6, T="RU0818"	

Message-S3: STM requests display of indicators 25 - 36 at positions 1-12			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=25, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RL1019"			
(2): ID=26, P=2, IC=0, MI=1000010000b, L=6, T="RL091A"	(3): ID=27, P=3, IC=0, MI=1000010000b, L=6, T="RL091B"		
(4): ID=28, P=4, IC=0, MI=1000010000b, L=6, T="RL091C"	(5): ID=29, P=5, IC=0, MI=1000010000b, L=6, T="RL091D"		
(6): ID=30, P=6, IC=0, MI=1000010000b, L=6, T="RL121E"	(7): ID=31, P=7, IC=0, MI=1000010000b, L=6, T="RL101F"		
(8): ID=32, P=8, IC=0, MI=1000010000b, L=6, T="RL1020"	(9): ID=33, P=9, IC=0, MI=1000010000b, L=6, T="RL1021"		
(10): ID=34, P=10, IC=0, MI=1000010000b, L=6, T="RL1222"	(11): ID=35, P=11, IC=0, MI=1000010000b, L=6, T="RL1223"		
(12): ID=36, P=12, IC=0, MI=1000010000b, L=6, T="RL1224"			

Message-S4: STM requests display of indicators 37 - 48 at positions 13-24			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=37, P=13, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RL1025"			



(2): ID=38, P=14, IC=0, MI=1000010000b, L=6, T="RL1026"	(3): ID=39, P=15, IC=0, MI=1000010000b, L=6, T="RL1227"
(4): ID=40, P=16, IC=0, MI=1000010000b, L=6, T="RL1228"	(5): ID=41, P=17, IC=0, MI=1000010000b, L=6, T="RL1229"
(6): ID=42, P=18, IC=0, MI=1000010000b, L=6, T="RL122A"	(7): ID=43, P=19, IC=0, MI=1000010000b, L=6, T="RL102B"
(8): ID=44, P=20, IC=0, MI=1000010000b, L=6, T="RL102C"	(9): ID=45, P=21, IC=0, MI=1000010000b, L=6, T="RL272D"
(10): ID=46, P=22, IC=0, MI=1000010000b, L=6, T="RL122E"	(11): ID=47, P=23, IC=0, MI=1000010000b, L=6, T="RL122F"
(12): ID=48, P=24, IC=0, MI=1000010000b, L=6, T="RL1230"	

Message-S5: STM requests display of indicators 49 - 60 at positions 1-12			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=49, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RC1231"			
(2): ID=50, P=2, IC=0, MI=1000010000b, L=6, T="RC1032"	(3): ID=51, P=3, IC=0, MI=1000010000b, L=6, T="RC1033"		
(4): ID=52, P=4, IC=0, MI=1000010000b, L=6, T="RC1034"	(5): ID=53, P=5, IC=0, MI=1000010000b, L=6, T="RC1035"		
(6): ID=54, P=6, IC=0, MI=1000010000b, L=6, T="RC1636"	(7): ID=55, P=7, IC=0, MI=1000010000b, L=6, T="RC1237"		
(8): ID=56, P=8, IC=0, MI=1000010000b, L=6, T="RC1238"	(9): ID=57, P=9, IC=0, MI=1000010000b, L=6, T="RC1239"		
(10): ID=58, P=10, IC=0, MI=1000010000b, L=6, T="RC163A"	(11): ID=59, P=11, IC=0, MI=1000010000b, L=6, T="RC163B"		
(12): ID=60, P=12, IC=0, MI=1000010000b, L=6, T="RC163C"			

Message-S6: STM requests display of indicators 61 - 72 at positions 13-24			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=61, P=13, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RC123D"			
(2): ID=62, P=14, IC=0, MI=1000010000b, L=6, T="RC123E"		(3): ID=63, P=15, IC=0, MI=1000010000b, L=6, T="RC163F"	
(4): ID=64, P=16, IC=0, MI=1000010000b, L=6, T="RC1640"		(5): ID=65, P=17, IC=0, MI=1000010000b, L=6, T="RC1641"	
(6): ID=66, P=18, IC=0, MI=1000010000b, L=6, T="RC1642"		(7): ID=67, P=19, IC=0, MI=1000010000b, L=6, T="RC1243"	
(8): ID=68, P=20, IC=0, MI=1000010000b, L=6, T="RC1244"		(9): ID=69, P=21, IC=0, MI=1000010000b, L=6, T="RC4645"	
(10): ID=70, P=22, IC=0, MI=1000010000b, L=6, T="RC1646"		(11): ID=71, P=23, IC=0, MI=1000010000b, L=6, T="RC1647"	
(12): ID=72, P=24, IC=0, MI=1000010000b, L=6, T="RC1648"			

Message-S7: STM requests display of indicators 73 - 84 at positions 1-12			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=73, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU1449"			
(2): ID=74, P=2, IC=0, MI=1000010000b, L=6, T="LU114A"		(3): ID=75, P=3, IC=0, MI=1000010000b, L=6, T="LU114B"	
(4): ID=76, P=4, IC=0, MI=1000010000b, L=6, T="LU114C"		(5): ID=77, P=5, IC=0, MI=1000010000b, L=6, T="LU114D"	
(6): ID=78, P=6, IC=0, MI=1000010000b, L=6, T="LU204E"		(7): ID=79, P=7, IC=0, MI=1000010000b, L=6, T="LU144F"	
(8): ID=80, P=8, IC=0, MI=1000010000b, L=6, T="LU1450"		(9): ID=81, P=9, IC=0, MI=1000010000b, L=6, T="LU1451"	
(10): ID=82, P=10, IC=0, MI=1000010000b, L=6, T="LU2052"		(11): ID=83, P=11, IC=0, MI=1000010000b, L=6, T="LU2053"	
(12): ID=84, P=12, IC=0, MI=1000010000b, L=6, T="LU2054"			



Message-S8: STM requests display of indicators 85 - 96 at positions 13-24			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=85, P=13, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LU1455"			
(2): ID=86, P=14, IC=0, MI=1000010000b, L=6, T="LU1456"		(3): ID=87, P=15, IC=0, MI=1000010000b, L=6, T="LU2057"	
(4): ID=88, P=16, IC=0, MI=1000010000b, L=6, T="LU2058"		(5): ID=89, P=17, IC=0, MI=1000010000b, L=6, T="LU2059"	
(6): ID=90, P=18, IC=0, MI=1000010000b, L=6, T="LU205A"		(7): ID=91, P=19, IC=0, MI=1000010000b, L=6, T="LU145B"	
(8): ID=92, P=20, IC=0, MI=1000010000b, L=6, T="LU145C"		(9): ID=93, P=21, IC=0, MI=1000010000b, L=6, T="LU605D"	
(10): ID=94, P=22, IC=0, MI=1000010000b, L=6, T="LU205E"		(11): ID=95, P=23, IC=0, MI=1000010000b, L=6, T="LU205F"	
(12): ID=96, P=24, IC=0, MI=1000010000b, L=6, T="LU2060"			

Message-S9: STM requests display of indicators 97 - 108 at positions 1-12			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=97, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LL1661"			
(2): ID=98, P=2, IC=0, MI=1000010000b, L=6, T="LL1262"		(3): ID=99, P=3, IC=0, MI=1000010000b, L=6, T="LL1263"	
(4): ID=100, P=4, IC=0, MI=1000010000b, L=6, T="LL1264"		(5): ID=101, P=5, IC=0, MI=1000010000b, L=6, T="LL1265"	



(6): ID=102, P=6, IC=0, MI=1000010000b, L=6, T="LL2466"	(7): ID=103, P=7, IC=0, MI=1000010000b, L=6, T="LL1667"
(8): ID=104, P=8, IC=0, MI=1000010000b, L=6, T="LL1668"	(9): ID=105, P=9, IC=0, MI=1000010000b, L=6, T="LL1669"
(10): ID=106, P=10, IC=0, MI=1000010000b, L=6, T="LL246A"	(11): ID=107, P=11, IC=0, MI=1000010000b, L=6, T="LL246B"
(12): ID=108, P=12, IC=0, MI=1000010000b, L=6, T="LL246C"	

Message-S10: STM requests display of indicators 109 - 120 at positions 13-24			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=109, P=13, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LL166D"			
(2): ID=110, P=14, IC=0, MI=1000010000b, L=6, T="LL166E"	(3): ID=111, P=15, IC=0, MI=1000010000b, L=6, T="LL246F"		
(4): ID=112, P=16, IC=0, MI=1000010000b, L=6, T="LL2470"	(5): ID=113, P=17, IC=0, MI=1000010000b, L=6, T="LL2471"		
(6): ID=114, P=18, IC=0, MI=1000010000b, L=6, T="LL2472"	(7): ID=115, P=19, IC=0, MI=1000010000b, L=6, T="LL1673"		
(8): ID=116, P=20, IC=0, MI=1000010000b, L=6, T="LL1674"	(9): ID=117, P=21, IC=0, MI=1000010000b, L=6, T="LL6075"		
(10): ID=118, P=22, IC=0, MI=1000010000b, L=6, T="LL2476"	(11): ID=119, P=23, IC=0, MI=1000010000b, L=6, T="LL2477"		
(12): ID=120, P=24, IC=0, MI=1000010000b, L=6, T="LL2478"			

Message-S11: STM requests display of indicators 121 - 132 at positions 1-12			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length



STM-15: PL=25, ST=7, (State DA)	
STM-35: PL=1046, N=12, ID=121, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC1879"	
(2): ID=122, P=2, IC=0, MI=1000010000b, L=6, T="LC137A"	(3): ID=123, P=3, IC=0, MI=1000010000b, L=6, T="LC137B"
(4): ID=124, P=4, IC=0, MI=1000010000b, L=6, T="LC137C"	(5): ID=125, P=5, IC=0, MI=1000010000b, L=6, T="LC137D"
(6): ID=126, P=6, IC=0, MI=1000010000b, L=6, T="LC287E"	(7): ID=127, P=7, IC=0, MI=1000010000b, L=6, T="LC187F"
(8): ID=128, P=8, IC=0, MI=1000010000b, L=6, T="LC1880"	(9): ID=129, P=9, IC=0, MI=1000010000b, L=6, T="LC1881"
(10): ID=130, P=10, IC=0, MI=1000010000b, L=6, T="LC2882"	(11): ID=131, P=11, IC=0, MI=1000010000b, L=6, T="LC2883"
(12): ID=132, P=12, IC=0, MI=1000010000b, L=6, T="LC2884"	

Message-S12: STM requests display of indicators 133 - 144 at positions 13-24			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=133, P=13, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="LC1885"			
(2): ID=134, P=14, IC=0, MI=1000010000b, L=6, T="LC1886"	(3): ID=135, P=15, IC=0, MI=1000010000b, L=6, T="LC2887"		
(4): ID=136, P=16, IC=0, MI=1000010000b, L=6, T="LC2888"	(5): ID=137, P=17, IC=0, MI=1000010000b, L=6, T="LC2889"		
(6): ID=138, P=18, IC=0, MI=1000010000b, L=6, T="LC288A"	(7): ID=139, P=19, IC=0, MI=1000010000b, L=6, T="LC188B"		
(8): ID=140, P=20, IC=0, MI=1000010000b, L=6, T="LC188C"	(9): ID=141, P=21, IC=0, MI=1000010000b, L=6, T="LC608D"		
(10): ID=142, P=22, IC=0, MI=1000010000b, L=6, T="LC288E"	(11): ID=143, P=23, IC=0, MI=1000010000b, L=6, T="LC288F"		
(12): ID=144, P=24, IC=0, MI=1000010000b, L=6, T="LC2890"			



Message-S13: STM requests display of indicators 145 - 156 at positions 1-12			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=145, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CU2091"			
(2): ID=146, P=2, IC=0, MI=1000010000b, L=6, T="CU1492"		(3): ID=147, P=3, IC=0, MI=1000010000b, L=6, T="CU1493"	
(4): ID=148, P=4, IC=0, MI=1000010000b, L=6, T="CU1494"		(5): ID=149, P=5, IC=0, MI=1000010000b, L=6, T="CU1495"	
(6): ID=150, P=6, IC=0, MI=1000010000b, L=6, T="CU3296"		(7): ID=151, P=7, IC=0, MI=1000010000b, L=6, T="CU2097"	
(8): ID=152, P=8, IC=0, MI=1000010000b, L=6, T="CU2098"		(9): ID=153, P=9, IC=0, MI=1000010000b, L=6, T="CU2099"	
(10): ID=154, P=10, IC=0, MI=1000010000b, L=6, T="CU329A"		(11): ID=155, P=11, IC=0, MI=1000010000b, L=6, T="CU329B"	
(12): ID=156, P=12, IC=0, MI=1000010000b, L=6, T="CU329C"			

Message-S14: STM requests display of indicators 157 - 168 at positions 13-24			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=157, P=13, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CU209D"			
(2): ID=158, P=14, IC=0, MI=1000010000b, L=6, T="CU209E"		(3): ID=159, P=15, IC=0, MI=1000010000b, L=6, T="CU329F"	
(4): ID=160, P=16, IC=0, MI=1000010000b, L=6, T="CU32A0"		(5): ID=161, P=17, IC=0, MI=1000010000b, L=6, T="CU32A1"	
(6): ID=162, P=18, IC=0, MI=1000010000b, L=6, T="CU32A2"		(7): ID=163, P=19, IC=0, MI=1000010000b, L=6, T="CU20A3"	
(8): ID=164, P=20, IC=0, MI=1000010000b, L=6, T="CU20A4"		(9): ID=165, P=21, IC=0, MI=1000010000b, L=6, T="CU60A5"	



(10): ID=166, P=22, IC=0, MI=1000010000b, L=6, T="CU32A6"	(11): ID=167, P=23, IC=0, MI=1000010000b, L=6, T="CU32A7"
(12): ID=168, P=24, IC=0, MI=1000010000b, L=6, T="CU32A8"	

Message-S15: STM removes indicators 145 - 168			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=145, P=1, IC=0, MI=0000000000b, L=0			
(2): ID=146, P=2, IC=0, MI=0000000000b, L=0	(3): ID=147, P=3, IC=0, MI=0000000000b, L=0	(4): ID=148, P=4, IC=0, MI=0000000000b, L=0	
(5): ID=149, P=5, IC=0, MI=0000000000b, L=0	(6): ID=150, P=6, IC=0, MI=0000000000b, L=0	(7): ID=151, P=7, IC=0, MI=0000000000b, L=0	
(8): ID=152, P=8, IC=0, MI=0000000000b, L=0	(9): ID=153, P=9, IC=0, MI=0000000000b, L=0	(10): ID=154, P=10, IC=0, MI=0000000000b, L=0	
(11): ID=155, P=11, IC=0, MI=0000000000b, L=0	(12): ID=156, P=12, IC=0, MI=0000000000b, L=0	(13): ID=157, P=13, IC=0, MI=0000000000b, L=0	
(14): ID=158, P=14, IC=0, MI=0000000000b, L=0	(15): ID=159, P=15, IC=0, MI=0000000000b, L=0	(16): ID=160, P=16, IC=0, MI=0000000000b, L=0	
(17): ID=161, P=17, IC=0, MI=0000000000b, L=0	(18): ID=162, P=18, IC=0, MI=0000000000b, L=0	(19): ID=163, P=19, IC=0, MI=0000000000b, L=0	
(20): ID=164, P=20, IC=0, MI=0000000000b, L=0	(21): ID=165, P=21, IC=0, MI=0000000000b, L=0	(22): ID=166, P=22, IC=0, MI=0000000000b, L=0	
(23): ID=167, P=23, IC=0, MI=0000000000b, L=0	(24): ID=168, P=24, IC=0, MI=0000000000b, L=0		

Message-S16: STM requests display of indicators 169 - 180 at positions 1-12			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length



STM-15: PL=25, ST=7, (State DA)	
STM-35: PL=1046, N=12, ID=169, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CL22A9"	
(2): ID=170, P=2, IC=0, MI=1000010000b, L=6, T="CL15AA"	(3): ID=171, P=3, IC=0, MI=1000010000b, L=6, T="CL15AB"
(4): ID=172, P=4, IC=0, MI=1000010000b, L=6, T="CL15AC"	(5): ID=173, P=5, IC=0, MI=1000010000b, L=6, T="CL15AD"
(6): ID=174, P=6, IC=0, MI=1000010000b, L=6, T="CL36AE"	(7): ID=175, P=7, IC=0, MI=1000010000b, L=6, T="CL22AF"
(8): ID=176, P=8, IC=0, MI=1000010000b, L=6, T="CL22B0"	(9): ID=177, P=9, IC=0, MI=1000010000b, L=6, T="CL22B1"
(10): ID=178, P=10, IC=0, MI=1000010000b, L=6, T="CL36B2"	(11): ID=179, P=11, IC=0, MI=1000010000b, L=6, T="CL36B3"
(12): ID=180, P=12, IC=0, MI=1000010000b, L=6, T="CL36B4"	

Message-S17: STM requests display of indicators 181 - 192 at positions 13-24			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=181, P=13, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CL22B5"			
(2): ID=182, P=14, IC=0, MI=1000010000b, L=6, T="CL22B6"	(3): ID=183, P=15, IC=0, MI=1000010000b, L=6, T="CL36B7"		
(4): ID=184, P=16, IC=0, MI=1000010000b, L=6, T="CL36B8"	(5): ID=185, P=17, IC=0, MI=1000010000b, L=6, T="CL36B9"		
(6): ID=186, P=18, IC=0, MI=1000010000b, L=6, T="CL36BA"	(7): ID=187, P=19, IC=0, MI=1000010000b, L=6, T="CL22BB"		
(8): ID=188, P=20, IC=0, MI=1000010000b, L=6, T="CL22BC"	(9): ID=189, P=21, IC=0, MI=1000010000b, L=6, T="CL60BD"		
(10): ID=190, P=22, IC=0, MI=1000010000b, L=6, T="CL36BE"	(11): ID=191, P=23, IC=0, MI=1000010000b, L=6, T="CL36BF"		
(12): ID=192, P=24, IC=0, MI=1000010000b, L=6, T="CL36C0"			



Message-S18: STM removes indicators 169 - 192			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=169, P=1, IC=0, MI=0000000000b, L=0			
(2): ID=170, P=2, IC=0, MI=0000000000b, L=0		(3): ID=171, P=3, IC=0, MI=0000000000b, L=0	
(5): ID=173, P=5, IC=0, MI=0000000000b, L=0		(6): ID=174, P=6, IC=0, MI=0000000000b, L=0	
(8): ID=176, P=8, IC=0, MI=0000000000b, L=0		(9): ID=177, P=9, IC=0, MI=0000000000b, L=0	
(11): ID=179, P=11, IC=0, MI=0000000000b, L=0		(12): ID=180, P=12, IC=0, MI=0000000000b, L=0	
(14): ID=182, P=14, IC=0, MI=0000000000b, L=0		(15): ID=183, P=15, IC=0, MI=0000000000b, L=0	
(17): ID=185, P=17, IC=0, MI=0000000000b, L=0		(18): ID=186, P=18, IC=0, MI=0000000000b, L=0	
(20): ID=188, P=20, IC=0, MI=0000000000b, L=0		(21): ID=189, P=21, IC=0, MI=0000000000b, L=0	
(23): ID=191, P=23, IC=0, MI=0000000000b, L=0		(24): ID=192, P=24, IC=0, MI=0000000000b, L=0	

Message-S19: STM requests display of indicators 193 - 204 at positions 1-12			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=193, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC24C1"			
(2): ID=194, P=2, IC=0, MI=1000010000b, L=6, T="CC16C2"		(3): ID=195, P=3, IC=0, MI=1000010000b, L=6, T="CC16C3"	
(4): ID=196, P=4, IC=0, MI=1000010000b, L=6, T="CC16C4"		(5): ID=197, P=5, IC=0, MI=1000010000b, L=6, T="CC16C5"	



(6): ID=198, P=6, IC=0, MI=1000010000b, L=6, T="CC40C6"	(7): ID=199, P=7, IC=0, MI=1000010000b, L=6, T="CC24C7"
(8): ID=200, P=8, IC=0, MI=1000010000b, L=6, T="CC24C8"	(9): ID=201, P=9, IC=0, MI=1000010000b, L=6, T="CC24C9"
(10): ID=202, P=10, IC=0, MI=1000010000b, L=6, T="CC40CA"	(11): ID=203, P=11, IC=0, MI=1000010000b, L=6, T="CC40CB"
(12): ID=204, P=12, IC=0, MI=1000010000b, L=6, T="CC40CC"	

Message-S20: STM requests display of indicators 205 - 216 at positions 13-24			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=205, P=13, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC24CD"			
(2): ID=206, P=14, IC=0, MI=1000010000b, L=6, T="CC24CE"	(3): ID=207, P=15, IC=0, MI=1000010000b, L=6, T="CC40CF"		
(4): ID=208, P=16, IC=0, MI=1000010000b, L=6, T="CC40D0"	(5): ID=209, P=17, IC=0, MI=1000010000b, L=6, T="CC40D1"		
(6): ID=210, P=18, IC=0, MI=1000010000b, L=6, T="CC40D2"	(7): ID=211, P=19, IC=0, MI=1000010000b, L=6, T="CC24D3"		
(8): ID=212, P=20, IC=0, MI=1000010000b, L=6, T="CC24D4"	(9): ID=213, P=21, IC=0, MI=1000010000b, L=6, T="CC60D5"		
(10): ID=214, P=22, IC=0, MI=1000010000b, L=6, T="CC40D6"	(11): ID=215, P=23, IC=0, MI=1000010000b, L=6, T="CC40D7"		
(12): ID=216, P=24, IC=0, MI=1000010000b, L=6, T="CC40D8"			

Message-S21: STM removes indicators 193 - 216			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length



STM-15: PL=25, ST=7, (State DA)		
STM-35: PL=914, N=24, ID=193, P=1, IC=0, MI=0000000000b, L=0		
(2): ID=194, P=2, IC=0, MI=0000000000b, L=0	(3): ID=195, P=3, IC=0, MI=0000000000b, L=0	(4): ID=196, P=4, IC=0, MI=0000000000b, L=0
(5): ID=197, P=5, IC=0, MI=0000000000b, L=0	(6): ID=198, P=6, IC=0, MI=0000000000b, L=0	(7): ID=199, P=7, IC=0, MI=0000000000b, L=0
(8): ID=200, P=8, IC=0, MI=0000000000b, L=0	(9): ID=201, P=9, IC=0, MI=0000000000b, L=0	(10): ID=202, P=10, IC=0, MI=0000000000b, L=0
(11): ID=203, P=11, IC=0, MI=0000000000b, L=0	(12): ID=204, P=12, IC=0, MI=0000000000b, L=0	(13): ID=205, P=13, IC=0, MI=0000000000b, L=0
(14): ID=206, P=14, IC=0, MI=0000000000b, L=0	(15): ID=207, P=15, IC=0, MI=0000000000b, L=0	(16): ID=208, P=16, IC=0, MI=0000000000b, L=0
(17): ID=209, P=17, IC=0, MI=0000000000b, L=0	(18): ID=210, P=18, IC=0, MI=0000000000b, L=0	(19): ID=211, P=19, IC=0, MI=0000000000b, L=0
(20): ID=212, P=20, IC=0, MI=0000000000b, L=0	(21): ID=213, P=21, IC=0, MI=0000000000b, L=0	(22): ID=214, P=22, IC=0, MI=0000000000b, L=0
(23): ID=215, P=23, IC=0, MI=0000000000b, L=0	(24): ID=216, P=24, IC=0, MI=0000000000b, L=0	

Message-S22: STM requests display of indicators 217 - 228 at positions 1-12			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=217, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU26D9"			
(2): ID=218, P=2, IC=0, MI=1000010000b, L=6, T="RU17DA"		(3): ID=219, P=3, IC=0, MI=1000010000b, L=6, T="RU17DB"	
(4): ID=220, P=4, IC=0, MI=1000010000b, L=6, T="RU17DC"		(5): ID=221, P=5, IC=0, MI=1000010000b, L=6, T="RU17DD"	
(6): ID=222, P=6, IC=0, MI=1000010000b, L=6, T="RU44DE"		(7): ID=223, P=7, IC=0, MI=1000010000b, L=6, T="RU26DF"	
(8): ID=224, P=8, IC=0, MI=1000010000b, L=6, T="RU26E0"		(9): ID=225, P=9, IC=0, MI=1000010000b, L=6, T="RU26E1"	
(10): ID=226, P=10, IC=0, MI=1000010000b, L=6, T="RU44E2"		(11): ID=227, P=11, IC=0, MI=1000010000b, L=6, T="RU44E3"	
(12): ID=228, P=12, IC=0, MI=1000010000b, L=6, T="RU44E4"			



Message-S23: STM requests display of indicators 229 - 240 at positions 13-24			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=229, P=13, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU26E5"			
(2): ID=230, P=14, IC=0, MI=1000010000b, L=6, T="RU26E6"		(3): ID=231, P=15, IC=0, MI=1000010000b, L=6, T="RU44E7"	
(4): ID=232, P=16, IC=0, MI=1000010000b, L=6, T="RU44E8"		(5): ID=233, P=17, IC=0, MI=1000010000b, L=6, T="RU44E9"	
(6): ID=234, P=18, IC=0, MI=1000010000b, L=6, T="RU44EA"		(7): ID=235, P=19, IC=0, MI=1000010000b, L=6, T="RU26EB"	
(8): ID=236, P=20, IC=0, MI=1000010000b, L=6, T="RU26EC"		(9): ID=237, P=21, IC=0, MI=1000010000b, L=6, T="RU60ED"	
(10): ID=238, P=22, IC=0, MI=1000010000b, L=6, T="RU44EE"		(11): ID=239, P=23, IC=0, MI=1000010000b, L=6, T="RU44EF"	
(12): ID=240, P=24, IC=0, MI=1000010000b, L=6, T="RU44F0"			

Message-S24: STM removes indicators 217 - 240			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=217, P=1, IC=0, MI=0000000000b, L=0			
(2): ID=218, P=2, IC=0, MI=0000000000b, L=0		(3): ID=219, P=3, IC=0, MI=0000000000b, L=0	(4): ID=220, P=4, IC=0, MI=0000000000b, L=0
(5): ID=221, P=5, IC=0, MI=0000000000b, L=0		(6): ID=222, P=6, IC=0, MI=0000000000b, L=0	(7): ID=223, P=7, IC=0, MI=0000000000b, L=0



(8): ID=224, P=8, IC=0, MI=0000000000b, L=0	(9): ID=225, P=9, IC=0, MI=0000000000b, L=0	(10): ID=226, P=10, IC=0, MI=0000000000b, L=0
(11): ID=227, P=11, IC=0, MI=0000000000b, L=0	(12): ID=228, P=12, IC=0, MI=0000000000b, L=0	(13): ID=229, P=13, IC=0, MI=0000000000b, L=0
(14): ID=230, P=14, IC=0, MI=0000000000b, L=0	(15): ID=231, P=15, IC=0, MI=0000000000b, L=0	(16): ID=232, P=16, IC=0, MI=0000000000b, L=0
(17): ID=233, P=17, IC=0, MI=0000000000b, L=0	(18): ID=234, P=18, IC=0, MI=0000000000b, L=0	(19): ID=235, P=19, IC=0, MI=0000000000b, L=0
(20): ID=236, P=20, IC=0, MI=0000000000b, L=0	(21): ID=237, P=21, IC=0, MI=0000000000b, L=0	(22): ID=238, P=22, IC=0, MI=0000000000b, L=0
(23): ID=239, P=23, IC=0, MI=0000000000b, L=0	(24): ID=240, P=24, IC=0, MI=0000000000b, L=0	

Message-S25: STM requests display of indicators 241 - 252 at positions 1-12			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=241, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC28F1"			
(2): ID=242, P=2, IC=0, MI=1000010000b, L=6, T="CC18F2"		(3): ID=243, P=3, IC=0, MI=1000010000b, L=6, T="CC18F3"	
(4): ID=244, P=4, IC=0, MI=1000010000b, L=6, T="CC18F4"		(5): ID=245, P=5, IC=0, MI=1000010000b, L=6, T="CC18F5"	
(6): ID=246, P=6, IC=0, MI=1000010000b, L=6, T="CC48F6"		(7): ID=247, P=7, IC=0, MI=1000010000b, L=6, T="CC28F7"	
(8): ID=248, P=8, IC=0, MI=1000010000b, L=6, T="CC28F8"		(9): ID=249, P=9, IC=0, MI=1000010000b, L=6, T="CC28F9"	
(10): ID=250, P=10, IC=0, MI=1000010000b, L=6, T="CC48FA"		(11): ID=251, P=11, IC=0, MI=1000010000b, L=6, T="CC48FB"	
(12): ID=252, P=12, IC=0, MI=1000010000b, L=6, T="CC48FC"			

Message-S26: STM requests display of indicators 253 - 255 at positions 13-15			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	41	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=281, N=3, ID=253, P=13, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="CC28FD"			
(2): ID=254, P=14, IC=0, MI=1000010000b, L=6, T="CC28FE"			(3): ID=255, P=15, IC=0, MI=1000010000b, L=6, T="CC48FF"

Message-S27: STM removes indicators 241 - 255			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	78	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=581, N=15, ID=241, P=1, IC=0, MI=0000000000b, L=0			
(2): ID=242, P=2, IC=0, MI=0000000000b, L=0		(3): ID=243, P=3, IC=0, MI=0000000000b, L=0	
(5): ID=245, P=5, IC=0, MI=0000000000b, L=0		(6): ID=246, P=6, IC=0, MI=0000000000b, L=0	
(8): ID=248, P=8, IC=0, MI=0000000000b, L=0		(9): ID=249, P=9, IC=0, MI=0000000000b, L=0	
(11): ID=251, P=11, IC=0, MI=0000000000b, L=0		(12): ID=252, P=12, IC=0, MI=0000000000b, L=0	
(14): ID=254, P=14, IC=0, MI=0000000000b, L=0		(15): ID=255, P=15, IC=0, MI=0000000000b, L=0	
		(4): ID=244, P=4, IC=0, MI=0000000000b, L=0	
		(7): ID=247, P=7, IC=0, MI=0000000000b, L=0	
		(10): ID=250, P=10, IC=0, MI=0000000000b, L=0	
		(13): ID=253, P=13, IC=0, MI=0000000000b, L=0	

Message-S28: STM requests display of indicators 1-12 at positions 1-12 with captions			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length



STM-15: PL=25, ST=7, (State DA)	
STM-35: PL=1046, N=12, ID=1, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU0801"	
(2): ID=2, P=2, IC=0, MI=1000010000b, L=6, T="RU0802"	(3): ID=3, P=3, IC=0, MI=1000010000b, L=6, T="RU0803"
(4): ID=4, P=4, IC=0, MI=1000010000b, L=6, T="RU0804"	(5): ID=5, P=5, IC=0, MI=1000010000b, L=6, T="RU0805"
(6): ID=6, P=6, IC=0, MI=1000010000b, L=6, T="RU0806"	(7): ID=7, P=7, IC=0, MI=1000010000b, L=6, T="RU0807"
(8): ID=8, P=8, IC=0, MI=1000010000b, L=6, T="RU0808"	(9): ID=9, P=9, IC=0, MI=1000010000b, L=6, T="RU0809"
(10): ID=10, P=10, IC=0, MI=1000010000b, L=6, T="RU080A"	(11): ID=11, P=11, IC=0, MI=1000010000b, L=6, T="RU080B"
(12): ID=12, P=12, IC=0, MI=1000010000b, L=6, T="RU080C"	

Message-S29: STM requests display of indicators 13 - 24 at positions 13-24 with captions			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=13, P=13, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU080D"			
(2): ID=14, P=14, IC=0, MI=1000010000b, L=6, T="RU080E"	(3): ID=15, P=15, IC=0, MI=1000010000b, L=6, T="RU080F"		
(4): ID=16, P=16, IC=0, MI=1000010000b, L=6, T="RU0810"	(5): ID=17, P=17, IC=0, MI=1000010000b, L=6, T="RU0811"		
(6): ID=18, P=18, IC=0, MI=1000010000b, L=6, T="RU0812"	(7): ID=19, P=19, IC=0, MI=1000010000b, L=6, T="RU0813"		
(8): ID=20, P=20, IC=0, MI=1000010000b, L=6, T="RU0814"	(9): ID=21, P=21, IC=0, MI=1000010000b, L=6, T="RU0815"		
(10): ID=22, P=22, IC=0, MI=1000010000b, L=6, T="RU0816"	(11): ID=23, P=23, IC=0, MI=1000010000b, L=6, T="RU0817"		
(12): ID=24, P=24, IC=0, MI=1000010000b, L=6, T="RU0818"			



Message-S30: STM requests display of indicators 1-12 at positions 5-16 with captions			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=1, P=5, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU0801"			
(2): ID=2, P=6, IC=0, MI=1000010000b, L=6, T="RU0802"		(3): ID=3, P=7, IC=0, MI=1000010000b, L=6, T="RU0803"	
(4): ID=4, P=8, IC=0, MI=1000010000b, L=6, T="RU0804"		(5): ID=5, P=9, IC=0, MI=1000010000b, L=6, T="RU0805"	
(6): ID=6, P=10, IC=0, MI=1000010000b, L=6, T="RU0806"		(7): ID=7, P=11, IC=0, MI=1000010000b, L=6, T="RU0807"	
(8): ID=8, P=12, IC=0, MI=1000010000b, L=6, T="RU0808"		(9): ID=9, P=13, IC=0, MI=1000010000b, L=6, T="RU0809"	
(10): ID=10, P=14, IC=0, MI=1000010000b, L=6, T="RU080A"		(11): ID=11, P=15, IC=0, MI=1000010000b, L=6, T="RU080B"	
(12): ID=12, P=16, IC=0, MI=1000010000b, L=6, T="RU080C"			

Message-S31: STM requests display of indicators 13 - 24 at positions 17-24, 1-4 with captions			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=13, P=17, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU080D"			
(2): ID=14, P=18, IC=0, MI=1000010000b, L=6, T="RU080E"		(3): ID=15, P=19, IC=0, MI=1000010000b, L=6, T="RU080F"	
(4): ID=16, P=20, IC=0, MI=1000010000b, L=6, T="RU0810"		(5): ID=17, P=21, IC=0, MI=1000010000b, L=6, T="RU0811"	
(6): ID=18, P=22, IC=0, MI=1000010000b, L=6, T="RU0812"		(7): ID=19, P=23, IC=0, MI=1000010000b, L=6, T="RU0813"	
(8): ID=20, P=24, IC=0, MI=1000010000b, L=6, T="RU0814"		(9): ID=21, P=1, IC=0, MI=1000010000b, L=6, T="RU0815"	



(10): ID=22, P=2, IC=0, MI=1000010000b, L=6, T="RU0816"	(11): ID=23, P=3, IC=0, MI=1000010000b, L=6, T="RU0817"
(12): ID=24, P=4, IC=0, MI=1000010000b, L=6, T="RU0818"	

Message-S32: STM requests display of indicators 1-12 at positions 9-20 with captions			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=1, P=9, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU0801"			
(2): ID=2, P=10, IC=0, MI=1000010000b, L=6, T="RU0802"	(3): ID=3, P=11, IC=0, MI=1000010000b, L=6, T="RU0803"		
(4): ID=4, P=12, IC=0, MI=1000010000b, L=6, T="RU0804"	(5): ID=5, P=13, IC=0, MI=1000010000b, L=6, T="RU0805"		
(6): ID=6, P=14, IC=0, MI=1000010000b, L=6, T="RU0806"	(7): ID=7, P=15, IC=0, MI=1000010000b, L=6, T="RU0807"		
(8): ID=8, P=16, IC=0, MI=1000010000b, L=6, T="RU0808"	(9): ID=9, P=17, IC=0, MI=1000010000b, L=6, T="RU0809"		
(10): ID=10, P=18, IC=0, MI=1000010000b, L=6, T="RU080A"	(11): ID=11, P=19, IC=0, MI=1000010000b, L=6, T="RU080B"		
(12): ID=12, P=20, IC=0, MI=1000010000b, L=6, T="RU080C"			

Message-S33: STM requests display of indicators 13 - 24 at positions 21-24, 1-8 with captions			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=13, P=21, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU080D"			



(2): ID=14, P=22, IC=0, MI=1000010000b, L=6, T="RU080E"	(3): ID=15, P=23, IC=0, MI=1000010000b, L=6, T="RU080F"
(4): ID=16, P=24, IC=0, MI=1000010000b, L=6, T="RU0810"	(5): ID=17, P=1, IC=0, MI=1000010000b, L=6, T="RU0811"
(6): ID=18, P=2, IC=0, MI=1000010000b, L=6, T="RU0812"	(7): ID=19, P=3, IC=0, MI=1000010000b, L=6, T="RU0813"
(8): ID=20, P=4, IC=0, MI=1000010000b, L=6, T="RU0814"	(9): ID=21, P=5, IC=0, MI=1000010000b, L=6, T="RU0815"
(10): ID=22, P=6, IC=0, MI=1000010000b, L=6, T="RU0816"	(11): ID=23, P=7, IC=0, MI=1000010000b, L=6, T="RU0817"
(12): ID=24, P=8, IC=0, MI=1000010000b, L=6, T="RU0818"	

Message-S34: STM requests display of indicators 1-12 at positions 13-24 with captions			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=1, P=13, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU0801"			
(2): ID=2, P=14, IC=0, MI=1000010000b, L=6, T="RU0802"	(3): ID=3, P=15, IC=0, MI=1000010000b, L=6, T="RU0803"		
(4): ID=4, P=16, IC=0, MI=1000010000b, L=6, T="RU0804"	(5): ID=5, P=17, IC=0, MI=1000010000b, L=6, T="RU0805"		
(6): ID=6, P=18, IC=0, MI=1000010000b, L=6, T="RU0806"	(7): ID=7, P=19, IC=0, MI=1000010000b, L=6, T="RU0807"		
(8): ID=8, P=20, IC=0, MI=1000010000b, L=6, T="RU0808"	(9): ID=9, P=21, IC=0, MI=1000010000b, L=6, T="RU0809"		
(10): ID=10, P=22, IC=0, MI=1000010000b, L=6, T="RU080A"	(11): ID=11, P=23, IC=0, MI=1000010000b, L=6, T="RU080B"		
(12): ID=12, P=24, IC=0, MI=1000010000b, L=6, T="RU080C"			

Message-S35: STM requests display of indicators 13 - 24 at positions 1-12 with captions			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=13, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU080D"			
(2): ID=14, P=2, IC=0, MI=1000010000b, L=6, T="RU080E"		(3): ID=15, P=3, IC=0, MI=1000010000b, L=6, T="RU080F"	
(4): ID=16, P=4, IC=0, MI=1000010000b, L=6, T="RU0810"		(5): ID=17, P=5, IC=0, MI=1000010000b, L=6, T="RU0811"	
(6): ID=18, P=6, IC=0, MI=1000010000b, L=6, T="RU0812"		(7): ID=19, P=7, IC=0, MI=1000010000b, L=6, T="RU0813"	
(8): ID=20, P=8, IC=0, MI=1000010000b, L=6, T="RU0814"		(9): ID=21, P=9, IC=0, MI=1000010000b, L=6, T="RU0815"	
(10): ID=22, P=10, IC=0, MI=1000010000b, L=6, T="RU0816"		(11): ID=23, P=11, IC=0, MI=1000010000b, L=6, T="RU0817"	
(12): ID=24, P=12, IC=0, MI=1000010000b, L=6, T="RU0818"			

Message-S36: STM requests display of indicators 1-12 at positions 17-24, 1-4 with captions			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=1, P=17, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU0801"			
(2): ID=2, P=18, IC=0, MI=1000010000b, L=6, T="RU0802"		(3): ID=3, P=19, IC=0, MI=1000010000b, L=6, T="RU0803"	
(4): ID=4, P=20, IC=0, MI=1000010000b, L=6, T="RU0804"		(5): ID=5, P=21, IC=0, MI=1000010000b, L=6, T="RU0805"	
(6): ID=6, P=22, IC=0, MI=1000010000b, L=6, T="RU0806"		(7): ID=7, P=23, IC=0, MI=1000010000b, L=6, T="RU0807"	
(8): ID=8, P=24, IC=0, MI=1000010000b, L=6, T="RU0808"		(9): ID=9, P=1, IC=0, MI=1000010000b, L=6, T="RU0809"	
(10): ID=10, P=2, IC=0, MI=1000010000b, L=6, T="RU080A"		(11): ID=11, P=3, IC=0, MI=1000010000b, L=6, T="RU080B"	
(12): ID=12, P=4, IC=0, MI=1000010000b, L=6, T="RU080C"			



Message-S37: STM requests display of indicators 13 - 24 at positions 5-16 with captions			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=13, P=5, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU080D"			
(2): ID=14, P=6, IC=0, MI=1000010000b, L=6, T="RU080E"		(3): ID=15, P=7, IC=0, MI=1000010000b, L=6, T="RU080F"	
(4): ID=16, P=8, IC=0, MI=1000010000b, L=6, T="RU0810"		(5): ID=17, P=9, IC=0, MI=1000010000b, L=6, T="RU0811"	
(6): ID=18, P=10, IC=0, MI=1000010000b, L=6, T="RU0812"		(7): ID=19, P=11, IC=0, MI=1000010000b, L=6, T="RU0813"	
(8): ID=20, P=12, IC=0, MI=1000010000b, L=6, T="RU0814"		(9): ID=21, P=13, IC=0, MI=1000010000b, L=6, T="RU0815"	
(10): ID=22, P=14, IC=0, MI=1000010000b, L=6, T="RU0816"		(11): ID=23, P=15, IC=0, MI=1000010000b, L=6, T="RU0817"	
(12): ID=24, P=16, IC=0, MI=1000010000b, L=6, T="RU0818"			

Message-S38: STM requests display of indicators 1-12 at positions 21-24, 1-8 with captions			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=1, P=21, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU0801"			
(2): ID=2, P=22, IC=0, MI=1000010000b, L=6, T="RU0802"		(3): ID=3, P=23, IC=0, MI=1000010000b, L=6, T="RU0803"	
(4): ID=4, P=24, IC=0, MI=1000010000b, L=6, T="RU0804"		(5): ID=5, P=1, IC=0, MI=1000010000b, L=6, T="RU0805"	



(6): ID=6, P=2, IC=0, MI=1000010000b, L=6, T="RU0806"	(7): ID=7, P=3, IC=0, MI=1000010000b, L=6, T="RU0807"
(8): ID=8, P=4, IC=0, MI=1000010000b, L=6, T="RU0808"	(9): ID=9, P=5, IC=0, MI=1000010000b, L=6, T="RU0809"
(10): ID=10, P=6, IC=0, MI=1000010000b, L=6, T="RU080A"	(11): ID=11, P=7, IC=0, MI=1000010000b, L=6, T="RU080B"
(12): ID=12, P=8, IC=0, MI=1000010000b, L=6, T="RU080C"	

Message-S39: STM requests display of indicators 13 - 24 at positions 9-20 with captions			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	136	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1046, N=12, ID=13, P=9, IC=0, MI=1000010000b (black on red, No flashing), L=6, T="RU080D"			
(2): ID=14, P=10, IC=0, MI=1000010000b, L=6, T="RU080E"	(3): ID=15, P=11, IC=0, MI=1000010000b, L=6, T="RU080F"		
(4): ID=16, P=12, IC=0, MI=1000010000b, L=6, T="RU0810"	(5): ID=17, P=13, IC=0, MI=1000010000b, L=6, T="RU0811"		
(6): ID=18, P=14, IC=0, MI=1000010000b, L=6, T="RU0812"	(7): ID=19, P=15, IC=0, MI=1000010000b, L=6, T="RU0813"		
(8): ID=20, P=16, IC=0, MI=1000010000b, L=6, T="RU0814"	(9): ID=21, P=17, IC=0, MI=1000010000b, L=6, T="RU0815"		
(10): ID=22, P=18, IC=0, MI=1000010000b, L=6, T="RU0816"	(11): ID=23, P=19, IC=0, MI=1000010000b, L=6, T="RU0817"		
(12): ID=24, P=20, IC=0, MI=1000010000b, L=6, T="RU0818"			

Message-S40: STM requests display of indicators 2,4,7,13,15,23 at positions 2,4,7,13,15,23 with icons.			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	37	Message Length



STM-15: PL=25, ST=7, (State DA)	
STM-35: PL=248, N=6, ID=2, P=2, IC=10, MI=1000010000b (black on red, No flashing), L=0	
(2): ID=4, P=4, IC=12, MI=1000010000b, L=0	(3): ID=7, P=7, IC=15, MI=1000010000b, L=0
(4): ID=13, P=13, IC=21, MI=1000010000b, L=0	(5): ID=15, P=15, IC=23, MI=1000010000b, L=0
(6): ID=23, P=23, IC=31, MI=1000010000b, L=0	

Message-S41: STM requests display of indicators 2,4,7,13,15,23 at positions 3,5,8,14,16,24 with icons.			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	37	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=248, N=6, ID=2, P=3, IC=10, MI=1000010000b (black on red, No flashing), L=0			
(2): ID=4, P=5, IC=12, MI=1000010000b, L=0	(3): ID=7, P=8, IC=15, MI=1000010000b, L=0		
(4): ID=13, P=14, IC=21, MI=1000010000b, L=0	(5): ID=15, P=16, IC=23, MI=1000010000b, L=0		
(6): ID=23, P=24, IC=31, MI=1000010000b, L=0			

2.2.13 Test Case 7b3.1

TEST CASE HEADER	
Test case identification	DMI Function
	7b3.0.1.0
	Icon identity test with indicators for configuration(s) 7a.3, single indicator request with different icons:
	All icons fitting into an indicator position are displayed with indicator 1 at position 2 in a loop one after the other



ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.5, 13.4.1.6, 13.4.3.3
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service: 7a.3. The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	

Starting Conditions	Value	Comments
STM State	DA	
ETCS Mode	SN	
ETCS Level	NTC	
Train State	not relevant	
ETCS Train Data	not relevant	
Active DMI channel Connection	Established	
Other DMI channels Connections	not relevant	
TIU Connection	not relevant	
BIU Connection	not relevant	
JD Connection	not relevant	
TIU Regenerative Brake Command	not relevant	
TIU Magnetic Shoes Brake Command	not relevant	
TIU Eddy Current Brake Command for Emergency Brake	not relevant	

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TIU Eddy Current Brake Command for Service Brake	not relevant	
TIU Pantograph Command	not relevant	
TIU Air Tightness Command	not relevant	
TIU Main Switch / Circuit Breaker Command	not relevant	
TIU Traction Cut Off Command	not relevant	
TIU Traction Status	not relevant	
TIU Direction Controller Position Status	not relevant	
TIU Cab Status	Cab A or B active	For the test it is not relevant, what cab is active
BIU Emergency Brake Command	not relevant	
BIU Service Brake Command	not relevant	
BIU Emergency Brake Status	not relevant	
BIU Service Brake Status	not relevant	
NTC isolation status	Not isolated for active STM. Not relevant for other STMs	

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of indicator 1 at position 2 with icon 1	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicator with icon 1 is displayed at position 2
2	STM requests display of indicator 1 at position 2 with icon 2	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Indicator with icon 2 is displayed at position 2
3	STM requests display of indicator 1 at position 2 with icon 3	PROF	T0+10s	connection of active DMI channel: Message-S3	DMI		Indicator with icon 3 is displayed at position 2
4	STM requests display of indicator 1 at position 2 with icon 4	PROF	T0+15s	connection of active DMI channel: Message-S4	DMI		Indicator with icon 4 is displayed at position 2

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5	STM requests display of indicator 1 at position 2 with icon 5	PROF	T0+20s	connection of active DMI channel: Message-S5	DMI		Indicator with icon 5 is displayed at position 2
6	STM requests display of indicator 1 at position 2 with icon 6	PROF	T0+25s	connection of active DMI channel: Message-S6	DMI		Indicator with icon 6 is displayed at position 2

Message-S1: STM requests display of indicator 1 at position 2 with icon 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	63	Packet Length
N_ITER	5	1	Request for 1 indicator
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	2	
NID_ICON(1)	8	1	
M_IND_ATTRIB(1)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	

Message-S2: STM requests display of indicator 1 at position 2 with icon 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=1, P=2, IC=2, MI=1000001000b (black on white, No flashing), L=0			

Message-S3: STM requests display of indicator 1 at position 2 with icon 3			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=1, P=2, IC=3, MI=1000001000b (black on white, No flashing), L=0			

Message-S4: STM requests display of indicator 1 at position 2 with icon 4			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=1, P=2, IC=4, MI=1000001000b (black on white, No flashing), L=0			

Message-S5: STM requests display of indicator 1 at position 2 with icon 5			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=1, P=2, IC=5, MI=1000001000b (black on white, No flashing), L=0			



Message-S6: STM requests display of indicator 1 at position 2 with icon 6			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=1, P=2, IC=6, MI=1000001000b (black on white, No flashing), L=0			

End Conditions	Value	Comments
STM State	unchanged	
ETCS Mode	unchanged	
ETCS Level	unchanged	
Train State	not relevant	
ETCS Train Data	not relevant	
Active DMI channel Connection	unchanged	
Other DMI channels Connections	not relevant	
TIU Connection	not relevant	
BIU Connection	not relevant	
JD Connection	not relevant	
TIU Regenerative Brake Command	not relevant	
TIU Magnetic Shoes Brake Command	not relevant	
TIU Eddy Current Brake Command for Emergency Brake	not relevant	
TIU Eddy Current Brake Command for Service Brake	not relevant	



TIU Pantograph Command	not relevant	
TIU Air Tightness Command	not relevant	
TIU Main Switch / Circuit Breaker Command	not relevant	
TIU Traction Cut Off Command	not relevant	
TIU Traction Status	not relevant	
TIU Direction Controller Position Status	not relevant	
TIU Cab Status	unchanged	
BIU Emergency Brake Command	not relevant	
BIU Service Brake Command	not relevant	
BIU Emergency Brake Status	not relevant	
BIU Service Brake Status	not relevant	
NTC isolation status	unchanged	

2.2.14 Test case 7b3.2

TEST CASE HEADER	
Test case identification	DMI Function
	7b3.0.2.0
	Icon identity test with indicators for configuration(s) 7a.3, set of indicators with different icons: All icons fitting into an indicator position are displayed in sets of 3 indicators in a loop.
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.5, 13.4.1.6, 13.4.3.3
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	



Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service: 7a.3. The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b3.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of indicators 1-3 at positions 1-3 with different icons (set 1)	PROF	T0	connection of active DMI channel: Message-S1	DMI		Icons 1, 5, 6 (icon set 1) are displayed at positions 1-3
2	STM requests display of indicators 1-3 at positions 1-3 with different icons (set 2)	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Icons 2, 5, 6 (icon set 2) are displayed at positions 1-3
3	STM requests display of indicators 1-3 at positions 1-3 with different icons (set 3)	PROF	T0+10s	connection of active DMI channel: Message-S3	DMI		Icons 3, 5, 6 (icon set 3) are displayed at positions 1-3
4	STM requests display of indicators 1-3 at positions 1-3 with different icons (set 4)	PROF	T0+15s	connection of active DMI channel: Message-S4	DMI		Icons 4, 5, 6 (icon set 4) are displayed at positions 1-3

Message-S1: STM requests display of indicators 1-3 at positions 1-3 with different icons (set 1)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	23	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length



NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	137	Packet Length
N_ITER	5	3	Request for 3 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	1	
M_IND_ATTRIB(1)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	5	
M_IND_ATTRIB(2)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	6	
M_IND_ATTRIB(3)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
Padding bits	6	000000b	

Message-S2: STM requests display of indicators 1-3 at positions 1-3 with different icons (set 2)			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	23	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=137, N=3, ID=1, P=1, IC=2, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=2, P=2, IC=5, MI=1000001000b, L=0			(3): ID=3, P=3, IC=6, MI=1000001000b, L=0

Message-S3: STM requests display of indicators 1-3 at positions 1-3 with different icons (set 3)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	23	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=137, N=3, ID=1, P=1, IC=3, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=2, P=2, IC=5, MI=1000001000b, L=0			(3): ID=3, P=3, IC=6, MI=1000001000b, L=0

Message-S4: STM requests display of indicators 1-3 at positions 1-3 with different icons (set 4)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	23	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=137, N=3, ID=1, P=1, IC=4, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=2, P=2, IC=5, MI=1000001000b, L=0			(3): ID=3, P=3, IC=6, MI=1000001000b, L=0



2.2.15 Test Case 7b3.3

TEST CASE HEADER	
Test case identification	DMI Function
	7b3.0.3.0
	Icon identity test with indicators for configuration(s) 7a.3, set of indicators with same icon: A set of 3 indicators is displayed with same icon 5 (driver)
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.5, 13.4.1.6, 13.4.3.3
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service: 7a.3. The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b3.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of indicators 1-3 at positions 1, 2, 3 with same icon 5 (driver)	PROF	T0	connection of active DMI channel: Message-S1	DMI		Icon 5 (driver) is displayed at positions 1, 2, 3

Message-S1: STM requests display of indicators 1-3 at positions 1, 2, 3 with same icon 5 (driver)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	23	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	137	Packet Length
N_ITER	5	6	Request for 6 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	5	
M_IND_ATTRIB(1)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	5	
M_IND_ATTRIB(2)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	5	
M_IND_ATTRIB(3)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
Padding bits	6	000000b	

2.2.16 Test Case 7b3.4

TEST CASE HEADER	
Test case identification	DMI Function
	7b3.0.1.0
	Icon identity test with indicators for configuration(s) 7a.5, 7a.6 or 7a.7 (one configuration shall be chosen), single indicator request with different icons:
	All icons fitting into an indicator position are displayed with indicator 16 at position 3 in a loop one after the other
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.5, 13.4.1.6, 13.4.3.3
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service: 7a.5, 7a.6 or 7a.7 (one configuration shall be chosen). The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b3.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of indicator 16 at position 3 with icon 1	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicator with icon 1 is displayed at position 3
2	STM requests display of indicator 16 at position 3 with icon 2	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Indicator with icon 2 is displayed at position 3
3	STM requests display of indicator	PROF	T0+10s	connection of active DMI channel:	DMI		Indicator with icon 10 is displayed at



	16 at position 3 with icon 10			Message-S3			position 3
4	STM requests display of indicator 16 at position 3 with icon 11	PROF	T0+15s	connection of active DMI channel: Message-S4	DMI		Indicator with icon 11 is displayed at position 3
5	STM requests display of indicator 16 at position 3 with icon 12	PROF	T0+20s	connection of active DMI channel: Message-S5	DMI		Indicator with icon 12 is displayed at position 3
6	STM requests display of indicator 16 at position 3 with icon 13	PROF	T0+25s	connection of active DMI channel: Message-S6	DMI		Indicator with icon 13 is displayed at position 3
7	STM requests display of indicator 16 at position 3 with icon 20	PROF	T0+30s	connection of active DMI channel: Message-S7	DMI		Indicator with icon 20 is displayed at position 3
8	STM requests display of indicator 16 at position 3 with icon 21	PROF	T0+35s	connection of active DMI channel: Message-S8	DMI		Indicator with icon 21 is displayed at position 3
9	STM requests display of indicator 16 at position 3 with icon 40	PROF	T0+40s	connection of active DMI channel: Message-S9	DMI		Indicator with icon 40 is displayed at position 3
10	STM requests display of indicator 16 at position 3 with icon 41	PROF	T0+45s	connection of active DMI channel: Message-S10	DMI		Indicator with icon 41 is displayed at position 3
11	STM requests display of indicator 16 at position 3 with icon 42	PROF	T0+50s	connection of active DMI channel: Message-S11	DMI		Indicator with icon 42 is displayed at position 3
12	STM requests display of indicator 16 at position 3 with icon 43	PROF	T0+55s	connection of active DMI channel: Message-S12	DMI		Indicator with icon 43 is displayed at position 3
13	STM requests display of indicator 16 at position 3 with icon 44	PROF	T0+60s	connection of active DMI channel: Message-S13	DMI		Indicator with icon 44 is displayed at position 3

Message-S1: STM requests display of indicator 16 at position 3 with icon 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
NID_PACKET	8	15	State report from STM (STM-15)



L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	63	Packet Length
N_ITER	5	1	Request for 1 indicator
NID_INDICATOR(1)	8	16	Indicator 16
NID_INDPOS(1)	5	3	
NID_ICON(1)	8	1	
M_IND_ATTRIB(1)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	

Message-S2: STM requests display of indicator 16 at position 3 with icon 2			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=3, IC=2, MI=1000001000b (black on white, No flashing), L=0			

Message-S3: STM requests display of indicator 16 at position 3 with icon 10			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=3, IC=10, MI=1000001000b (black on white, No flashing), L=0			



Message-S4: STM requests display of indicator 16 at position 3 with icon 11			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=3, IC=11, MI=1000001000b (black on white, No flashing), L=0			

Message-S5: STM requests display of indicator 16 at position 3 with icon 12			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=3, IC=12, MI=1000001000b (black on white, No flashing), L=0			

Message-S6: STM requests display of indicator 16 at position 3 with icon 13			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=3, IC=13, MI=1000001000b (black on white, No flashing), L=0			

Message-S7: STM requests display of indicator 16 at position 3 with icon 20			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=3, IC=20, MI=1000001000b (black on white, No flashing), L=0			

Message-S8: STM requests display of indicator 16 at position 3 with icon 21			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=3, IC=21, MI=1000001000b (black on white, No flashing), L=0			

Message-S9: STM requests display of indicator 16 at position 3 with icon 40			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=3, IC=40, MI=1000001000b (black on white, No flashing), L=0			

Message-S10: STM requests display of indicator 16 at position 3 with icon 41			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			



STM-35: PL=63, N=1, ID=16, P=3, IC=41, MI=1000001000b (black on white, No flashing), L=0

Message-S11: STM requests display of indicator 16 at position 3 with icon 42			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=3, IC=42, MI=1000001000b (black on white, No flashing), L=0			

Message-S12: STM requests display of indicator 16 at position 3 with icon 43			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=3, IC=43, MI=1000001000b (black on white, No flashing), L=0			

Message-S13: STM requests display of indicator 16 at position 3 with icon 44			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=16, P=3, IC=44, MI=1000001000b (black on white, No flashing), L=0			



2.2.17 Test Case 7b3.5

TEST CASE HEADER	
Test case identification	DMI Function
	7b3.0.2.0
	Icon identity test with indicators for configuration(s) 7a.5, 7a.6 or 7a.7 (one configuration shall be chosen), set of indicators with different icons: All icons fitting into an indicator position are displayed in sets of 8 indicators in a loop.
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.5, 13.4.1.6, 13.4.3.3
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service: 7a.5, 7a.6 or 7a.7 (one configuration shall be chosen). The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b3.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of indicators 1-8 at positions 1-8 with different icons (set 1)	PROF	T0	connection of active DMI channel: Message-S1	DMI		Icons 1, 2, 10, 11, 12, 13, 20, 21 (icon set 1) are displayed at positions 1-8
2	STM requests display of indicators 1-8 at positions 1-8 with different icons (set 2)	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Icons 40, 41, 42, 43, 44, 1, 2, 10 (icon set 2) are displayed at positions 1-8



Message-S1: STM requests display of indicators 1-8 at positions 1-8 with different icons (set 1)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	322	Packet Length
N_ITER	5	8	Request for 8 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	1	
M_IND_ATTRIB(1)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	2	
M_IND_ATTRIB(2)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	10	



M_IND_ATTRIB(3)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(4)	8	4	Indicator 4
NID_INDPOS(4)	5	4	
NID_ICON(4)	8	11	
M_IND_ATTRIB(4)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(5)	8	5	Indicator 5
NID_INDPOS(5)	5	5	
NID_ICON(5)	8	12	
M_IND_ATTRIB(5)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(6)	8	6	Indicator 6
NID_INDPOS(6)	5	6	
NID_ICON(6)	8	13	
M_IND_ATTRIB(6)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(7)	8	7	Indicator 7
NID_INDPOS(7)	5	7	
NID_ICON(7)	8	20	
M_IND_ATTRIB(7)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(8)	8	8	Indicator 8



NID_INDPOS(8)	5	8	
NID_ICON(8)	8	21	
M_IND_ATTRIB(8)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
Padding bits	5	00000b	

Message-S2: STM requests display of indicators 1-8 at positions 1-8 with different icons (set 2)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=322, N=8, ID=1, P=1, IC=40, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=2, P=2, IC=41, MI=1000001000b, L=0		(3): ID=3, P=3, IC=42, MI=1000001000b, L=0	
(4): ID=4, P=4, IC=43, MI=1000001000b, L=0		(5): ID=5, P=5, IC=44, MI=1000001000b, L=0	
(6): ID=6, P=6, IC=1, MI=1000001000b, L=0		(7): ID=7, P=7, IC=2, MI=1000001000b, L=0	
(8): ID=8, P=8, IC=10, MI=1000001000b, L=0			

2.2.18 Test Case 7b3.6

TEST CASE HEADER	
Test case identification	DMI Function
	7b3.0.3.0
	Icon identity test with indicators for configuration(s) 7a.5, 7a.6 or 7a.7 (one configuration shall be chosen), set of indicators with same icon:



	A set of 8 indicators is displayed with same icon 13 (red loop)
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.5, 13.4.1.6, 13.4.3.3
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service: 7a.5, 7a.6 or 7a.7 (one configuration shall be chosen). The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b3.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of indicators 9-16 at positions 1, 2, 3, 4, 5, 6, 7, 8 with same icon 13 (red loop)	PROF	T0	connection of active DMI channel: Message-S1	DMI		Icon 13 (red loop) is displayed at positions 1, 2, 3, 4, 5, 6, 7, 8

Message-S1: STM requests display of indicators 9-16 at positions 1, 2, 3, 4, 5, 6, 7, 8 with same icon 13 (red loop)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)



L_PACKET	13	322	Packet Length
N_ITER	5	14	Request for 14 indicators
NID_INDICATOR(1)	8	9	Indicator 9
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	13	
M_IND_ATTRIB(1)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(2)	8	10	Indicator 10
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	13	
M_IND_ATTRIB(2)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(3)	8	11	Indicator 11
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	13	
M_IND_ATTRIB(3)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(4)	8	12	Indicator 12
NID_INDPOS(4)	5	4	
NID_ICON(4)	8	13	
M_IND_ATTRIB(4)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(5)	8	13	Indicator 13



NID_INDPOS(5)	5	5	
NID_ICON(5)	8	13	
M_IND_ATTRIB(5)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(6)	8	14	Indicator 14
NID_INDPOS(6)	5	6	
NID_ICON(6)	8	13	
M_IND_ATTRIB(6)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(7)	8	15	Indicator 15
NID_INDPOS(7)	5	7	
NID_ICON(7)	8	13	
M_IND_ATTRIB(7)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(8)	8	16	Indicator 16
NID_INDPOS(8)	5	8	
NID_ICON(8)	8	13	
M_IND_ATTRIB(8)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
Padding bits	5	00000b	



2.2.19 Test Case 7b3.7

TEST CASE HEADER	
Test case identification	DMI Function
	7b3.0.1.0
	Icon identity test with indicators for configuration(s) 7a.9, single indicator request with different icons: All icons fitting into an indicator position are displayed with indicator 88 at position 21 in a loop one after the other
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.5, 13.4.1.6, 13.4.3.3
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service: 7a.9. The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b3.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of indicator 88 at position 21 with icon 1	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicator with icon 1 is displayed at position 21
2	STM requests display of indicator 88 at position 21 with icon 2	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Indicator with icon 2 is displayed at position 21
...
127	STM requests display of indicator 88 at position 21 with icon 127	PROF	T0+630s	connection of active DMI channel: Message-S127	DMI		Indicator with icon 127 is displayed at position 21



...
253	STM requests display of indicator 88 at position 21 with icon 253	PROF	T0+1260s	connection of active DMI channel: Message-S253	DMI		Indicator with icon 253 is displayed at position 21
254	STM requests display of indicator 88 at position 21 with icon 254	PROF	T0+1265s	connection of active DMI channel: Message-S254	DMI		Indicator with icon 254 is displayed at position 21
255	STM requests display of indicator 88 at position 21 with icon 255	PROF	T0+1270s	connection of active DMI channel: Message-S255	DMI		Indicator with icon 255 is displayed at position 21

Message-S1: STM requests display of indicator 88 at position 21 with icon 1			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	63	Packet Length
N_ITER	5	1	Request for 1 indicator
NID_INDICATOR(1)	8	88	Indicator 88
NID_INDPOS(1)	5	21	
NID_ICON(1)	8	1	
M_IND_ATTRIB(1)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	

Message-S2: STM requests display of indicator 88 at position 21 with icon 2



VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=88, P=21, IC=2, MI=1000001000b (black on white, No flashing), L=0			

Message-S127: STM requests display of indicator 88 at position 21 with icon 127			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=88, P=21, IC=127, MI=1000001000b (black on white, No flashing), L=0			

Message-S253: STM requests display of indicator 88 at position 21 with icon 253			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=88, P=21, IC=253, MI=1000001000b (black on white, No flashing), L=0			

Message-S254: STM requests display of indicator 88 at position 21 with icon 254			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length



STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=88, P=21, IC=254, MI=1000001000b (black on white, No flashing), L=0			
Message-S255: STM requests display of indicator 88 at position 21 with icon 255			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=88, P=21, IC=255, MI=1000001000b (black on white, No flashing), L=0			

2.2.20 Test Case 7b3.8

TEST CASE HEADER	
Test case identification	DMI Function
	7b3.0.2.0
	Icon identity test with indicators for configuration(s) 7a.9, set of indicators with different icons: All icons fitting into an indicator position are displayed in sets of 24 indicators in a loop.
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.5, 13.4.1.6, 13.4.3.3
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service: 7a.9. The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9

Comments and constraints	Starting and end conditions as for test case 7b3.1
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ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 1)	PROF	T0	connection of active DMI channel: Message-S1	DMI		Icons 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32 (icon set 1) are displayed at positions 1-24
2	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 2)	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Icons 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64 (icon set 2) are displayed at positions 1-24
3	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 3)	PROF	T0+10s	connection of active DMI channel: Message-S3	DMI		Icons 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96 (icon set 3) are displayed at positions 1-24
4	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 4)	PROF	T0+15s	connection of active DMI channel: Message-S4	DMI		Icons 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128 (icon set 4) are displayed at positions 1-24
5	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 5)	PROF	T0+20s	connection of active DMI channel: Message-S5	DMI		Icons 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160 (icon set 5) are displayed at positions 1-24
6	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 6)	PROF	T0+25s	connection of active DMI channel: Message-S6	DMI		Icons 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192 (icon set 6) are displayed at positions 1-24



7	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 7)	PROF	T0+30s	connection of active DMI channel: Message-S7	DMI		Icons 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224 (icon set 7) are displayed at positions 1-24
8	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 8)	PROF	T0+35s	connection of active DMI channel: Message-S8	DMI		Icons 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 160 (icon set 8) are displayed at positions 1-24
9	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 9)	PROF	T0+40s	connection of active DMI channel: Message-S9	DMI		Icons 9, 10, 11, 12, 13, 2, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 1, 30, 31, 32 (icon set 9) are displayed at positions 1-24
10	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 10)	PROF	T0+45s	connection of active DMI channel: Message-S10	DMI		Icons 41, 42, 43, 44, 45, 34, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 33, 62, 63, 64 (icon set 10) are displayed at positions 1-24
11	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 11)	PROF	T0+50s	connection of active DMI channel: Message-S11	DMI		Icons 73, 74, 75, 76, 77, 66, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 65, 94, 95, 96 (icon set 11) are displayed at positions 1-24
12	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 12)	PROF	T0+55s	connection of active DMI channel: Message-S12	DMI		Icons 105, 106, 107, 108, 109, 98, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 97, 126, 127, 128 (icon set 12) are displayed at positions 1-24
13	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 13)	PROF	T0+60s	connection of active DMI channel: Message-S13	DMI		Icons 137, 138, 139, 140, 141, 130, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 129, 158, 159, 160 (icon set 13) are displayed at positions 1-24



14	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 14)	PROF	T0+65s	connection of active DMI channel: Message-S14	DMI		Icons 169, 170, 171, 172, 173, 162, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 161, 190, 191, 192 (icon set 14) are displayed at positions 1-24
15	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 15)	PROF	T0+70s	connection of active DMI channel: Message-S15	DMI		Icons 201, 202, 203, 204, 205, 194, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 193, 222, 223, 224 (icon set 15) are displayed at positions 1-24
16	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 16)	PROF	T0+75s	connection of active DMI channel: Message-S16	DMI		Icons 233, 234, 235, 236, 237, 226, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 225, 254, 255, 160 (icon set 16) are displayed at positions 1-24
17	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 17)	PROF	T0+80s	connection of active DMI channel: Message-S17	DMI		Icons 9, 10, 11, 12, 13, 3, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 6, 30, 31, 32 (icon set 17) are displayed at positions 1-24
18	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 18)	PROF	T0+85s	connection of active DMI channel: Message-S18	DMI		Icons 41, 42, 43, 44, 45, 35, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 38, 62, 63, 64 (icon set 18) are displayed at positions 1-24
19	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 19)	PROF	T0+90s	connection of active DMI channel: Message-S19	DMI		Icons 73, 74, 75, 76, 77, 67, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 70, 94, 95, 96 (icon set 19) are displayed at positions 1-24
20	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 20)	PROF	T0+95s	connection of active DMI channel: Message-S20	DMI		Icons 105, 106, 107, 108, 109, 99, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 102, 126, 127, 128 (icon set 20) are displayed at positions 1-24



21	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 21)	PROF	T0+100s	connection of active DMI channel: Message-S21	DMI		Icons 137, 138, 139, 140, 141, 131, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 134, 158, 159, 160 (icon set 21) are displayed at positions 1-24
22	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 22)	PROF	T0+105s	connection of active DMI channel: Message-S22	DMI		Icons 169, 170, 171, 172, 173, 163, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 166, 190, 191, 192 (icon set 22) are displayed at positions 1-24
23	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 23)	PROF	T0+110s	connection of active DMI channel: Message-S23	DMI		Icons 201, 202, 203, 204, 205, 195, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 198, 222, 223, 224 (icon set 23) are displayed at positions 1-24
24	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 24)	PROF	T0+115s	connection of active DMI channel: Message-S24	DMI		Icons 233, 234, 235, 236, 237, 227, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 230, 254, 255, 160 (icon set 24) are displayed at positions 1-24
25	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 25)	PROF	T0+120s	connection of active DMI channel: Message-S25	DMI		Icons 9, 10, 11, 12, 13, 4, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 7, 30, 31, 32 (icon set 25) are displayed at positions 1-24
26	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 26)	PROF	T0+125s	connection of active DMI channel: Message-S26	DMI		Icons 41, 42, 43, 44, 45, 36, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 39, 62, 63, 64 (icon set 26) are displayed at positions 1-24
27	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 27)	PROF	T0+130s	connection of active DMI channel: Message-S27	DMI		Icons 73, 74, 75, 76, 77, 68, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 71, 94, 95, 96 (icon set 27) are displayed at positions 1-24



28	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 28)	PROF	T0+135s	connection of active DMI channel: Message-S28	DMI		Icons 105, 106, 107, 108, 109, 100, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 103, 126, 127, 128 (icon set 28) are displayed at positions 1-24
29	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 29)	PROF	T0+140s	connection of active DMI channel: Message-S29	DMI		Icons 137, 138, 139, 140, 141, 132, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 135, 158, 159, 160 (icon set 29) are displayed at positions 1-24
30	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 30)	PROF	T0+145s	connection of active DMI channel: Message-S30	DMI		Icons 169, 170, 171, 172, 173, 164, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 167, 190, 191, 192 (icon set 30) are displayed at positions 1-24
31	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 31)	PROF	T0+150s	connection of active DMI channel: Message-S31	DMI		Icons 201, 202, 203, 204, 205, 196, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 199, 222, 223, 224 (icon set 31) are displayed at positions 1-24
32	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 32)	PROF	T0+155s	connection of active DMI channel: Message-S32	DMI		Icons 233, 234, 235, 236, 237, 228, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 231, 254, 255, 160 (icon set 32) are displayed at positions 1-24
33	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 33)	PROF	T0+160s	connection of active DMI channel: Message-S33	DMI		Icons 9, 10, 11, 12, 13, 2, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 8, 30, 31, 32 (icon set 33) are displayed at positions 1-24
34	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 34)	PROF	T0+165s	connection of active DMI channel: Message-S34	DMI		Icons 41, 42, 43, 44, 45, 34, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 40, 62, 63, 64 (icon set 34) are displayed at positions 1-24



35	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 35)	PROF	T0+170s	connection of active DMI channel: Message-S35	DMI		Icons 73, 74, 75, 76, 77, 66, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 72, 94, 95, 96 (icon set 35) are displayed at positions 1-24
36	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 36)	PROF	T0+175s	connection of active DMI channel: Message-S36	DMI		Icons 105, 106, 107, 108, 109, 98, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 104, 126, 127, 128 (icon set 36) are displayed at positions 1-24
37	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 37)	PROF	T0+180s	connection of active DMI channel: Message-S37	DMI		Icons 137, 138, 139, 140, 141, 130, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 136, 158, 159, 160 (icon set 37) are displayed at positions 1-24
38	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 38)	PROF	T0+185s	connection of active DMI channel: Message-S38	DMI		Icons 169, 170, 171, 172, 173, 162, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 168, 190, 191, 192 (icon set 38) are displayed at positions 1-24
39	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 39)	PROF	T0+190s	connection of active DMI channel: Message-S39	DMI		Icons 201, 202, 203, 204, 205, 194, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 200, 222, 223, 224 (icon set 39) are displayed at positions 1-24
40	STM requests display of indicators 232-255 at positions 1-24 with different icons (set 40)	PROF	T0+195s	connection of active DMI channel: Message-S40	DMI		Icons 233, 234, 235, 236, 237, 226, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 232, 254, 255, 160 (icon set 40) are displayed at positions 1-24

Message-S1: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 1)			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	914	Packet Length
N_ITER	5	24	Request for 24 indicators
NID_INDICATOR(1)	8	232	Indicator 232
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	9	
M_IND_ATTRIB(1)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(2)	8	233	Indicator 233
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	10	
M_IND_ATTRIB(2)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(3)	8	234	Indicator 234
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	11	
M_IND_ATTRIB(3)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	



NID_INDICATOR(4)	8	235	Indicator 235
NID_INDPOS(4)	5	4	
NID_ICON(4)	8	12	
M_IND_ATTRIB(4)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(5)	8	236	Indicator 236
NID_INDPOS(5)	5	5	
NID_ICON(5)	8	13	
M_IND_ATTRIB(5)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(6)	8	237	Indicator 237
NID_INDPOS(6)	5	6	
NID_ICON(6)	8	14	
M_IND_ATTRIB(6)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(7)	8	238	Indicator 238
NID_INDPOS(7)	5	7	
NID_ICON(7)	8	15	
M_IND_ATTRIB(7)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(8)	8	239	Indicator 239
NID_INDPOS(8)	5	8	
NID_ICON(8)	8	16	



M_IND_ATTRIB(8)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(9)	8	240	Indicator 240
NID_INDPOS(9)	5	9	
NID_ICON(9)	8	17	
M_IND_ATTRIB(9)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(10)	8	241	Indicator 241
NID_INDPOS(10)	5	10	
NID_ICON(10)	8	18	
M_IND_ATTRIB(10)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(11)	8	242	Indicator 242
NID_INDPOS(11)	5	11	
NID_ICON(11)	8	19	
M_IND_ATTRIB(11)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(12)	8	243	Indicator 243
NID_INDPOS(12)	5	12	
NID_ICON(12)	8	20	
M_IND_ATTRIB(12)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(13)	8	244	Indicator 244



NID_INDPOS(13)	5	13	
NID_ICON(13)	8	21	
M_IND_ATTRIB(13)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(14)	8	245	Indicator 245
NID_INDPOS(14)	5	14	
NID_ICON(14)	8	22	
M_IND_ATTRIB(14)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(15)	8	246	Indicator 246
NID_INDPOS(15)	5	15	
NID_ICON(15)	8	23	
M_IND_ATTRIB(15)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(16)	8	247	Indicator 247
NID_INDPOS(16)	5	16	
NID_ICON(16)	8	24	
M_IND_ATTRIB(16)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(17)	8	248	Indicator 248
NID_INDPOS(17)	5	17	
NID_ICON(17)	8	25	
M_IND_ATTRIB(17)	10	1000001000b	black on white, No flashing



L_CAPTION(1)	6	0	
NID_INDICATOR(18)	8	249	Indicator 249
NID_INDPOS(18)	5	18	
NID_ICON(18)	8	26	
M_IND_ATTRIB(18)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(19)	8	250	Indicator 250
NID_INDPOS(19)	5	19	
NID_ICON(19)	8	27	
M_IND_ATTRIB(19)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(20)	8	251	Indicator 251
NID_INDPOS(20)	5	20	
NID_ICON(20)	8	28	
M_IND_ATTRIB(20)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(21)	8	252	Indicator 252
NID_INDPOS(21)	5	21	
NID_ICON(21)	8	29	
M_IND_ATTRIB(21)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(22)	8	253	Indicator 253
NID_INDPOS(22)	5	22	



NID_ICON(22)	8	30	
M_IND_ATTRIB(22)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(23)	8	254	Indicator 254
NID_INDPOS(23)	5	23	
NID_ICON(23)	8	31	
M_IND_ATTRIB(23)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(24)	8	255	Indicator 255
NID_INDPOS(24)	5	24	
NID_ICON(24)	8	32	
M_IND_ATTRIB(24)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
Padding bits	5	00000b	

Message-S2: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 2)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=41, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=42, MI=1000001000b, L=0			(3): ID=234, P=3, IC=43, MI=1000001000b, L=0
(4): ID=235, P=4, IC=44, MI=1000001000b, L=0			(5): ID=236, P=5, IC=45, MI=1000001000b, L=0



(6): ID=237, P=6, IC=46, MI=1000001000b, L=0	(7): ID=238, P=7, IC=47, MI=1000001000b, L=0
(8): ID=239, P=8, IC=48, MI=1000001000b, L=0	(9): ID=240, P=9, IC=49, MI=1000001000b, L=0
(10): ID=241, P=10, IC=50, MI=1000001000b, L=0	(11): ID=242, P=11, IC=51, MI=1000001000b, L=0
(12): ID=243, P=12, IC=52, MI=1000001000b, L=0	(13): ID=244, P=13, IC=53, MI=1000001000b, L=0
(14): ID=245, P=14, IC=54, MI=1000001000b, L=0	(15): ID=246, P=15, IC=55, MI=1000001000b, L=0
(16): ID=247, P=16, IC=56, MI=1000001000b, L=0	(17): ID=248, P=17, IC=57, MI=1000001000b, L=0
(18): ID=249, P=18, IC=58, MI=1000001000b, L=0	(19): ID=250, P=19, IC=59, MI=1000001000b, L=0
(20): ID=251, P=20, IC=60, MI=1000001000b, L=0	(21): ID=252, P=21, IC=61, MI=1000001000b, L=0
(22): ID=253, P=22, IC=62, MI=1000001000b, L=0	(23): ID=254, P=23, IC=63, MI=1000001000b, L=0
(24): ID=255, P=24, IC=64, MI=1000001000b, L=0	

Message-S3: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 3)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=73, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=74, MI=1000001000b, L=0	(3): ID=234, P=3, IC=75, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=76, MI=1000001000b, L=0	(5): ID=236, P=5, IC=77, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=78, MI=1000001000b, L=0	(7): ID=238, P=7, IC=79, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=80, MI=1000001000b, L=0	(9): ID=240, P=9, IC=81, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=82, MI=1000001000b, L=0	(11): ID=242, P=11, IC=83, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=84, MI=1000001000b, L=0	(13): ID=244, P=13, IC=85, MI=1000001000b, L=0		



(14): ID=245, P=14, IC=86, MI=1000001000b, L=0	(15): ID=246, P=15, IC=87, MI=1000001000b, L=0
(16): ID=247, P=16, IC=88, MI=1000001000b, L=0	(17): ID=248, P=17, IC=89, MI=1000001000b, L=0
(18): ID=249, P=18, IC=90, MI=1000001000b, L=0	(19): ID=250, P=19, IC=91, MI=1000001000b, L=0
(20): ID=251, P=20, IC=92, MI=1000001000b, L=0	(21): ID=252, P=21, IC=93, MI=1000001000b, L=0
(22): ID=253, P=22, IC=94, MI=1000001000b, L=0	(23): ID=254, P=23, IC=95, MI=1000001000b, L=0
(24): ID=255, P=24, IC=96, MI=1000001000b, L=0	

Message-S4: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 4)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=105, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=106, MI=1000001000b, L=0	(3): ID=234, P=3, IC=107, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=108, MI=1000001000b, L=0	(5): ID=236, P=5, IC=109, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=110, MI=1000001000b, L=0	(7): ID=238, P=7, IC=111, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=112, MI=1000001000b, L=0	(9): ID=240, P=9, IC=113, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=114, MI=1000001000b, L=0	(11): ID=242, P=11, IC=115, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=116, MI=1000001000b, L=0	(13): ID=244, P=13, IC=117, MI=1000001000b, L=0		
(14): ID=245, P=14, IC=118, MI=1000001000b, L=0	(15): ID=246, P=15, IC=119, MI=1000001000b, L=0		
(16): ID=247, P=16, IC=120, MI=1000001000b, L=0	(17): ID=248, P=17, IC=121, MI=1000001000b, L=0		
(18): ID=249, P=18, IC=122, MI=1000001000b, L=0	(19): ID=250, P=19, IC=123, MI=1000001000b, L=0		
(20): ID=251, P=20, IC=124, MI=1000001000b, L=0	(21): ID=252, P=21, IC=125, MI=1000001000b, L=0		



(22): ID=253, P=22, IC=126, MI=1000001000b, L=0	(23): ID=254, P=23, IC=127, MI=1000001000b, L=0
(24): ID=255, P=24, IC=128, MI=1000001000b, L=0	

Message-S5: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 5)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=137, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=138, MI=1000001000b, L=0	(3): ID=234, P=3, IC=139, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=140, MI=1000001000b, L=0	(5): ID=236, P=5, IC=141, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=142, MI=1000001000b, L=0	(7): ID=238, P=7, IC=143, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=144, MI=1000001000b, L=0	(9): ID=240, P=9, IC=145, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=146, MI=1000001000b, L=0	(11): ID=242, P=11, IC=147, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=148, MI=1000001000b, L=0	(13): ID=244, P=13, IC=149, MI=1000001000b, L=0		
(14): ID=245, P=14, IC=150, MI=1000001000b, L=0	(15): ID=246, P=15, IC=151, MI=1000001000b, L=0		
(16): ID=247, P=16, IC=152, MI=1000001000b, L=0	(17): ID=248, P=17, IC=153, MI=1000001000b, L=0		
(18): ID=249, P=18, IC=154, MI=1000001000b, L=0	(19): ID=250, P=19, IC=155, MI=1000001000b, L=0		
(20): ID=251, P=20, IC=156, MI=1000001000b, L=0	(21): ID=252, P=21, IC=157, MI=1000001000b, L=0		
(22): ID=253, P=22, IC=158, MI=1000001000b, L=0	(23): ID=254, P=23, IC=159, MI=1000001000b, L=0		
(24): ID=255, P=24, IC=160, MI=1000001000b, L=0			



Message-S6: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 6)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=169, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=170, MI=1000001000b, L=0		(3): ID=234, P=3, IC=171, MI=1000001000b, L=0	
(4): ID=235, P=4, IC=172, MI=1000001000b, L=0		(5): ID=236, P=5, IC=173, MI=1000001000b, L=0	
(6): ID=237, P=6, IC=174, MI=1000001000b, L=0		(7): ID=238, P=7, IC=175, MI=1000001000b, L=0	
(8): ID=239, P=8, IC=176, MI=1000001000b, L=0		(9): ID=240, P=9, IC=177, MI=1000001000b, L=0	
(10): ID=241, P=10, IC=178, MI=1000001000b, L=0		(11): ID=242, P=11, IC=179, MI=1000001000b, L=0	
(12): ID=243, P=12, IC=180, MI=1000001000b, L=0		(13): ID=244, P=13, IC=181, MI=1000001000b, L=0	
(14): ID=245, P=14, IC=182, MI=1000001000b, L=0		(15): ID=246, P=15, IC=183, MI=1000001000b, L=0	
(16): ID=247, P=16, IC=184, MI=1000001000b, L=0		(17): ID=248, P=17, IC=185, MI=1000001000b, L=0	
(18): ID=249, P=18, IC=186, MI=1000001000b, L=0		(19): ID=250, P=19, IC=187, MI=1000001000b, L=0	
(20): ID=251, P=20, IC=188, MI=1000001000b, L=0		(21): ID=252, P=21, IC=189, MI=1000001000b, L=0	
(22): ID=253, P=22, IC=190, MI=1000001000b, L=0		(23): ID=254, P=23, IC=191, MI=1000001000b, L=0	
(24): ID=255, P=24, IC=192, MI=1000001000b, L=0			

Message-S7: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 7)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length



STM-15: PL=25, ST=7, (State DA)	
STM-35: PL=914, N=24, ID=232, P=1, IC=201, MI=1000001000b (black on white, No flashing), L=0	
(2): ID=233, P=2, IC=202, MI=1000001000b, L=0	(3): ID=234, P=3, IC=203, MI=1000001000b, L=0
(4): ID=235, P=4, IC=204, MI=1000001000b, L=0	(5): ID=236, P=5, IC=205, MI=1000001000b, L=0
(6): ID=237, P=6, IC=206, MI=1000001000b, L=0	(7): ID=238, P=7, IC=207, MI=1000001000b, L=0
(8): ID=239, P=8, IC=208, MI=1000001000b, L=0	(9): ID=240, P=9, IC=209, MI=1000001000b, L=0
(10): ID=241, P=10, IC=210, MI=1000001000b, L=0	(11): ID=242, P=11, IC=211, MI=1000001000b, L=0
(12): ID=243, P=12, IC=212, MI=1000001000b, L=0	(13): ID=244, P=13, IC=213, MI=1000001000b, L=0
(14): ID=245, P=14, IC=214, MI=1000001000b, L=0	(15): ID=246, P=15, IC=215, MI=1000001000b, L=0
(16): ID=247, P=16, IC=216, MI=1000001000b, L=0	(17): ID=248, P=17, IC=217, MI=1000001000b, L=0
(18): ID=249, P=18, IC=218, MI=1000001000b, L=0	(19): ID=250, P=19, IC=219, MI=1000001000b, L=0
(20): ID=251, P=20, IC=220, MI=1000001000b, L=0	(21): ID=252, P=21, IC=221, MI=1000001000b, L=0
(22): ID=253, P=22, IC=222, MI=1000001000b, L=0	(23): ID=254, P=23, IC=223, MI=1000001000b, L=0
(24): ID=255, P=24, IC=224, MI=1000001000b, L=0	

Message-S8: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 8)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=233, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=234, MI=1000001000b, L=0	(3): ID=234, P=3, IC=235, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=236, MI=1000001000b, L=0	(5): ID=236, P=5, IC=237, MI=1000001000b, L=0		



(6): ID=237, P=6, IC=238, MI=1000001000b, L=0	(7): ID=238, P=7, IC=239, MI=1000001000b, L=0
(8): ID=239, P=8, IC=240, MI=1000001000b, L=0	(9): ID=240, P=9, IC=241, MI=1000001000b, L=0
(10): ID=241, P=10, IC=242, MI=1000001000b, L=0	(11): ID=242, P=11, IC=243, MI=1000001000b, L=0
(12): ID=243, P=12, IC=244, MI=1000001000b, L=0	(13): ID=244, P=13, IC=245, MI=1000001000b, L=0
(14): ID=245, P=14, IC=246, MI=1000001000b, L=0	(15): ID=246, P=15, IC=247, MI=1000001000b, L=0
(16): ID=247, P=16, IC=248, MI=1000001000b, L=0	(17): ID=248, P=17, IC=249, MI=1000001000b, L=0
(18): ID=249, P=18, IC=250, MI=1000001000b, L=0	(19): ID=250, P=19, IC=251, MI=1000001000b, L=0
(20): ID=251, P=20, IC=252, MI=1000001000b, L=0	(21): ID=252, P=21, IC=253, MI=1000001000b, L=0
(22): ID=253, P=22, IC=254, MI=1000001000b, L=0	(23): ID=254, P=23, IC=255, MI=1000001000b, L=0
(24): ID=255, P=24, IC=160, MI=1000001000b, L=0	

Message-S9: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 9)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=9, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=10, MI=1000001000b, L=0	(3): ID=234, P=3, IC=11, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=12, MI=1000001000b, L=0	(5): ID=236, P=5, IC=13, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=2, MI=1000001000b, L=0	(7): ID=238, P=7, IC=15, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=16, MI=1000001000b, L=0	(9): ID=240, P=9, IC=17, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=18, MI=1000001000b, L=0	(11): ID=242, P=11, IC=19, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=20, MI=1000001000b, L=0	(13): ID=244, P=13, IC=21, MI=1000001000b, L=0		



(14): ID=245, P=14, IC=22, MI=1000001000b, L=0	(15): ID=246, P=15, IC=23, MI=1000001000b, L=0
(16): ID=247, P=16, IC=24, MI=1000001000b, L=0	(17): ID=248, P=17, IC=25, MI=1000001000b, L=0
(18): ID=249, P=18, IC=26, MI=1000001000b, L=0	(19): ID=250, P=19, IC=27, MI=1000001000b, L=0
(20): ID=251, P=20, IC=28, MI=1000001000b, L=0	(21): ID=252, P=21, IC=1, MI=1000001000b, L=0
(22): ID=253, P=22, IC=30, MI=1000001000b, L=0	(23): ID=254, P=23, IC=31, MI=1000001000b, L=0
(24): ID=255, P=24, IC=32, MI=1000001000b, L=0	

Message-S10: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 10)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=41, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=42, MI=1000001000b, L=0	(3): ID=234, P=3, IC=43, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=44, MI=1000001000b, L=0	(5): ID=236, P=5, IC=45, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=34, MI=1000001000b, L=0	(7): ID=238, P=7, IC=47, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=48, MI=1000001000b, L=0	(9): ID=240, P=9, IC=49, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=50, MI=1000001000b, L=0	(11): ID=242, P=11, IC=51, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=52, MI=1000001000b, L=0	(13): ID=244, P=13, IC=53, MI=1000001000b, L=0		
(14): ID=245, P=14, IC=54, MI=1000001000b, L=0	(15): ID=246, P=15, IC=55, MI=1000001000b, L=0		
(16): ID=247, P=16, IC=56, MI=1000001000b, L=0	(17): ID=248, P=17, IC=57, MI=1000001000b, L=0		
(18): ID=249, P=18, IC=58, MI=1000001000b, L=0	(19): ID=250, P=19, IC=59, MI=1000001000b, L=0		
(20): ID=251, P=20, IC=60, MI=1000001000b, L=0	(21): ID=252, P=21, IC=33, MI=1000001000b, L=0		



(22): ID=253, P=22, IC=62, MI=1000001000b, L=0	(23): ID=254, P=23, IC=63, MI=1000001000b, L=0
(24): ID=255, P=24, IC=64, MI=1000001000b, L=0	

Message-S11: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 11)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=73, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=74, MI=1000001000b, L=0	(3): ID=234, P=3, IC=75, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=76, MI=1000001000b, L=0	(5): ID=236, P=5, IC=77, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=66, MI=1000001000b, L=0	(7): ID=238, P=7, IC=79, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=80, MI=1000001000b, L=0	(9): ID=240, P=9, IC=81, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=82, MI=1000001000b, L=0	(11): ID=242, P=11, IC=83, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=84, MI=1000001000b, L=0	(13): ID=244, P=13, IC=85, MI=1000001000b, L=0		
(14): ID=245, P=14, IC=86, MI=1000001000b, L=0	(15): ID=246, P=15, IC=87, MI=1000001000b, L=0		
(16): ID=247, P=16, IC=88, MI=1000001000b, L=0	(17): ID=248, P=17, IC=89, MI=1000001000b, L=0		
(18): ID=249, P=18, IC=90, MI=1000001000b, L=0	(19): ID=250, P=19, IC=91, MI=1000001000b, L=0		
(20): ID=251, P=20, IC=92, MI=1000001000b, L=0	(21): ID=252, P=21, IC=65, MI=1000001000b, L=0		
(22): ID=253, P=22, IC=94, MI=1000001000b, L=0	(23): ID=254, P=23, IC=95, MI=1000001000b, L=0		
(24): ID=255, P=24, IC=96, MI=1000001000b, L=0			



Message-S12: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 12)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=105, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=106, MI=1000001000b, L=0		(3): ID=234, P=3, IC=107, MI=1000001000b, L=0	
(4): ID=235, P=4, IC=108, MI=1000001000b, L=0		(5): ID=236, P=5, IC=109, MI=1000001000b, L=0	
(6): ID=237, P=6, IC=98, MI=1000001000b, L=0		(7): ID=238, P=7, IC=111, MI=1000001000b, L=0	
(8): ID=239, P=8, IC=112, MI=1000001000b, L=0		(9): ID=240, P=9, IC=113, MI=1000001000b, L=0	
(10): ID=241, P=10, IC=114, MI=1000001000b, L=0		(11): ID=242, P=11, IC=115, MI=1000001000b, L=0	
(12): ID=243, P=12, IC=116, MI=1000001000b, L=0		(13): ID=244, P=13, IC=117, MI=1000001000b, L=0	
(14): ID=245, P=14, IC=118, MI=1000001000b, L=0		(15): ID=246, P=15, IC=119, MI=1000001000b, L=0	
(16): ID=247, P=16, IC=120, MI=1000001000b, L=0		(17): ID=248, P=17, IC=121, MI=1000001000b, L=0	
(18): ID=249, P=18, IC=122, MI=1000001000b, L=0		(19): ID=250, P=19, IC=123, MI=1000001000b, L=0	
(20): ID=251, P=20, IC=124, MI=1000001000b, L=0		(21): ID=252, P=21, IC=97, MI=1000001000b, L=0	
(22): ID=253, P=22, IC=126, MI=1000001000b, L=0		(23): ID=254, P=23, IC=127, MI=1000001000b, L=0	
(24): ID=255, P=24, IC=128, MI=1000001000b, L=0			

Message-S13: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 13)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length



STM-15: PL=25, ST=7, (State DA)	
STM-35: PL=914, N=24, ID=232, P=1, IC=137, MI=1000001000b (black on white, No flashing), L=0	
(2): ID=233, P=2, IC=138, MI=1000001000b, L=0	(3): ID=234, P=3, IC=139, MI=1000001000b, L=0
(4): ID=235, P=4, IC=140, MI=1000001000b, L=0	(5): ID=236, P=5, IC=141, MI=1000001000b, L=0
(6): ID=237, P=6, IC=130, MI=1000001000b, L=0	(7): ID=238, P=7, IC=143, MI=1000001000b, L=0
(8): ID=239, P=8, IC=144, MI=1000001000b, L=0	(9): ID=240, P=9, IC=145, MI=1000001000b, L=0
(10): ID=241, P=10, IC=146, MI=1000001000b, L=0	(11): ID=242, P=11, IC=147, MI=1000001000b, L=0
(12): ID=243, P=12, IC=148, MI=1000001000b, L=0	(13): ID=244, P=13, IC=149, MI=1000001000b, L=0
(14): ID=245, P=14, IC=150, MI=1000001000b, L=0	(15): ID=246, P=15, IC=151, MI=1000001000b, L=0
(16): ID=247, P=16, IC=152, MI=1000001000b, L=0	(17): ID=248, P=17, IC=153, MI=1000001000b, L=0
(18): ID=249, P=18, IC=154, MI=1000001000b, L=0	(19): ID=250, P=19, IC=155, MI=1000001000b, L=0
(20): ID=251, P=20, IC=156, MI=1000001000b, L=0	(21): ID=252, P=21, IC=129, MI=1000001000b, L=0
(22): ID=253, P=22, IC=158, MI=1000001000b, L=0	(23): ID=254, P=23, IC=159, MI=1000001000b, L=0
(24): ID=255, P=24, IC=160, MI=1000001000b, L=0	

Message-S14: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 14)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=169, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=170, MI=1000001000b, L=0	(3): ID=234, P=3, IC=171, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=172, MI=1000001000b, L=0	(5): ID=236, P=5, IC=173, MI=1000001000b, L=0		



(6): ID=237, P=6, IC=162, MI=1000001000b, L=0	(7): ID=238, P=7, IC=175, MI=1000001000b, L=0
(8): ID=239, P=8, IC=176, MI=1000001000b, L=0	(9): ID=240, P=9, IC=177, MI=1000001000b, L=0
(10): ID=241, P=10, IC=178, MI=1000001000b, L=0	(11): ID=242, P=11, IC=179, MI=1000001000b, L=0
(12): ID=243, P=12, IC=180, MI=1000001000b, L=0	(13): ID=244, P=13, IC=181, MI=1000001000b, L=0
(14): ID=245, P=14, IC=182, MI=1000001000b, L=0	(15): ID=246, P=15, IC=183, MI=1000001000b, L=0
(16): ID=247, P=16, IC=184, MI=1000001000b, L=0	(17): ID=248, P=17, IC=185, MI=1000001000b, L=0
(18): ID=249, P=18, IC=186, MI=1000001000b, L=0	(19): ID=250, P=19, IC=187, MI=1000001000b, L=0
(20): ID=251, P=20, IC=188, MI=1000001000b, L=0	(21): ID=252, P=21, IC=161, MI=1000001000b, L=0
(22): ID=253, P=22, IC=190, MI=1000001000b, L=0	(23): ID=254, P=23, IC=191, MI=1000001000b, L=0
(24): ID=255, P=24, IC=192, MI=1000001000b, L=0	

Message-S15: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 15)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=201, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=202, MI=1000001000b, L=0	(3): ID=234, P=3, IC=203, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=204, MI=1000001000b, L=0	(5): ID=236, P=5, IC=205, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=194, MI=1000001000b, L=0	(7): ID=238, P=7, IC=207, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=208, MI=1000001000b, L=0	(9): ID=240, P=9, IC=209, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=210, MI=1000001000b, L=0	(11): ID=242, P=11, IC=211, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=212, MI=1000001000b, L=0	(13): ID=244, P=13, IC=213, MI=1000001000b, L=0		



(14): ID=245, P=14, IC=214, MI=1000001000b, L=0	(15): ID=246, P=15, IC=215, MI=1000001000b, L=0
(16): ID=247, P=16, IC=216, MI=1000001000b, L=0	(17): ID=248, P=17, IC=217, MI=1000001000b, L=0
(18): ID=249, P=18, IC=218, MI=1000001000b, L=0	(19): ID=250, P=19, IC=219, MI=1000001000b, L=0
(20): ID=251, P=20, IC=220, MI=1000001000b, L=0	(21): ID=252, P=21, IC=193, MI=1000001000b, L=0
(22): ID=253, P=22, IC=222, MI=1000001000b, L=0	(23): ID=254, P=23, IC=223, MI=1000001000b, L=0
(24): ID=255, P=24, IC=224, MI=1000001000b, L=0	

Message-S16: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 16)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=233, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=234, MI=1000001000b, L=0	(3): ID=234, P=3, IC=235, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=236, MI=1000001000b, L=0	(5): ID=236, P=5, IC=237, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=226, MI=1000001000b, L=0	(7): ID=238, P=7, IC=239, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=240, MI=1000001000b, L=0	(9): ID=240, P=9, IC=241, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=242, MI=1000001000b, L=0	(11): ID=242, P=11, IC=243, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=244, MI=1000001000b, L=0	(13): ID=244, P=13, IC=245, MI=1000001000b, L=0		
(14): ID=245, P=14, IC=246, MI=1000001000b, L=0	(15): ID=246, P=15, IC=247, MI=1000001000b, L=0		
(16): ID=247, P=16, IC=248, MI=1000001000b, L=0	(17): ID=248, P=17, IC=249, MI=1000001000b, L=0		
(18): ID=249, P=18, IC=250, MI=1000001000b, L=0	(19): ID=250, P=19, IC=251, MI=1000001000b, L=0		
(20): ID=251, P=20, IC=252, MI=1000001000b, L=0	(21): ID=252, P=21, IC=225, MI=1000001000b, L=0		



(22): ID=253, P=22, IC=254, MI=1000001000b, L=0	(23): ID=254, P=23, IC=255, MI=1000001000b, L=0
(24): ID=255, P=24, IC=160, MI=1000001000b, L=0	

Message-S17: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 17)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=9, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=10, MI=1000001000b, L=0	(3): ID=234, P=3, IC=11, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=12, MI=1000001000b, L=0	(5): ID=236, P=5, IC=13, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=3, MI=1000001000b, L=0	(7): ID=238, P=7, IC=15, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=16, MI=1000001000b, L=0	(9): ID=240, P=9, IC=17, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=18, MI=1000001000b, L=0	(11): ID=242, P=11, IC=19, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=20, MI=1000001000b, L=0	(13): ID=244, P=13, IC=21, MI=1000001000b, L=0		
(14): ID=245, P=14, IC=22, MI=1000001000b, L=0	(15): ID=246, P=15, IC=23, MI=1000001000b, L=0		
(16): ID=247, P=16, IC=24, MI=1000001000b, L=0	(17): ID=248, P=17, IC=25, MI=1000001000b, L=0		
(18): ID=249, P=18, IC=26, MI=1000001000b, L=0	(19): ID=250, P=19, IC=27, MI=1000001000b, L=0		
(20): ID=251, P=20, IC=28, MI=1000001000b, L=0	(21): ID=252, P=21, IC=6, MI=1000001000b, L=0		
(22): ID=253, P=22, IC=30, MI=1000001000b, L=0	(23): ID=254, P=23, IC=31, MI=1000001000b, L=0		
(24): ID=255, P=24, IC=32, MI=1000001000b, L=0			



Message-S18: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 18)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=41, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=42, MI=1000001000b, L=0		(3): ID=234, P=3, IC=43, MI=1000001000b, L=0	
(4): ID=235, P=4, IC=44, MI=1000001000b, L=0		(5): ID=236, P=5, IC=45, MI=1000001000b, L=0	
(6): ID=237, P=6, IC=35, MI=1000001000b, L=0		(7): ID=238, P=7, IC=47, MI=1000001000b, L=0	
(8): ID=239, P=8, IC=48, MI=1000001000b, L=0		(9): ID=240, P=9, IC=49, MI=1000001000b, L=0	
(10): ID=241, P=10, IC=50, MI=1000001000b, L=0		(11): ID=242, P=11, IC=51, MI=1000001000b, L=0	
(12): ID=243, P=12, IC=52, MI=1000001000b, L=0		(13): ID=244, P=13, IC=53, MI=1000001000b, L=0	
(14): ID=245, P=14, IC=54, MI=1000001000b, L=0		(15): ID=246, P=15, IC=55, MI=1000001000b, L=0	
(16): ID=247, P=16, IC=56, MI=1000001000b, L=0		(17): ID=248, P=17, IC=57, MI=1000001000b, L=0	
(18): ID=249, P=18, IC=58, MI=1000001000b, L=0		(19): ID=250, P=19, IC=59, MI=1000001000b, L=0	
(20): ID=251, P=20, IC=60, MI=1000001000b, L=0		(21): ID=252, P=21, IC=38, MI=1000001000b, L=0	
(22): ID=253, P=22, IC=62, MI=1000001000b, L=0		(23): ID=254, P=23, IC=63, MI=1000001000b, L=0	
(24): ID=255, P=24, IC=64, MI=1000001000b, L=0			

Message-S19: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 19)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length



STM-15: PL=25, ST=7, (State DA)	
STM-35: PL=914, N=24, ID=232, P=1, IC=73, MI=1000001000b (black on white, No flashing), L=0	
(2): ID=233, P=2, IC=74, MI=1000001000b, L=0	(3): ID=234, P=3, IC=75, MI=1000001000b, L=0
(4): ID=235, P=4, IC=76, MI=1000001000b, L=0	(5): ID=236, P=5, IC=77, MI=1000001000b, L=0
(6): ID=237, P=6, IC=67, MI=1000001000b, L=0	(7): ID=238, P=7, IC=79, MI=1000001000b, L=0
(8): ID=239, P=8, IC=80, MI=1000001000b, L=0	(9): ID=240, P=9, IC=81, MI=1000001000b, L=0
(10): ID=241, P=10, IC=82, MI=1000001000b, L=0	(11): ID=242, P=11, IC=83, MI=1000001000b, L=0
(12): ID=243, P=12, IC=84, MI=1000001000b, L=0	(13): ID=244, P=13, IC=85, MI=1000001000b, L=0
(14): ID=245, P=14, IC=86, MI=1000001000b, L=0	(15): ID=246, P=15, IC=87, MI=1000001000b, L=0
(16): ID=247, P=16, IC=88, MI=1000001000b, L=0	(17): ID=248, P=17, IC=89, MI=1000001000b, L=0
(18): ID=249, P=18, IC=90, MI=1000001000b, L=0	(19): ID=250, P=19, IC=91, MI=1000001000b, L=0
(20): ID=251, P=20, IC=92, MI=1000001000b, L=0	(21): ID=252, P=21, IC=70, MI=1000001000b, L=0
(22): ID=253, P=22, IC=94, MI=1000001000b, L=0	(23): ID=254, P=23, IC=95, MI=1000001000b, L=0
(24): ID=255, P=24, IC=96, MI=1000001000b, L=0	

Message-S20: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 20)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=105, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=106, MI=1000001000b, L=0	(3): ID=234, P=3, IC=107, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=108, MI=1000001000b, L=0	(5): ID=236, P=5, IC=109, MI=1000001000b, L=0		



(6): ID=237, P=6, IC=99, MI=1000001000b, L=0	(7): ID=238, P=7, IC=111, MI=1000001000b, L=0
(8): ID=239, P=8, IC=112, MI=1000001000b, L=0	(9): ID=240, P=9, IC=113, MI=1000001000b, L=0
(10): ID=241, P=10, IC=114, MI=1000001000b, L=0	(11): ID=242, P=11, IC=115, MI=1000001000b, L=0
(12): ID=243, P=12, IC=116, MI=1000001000b, L=0	(13): ID=244, P=13, IC=117, MI=1000001000b, L=0
(14): ID=245, P=14, IC=118, MI=1000001000b, L=0	(15): ID=246, P=15, IC=119, MI=1000001000b, L=0
(16): ID=247, P=16, IC=120, MI=1000001000b, L=0	(17): ID=248, P=17, IC=121, MI=1000001000b, L=0
(18): ID=249, P=18, IC=122, MI=1000001000b, L=0	(19): ID=250, P=19, IC=123, MI=1000001000b, L=0
(20): ID=251, P=20, IC=124, MI=1000001000b, L=0	(21): ID=252, P=21, IC=102, MI=1000001000b, L=0
(22): ID=253, P=22, IC=126, MI=1000001000b, L=0	(23): ID=254, P=23, IC=127, MI=1000001000b, L=0
(24): ID=255, P=24, IC=128, MI=1000001000b, L=0	

Message-S21: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 21)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=137, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=138, MI=1000001000b, L=0	(3): ID=234, P=3, IC=139, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=140, MI=1000001000b, L=0	(5): ID=236, P=5, IC=141, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=131, MI=1000001000b, L=0	(7): ID=238, P=7, IC=143, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=144, MI=1000001000b, L=0	(9): ID=240, P=9, IC=145, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=146, MI=1000001000b, L=0	(11): ID=242, P=11, IC=147, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=148, MI=1000001000b, L=0	(13): ID=244, P=13, IC=149, MI=1000001000b, L=0		



(14): ID=245, P=14, IC=150, MI=1000001000b, L=0	(15): ID=246, P=15, IC=151, MI=1000001000b, L=0
(16): ID=247, P=16, IC=152, MI=1000001000b, L=0	(17): ID=248, P=17, IC=153, MI=1000001000b, L=0
(18): ID=249, P=18, IC=154, MI=1000001000b, L=0	(19): ID=250, P=19, IC=155, MI=1000001000b, L=0
(20): ID=251, P=20, IC=156, MI=1000001000b, L=0	(21): ID=252, P=21, IC=134, MI=1000001000b, L=0
(22): ID=253, P=22, IC=158, MI=1000001000b, L=0	(23): ID=254, P=23, IC=159, MI=1000001000b, L=0
(24): ID=255, P=24, IC=160, MI=1000001000b, L=0	

Message-S22: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 22)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=169, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=170, MI=1000001000b, L=0	(3): ID=234, P=3, IC=171, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=172, MI=1000001000b, L=0	(5): ID=236, P=5, IC=173, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=163, MI=1000001000b, L=0	(7): ID=238, P=7, IC=175, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=176, MI=1000001000b, L=0	(9): ID=240, P=9, IC=177, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=178, MI=1000001000b, L=0	(11): ID=242, P=11, IC=179, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=180, MI=1000001000b, L=0	(13): ID=244, P=13, IC=181, MI=1000001000b, L=0		
(14): ID=245, P=14, IC=182, MI=1000001000b, L=0	(15): ID=246, P=15, IC=183, MI=1000001000b, L=0		
(16): ID=247, P=16, IC=184, MI=1000001000b, L=0	(17): ID=248, P=17, IC=185, MI=1000001000b, L=0		
(18): ID=249, P=18, IC=186, MI=1000001000b, L=0	(19): ID=250, P=19, IC=187, MI=1000001000b, L=0		
(20): ID=251, P=20, IC=188, MI=1000001000b, L=0	(21): ID=252, P=21, IC=166, MI=1000001000b, L=0		



(22): ID=253, P=22, IC=190, MI=1000001000b, L=0	(23): ID=254, P=23, IC=191, MI=1000001000b, L=0
(24): ID=255, P=24, IC=192, MI=1000001000b, L=0	

Message-S23: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 23)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=201, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=202, MI=1000001000b, L=0	(3): ID=234, P=3, IC=203, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=204, MI=1000001000b, L=0	(5): ID=236, P=5, IC=205, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=195, MI=1000001000b, L=0	(7): ID=238, P=7, IC=207, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=208, MI=1000001000b, L=0	(9): ID=240, P=9, IC=209, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=210, MI=1000001000b, L=0	(11): ID=242, P=11, IC=211, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=212, MI=1000001000b, L=0	(13): ID=244, P=13, IC=213, MI=1000001000b, L=0		
(14): ID=245, P=14, IC=214, MI=1000001000b, L=0	(15): ID=246, P=15, IC=215, MI=1000001000b, L=0		
(16): ID=247, P=16, IC=216, MI=1000001000b, L=0	(17): ID=248, P=17, IC=217, MI=1000001000b, L=0		
(18): ID=249, P=18, IC=218, MI=1000001000b, L=0	(19): ID=250, P=19, IC=219, MI=1000001000b, L=0		
(20): ID=251, P=20, IC=220, MI=1000001000b, L=0	(21): ID=252, P=21, IC=198, MI=1000001000b, L=0		
(22): ID=253, P=22, IC=222, MI=1000001000b, L=0	(23): ID=254, P=23, IC=223, MI=1000001000b, L=0		
(24): ID=255, P=24, IC=224, MI=1000001000b, L=0			



Message-S24: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 24)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=233, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=234, MI=1000001000b, L=0		(3): ID=234, P=3, IC=235, MI=1000001000b, L=0	
(4): ID=235, P=4, IC=236, MI=1000001000b, L=0		(5): ID=236, P=5, IC=237, MI=1000001000b, L=0	
(6): ID=237, P=6, IC=227, MI=1000001000b, L=0		(7): ID=238, P=7, IC=239, MI=1000001000b, L=0	
(8): ID=239, P=8, IC=240, MI=1000001000b, L=0		(9): ID=240, P=9, IC=241, MI=1000001000b, L=0	
(10): ID=241, P=10, IC=242, MI=1000001000b, L=0		(11): ID=242, P=11, IC=243, MI=1000001000b, L=0	
(12): ID=243, P=12, IC=244, MI=1000001000b, L=0		(13): ID=244, P=13, IC=245, MI=1000001000b, L=0	
(14): ID=245, P=14, IC=246, MI=1000001000b, L=0		(15): ID=246, P=15, IC=247, MI=1000001000b, L=0	
(16): ID=247, P=16, IC=248, MI=1000001000b, L=0		(17): ID=248, P=17, IC=249, MI=1000001000b, L=0	
(18): ID=249, P=18, IC=250, MI=1000001000b, L=0		(19): ID=250, P=19, IC=251, MI=1000001000b, L=0	
(20): ID=251, P=20, IC=252, MI=1000001000b, L=0		(21): ID=252, P=21, IC=230, MI=1000001000b, L=0	
(22): ID=253, P=22, IC=254, MI=1000001000b, L=0		(23): ID=254, P=23, IC=255, MI=1000001000b, L=0	
(24): ID=255, P=24, IC=160, MI=1000001000b, L=0			

Message-S25: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 25)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length



STM-15: PL=25, ST=7, (State DA)	
STM-35: PL=914, N=24, ID=232, P=1, IC=9, MI=1000001000b (black on white, No flashing), L=0	
(2): ID=233, P=2, IC=10, MI=1000001000b, L=0	(3): ID=234, P=3, IC=11, MI=1000001000b, L=0
(4): ID=235, P=4, IC=12, MI=1000001000b, L=0	(5): ID=236, P=5, IC=13, MI=1000001000b, L=0
(6): ID=237, P=6, IC=4, MI=1000001000b, L=0	(7): ID=238, P=7, IC=15, MI=1000001000b, L=0
(8): ID=239, P=8, IC=16, MI=1000001000b, L=0	(9): ID=240, P=9, IC=17, MI=1000001000b, L=0
(10): ID=241, P=10, IC=18, MI=1000001000b, L=0	(11): ID=242, P=11, IC=19, MI=1000001000b, L=0
(12): ID=243, P=12, IC=20, MI=1000001000b, L=0	(13): ID=244, P=13, IC=21, MI=1000001000b, L=0
(14): ID=245, P=14, IC=22, MI=1000001000b, L=0	(15): ID=246, P=15, IC=23, MI=1000001000b, L=0
(16): ID=247, P=16, IC=24, MI=1000001000b, L=0	(17): ID=248, P=17, IC=25, MI=1000001000b, L=0
(18): ID=249, P=18, IC=26, MI=1000001000b, L=0	(19): ID=250, P=19, IC=27, MI=1000001000b, L=0
(20): ID=251, P=20, IC=28, MI=1000001000b, L=0	(21): ID=252, P=21, IC=7, MI=1000001000b, L=0
(22): ID=253, P=22, IC=30, MI=1000001000b, L=0	(23): ID=254, P=23, IC=31, MI=1000001000b, L=0
(24): ID=255, P=24, IC=32, MI=1000001000b, L=0	

Message-S26: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 26)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=41, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=42, MI=1000001000b, L=0	(3): ID=234, P=3, IC=43, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=44, MI=1000001000b, L=0	(5): ID=236, P=5, IC=45, MI=1000001000b, L=0		



(6): ID=237, P=6, IC=36, MI=1000001000b, L=0	(7): ID=238, P=7, IC=47, MI=1000001000b, L=0
(8): ID=239, P=8, IC=48, MI=1000001000b, L=0	(9): ID=240, P=9, IC=49, MI=1000001000b, L=0
(10): ID=241, P=10, IC=50, MI=1000001000b, L=0	(11): ID=242, P=11, IC=51, MI=1000001000b, L=0
(12): ID=243, P=12, IC=52, MI=1000001000b, L=0	(13): ID=244, P=13, IC=53, MI=1000001000b, L=0
(14): ID=245, P=14, IC=54, MI=1000001000b, L=0	(15): ID=246, P=15, IC=55, MI=1000001000b, L=0
(16): ID=247, P=16, IC=56, MI=1000001000b, L=0	(17): ID=248, P=17, IC=57, MI=1000001000b, L=0
(18): ID=249, P=18, IC=58, MI=1000001000b, L=0	(19): ID=250, P=19, IC=59, MI=1000001000b, L=0
(20): ID=251, P=20, IC=60, MI=1000001000b, L=0	(21): ID=252, P=21, IC=39, MI=1000001000b, L=0
(22): ID=253, P=22, IC=62, MI=1000001000b, L=0	(23): ID=254, P=23, IC=63, MI=1000001000b, L=0
(24): ID=255, P=24, IC=64, MI=1000001000b, L=0	

Message-S27: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 27)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=73, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=74, MI=1000001000b, L=0	(3): ID=234, P=3, IC=75, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=76, MI=1000001000b, L=0	(5): ID=236, P=5, IC=77, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=68, MI=1000001000b, L=0	(7): ID=238, P=7, IC=79, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=80, MI=1000001000b, L=0	(9): ID=240, P=9, IC=81, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=82, MI=1000001000b, L=0	(11): ID=242, P=11, IC=83, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=84, MI=1000001000b, L=0	(13): ID=244, P=13, IC=85, MI=1000001000b, L=0		



(14): ID=245, P=14, IC=86, MI=1000001000b, L=0	(15): ID=246, P=15, IC=87, MI=1000001000b, L=0
(16): ID=247, P=16, IC=88, MI=1000001000b, L=0	(17): ID=248, P=17, IC=89, MI=1000001000b, L=0
(18): ID=249, P=18, IC=90, MI=1000001000b, L=0	(19): ID=250, P=19, IC=91, MI=1000001000b, L=0
(20): ID=251, P=20, IC=92, MI=1000001000b, L=0	(21): ID=252, P=21, IC=71, MI=1000001000b, L=0
(22): ID=253, P=22, IC=94, MI=1000001000b, L=0	(23): ID=254, P=23, IC=95, MI=1000001000b, L=0
(24): ID=255, P=24, IC=96, MI=1000001000b, L=0	

Message-S28: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 28)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=105, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=106, MI=1000001000b, L=0	(3): ID=234, P=3, IC=107, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=108, MI=1000001000b, L=0	(5): ID=236, P=5, IC=109, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=100, MI=1000001000b, L=0	(7): ID=238, P=7, IC=111, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=112, MI=1000001000b, L=0	(9): ID=240, P=9, IC=113, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=114, MI=1000001000b, L=0	(11): ID=242, P=11, IC=115, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=116, MI=1000001000b, L=0	(13): ID=244, P=13, IC=117, MI=1000001000b, L=0		
(14): ID=245, P=14, IC=118, MI=1000001000b, L=0	(15): ID=246, P=15, IC=119, MI=1000001000b, L=0		
(16): ID=247, P=16, IC=120, MI=1000001000b, L=0	(17): ID=248, P=17, IC=121, MI=1000001000b, L=0		
(18): ID=249, P=18, IC=122, MI=1000001000b, L=0	(19): ID=250, P=19, IC=123, MI=1000001000b, L=0		
(20): ID=251, P=20, IC=124, MI=1000001000b, L=0	(21): ID=252, P=21, IC=103, MI=1000001000b, L=0		



(22): ID=253, P=22, IC=126, MI=1000001000b, L=0	(23): ID=254, P=23, IC=127, MI=1000001000b, L=0
(24): ID=255, P=24, IC=128, MI=1000001000b, L=0	

Message-S29: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 29)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=137, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=138, MI=1000001000b, L=0	(3): ID=234, P=3, IC=139, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=140, MI=1000001000b, L=0	(5): ID=236, P=5, IC=141, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=132, MI=1000001000b, L=0	(7): ID=238, P=7, IC=143, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=144, MI=1000001000b, L=0	(9): ID=240, P=9, IC=145, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=146, MI=1000001000b, L=0	(11): ID=242, P=11, IC=147, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=148, MI=1000001000b, L=0	(13): ID=244, P=13, IC=149, MI=1000001000b, L=0		
(14): ID=245, P=14, IC=150, MI=1000001000b, L=0	(15): ID=246, P=15, IC=151, MI=1000001000b, L=0		
(16): ID=247, P=16, IC=152, MI=1000001000b, L=0	(17): ID=248, P=17, IC=153, MI=1000001000b, L=0		
(18): ID=249, P=18, IC=154, MI=1000001000b, L=0	(19): ID=250, P=19, IC=155, MI=1000001000b, L=0		
(20): ID=251, P=20, IC=156, MI=1000001000b, L=0	(21): ID=252, P=21, IC=135, MI=1000001000b, L=0		
(22): ID=253, P=22, IC=158, MI=1000001000b, L=0	(23): ID=254, P=23, IC=159, MI=1000001000b, L=0		
(24): ID=255, P=24, IC=160, MI=1000001000b, L=0			



Message-S30: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 30)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=169, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=170, MI=1000001000b, L=0		(3): ID=234, P=3, IC=171, MI=1000001000b, L=0	
(4): ID=235, P=4, IC=172, MI=1000001000b, L=0		(5): ID=236, P=5, IC=173, MI=1000001000b, L=0	
(6): ID=237, P=6, IC=164, MI=1000001000b, L=0		(7): ID=238, P=7, IC=175, MI=1000001000b, L=0	
(8): ID=239, P=8, IC=176, MI=1000001000b, L=0		(9): ID=240, P=9, IC=177, MI=1000001000b, L=0	
(10): ID=241, P=10, IC=178, MI=1000001000b, L=0		(11): ID=242, P=11, IC=179, MI=1000001000b, L=0	
(12): ID=243, P=12, IC=180, MI=1000001000b, L=0		(13): ID=244, P=13, IC=181, MI=1000001000b, L=0	
(14): ID=245, P=14, IC=182, MI=1000001000b, L=0		(15): ID=246, P=15, IC=183, MI=1000001000b, L=0	
(16): ID=247, P=16, IC=184, MI=1000001000b, L=0		(17): ID=248, P=17, IC=185, MI=1000001000b, L=0	
(18): ID=249, P=18, IC=186, MI=1000001000b, L=0		(19): ID=250, P=19, IC=187, MI=1000001000b, L=0	
(20): ID=251, P=20, IC=188, MI=1000001000b, L=0		(21): ID=252, P=21, IC=167, MI=1000001000b, L=0	
(22): ID=253, P=22, IC=190, MI=1000001000b, L=0		(23): ID=254, P=23, IC=191, MI=1000001000b, L=0	
(24): ID=255, P=24, IC=192, MI=1000001000b, L=0			

Message-S31: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 31)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length



STM-15: PL=25, ST=7, (State DA)	
STM-35: PL=914, N=24, ID=232, P=1, IC=201, MI=1000001000b (black on white, No flashing), L=0	
(2): ID=233, P=2, IC=202, MI=1000001000b, L=0	(3): ID=234, P=3, IC=203, MI=1000001000b, L=0
(4): ID=235, P=4, IC=204, MI=1000001000b, L=0	(5): ID=236, P=5, IC=205, MI=1000001000b, L=0
(6): ID=237, P=6, IC=196, MI=1000001000b, L=0	(7): ID=238, P=7, IC=207, MI=1000001000b, L=0
(8): ID=239, P=8, IC=208, MI=1000001000b, L=0	(9): ID=240, P=9, IC=209, MI=1000001000b, L=0
(10): ID=241, P=10, IC=210, MI=1000001000b, L=0	(11): ID=242, P=11, IC=211, MI=1000001000b, L=0
(12): ID=243, P=12, IC=212, MI=1000001000b, L=0	(13): ID=244, P=13, IC=213, MI=1000001000b, L=0
(14): ID=245, P=14, IC=214, MI=1000001000b, L=0	(15): ID=246, P=15, IC=215, MI=1000001000b, L=0
(16): ID=247, P=16, IC=216, MI=1000001000b, L=0	(17): ID=248, P=17, IC=217, MI=1000001000b, L=0
(18): ID=249, P=18, IC=218, MI=1000001000b, L=0	(19): ID=250, P=19, IC=219, MI=1000001000b, L=0
(20): ID=251, P=20, IC=220, MI=1000001000b, L=0	(21): ID=252, P=21, IC=199, MI=1000001000b, L=0
(22): ID=253, P=22, IC=222, MI=1000001000b, L=0	(23): ID=254, P=23, IC=223, MI=1000001000b, L=0
(24): ID=255, P=24, IC=224, MI=1000001000b, L=0	

Message-S32: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 32)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=233, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=234, MI=1000001000b, L=0	(3): ID=234, P=3, IC=235, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=236, MI=1000001000b, L=0	(5): ID=236, P=5, IC=237, MI=1000001000b, L=0		



(6): ID=237, P=6, IC=228, MI=1000001000b, L=0	(7): ID=238, P=7, IC=239, MI=1000001000b, L=0
(8): ID=239, P=8, IC=240, MI=1000001000b, L=0	(9): ID=240, P=9, IC=241, MI=1000001000b, L=0
(10): ID=241, P=10, IC=242, MI=1000001000b, L=0	(11): ID=242, P=11, IC=243, MI=1000001000b, L=0
(12): ID=243, P=12, IC=244, MI=1000001000b, L=0	(13): ID=244, P=13, IC=245, MI=1000001000b, L=0
(14): ID=245, P=14, IC=246, MI=1000001000b, L=0	(15): ID=246, P=15, IC=247, MI=1000001000b, L=0
(16): ID=247, P=16, IC=248, MI=1000001000b, L=0	(17): ID=248, P=17, IC=249, MI=1000001000b, L=0
(18): ID=249, P=18, IC=250, MI=1000001000b, L=0	(19): ID=250, P=19, IC=251, MI=1000001000b, L=0
(20): ID=251, P=20, IC=252, MI=1000001000b, L=0	(21): ID=252, P=21, IC=231, MI=1000001000b, L=0
(22): ID=253, P=22, IC=254, MI=1000001000b, L=0	(23): ID=254, P=23, IC=255, MI=1000001000b, L=0
(24): ID=255, P=24, IC=160, MI=1000001000b, L=0	

Message-S33: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 33)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=9, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=10, MI=1000001000b, L=0	(3): ID=234, P=3, IC=11, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=12, MI=1000001000b, L=0	(5): ID=236, P=5, IC=13, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=2, MI=1000001000b, L=0	(7): ID=238, P=7, IC=15, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=16, MI=1000001000b, L=0	(9): ID=240, P=9, IC=17, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=18, MI=1000001000b, L=0	(11): ID=242, P=11, IC=19, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=20, MI=1000001000b, L=0	(13): ID=244, P=13, IC=21, MI=1000001000b, L=0		



(14): ID=245, P=14, IC=22, MI=1000001000b, L=0	(15): ID=246, P=15, IC=23, MI=1000001000b, L=0
(16): ID=247, P=16, IC=24, MI=1000001000b, L=0	(17): ID=248, P=17, IC=25, MI=1000001000b, L=0
(18): ID=249, P=18, IC=26, MI=1000001000b, L=0	(19): ID=250, P=19, IC=27, MI=1000001000b, L=0
(20): ID=251, P=20, IC=28, MI=1000001000b, L=0	(21): ID=252, P=21, IC=8, MI=1000001000b, L=0
(22): ID=253, P=22, IC=30, MI=1000001000b, L=0	(23): ID=254, P=23, IC=31, MI=1000001000b, L=0
(24): ID=255, P=24, IC=32, MI=1000001000b, L=0	

Message-S34: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 34)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=41, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=42, MI=1000001000b, L=0	(3): ID=234, P=3, IC=43, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=44, MI=1000001000b, L=0	(5): ID=236, P=5, IC=45, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=34, MI=1000001000b, L=0	(7): ID=238, P=7, IC=47, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=48, MI=1000001000b, L=0	(9): ID=240, P=9, IC=49, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=50, MI=1000001000b, L=0	(11): ID=242, P=11, IC=51, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=52, MI=1000001000b, L=0	(13): ID=244, P=13, IC=53, MI=1000001000b, L=0		
(14): ID=245, P=14, IC=54, MI=1000001000b, L=0	(15): ID=246, P=15, IC=55, MI=1000001000b, L=0		
(16): ID=247, P=16, IC=56, MI=1000001000b, L=0	(17): ID=248, P=17, IC=57, MI=1000001000b, L=0		
(18): ID=249, P=18, IC=58, MI=1000001000b, L=0	(19): ID=250, P=19, IC=59, MI=1000001000b, L=0		
(20): ID=251, P=20, IC=60, MI=1000001000b, L=0	(21): ID=252, P=21, IC=40, MI=1000001000b, L=0		



(22): ID=253, P=22, IC=62, MI=1000001000b, L=0	(23): ID=254, P=23, IC=63, MI=1000001000b, L=0
(24): ID=255, P=24, IC=64, MI=1000001000b, L=0	

Message-S35: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 35)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=73, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=74, MI=1000001000b, L=0	(3): ID=234, P=3, IC=75, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=76, MI=1000001000b, L=0	(5): ID=236, P=5, IC=77, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=66, MI=1000001000b, L=0	(7): ID=238, P=7, IC=79, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=80, MI=1000001000b, L=0	(9): ID=240, P=9, IC=81, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=82, MI=1000001000b, L=0	(11): ID=242, P=11, IC=83, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=84, MI=1000001000b, L=0	(13): ID=244, P=13, IC=85, MI=1000001000b, L=0		
(14): ID=245, P=14, IC=86, MI=1000001000b, L=0	(15): ID=246, P=15, IC=87, MI=1000001000b, L=0		
(16): ID=247, P=16, IC=88, MI=1000001000b, L=0	(17): ID=248, P=17, IC=89, MI=1000001000b, L=0		
(18): ID=249, P=18, IC=90, MI=1000001000b, L=0	(19): ID=250, P=19, IC=91, MI=1000001000b, L=0		
(20): ID=251, P=20, IC=92, MI=1000001000b, L=0	(21): ID=252, P=21, IC=72, MI=1000001000b, L=0		
(22): ID=253, P=22, IC=94, MI=1000001000b, L=0	(23): ID=254, P=23, IC=95, MI=1000001000b, L=0		
(24): ID=255, P=24, IC=96, MI=1000001000b, L=0			



Message-S36: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 36)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=105, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=106, MI=1000001000b, L=0		(3): ID=234, P=3, IC=107, MI=1000001000b, L=0	
(4): ID=235, P=4, IC=108, MI=1000001000b, L=0		(5): ID=236, P=5, IC=109, MI=1000001000b, L=0	
(6): ID=237, P=6, IC=98, MI=1000001000b, L=0		(7): ID=238, P=7, IC=111, MI=1000001000b, L=0	
(8): ID=239, P=8, IC=112, MI=1000001000b, L=0		(9): ID=240, P=9, IC=113, MI=1000001000b, L=0	
(10): ID=241, P=10, IC=114, MI=1000001000b, L=0		(11): ID=242, P=11, IC=115, MI=1000001000b, L=0	
(12): ID=243, P=12, IC=116, MI=1000001000b, L=0		(13): ID=244, P=13, IC=117, MI=1000001000b, L=0	
(14): ID=245, P=14, IC=118, MI=1000001000b, L=0		(15): ID=246, P=15, IC=119, MI=1000001000b, L=0	
(16): ID=247, P=16, IC=120, MI=1000001000b, L=0		(17): ID=248, P=17, IC=121, MI=1000001000b, L=0	
(18): ID=249, P=18, IC=122, MI=1000001000b, L=0		(19): ID=250, P=19, IC=123, MI=1000001000b, L=0	
(20): ID=251, P=20, IC=124, MI=1000001000b, L=0		(21): ID=252, P=21, IC=104, MI=1000001000b, L=0	
(22): ID=253, P=22, IC=126, MI=1000001000b, L=0		(23): ID=254, P=23, IC=127, MI=1000001000b, L=0	
(24): ID=255, P=24, IC=128, MI=1000001000b, L=0			

Message-S37: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 37)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length



STM-15: PL=25, ST=7, (State DA)	
STM-35: PL=914, N=24, ID=232, P=1, IC=137, MI=1000001000b (black on white, No flashing), L=0	
(2): ID=233, P=2, IC=138, MI=1000001000b, L=0	(3): ID=234, P=3, IC=139, MI=1000001000b, L=0
(4): ID=235, P=4, IC=140, MI=1000001000b, L=0	(5): ID=236, P=5, IC=141, MI=1000001000b, L=0
(6): ID=237, P=6, IC=130, MI=1000001000b, L=0	(7): ID=238, P=7, IC=143, MI=1000001000b, L=0
(8): ID=239, P=8, IC=144, MI=1000001000b, L=0	(9): ID=240, P=9, IC=145, MI=1000001000b, L=0
(10): ID=241, P=10, IC=146, MI=1000001000b, L=0	(11): ID=242, P=11, IC=147, MI=1000001000b, L=0
(12): ID=243, P=12, IC=148, MI=1000001000b, L=0	(13): ID=244, P=13, IC=149, MI=1000001000b, L=0
(14): ID=245, P=14, IC=150, MI=1000001000b, L=0	(15): ID=246, P=15, IC=151, MI=1000001000b, L=0
(16): ID=247, P=16, IC=152, MI=1000001000b, L=0	(17): ID=248, P=17, IC=153, MI=1000001000b, L=0
(18): ID=249, P=18, IC=154, MI=1000001000b, L=0	(19): ID=250, P=19, IC=155, MI=1000001000b, L=0
(20): ID=251, P=20, IC=156, MI=1000001000b, L=0	(21): ID=252, P=21, IC=136, MI=1000001000b, L=0
(22): ID=253, P=22, IC=158, MI=1000001000b, L=0	(23): ID=254, P=23, IC=159, MI=1000001000b, L=0
(24): ID=255, P=24, IC=160, MI=1000001000b, L=0	

Message-S38: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 38)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=169, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=170, MI=1000001000b, L=0	(3): ID=234, P=3, IC=171, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=172, MI=1000001000b, L=0	(5): ID=236, P=5, IC=173, MI=1000001000b, L=0		



(6): ID=237, P=6, IC=162, MI=1000001000b, L=0	(7): ID=238, P=7, IC=175, MI=1000001000b, L=0
(8): ID=239, P=8, IC=176, MI=1000001000b, L=0	(9): ID=240, P=9, IC=177, MI=1000001000b, L=0
(10): ID=241, P=10, IC=178, MI=1000001000b, L=0	(11): ID=242, P=11, IC=179, MI=1000001000b, L=0
(12): ID=243, P=12, IC=180, MI=1000001000b, L=0	(13): ID=244, P=13, IC=181, MI=1000001000b, L=0
(14): ID=245, P=14, IC=182, MI=1000001000b, L=0	(15): ID=246, P=15, IC=183, MI=1000001000b, L=0
(16): ID=247, P=16, IC=184, MI=1000001000b, L=0	(17): ID=248, P=17, IC=185, MI=1000001000b, L=0
(18): ID=249, P=18, IC=186, MI=1000001000b, L=0	(19): ID=250, P=19, IC=187, MI=1000001000b, L=0
(20): ID=251, P=20, IC=188, MI=1000001000b, L=0	(21): ID=252, P=21, IC=168, MI=1000001000b, L=0
(22): ID=253, P=22, IC=190, MI=1000001000b, L=0	(23): ID=254, P=23, IC=191, MI=1000001000b, L=0
(24): ID=255, P=24, IC=192, MI=1000001000b, L=0	

Message-S39: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 39)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=201, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=202, MI=1000001000b, L=0	(3): ID=234, P=3, IC=203, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=204, MI=1000001000b, L=0	(5): ID=236, P=5, IC=205, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=194, MI=1000001000b, L=0	(7): ID=238, P=7, IC=207, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=208, MI=1000001000b, L=0	(9): ID=240, P=9, IC=209, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=210, MI=1000001000b, L=0	(11): ID=242, P=11, IC=211, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=212, MI=1000001000b, L=0	(13): ID=244, P=13, IC=213, MI=1000001000b, L=0		



(14): ID=245, P=14, IC=214, MI=1000001000b, L=0	(15): ID=246, P=15, IC=215, MI=1000001000b, L=0
(16): ID=247, P=16, IC=216, MI=1000001000b, L=0	(17): ID=248, P=17, IC=217, MI=1000001000b, L=0
(18): ID=249, P=18, IC=218, MI=1000001000b, L=0	(19): ID=250, P=19, IC=219, MI=1000001000b, L=0
(20): ID=251, P=20, IC=220, MI=1000001000b, L=0	(21): ID=252, P=21, IC=200, MI=1000001000b, L=0
(22): ID=253, P=22, IC=222, MI=1000001000b, L=0	(23): ID=254, P=23, IC=223, MI=1000001000b, L=0
(24): ID=255, P=24, IC=224, MI=1000001000b, L=0	

Message-S40: STM requests display of indicators 232-255 at positions 1-24 with different icons (set 40)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	120	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=914, N=24, ID=232, P=1, IC=233, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=233, P=2, IC=234, MI=1000001000b, L=0	(3): ID=234, P=3, IC=235, MI=1000001000b, L=0		
(4): ID=235, P=4, IC=236, MI=1000001000b, L=0	(5): ID=236, P=5, IC=237, MI=1000001000b, L=0		
(6): ID=237, P=6, IC=226, MI=1000001000b, L=0	(7): ID=238, P=7, IC=239, MI=1000001000b, L=0		
(8): ID=239, P=8, IC=240, MI=1000001000b, L=0	(9): ID=240, P=9, IC=241, MI=1000001000b, L=0		
(10): ID=241, P=10, IC=242, MI=1000001000b, L=0	(11): ID=242, P=11, IC=243, MI=1000001000b, L=0		
(12): ID=243, P=12, IC=244, MI=1000001000b, L=0	(13): ID=244, P=13, IC=245, MI=1000001000b, L=0		
(14): ID=245, P=14, IC=246, MI=1000001000b, L=0	(15): ID=246, P=15, IC=247, MI=1000001000b, L=0		
(16): ID=247, P=16, IC=248, MI=1000001000b, L=0	(17): ID=248, P=17, IC=249, MI=1000001000b, L=0		
(18): ID=249, P=18, IC=250, MI=1000001000b, L=0	(19): ID=250, P=19, IC=251, MI=1000001000b, L=0		
(20): ID=251, P=20, IC=252, MI=1000001000b, L=0	(21): ID=252, P=21, IC=232, MI=1000001000b, L=0		



(22): ID=253, P=22, IC=254, MI=1000001000b, L=0	(23): ID=254, P=23, IC=255, MI=1000001000b, L=0
(24): ID=255, P=24, IC=160, MI=1000001000b, L=0	

2.2.21 Test Case 7b3.9

TEST CASE HEADER	
Test case identification	DMI Function
	7b3.0.3.0
	Icon identity test with indicators for configuration(s) 7a.9, set of indicators with same icon: A set of 15 indicators is displayed with same icon 16 (driver)
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.1.1, 13.4.1.2, 13.4.1.5, 13.4.1.6, 13.4.3.3
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service: 7a.9.
	The ETCS onboard DMI function shall be configured with a set of 8 STMs using the 8 DMI configurations 7a.2 - 7a.9
Comments and constraints	Starting and end conditions as for test case 7b3.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of indicators 100-114 at positions 1, 6, 7, 8, 10, 11, 15, 16, 17, 18, 19, 21, 22, 23, 24	PROF	T0	connection of active DMI channel: Message-S1	DMI		Icon 16 (driver) is displayed at positions 1, 6, 7, 8, 10, 11, 15, 16, 17, 18, 19, 21, 22, 23, 24



	with same icon 16 (driver)					
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Message-S1: STM requests display of indicators 100-114 at positions 1, 6, 7, 8, 10, 11, 15, 16, 17, 18, 19, 21, 22, 23, 24 with same icon 16 (driver)			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	78	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	581	Packet Length
N_ITER	5	17	Request for 17 indicators
NID_INDICATOR(1)	8	100	Indicator 100
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	16	
M_IND_ATTRIB(1)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(2)	8	101	Indicator 101
NID_INDPOS(2)	5	6	
NID_ICON(2)	8	16	
M_IND_ATTRIB(2)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(3)	8	102	Indicator 102
NID_INDPOS(3)	5	7	

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NID_ICON(3)	8	16	
M_IND_ATTRIB(3)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(4)	8	103	Indicator 103
NID_INDPOS(4)	5	8	
NID_ICON(4)	8	16	
M_IND_ATTRIB(4)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(5)	8	104	Indicator 104
NID_INDPOS(5)	5	10	
NID_ICON(5)	8	16	
M_IND_ATTRIB(5)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(6)	8	105	Indicator 105
NID_INDPOS(6)	5	11	
NID_ICON(6)	8	16	
M_IND_ATTRIB(6)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(7)	8	106	Indicator 106
NID_INDPOS(7)	5	15	
NID_ICON(7)	8	16	
M_IND_ATTRIB(7)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	



NID_INDICATOR(8)	8	107	Indicator 107
NID_INDPOS(8)	5	16	
NID_ICON(8)	8	16	
M_IND_ATTRIB(8)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(9)	8	108	Indicator 108
NID_INDPOS(9)	5	17	
NID_ICON(9)	8	16	
M_IND_ATTRIB(9)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(10)	8	109	Indicator 109
NID_INDPOS(10)	5	18	
NID_ICON(10)	8	16	
M_IND_ATTRIB(10)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(11)	8	110	Indicator 110
NID_INDPOS(11)	5	19	
NID_ICON(11)	8	16	
M_IND_ATTRIB(11)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(12)	8	111	Indicator 111
NID_INDPOS(12)	5	21	
NID_ICON(12)	8	16	



M_IND_ATTRIB(12)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(13)	8	112	Indicator 112
NID_INDPOS(13)	5	22	
NID_ICON(13)	8	16	
M_IND_ATTRIB(13)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(14)	8	113	Indicator 113
NID_INDPOS(14)	5	23	
NID_ICON(14)	8	16	
M_IND_ATTRIB(14)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
NID_INDICATOR(15)	8	114	Indicator 114
NID_INDPOS(15)	5	24	
NID_ICON(15)	8	16	
M_IND_ATTRIB(15)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	0	
Padding bits	2	00b	

2.2.22 Test Case 7b4.1

TEST CASE HEADER	
Test case identification	DMI Function



	7b4.0.1.0
	Colour Handling test for indicators: colours according to Table 4 of ETCS DMI Specification: display 2 x 6 indicators with all possible combinations of text and background colour, where text colour <> background colour and colour is specified in Table 4 of ETCS DMI Specification (only colours selectable by M_IND_ATTRIB)
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.3.4
	ERA ERTMS 015560 (DMI Spec) 9.3.1.2, 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	Unified DMI service: 7a.1 Customisable DMI service: 7a.4, 7a.5, 7a.6, 7a.7, 7a.8, 7a.9 (one configuration shall be chosen for test)
Comments and constraints	

Starting Conditions	Value	Comments
STM State	DA	
ETCS Mode	SN	
ETCS Level	NTC	
Train State	not relevant	
ETCS Train Data	not relevant	
Active DMI channel Connection	Established	
Other DMI channels Connections	not relevant	
TIU Connection	not relevant	
BIU Connection	not relevant	
JD Connection	not relevant	

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TIU Regenerative Brake Command	not relevant	
TIU Magnetic Shoes Brake Command	not relevant	
TIU Eddy Current Brake Command for Emergency Brake	not relevant	
TIU Eddy Current Brake Command for Service Brake	not relevant	
TIU Pantograph Command	not relevant	
TIU Air Tightness Command	not relevant	
TIU Main Switch / Circuit Breaker Command	not relevant	
TIU Traction Cut Off Command	not relevant	
TIU Traction Status	not relevant	
TIU Direction Controller Position Status	not relevant	
TIU Cab Status	Cab A or B active	For the test it is not relevant, what cab is active
BIU Emergency Brake Command	not relevant	
BIU Service Brake Command	not relevant	
BIU Emergency Brake Status	not relevant	
BIU Service Brake Status	not relevant	
NTC isolation status	Not isolated for active STM. Not relevant for other STMs	

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests first set of 6 indicators with different colours	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicators are displayed on DMI with requested colours
2	STM requests second set of 6	PROF	T0 + 5s	connection of active DMI channel:	DMI		Indicators are displayed on DMI with



	indicators with different colours		Message-S2		requested colours
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Message-S1: Request of first set of 6 indicators with different colours			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	65	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	472	Packet Length
N_ITER	5	6	Request for 6 indicators
NID_INDICATOR(1)	8	1	
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000000001b	white on dark blue, No flashing
L_CAPTION(1)	6	5	Caption="WonDB"
X_CAPTION(1,1)	8	"W"	
X_CAPTION(1,2)	8	"o"	
X_CAPTION(1,3)	8	"n"	
X_CAPTION(1,4)	8	"D"	
X_CAPTION(1,5)	8	"B"	
NID_INDICATOR(2)	8	2	
NID_INDPOS(2)	5	2	

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NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000000010b	red on dark blue, No flashing
L_CAPTION(2)	6	5	Caption="RonDB"
X_CAPTION(2,1)	8	"R"	
X_CAPTION(2,2)	8	"o"	
X_CAPTION(2,3)	8	"n"	
X_CAPTION(2,4)	8	"D"	
X_CAPTION(2,5)	8	"B"	
NID_INDICATOR(3)	8	3	
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000000101b	yellow on dark blue, No flashing
L_CAPTION(3)	6	5	Caption="YonDB"
X_CAPTION(3,1)	8	"Y"	
X_CAPTION(3,2)	8	"o"	
X_CAPTION(3,3)	8	"n"	
X_CAPTION(3,4)	8	"D"	
X_CAPTION(3,5)	8	"B"	
NID_INDICATOR(4)	8	4	
NID_INDPOS(4)	5	5	
NID_ICON(4)	8	0	
M_IND_ATTRIB(4)	10	1000001000b	black on white, No flashing
L_CAPTION(4)	6	5	Caption="BKonW"



X_CAPTION(4,1)	8	"B"	
X_CAPTION(4,2)	8	"K"	
X_CAPTION(4,3)	8	"o"	
X_CAPTION(4,4)	8	"n"	
X_CAPTION(4,5)	8	"W"	
NID_INDICATOR(5)	8	5	
NID_INDPOS(5)	5	6	
NID_ICON(5)	8	0	
M_IND_ATTRIB(5)	10	1000001010b	red on white, No flashing
L_CAPTION(5)	6	4	Caption="RonW"
X_CAPTION(5,1)	8	"R"	
X_CAPTION(5,2)	8	"o"	
X_CAPTION(5,3)	8	"n"	
X_CAPTION(5,4)	8	"W"	
NID_INDICATOR(6)	8	6	
NID_INDPOS(6)	5	7	
NID_ICON(6)	8	0	
M_IND_ATTRIB(6)	10	1000001101b	yellow on white, No flashing
L_CAPTION(6)	6	4	Caption="YonW"
X_CAPTION(6,1)	8	"Y"	
X_CAPTION(6,2)	8	"o"	
X_CAPTION(6,3)	8	"n"	
X_CAPTION(6,4)	8	"W"	



Padding bits	7	0000000b	
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Message-S2: Request of 2th set of 6 indicators with different colours			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	63	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=456, N=6, ID=1, P=1, IC=0, MI=1000010000b (black on red, No flashing), L=5, T="BKonR"			
(2): ID=2, P=2, IC=0, MI=1000010001b (white on red, No flashing), L=4, T="WonR"			
(3): ID=3, P=3, IC=0, MI=1000010101b (yellow on red, No flashing), L=4, T="YonR"			
(4): ID=4, P=5, IC=0, MI=1000101000b (black on yellow, No flashing), L=5, T="BKonY"			
(5): ID=5, P=6, IC=0, MI=1000101001b (white on yellow, No flashing), L=4, T="WonY"			
(6): ID=6, P=7, IC=0, MI=1000101010b (red on yellow, No flashing), L=4, T="RonY"			

End Conditions	Value	Comments
STM State	unchanged	
ETCS Mode	unchanged	
ETCS Level	unchanged	
Train State	not relevant	
ETCS Train Data	not relevant	
Active DMI channel Connection	unchanged	
Other DMI channels Connections	not relevant	
TIU Connection	not relevant	
BIU Connection	not relevant	

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JD Connection	not relevant	
TIU Regenerative Brake Command	not relevant	
TIU Magnetic Shoes Brake Command	not relevant	
TIU Eddy Current Brake Command for Emergency Brake	not relevant	
TIU Eddy Current Brake Command for Service Brake	not relevant	
TIU Pantograph Command	not relevant	
TIU Air Tightness Command	not relevant	
TIU Main Switch / Circuit Breaker Command	not relevant	
TIU Traction Cut Off Command	not relevant	
TIU Traction Status	not relevant	
TIU Direction Controller Position Status	not relevant	
TIU Cab Status	unchanged	
BIU Emergency Brake Command	not relevant	
BIU Service Brake Command	not relevant	
BIU Emergency Brake Status	not relevant	
BIU Service Brake Status	not relevant	
NTC isolation status	unchanged	

2.2.23 Test case 7b4.2

TEST CASE HEADER	
Test case identification	DMI Function
	7b4.0.2.0



	Colour Handling test for indicators: text/background colours according to Table 4/19 of ETCS DMI Specification: display 4 x 4 indicators with all possible combinations of text and background colour, where text colour is specified in Table 4 of ETCS DMI Specification (only colours selectable by M_IND_ATTRIB) and background colour is specified in Table 19 of ETCS DMI Specification.
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.3.4
	ERA ERTMS 015560 (DMI Spec) 9.3.1.2, 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	Unified DMI service: 7a.1 Customisable DMI service: 7a.4, 7a.5, 7a.6, 7a.7, 7a.8, 7a.9 (one configuration shall be chosen for test)
Comments and constraints	Starting and end conditions as for Test Case 7b4.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests first set of 4 indicators with different colours	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicators are displayed on DMI with requested colours
2	STM requests second set of 4 indicators with different colours	PROF	T0 + 5s	connection of active DMI channel: Message-S2	DMI		Indicators are displayed on DMI with requested colours
3	STM requests third set of 4 indicators with different colours	PROF	T0 + 10s	connection of active DMI channel: Message-S3	DMI		Indicators are displayed on DMI with requested colours
4	STM requests fourth set of 4 indicators with different colours	PROF	T0 + 15s	connection of active DMI channel: Message-S4	DMI		Indicators are displayed on DMI with requested colours

Message-S1: Request of first set of 4 indicators with different colours			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	47	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=334, N=4, ID=1, P=1, IC=0, MI=1000011001b (white on blue, No flashing), L=5, T="WonBE"			
(2): ID=2, P=2, IC=0, MI=1000011010b (red on blue, No flashing), L=5, T="RonBE"			
(3): ID=3, P=3, IC=0, MI=1000011101b (yellow on blue, No flashing), L=5, T="YonBE"			
(4): ID=4, P=5, IC=0, MI=1000100000b (black on green, No flashing), L=5, T="BKonG"			

Message-S2: Request of 2th set of 4 indicators with different colours			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	45	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=318, N=4, ID=1, P=1, IC=0, MI=1000100001b (white on green, No flashing), L=4, T="WonG"			
(2): ID=2, P=2, IC=0, MI=1000100010b (red on green, No flashing), L=4, T="RonG"			
(3): ID=3, P=3, IC=0, MI=1000100101b (yellow on green, No flashing), L=4, T="YonG"			
(4): ID=4, P=5, IC=0, MI=1000110000b (black on light red, No flashing), L=6, T="BKonLR"			

Message-S3: Request of 3th set of 4 indicators with different colours			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	48	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=342, N=4, ID=1, P=1, IC=0, MI=1000110001b (white on light red, No flashing), L=5, T="WonLR"			



(2): ID=2, P=2, IC=0, MI=1000110010b (red on light red, No flashing), L=5, T="RonLR"
(3): ID=3, P=3, IC=0, MI=1000110101b (yellow on light red, No flashing), L=5, T="YonLR"
(4): ID=4, P=5, IC=0, MI=1000111000b (black on light green, No flashing), L=6, T="BKonLG"

Message-S4: Request of 4th set of 4 indicators with different colours			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	48	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=342, N=4, ID=1, P=1, IC=0, MI=1000111001b (white on light green, No flashing), L=5, T="WonLG"			
(2): ID=2, P=2, IC=0, MI=1000111010b (red on light green, No flashing), L=5, T="RonLG"			
(3): ID=3, P=3, IC=0, MI=1000111101b (yellow on light green, No flashing), L=5, T="YonLG"			
(4): ID=4, P=5, IC=0, MI=1000011000b (black on blue, No flashing), L=6, T="BKonBE"			

2.2.24 Test Case 7b4.3

TEST CASE HEADER	
Test case identification	DMI Function
	7b4.0.3.0
	Colour Handling test for indicators: text/background colours according to Table 19/4 of ETCS DMI Specification: display 4 x 4 indicators with all possible combinations of text and background colour, where text colour is specified in Table 19 of ETCS DMI Specification and background colour is specified in Table 4 of ETCS DMI Specification (only colours selectable by M_IND_ATTRIB).
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.3.4



	ERA ERTMS 015560 (DMI Spec) 9.3.1.2, 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	Unified DMI service: 7a.1 Customisable DMI service: 7a.4, 7a.5, 7a.6, 7a.7, 7a.8, 7a.9 (one configuration shall be chosen for test)
Comments and constraints	Starting and end conditions as for test case 7b4.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests first set of 4 indicators with different colours	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicators are displayed on DMI with requested colours
2	STM requests second set of 4 indicators with different colours	PROF	T0 + 5s	connection of active DMI channel: Message-S2	DMI		Indicators are displayed on DMI with requested colours
3	STM requests third set of 4 indicators with different colours	PROF	T0 + 10s	connection of active DMI channel: Message-S3	DMI		Indicators are displayed on DMI with requested colours
4	STM requests fourth set of 4 indicators with different colours	PROF	T0 + 15s	connection of active DMI channel: Message-S4	DMI		Indicators are displayed on DMI with requested colours

Message-S1: Request of first set of 4 indicators with different colours			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	49	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=350, N=4, ID=1, P=1, IC=0, MI=1000000100b (green on dark blue, No flashing), L=5, T="GonDB"			



(2): ID=2, P=2, IC=0, MI=1000000110b (light red on dark blue, No flashing), L=6, T="LRonDB"
(3): ID=3, P=3, IC=0, MI=1000000111b (light green on dark blue, No flashing), L=6, T="LGonDB"
(4): ID=4, P=5, IC=0, MI=1000001011b (blue on white, No flashing), L=5, T="BEonW"

Message-S2: Request of 2th set of 4 indicators with different colours			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=326, N=4, ID=1, P=1, IC=0, MI=1000001100b (green on white, No flashing), L=4, T="GonW"			
(2): ID=2, P=2, IC=0, MI=1000001110b (light red on white, No flashing), L=5, T="LRonW"			
(3): ID=3, P=3, IC=0, MI=1000001111b (light green on white, No flashing), L=5, T="LGonW"			
(4): ID=4, P=5, IC=0, MI=1000010011b (blue on red, No flashing), L=5, T="BEonR"			

Message-S3: Request of 3th set of 4 indicators with different colours			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=326, N=4, ID=1, P=1, IC=0, MI=1000010100b (green on red, No flashing), L=4, T="GonR"			
(2): ID=2, P=2, IC=0, MI=1000010110b (light red on red, No flashing), L=5, T="LRonR"			
(3): ID=3, P=3, IC=0, MI=1000010111b (light green on red, No flashing), L=5, T="LGonR"			
(4): ID=4, P=5, IC=0, MI=1000101011b (blue on yellow, No flashing), L=5, T="BEonY"			



Message-S4: Request of 4th set of 4 indicators with different colours			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	47	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=334, N=4, ID=1, P=1, IC=0, MI=1000101100b (green on yellow, No flashing), L=4, T="GonY"			
(2): ID=2, P=2, IC=0, MI=1000101110b (light red on yellow, No flashing), L=5, T="LRonY"			
(3): ID=3, P=3, IC=0, MI=1000101111b (light green on yellow, No flashing), L=5, T="LGonY"			
(4): ID=4, P=5, IC=0, MI=1000000011b (blue on dark blue, No flashing), L=6, T="BEonDB"			

2.2.25 Test Case 7b4.4

TEST CASE HEADER	
Test case identification	DMI Function
	7b4.0.4.0
	Colour Handling test for indicators: colours according to Table 19 of ETCS DMI Specification: display 2 x 6 indicators with all possible combinations of text and background colour, where text colour <> background colour and colour is specified in Table 19 of ETCS DMI Specification
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.3.4
	ERA ERTMS 015560 (DMI Spec) 9.3.1.2, 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board	Unified DMI service: 7a.1



configuration	Customisable DMI service: 7a.4, 7a.5, 7a.6, 7a.7, 7a.8, 7a.9 (one configuration shall be chosen for test)
Comments and constraints	Starting and end conditions as for test case 7b4.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests first set of 6 indicators with different colours	PROF	T0	connection of active DMI channel: Message-S1	DMI		Indicators are displayed on DMI with requested colours
2	STM requests second set of 6 indicators with different colours	PROF	T0 + 5s	connection of active DMI channel: Message-S2	DMI		Indicators are displayed on DMI with requested colours

Message-S1: Request of first set of 6 indicators with different colours			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	69	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=504, N=6, ID=1, P=1, IC=0, MI=1000011100b (green on blue, No flashing), L=5, T="GonBE"			
(2): ID=2, P=2, IC=0, MI=1000011110b (light red on blue, No flashing), L=6, T="LRonBE"			
(3): ID=3, P=3, IC=0, MI=1000011111b (light green on blue, No flashing), L=6, T="LGonBE"			
(4): ID=4, P=5, IC=0, MI=1000100011b (blue on green, No flashing), L=5, T="BEonG"			
(5): ID=5, P=6, IC=0, MI=1000100110b (light red on green, No flashing), L=5, T="LRonG"			
(6): ID=6, P=7, IC=0, MI=1000100111b (light green on green, No flashing), L=5, T="LGonG"			

Message-S2: Request of 2th set of 6 indicators with different colours			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM

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L_MESSAGE	8	71	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=520, N=6, ID=1, P=1, IC=0, MI=1000110011b (blue on light red, No flashing), L=6, T="BEonLR"			
(2): ID=2, P=2, IC=0, MI=1000110100b (green on light red, No flashing), L=5, T="GonLR"			
(3): ID=3, P=3, IC=0, MI=1000110111b (light green on light red, No flashing), L=6, T="LGonLR"			
(4): ID=4, P=5, IC=0, MI=1000111011b (blue on light green, No flashing), L=6, T="BEonLG"			
(5): ID=5, P=6, IC=0, MI=1000111100b (green on light green, No flashing), L=5, T="GonLG"			
(6): ID=6, P=7, IC=0, MI=1000111110b (light red on light green, No flashing), L=6, T="LRonLG"			

2.2.26 Test Case 7b5.1

TEST CASE HEADER	
Test case identification	DMI Function
	7b5.0.1.1.1.1.3.1.1.2.2.2.0
	Test of flashing modes with indicators for options 'flashing frequencies as with unified DMI service' and 'yellow frame': First 3 indicators are displayed without flashing with text. Then 2 indicators are displayed with fast flashing plus one indicator with slow flashing for reference, all with normal phase and text. Then 2 indicators are displayed with counter phase flashing plus one indicator with normal phase for reference, all with slow frequency and text.
ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.3.4, 13.4.3.5
	ERA ERTMS 015560 (DMI Spec) 9.3.2.1, 9.3.2.3, 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35



ERTMS/ETCS on-board configuration	For active STM: Unified DMI service or customisable DMI service with configuration 7a.3, 7a.4, 7a.5 or 7a.8 (The test shall be performed for the unified DMI service and one configuration with customisable DMI service)
Comments and constraints	Flashing of indicators should be according to options set in configuration, i.e. 'flashing frequencies as with unified DMI service' and style 'yellow frame'.

Starting Conditions	Value	Comments
STM State	DA	
ETCS Mode	SN	
ETCS Level	NTC	
Train State	not relevant	
ETCS Train Data	not relevant	
Active DMI channel Connection	Established	
Other DMI channels Connections	not relevant	
TIU Connection	not relevant	
BIU Connection	not relevant	
JD Connection	not relevant	
TIU Regenerative Brake Command	not relevant	
TIU Magnetic Shoes Brake Command	not relevant	
TIU Eddy Current Brake Command for Emergency Brake	not relevant	
TIU Eddy Current Brake Command for Service Brake	not relevant	
TIU Pantograph Command	not relevant	
TIU Air Tightness Command	not relevant	
TIU Main Switch / Circuit Breaker Command	not relevant	



TIU Traction Cut Off Command	not relevant	
TIU Traction Status	not relevant	
TIU Direction Controller Position Status	not relevant	
TIU Cab Status	Cab A or B active	For the test it is not relevant, what cab is active
BIU Emergency Brake Command	not relevant	
BIU Service Brake Command	not relevant	
BIU Emergency Brake Status	not relevant	
BIU Service Brake Status	not relevant	
NTC isolation status	Not isolated for active STM. Not relevant for other STMs	

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of 3 indicators with text without flashing	PROF	T0	connection of active DMI channel: Message-S1	DMI		indicators 1-3 are displayed at positions 1-3 without flashing
2	STM requests display of 2 indicators with fast flashing, normal phase and one indicator slow flashing, normal phase, all with text	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Indicators 1 and 2 are displayed at positions 1 and 2 with fast flashing. Indicator 3 is displayed at position 3 with slow flashing. All have the same phase.
3	STM requests display of 2 indicators with slow flashing, counter phase and one indicator slow flashing, normal phase, all with text	PROF	T0+10s	connection of active DMI channel: Message-S3	DMI		Indicators 1-3 are displayed at positions 1-3 with slow flashing. Indicators 1 and 2 have different phase than indicator 3.

Message-S1: STM requests display of 3 indicators with text without flashing			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	35	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	233	Packet Length
N_ITER	5	3	Request for 3 indicators
NID_INDICATOR(1)	8	3	Indicator 3
NID_INDPOS(1)	5	3	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	4	Caption="IND3"
X_CAPTION(1,1)	8	"I"	
X_CAPTION(1,2)	8	"N"	
X_CAPTION(1,3)	8	"D"	
X_CAPTION(1,4)	8	"3"	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000010000b	black on red, No flashing
L_CAPTION(2)	6	4	Caption="IND2"
X_CAPTION(2,1)	8	"I"	



X_CAPTION(2,2)	8	"N"	
X_CAPTION(2,3)	8	"D"	
X_CAPTION(2,4)	8	"2"	
NID_INDICATOR(3)	8	1	Indicator 1
NID_INDPOS(3)	5	1	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000010000b	black on red, No flashing
L_CAPTION(3)	6	4	Caption="IND1"
X_CAPTION(3,1)	8	"I"	
X_CAPTION(3,2)	8	"N"	
X_CAPTION(3,3)	8	"D"	
X_CAPTION(3,4)	8	"1"	
Padding bits	6	000000b	

Message-S2: STM requests display of 2 indicators with fast flashing, normal phase and one indicator slow flashing, normal phase, all with text			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	35	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=233, N=3, ID=3, P=3, IC=0, MI=1001010000b (black on red, slow flashing, normal phase), L=4, T="IND3"			
(2): ID=2, P=2, IC=0, MI=1010010000b (black on red, fast flashing, normal phase), L=4, T="IND2"			
(3): ID=1, P=1, IC=0, MI=1010010000b (black on red, fast flashing, normal phase), L=4, T="IND1"			

Message-S3: STM requests display of 2 indicators with slow flashing, counter phase and one indicator slow flashing, normal phase, all with text



VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	35	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=233, N=3, ID=3, P=3, IC=0, MI=1001010000b (black on red, slow flashing, normal phase), L=4, T="IND3"			
(2): ID=2, P=2, IC=0, MI=1101010000b (black on red, slow flashing, counter phase), L=4, T="IND2"			
(3): ID=1, P=1, IC=0, MI=1101010000b (black on red, slow flashing, counter phase), L=4, T="IND1"			

End Conditions	Value	Comments
STM State	unchanged	
ETCS Mode	unchanged	
ETCS Level	unchanged	
Train State	not relevant	
ETCS Train Data	not relevant	
Active DMI channel Connection	unchanged	
Other DMI channels Connections	not relevant	
TIU Connection	not relevant	
BIU Connection	not relevant	
JD Connection	not relevant	
TIU Regenerative Brake Command	not relevant	
TIU Magnetic Shoes Brake Command	not relevant	
TIU Eddy Current Brake Command for Emergency Brake	not relevant	
TIU Eddy Current Brake Command for Service Brake	not relevant	

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TIU Pantograph Command	not relevant	
TIU Air Tightness Command	not relevant	
TIU Main Switch / Circuit Breaker Command	not relevant	
TIU Traction Cut Off Command	not relevant	
TIU Traction Status	not relevant	
TIU Direction Controller Position Status	not relevant	
TIU Cab Status	unchanged	
BIU Emergency Brake Command	not relevant	
BIU Service Brake Command	not relevant	
BIU Emergency Brake Status	not relevant	
BIU Service Brake Status	not relevant	
NTC isolation status	unchanged	

2.2.27 Test case 7b5.2

TEST CASE HEADER	
Test case identification	DMI Function
	7b5.0.2.1.1.1.3.1.1.2.2.2.0
	Test of flashing modes with indicators for options 'flashing frequencies higher than unified DMI service' and 'yellow frame': First 3 indicators are displayed without flashing with text. Then 2 indicators are displayed with fast flashing plus one indicator with slow flashing for reference, all with normal phase and text. Then 2 indicators are displayed with counter phase flashing plus one indicator with normal phase for reference, all with slow frequency and text.
	Test case steps and messages as in test case 7b5.1.



ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.3.4, 13.4.3.5
	ERA ERTMS 015560 (DMI Spec) 9.3.2.1, 9.3.2.3, 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service 7a.7 or 7a.9 (one configuration shall be chosen)
Comments and constraints	Flashing of indicators should be according to options set in configuration, i.e. 'flashing frequencies higher than unified DMI service' and style 'yellow frame'.
	Starting and end conditions as for test case 7b5.1

2.2.28 Test Case 7b5.3

TEST CASE HEADER	
Test case identification	DMI Function
	7b5.0.3.2.1.1.3.1.1.3.1.1.2.2.2.2.2.0
	Test of flashing modes with indicators for options 'flashing frequencies lower than unified DMI service' and 'whole area': First 3 indicators are displayed without flashing with text.
	Then 2 indicators are displayed with fast flashing plus one indicator with slow flashing for reference, all with normal phase and text.
	Then 2 indicators are displayed with fast flashing plus one indicator with slow flashing for reference, all with normal phase and icon.
	Then 2 indicators are displayed with counter phase flashing plus one indicator with normal phase for reference, all with slow frequency and text.
	Then 2 indicators are displayed with counter phase flashing plus one indicator with normal phase for reference, all with slow frequency and icon.



ERTMS/ETCS on-board requirements tested	SUBSET-035 13.4.3.4, 13.4.3.5
	ERA ERTMS 015560 (DMI Spec) 9.3.2.2, 9.3.2.3, 9.3.4.1
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	For active STM: Customisable DMI service 7a.6
Comments and constraints	Flashing of indicators should be according to options set in configuration, i.e. 'flashing frequencies lower than unified DMI service' and style 'whole area'.
	Starting and end conditions as for test case 7b5.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of 3 indicators with text without flashing	PROF	T0	connection of active DMI channel: Message-S1	DMI		indicators 1-3 are displayed at positions 1-3 without flashing
2	STM requests display of 2 indicators with fast flashing, normal phase and one indicator slow flashing, normal phase, all with text	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		Indicators 1 and 2 are displayed at positions 1 and 2 with fast flashing. Indicator 3 is displayed at position 3 with slow flashing. All have the same phase.
3	STM requests display of 2 indicators with fast flashing, normal phase and one indicator slow flashing, normal phase, all with icons	PROF	T0+10s	connection of active DMI channel: Message-S3	DMI		Icons 1 and 2 are displayed at positions 1 and 2 with fast flashing. Icon 10 is displayed at position 3 with slow flashing. All have the same phase.
4	STM requests display of 2 indicators with slow flashing, counter phase and one indicator slow	PROF	T0+15s	connection of active DMI channel: Message-S4	DMI		Indicators 1-3 are displayed at positions 1-3 with slow flashing. Indicators 1 and 2 have different



	flashing, normal phase, all with text						phase than indicator 3.
5	STM requests display of 2 indicators with slow flashing, counter phase and one indicator slow flashing, normal phase, all with icons	PROF	T0+20s	connection of active DMI channel: Message-S5	DMI		Icons 1 and 2 are displayed at positions 1 and 2 with slow flashing. Icon 10 is displayed at position 3 with slow flashing. Icons 1 and 2 have different phase than icon 10.

Message-S1: STM requests display of 3 indicators with text without flashing			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	35	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	233	Packet Length
N_ITER	5	3	Request for 3 indicators
NID_INDICATOR(1)	8	3	Indicator 3
NID_INDPOS(1)	5	3	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	4	Caption="IND3"
X_CAPTION(1,1)	8	"I"	
X_CAPTION(1,2)	8	"N"	
X_CAPTION(1,3)	8	"D"	



X_CAPTION(1,4)	8	"3"	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000010000b	black on red, No flashing
L_CAPTION(2)	6	4	Caption="IND2"
X_CAPTION(2,1)	8	"I"	
X_CAPTION(2,2)	8	"N"	
X_CAPTION(2,3)	8	"D"	
X_CAPTION(2,4)	8	"2"	
NID_INDICATOR(3)	8	1	Indicator 1
NID_INDPOS(3)	5	1	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000010000b	black on red, No flashing
L_CAPTION(3)	6	4	Caption="IND1"
X_CAPTION(3,1)	8	"I"	
X_CAPTION(3,2)	8	"N"	
X_CAPTION(3,3)	8	"D"	
X_CAPTION(3,4)	8	"1"	
Padding bits	6	000000b	

Message-S2: STM requests display of 2 indicators with fast flashing, normal phase and one indicator slow flashing, normal phase, all with text

VARIABLE	Length	VALUE	COMMENT
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NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	35	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=233, N=3, ID=3, P=3, IC=0, MI=1001010000b (black on red, slow flashing, normal phase), L=4, T="IND3"			
(2): ID=2, P=2, IC=0, MI=1010010000b (black on red, fast flashing, normal phase), L=4, T="IND2"			
(3): ID=1, P=1, IC=0, MI=1010010000b (black on red, fast flashing, normal phase), L=4, T="IND1"			

Message-S3: STM requests display of 2 indicators with fast flashing, normal phase and one indicator slow flashing, normal phase, all with icons			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	23	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=137, N=3, ID=3, P=3, IC=10, MI=1001010000b (black on red, slow flashing, normal phase), L=0			
(2): ID=2, P=2, IC=2, MI=1010010000b (black on red, fast flashing, normal phase), L=0			
(3): ID=1, P=1, IC=1, MI=1010010000b (black on red, fast flashing, normal phase), L=0			

Message-S4: STM requests display of 2 indicators with slow flashing, counter phase and one indicator slow flashing, normal phase, all with text			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	35	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=233, N=3, ID=3, P=3, IC=0, MI=1001010000b (black on red, slow flashing, normal phase), L=4, T="IND3"			
(2): ID=2, P=2, IC=0, MI=1101010000b (black on red, slow flashing, counter phase), L=4, T="IND2"			
(3): ID=1, P=1, IC=0, MI=1101010000b (black on red, slow flashing, counter phase), L=4, T="IND1"			



Message-S5: STM requests display of 2 indicators with slow flashing, counter phase and one indicator slow flashing, normal phase, all with icons			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	23	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=137, N=3, ID=3, P=3, IC=10, MI=1001010000b (black on red, slow flashing, normal phase), L=0			
(2): ID=2, P=2, IC=2, MI=1101010000b (black on red, slow flashing, counter phase), L=0			
(3): ID=1, P=1, IC=1, MI=1101010000b (black on red, slow flashing, counter phase), L=0			

2.2.29 Test Case 7b6.1

TEST CASE HEADER	
Test case identification	DMI Function
	7b6.0.3.1.1.2.1.3.1.4.1.5.1.6.2
	Test of indicator caption display without icons, but varying text length and codepage: Indicators are displayed with caption text of different size with and without non ASCII characters.
ERTMS/ETCS on-board requirements tested	SUBSET-035 15.1.1.1 b)
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1, 9.3.4.2.1, 9.3.4.5
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	Unified DMI service: 7a.1
	Customisable DMI service: 7a.3, 7a.4, 7a.5, 7a.6, 7a.7, 7a.8, 7a.9 (one configuration shall be chosen)



Comments and constraints	
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Starting Conditions	Value	Comments
STM State	DA	
ETCS Mode	SN	
ETCS Level	NTC	
Train State	not relevant	
ETCS Train Data	not relevant	
Active DMI channel Connection	Established	
Other DMI channels Connections	not relevant	
TIU Connection	not relevant	
BIU Connection	not relevant	
JD Connection	not relevant	
TIU Regenerative Brake Command	not relevant	
TIU Magnetic Shoes Brake Command	not relevant	
TIU Eddy Current Brake Command for Emergency Brake	not relevant	
TIU Eddy Current Brake Command for Service Brake	not relevant	
TIU Pantograph Command	not relevant	
TIU Air Tightness Command	not relevant	
TIU Main Switch / Circuit Breaker Command	not relevant	
TIU Traction Cut Off Command	not relevant	
TIU Traction Status	not relevant	
TIU Direction Controller Position Status	not relevant	

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TIU Cab Status	Cab A or B active	For the test it is not relevant, what cab is active
BIU Emergency Brake Command	not relevant	
BIU Service Brake Command	not relevant	
BIU Emergency Brake Status	not relevant	
BIU Service Brake Status	not relevant	
NTC isolation status	Not isolated for active STM. Not relevant for other STMs	

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of 3 indicators with text with 1-6 chars, all ASCII	PROF	T0	connection of active DMI channel: Message-S1	DMI		indicators 1-3 are displayed with the requested texts in one line: Indicator 1 = 'h' Indicator 2 = 'hello' Indicator 3 = 'HELLO!'
2	STM requests display of 3 indicators with text with 1-6 chars, not all ASCII	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		indicators 1-3 are displayed with the requested texts in one line:



							Indicator 1 = 'Ä' Indicator 2 = 'ääää' Indicator 3 = 'öüÄÖÜ'
3	STM requests display of 3 indicators with text with 7-11 chars, all ASCII	PROF	T0+10s	connection of active DMI channel: Message-S3	DMI		indicators 1-3 are displayed with the requested texts splitted after the 6th char to two lines: Indicator 1 = 'Hello?' '!' Indicator 2 = 'Hello ' 'you' Indicator 3 = 'Hello ' 'World'
4	STM requests display of 3	PROF	T0+15s	connection of active DMI channel:	DMI		indicators 1-3 are displayed with the



	indicators with text with 7-11 chars, not all ASCII			Message-S4			<p>requested texts splitted after the 6th char to two lines:</p> <p>Indicator 1 = 'Störun' 'g'</p> <p>Indicator 2 = 'Arrêt ' 'forcé'</p> <p>Indicator 3 = 'Nöd br' 'omsen'</p>
5	STM requests display of 3 indicators with text with 12 chars, all ASCII	PROF	T0+20s	connection of active DMI channel: Message-S5	DMI		<p>indicators 1-3 are displayed with the requested texts splitted after the 6th char to two lines:</p> <p>Indicator 1 = 'HELLO!' 'HELLO!'</p> <p>Indicator 2 = '123456' '789ABC'</p> <p>Indicator 3 =</p>



							'Badspl' 'itting'
6	STM requests display of 3 indicators with text with 12 chars not all ASCII	PROF	T0+25s	connection of active DMI channel: Message-S6	DMI		indicators 1-3 are displayed with the requested texts splitted after the 6th char to two lines: Indicator 1 = 'Bremss' 'törung' Indicator 2 = 'Lüfter' 'störng' Indicator 3 = 'äöüÄÖÜ' 'äöüÄÖÜ'

Message-S1: STM requests display of 3 indicators with text with 1-6 chars, all ASCII			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	35	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length



NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	233	Packet Length
N_ITER	5	3	Request for 3 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	1	Caption="h"
X_CAPTION(1,1)	8	"h"	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000010000b	black on red, No flashing
L_CAPTION(2)	6	5	Caption="hello"
X_CAPTION(2,1)	8	"h"	
X_CAPTION(2,2)	8	"e"	
X_CAPTION(2,3)	8	"l"	
X_CAPTION(2,4)	8	"l"	
X_CAPTION(2,5)	8	"o"	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	



M_IND_ATTRIB(3)	10	1000010000b	black on red, No flashing
L_CAPTION(3)	6	6	Caption="HELLO!"
X_CAPTION(3,1)	8	"H"	
X_CAPTION(3,2)	8	"E"	
X_CAPTION(3,3)	8	"L"	
X_CAPTION(3,4)	8	"L"	
X_CAPTION(3,5)	8	"O"	
X_CAPTION(3,6)	8	"!"	
Padding bits	6	000000b	

Message-S2: STM requests display of 3 indicators with text with 1-6 chars, not all ASCII			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	45	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	313	Packet Length
N_ITER	5	3	Request for 3 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	



M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	2	Caption="Ä"
X_CAPTION(1,1)	8	C3h	'Ä'
X_CAPTION(1,2)	8	84h	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000010000b	black on red, No flashing
L_CAPTION(2)	6	8	Caption="ääää"
X_CAPTION(2,1)	8	C3h	'ä'
X_CAPTION(2,2)	8	A4h	
X_CAPTION(2,3)	8	C3h	'á'
X_CAPTION(2,4)	8	A1h	
X_CAPTION(2,5)	8	C3h	'â'
X_CAPTION(2,6)	8	A2h	
X_CAPTION(2,7)	8	C3h	'ã'
X_CAPTION(2,8)	8	A5h	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000010000b	black on red, No flashing
L_CAPTION(3)	6	12	Caption="äöüÄÖÜ"
X_CAPTION(3,1)	8	C3h	'ä'



X_CAPTION(3,2)	8	A4h	
X_CAPTION(3,3)	8	C3h	'ö'
X_CAPTION(3,4)	8	B6h	
X_CAPTION(3,5)	8	C3h	'ü'
X_CAPTION(3,6)	8	BCh	
X_CAPTION(3,7)	8	C3h	'Ä'
X_CAPTION(3,8)	8	84h	
X_CAPTION(3,9)	8	C3h	'Ö'
X_CAPTION(3,10)	8	96h	
X_CAPTION(3,11)	8	C3h	'Ü'
X_CAPTION(3,12)	8	9Ch	
Padding bits	6	000000b	

Message-S3: STM requests display of 3 indicators with text with 7-11 chars, all ASCII			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	50	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	353	Packet Length
N_ITER	5	3	Request for 3 indicators



NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	7	Caption="Hello?!"
X_CAPTION(1,1)	8	"H"	
X_CAPTION(1,2)	8	"e"	
X_CAPTION(1,3)	8	"l"	
X_CAPTION(1,4)	8	"l"	
X_CAPTION(1,5)	8	"o"	
X_CAPTION(1,6)	8	"?"	
X_CAPTION(1,7)	8	"!"	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000010000b	black on red, No flashing
L_CAPTION(2)	6	9	Caption="Hello you"
X_CAPTION(2,1)	8	"H"	
X_CAPTION(2,2)	8	"e"	
X_CAPTION(2,3)	8	"l"	
X_CAPTION(2,4)	8	"l"	
X_CAPTION(2,5)	8	"o"	
X_CAPTION(2,6)	8	" "	



X_CAPTION(2,7)	8	"y"	
X_CAPTION(2,8)	8	"o"	
X_CAPTION(2,9)	8	"u"	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000010000b	black on red, No flashing
L_CAPTION(3)	6	11	Caption="Hello World"
X_CAPTION(3,1)	8	"H"	
X_CAPTION(3,2)	8	"e"	
X_CAPTION(3,3)	8	"l"	
X_CAPTION(3,4)	8	"l"	
X_CAPTION(3,5)	8	"o"	
X_CAPTION(3,6)	8	" "	
X_CAPTION(3,7)	8	"W"	
X_CAPTION(3,8)	8	"o"	
X_CAPTION(3,9)	8	"r"	
X_CAPTION(3,10)	8	"l"	
X_CAPTION(3,11)	8	"d"	
Padding bits	6	000000b	

Message-S4: STM requests display of 3 indicators with text with 7-11 chars, not all ASCII			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	56	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	401	Packet Length
N_ITER	5	3	Request for 3 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	8	Caption="Störung"
X_CAPTION(1,1)	8	"S"	
X_CAPTION(1,2)	8	"t"	
X_CAPTION(1,3)	8	C3h	'ö'
X_CAPTION(1,4)	8	B6h	
X_CAPTION(1,5)	8	"r"	
X_CAPTION(1,6)	8	"u"	
X_CAPTION(1,7)	8	"n"	
X_CAPTION(1,8)	8	"g"	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	



NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000010000b	black on red, No flashing
L_CAPTION(2)	6	13	Caption="Arrêt forcé"
X_CAPTION(2,1)	8	"A"	
X_CAPTION(2,2)	8	"r"	
X_CAPTION(2,3)	8	"r"	
X_CAPTION(2,4)	8	C3h	'ê'
X_CAPTION(2,5)	8	AAh	
X_CAPTION(2,6)	8	"t"	
X_CAPTION(2,7)	8	" "	
X_CAPTION(2,8)	8	"f"	
X_CAPTION(2,9)	8	"o"	
X_CAPTION(2,10)	8	"r"	
X_CAPTION(2,11)	8	"c"	
X_CAPTION(2,12)	8	C3h	'é'
X_CAPTION(2,13)	8	A9h	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000010000b	black on red, No flashing
L_CAPTION(3)	6	12	Caption="Nöd bromsen"
X_CAPTION(3,1)	8	"N"	
X_CAPTION(3,2)	8	C3h	'ö'



X_CAPTION(3,3)	8	B6h	
X_CAPTION(3,4)	8	"d"	
X_CAPTION(3,5)	8	" "	
X_CAPTION(3,6)	8	"b"	
X_CAPTION(3,7)	8	"r"	
X_CAPTION(3,8)	8	"o"	
X_CAPTION(3,9)	8	"m"	
X_CAPTION(3,10)	8	"s"	
X_CAPTION(3,11)	8	"e"	
X_CAPTION(3,12)	8	"n"	
Padding bits	6	000000b	

Message-S5: STM requests display of 3 indicators with text with 12 chars, all ASCII			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	59	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	425	Packet Length
N_ITER	5	3	Request for 3 indicators
NID_INDICATOR(1)	8	1	Indicator 1



NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	12	Caption="HELLO!HELLO!"
X_CAPTION(1,1)	8	"H"	
X_CAPTION(1,2)	8	"E"	
X_CAPTION(1,3)	8	"L"	
X_CAPTION(1,4)	8	"L"	
X_CAPTION(1,5)	8	"O"	
X_CAPTION(1,6)	8	"!"	
X_CAPTION(1,7)	8	"H"	
X_CAPTION(1,8)	8	"E"	
X_CAPTION(1,9)	8	"L"	
X_CAPTION(1,10)	8	"L"	
X_CAPTION(1,11)	8	"O"	
X_CAPTION(1,12)	8	"!"	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000010000b	black on red, No flashing
L_CAPTION(2)	6	12	Caption="123456789ABC"
X_CAPTION(2,1)	8	"1"	
X_CAPTION(2,2)	8	"2"	



X_CAPTION(2,3)	8	"3"	
X_CAPTION(2,4)	8	"4"	
X_CAPTION(2,5)	8	"5"	
X_CAPTION(2,6)	8	"6"	
X_CAPTION(2,7)	8	"7"	
X_CAPTION(2,8)	8	"8"	
X_CAPTION(2,9)	8	"9"	
X_CAPTION(2,10)	8	"A"	
X_CAPTION(2,11)	8	"B"	
X_CAPTION(2,12)	8	"C"	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000010000b	black on red, No flashing
L_CAPTION(3)	6	12	Caption="Badsplitting"
X_CAPTION(3,1)	8	"B"	
X_CAPTION(3,2)	8	"a"	
X_CAPTION(3,3)	8	"d"	
X_CAPTION(3,4)	8	"s"	
X_CAPTION(3,5)	8	"p"	
X_CAPTION(3,6)	8	"l"	
X_CAPTION(3,7)	8	"i"	
X_CAPTION(3,8)	8	"t"	



X_CAPTION(3,9)	8	"t"	
X_CAPTION(3,10)	8	"i"	
X_CAPTION(3,11)	8	"n"	
X_CAPTION(3,12)	8	"g"	
Padding bits	6	000000b	

Message-S6: STM requests display of 3 indicators with text with 12 chars not all ASCII			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	74	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	545	Packet Length
N_ITER	5	3	Request for 3 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000010000b	black on red, No flashing
L_CAPTION(1)	6	13	Caption="Bremsstörung"
X_CAPTION(1,1)	8	"B"	
X_CAPTION(1,2)	8	"r"	



X_CAPTION(1,3)	8	"e"	
X_CAPTION(1,4)	8	"m"	
X_CAPTION(1,5)	8	"s"	
X_CAPTION(1,6)	8	"s"	
X_CAPTION(1,7)	8	"t"	
X_CAPTION(1,8)	8	C3h	'ö'
X_CAPTION(1,9)	8	B6h	
X_CAPTION(1,10)	8	"r"	
X_CAPTION(1,11)	8	"u"	
X_CAPTION(1,12)	8	"n"	
X_CAPTION(1,13)	8	"g"	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000010000b	black on red, No flashing
L_CAPTION(2)	6	14	Caption="Lüfterstörng"
X_CAPTION(2,1)	8	"L"	
X_CAPTION(2,2)	8	C3h	'ü'
X_CAPTION(2,3)	8	BCh	
X_CAPTION(2,4)	8	"f"	
X_CAPTION(2,5)	8	"t"	
X_CAPTION(2,6)	8	"e"	
X_CAPTION(2,7)	8	"r"	



X_CAPTION(2,8)	8	"s"	
X_CAPTION(2,9)	8	"t"	
X_CAPTION(2,10)	8	C3h	'ö'
X_CAPTION(2,11)	8	B6h	
X_CAPTION(2,12)	8	"r"	
X_CAPTION(2,13)	8	"n"	
X_CAPTION(2,14)	8	"g"	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000010000b	black on red, No flashing
L_CAPTION(3)	6	24	Caption="äöüÄÖÜäöüÄÖÜ"
X_CAPTION(3,1)	8	C3h	'ä'
X_CAPTION(3,2)	8	A4h	
X_CAPTION(3,3)	8	C3h	'ö'
X_CAPTION(3,4)	8	B6h	
X_CAPTION(3,5)	8	C3h	'ü'
X_CAPTION(3,6)	8	BCh	
X_CAPTION(3,7)	8	C3h	'Ä'
X_CAPTION(3,8)	8	84h	
X_CAPTION(3,9)	8	C3h	'Ö'
X_CAPTION(3,10)	8	96h	
X_CAPTION(3,11)	8	C3h	'Ü'



X_CAPTION(3,12)	8	9Ch	
X_CAPTION(3,13)	8	C3h	'ä'
X_CAPTION(3,14)	8	A4h	
X_CAPTION(3,15)	8	C3h	'ö'
X_CAPTION(3,16)	8	B6h	
X_CAPTION(3,17)	8	C3h	'ü'
X_CAPTION(3,18)	8	BCh	
X_CAPTION(3,19)	8	C3h	'Ä'
X_CAPTION(3,20)	8	84h	
X_CAPTION(3,21)	8	C3h	'Ö'
X_CAPTION(3,22)	8	96h	
X_CAPTION(3,23)	8	C3h	'Ü'
X_CAPTION(3,24)	8	9Ch	
Padding bits	6	000000b	

End Conditions	Value	Comments
STM State	unchanged	
ETCS Mode	unchanged	
ETCS Level	unchanged	
Train State	not relevant	
ETCS Train Data	not relevant	
Active DMI channel Connection	unchanged	
Other DMI channels Connections	not relevant	



TIU Connection	not relevant	
BIU Connection	not relevant	
JD Connection	not relevant	
TIU Regenerative Brake Command	not relevant	
TIU Magnetic Shoes Brake Command	not relevant	
TIU Eddy Current Brake Command for Emergency Brake	not relevant	
TIU Eddy Current Brake Command for Service Brake	not relevant	
TIU Pantograph Command	not relevant	
TIU Air Tightness Command	not relevant	
TIU Main Switch / Circuit Breaker Command	not relevant	
TIU Traction Cut Off Command	not relevant	
TIU Traction Status	not relevant	
TIU Direction Controller Position Status	not relevant	
TIU Cab Status	unchanged	
BIU Emergency Brake Command	not relevant	
BIU Service Brake Command	not relevant	
BIU Emergency Brake Status	not relevant	
BIU Service Brake Status	not relevant	
NTC isolation status	unchanged	

2.2.30 Test Case 7b6.2

TEST CASE HEADER

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Test case identification	DMI Function
	7b6.0.3.1.1.1.1.2.1.1.4.1.1.2
	Icon display and overlay test with indicators for configuration(s) 7a.3: Indicators are displayed with <ul style="list-style-type: none"> - text only, - icon only, icon filling area of indicator position, - icon and text, icon without qualifier 'caption upon icon', icon filling area of indicator position, - icon and text, icon with qualifier 'caption upon icon', icon filling area of indicator position,
ERTMS/ETCS on-board requirements tested	SUBSET-035 15.1.1.1 b)
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1, 9.3.4.2.1, 9.3.4.2.2, 9.3.4.2.3, 9.3.4.4, 9.3.4.5, 9.4.1.3
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	Customisable DMI service: 7a.3
Comments and constraints	Starting and end conditions as for test case 7b6.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of 3 indicator(s) with text only	PROF	T0	connection of active DMI channel: Message-S1	DMI		3 indicator(s) are displayed with text only
2	STM requests display of 3 indicator(s) with icon only with icon filling indicator area	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		3 indicator(s) are displayed with icon only



3	STM requests display of 3 indicator(s) with text and icon without caption upon icon and with icon filling indicator area	PROF	T0+10s	connection of active DMI channel: Message-S3	DMI		3 indicator(s) are displayed with Icon only
4	STM requests display of 3 indicator(s) with text and icon with caption upon icon and with icon filling indicator area	PROF	T0+15s	connection of active DMI channel: Message-S4	DMI		3 indicator(s) are displayed with text and icon

Message-S1: STM requests display of 3 indicator(s) with text only			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	26	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	161	Packet Length
N_ITER	5	3	Request for 3 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	1	Caption="1"
X_CAPTION(1,1)	8	"1"	
NID_INDICATOR(2)	8	2	Indicator 2

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NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000001000b	black on white, No flashing
L_CAPTION(2)	6	1	Caption="2"
X_CAPTION(2,1)	8	"2"	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000001000b	black on white, No flashing
L_CAPTION(3)	6	1	Caption="3"
X_CAPTION(3,1)	8	"3"	
Padding bits	6	000000b	

Message-S2: STM requests display of 3 indicator(s) with icon only with icon filling indicator area			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	23	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=137, N=3, ID=1, P=1, IC=1, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=2, P=2, IC=2, MI=1000001000b, L=0			
(3): ID=3, P=3, IC=3, MI=1000001000b, L=0			

Message-S3: STM requests display of 3 indicator(s) with text and icon without caption upon icon and with icon filling indicator area			
VARIABLE	Length	VALUE	COMMENT



NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	26	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=161, N=3, ID=1, P=1, IC=1, MI=1000001000b (black on white, No flashing), L=1, T="1"			
(2): ID=2, P=2, IC=2, MI=1000001000b, L=1, T="2"			
(3): ID=3, P=3, IC=3, MI=1000001000b, L=1, T="3"			

Message-S4: STM requests display of 3 indicator(s) with text and icon with caption upon icon and with icon filling indicator area			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	26	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=161, N=3, ID=1, P=1, IC=6, MI=1000001000b (black on white, No flashing), L=1, T="1"			
(2): ID=2, P=2, IC=6, MI=1000001000b, L=1, T="2"			
(3): ID=3, P=3, IC=6, MI=1000001000b, L=1, T="3"			

2.2.31 Test Case 7b6.3

TEST CASE HEADER	
Test case identification	DMI Function
	7b6.0.3.1.1.1.1.1.2.1.2.1.4.2.1.2
	Icon display and overlay test with indicators for configuration(s) 7a.5, 7a.6 and 7a.7 (one configuration shall be chosen):
	Indicators are displayed with

	<ul style="list-style-type: none"> - text only, - icon only, icon filling area of indicator position, - icon only, icon smaller than area of indicator position, - icon and text, icon without qualifier 'caption upon icon', icon filling area of indicator position, - icon and text, icon without qualifier 'caption upon icon', icon smaller than area of indicator position, - icon and text, icon with qualifier 'caption upon icon', icon smaller than area of indicator position.
ERTMS/ETCS on-board requirements tested	SUBSET-035 15.1.1.1 b)
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1, 9.3.4.2.1, 9.3.4.2.2, 9.3.4.2.3, 9.3.4.4, 9.3.4.5, 9.4.1.3
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	Customisable DMI service: 7a.5, 7a.6 and 7a.7 (one configuration shall be chosen)
Comments and constraints	Starting and end conditions as for test case 7b6.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of 8 indicator(s) with text only	PROF	T0	connection of active DMI channel: Message-S1	DMI		8 indicator(s) are displayed with text only
2	STM requests display of 8 indicator(s) with icon only with icon filling indicator area	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		8 indicator(s) are displayed with icon only
3	STM requests display of 8 indicator(s) with icon only with icon smaller than indicator area	PROF	T0+10s	connection of active DMI channel: Message-S3	DMI		8 indicator(s) are displayed with icon only. The icon(s) are displayed centred in button area surrounded by white background colour.



4	STM requests display of 8 indicator(s) with text and icon without caption upon icon and with icon filling indicator area	PROF	T0+15s	connection of active DMI channel: Message-S4	DMI		8 indicator(s) are displayed with Icon only
5	STM requests display of 8 indicator(s) with text and icon without caption upon icon and with icon smaller than indicator area	PROF	T0+20s	connection of active DMI channel: Message-S5	DMI		8 indicator(s) are displayed with Icon only. The icon(s) are displayed centred in button area surrounded by white background colour.
6	STM requests display of 8 indicator(s) with text and icon with caption upon icon and with icon smaller than indicator area	PROF	T0+25s	connection of active DMI channel: Message-S6	DMI		8 indicator(s) are displayed with text and icon. The icon(s) are displayed centred in button area surrounded by white background colour.

Message-S1: STM requests display of 8 indicator(s) with text only			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	54	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	386	Packet Length
N_ITER	5	8	Request for 8 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000001000b	black on white, No flashing



L_CAPTION(1)	6	1	Caption="1"
X_CAPTION(1,1)	8	"1"	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000001000b	black on white, No flashing
L_CAPTION(2)	6	1	Caption="2"
X_CAPTION(2,1)	8	"2"	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000001000b	black on white, No flashing
L_CAPTION(3)	6	1	Caption="3"
X_CAPTION(3,1)	8	"3"	
NID_INDICATOR(4)	8	4	Indicator 4
NID_INDPOS(4)	5	4	
NID_ICON(4)	8	0	
M_IND_ATTRIB(4)	10	1000001000b	black on white, No flashing
L_CAPTION(4)	6	1	Caption="4"
X_CAPTION(4,1)	8	"4"	
NID_INDICATOR(5)	8	5	Indicator 5
NID_INDPOS(5)	5	5	
NID_ICON(5)	8	0	



M_IND_ATTRIB(5)	10	1000001000b	black on white, No flashing
L_CAPTION(5)	6	1	Caption="5"
X_CAPTION(5,1)	8	"5"	
NID_INDICATOR(6)	8	6	Indicator 6
NID_INDPOS(6)	5	6	
NID_ICON(6)	8	0	
M_IND_ATTRIB(6)	10	1000001000b	black on white, No flashing
L_CAPTION(6)	6	1	Caption="6"
X_CAPTION(6,1)	8	"6"	
NID_INDICATOR(7)	8	7	Indicator 7
NID_INDPOS(7)	5	7	
NID_ICON(7)	8	0	
M_IND_ATTRIB(7)	10	1000001000b	black on white, No flashing
L_CAPTION(7)	6	1	Caption="7"
X_CAPTION(7,1)	8	"7"	
NID_INDICATOR(8)	8	8	Indicator 8
NID_INDPOS(8)	5	8	
NID_ICON(8)	8	0	
M_IND_ATTRIB(8)	10	1000001000b	black on white, No flashing
L_CAPTION(8)	6	1	Caption="8"
X_CAPTION(8,1)	8	"8"	
Padding bits	5	00000b	



Message-S2: STM requests display of 8 indicator(s) with icon only with icon filling indicator area			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=322, N=8, ID=1, P=1, IC=1, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=2, P=2, IC=2, MI=1000001000b, L=0		(3): ID=3, P=3, IC=10, MI=1000001000b, L=0	
(4): ID=4, P=4, IC=11, MI=1000001000b, L=0		(5): ID=5, P=5, IC=12, MI=1000001000b, L=0	
(6): ID=6, P=6, IC=13, MI=1000001000b, L=0		(7): ID=7, P=7, IC=20, MI=1000001000b, L=0	
(8): ID=8, P=8, IC=21, MI=1000001000b, L=0			

Message-S3: STM requests display of 8 indicator(s) with icon only with icon smaller than indicator area			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	46	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=322, N=8, ID=1, P=1, IC=40, MI=1000001000b (black on white, No flashing), L=0			
(2): ID=2, P=2, IC=41, MI=1000001000b, L=0		(3): ID=3, P=3, IC=42, MI=1000001000b, L=0	
(4): ID=4, P=4, IC=43, MI=1000001000b, L=0		(5): ID=5, P=5, IC=40, MI=1000001000b, L=0	
(6): ID=6, P=6, IC=41, MI=1000001000b, L=0		(7): ID=7, P=7, IC=42, MI=1000001000b, L=0	
(8): ID=8, P=8, IC=43, MI=1000001000b, L=0			



Message-S4: STM requests display of 8 indicator(s) with text and icon without caption upon icon and with icon filling indicator area			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	54	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=386, N=8, ID=1, P=1, IC=1, MI=1000001000b (black on white, No flashing), L=1, T="1"			
(2): ID=2, P=2, IC=2, MI=1000001000b, L=1, T="2"		(3): ID=3, P=3, IC=10, MI=1000001000b, L=1, T="3"	
(4): ID=4, P=4, IC=11, MI=1000001000b, L=1, T="4"		(5): ID=5, P=5, IC=12, MI=1000001000b, L=1, T="5"	
(6): ID=6, P=6, IC=13, MI=1000001000b, L=1, T="6"		(7): ID=7, P=7, IC=20, MI=1000001000b, L=1, T="7"	
(8): ID=8, P=8, IC=21, MI=1000001000b, L=1, T="8"			

Message-S5: STM requests display of 8 indicator(s) with text and icon without caption upon icon and with icon smaller than indicator area			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	54	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=386, N=8, ID=1, P=1, IC=40, MI=1000001000b (black on white, No flashing), L=1, T="1"			
(2): ID=2, P=2, IC=41, MI=1000001000b, L=1, T="2"		(3): ID=3, P=3, IC=42, MI=1000001000b, L=1, T="3"	
(4): ID=4, P=4, IC=43, MI=1000001000b, L=1, T="4"		(5): ID=5, P=5, IC=40, MI=1000001000b, L=1, T="5"	
(6): ID=6, P=6, IC=41, MI=1000001000b, L=1, T="6"		(7): ID=7, P=7, IC=42, MI=1000001000b, L=1, T="7"	
(8): ID=8, P=8, IC=43, MI=1000001000b, L=1, T="8"			



Message-S6: STM requests display of 8 indicator(s) with text and icon with caption upon icon and with icon smaller than indicator area			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	54	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=386, N=8, ID=1, P=1, IC=43, MI=1000001000b (black on white, No flashing), L=1, T="1"			
(2): ID=2, P=2, IC=43, MI=1000001000b, L=1, T="2"		(3): ID=3, P=3, IC=43, MI=1000001000b, L=1, T="3"	
(4): ID=4, P=4, IC=43, MI=1000001000b, L=1, T="4"		(5): ID=5, P=5, IC=43, MI=1000001000b, L=1, T="5"	
(6): ID=6, P=6, IC=43, MI=1000001000b, L=1, T="6"		(7): ID=7, P=7, IC=43, MI=1000001000b, L=1, T="7"	
(8): ID=8, P=8, IC=43, MI=1000001000b, L=1, T="8"			

2.2.32 Test Case 7b6.4

TEST CASE HEADER	
Test case identification	DMI Function
	7b6.0.3.1.1.1.1.1.2.1.2.1.4.1.1.4.2.1.2
	<p>Icon display and overlay test with indicators for configuration(s) 7a.9:</p> <p>Indicators are displayed with</p> <ul style="list-style-type: none"> - text only, - icon only, icon filling area of indicator position, - icon only, icon smaller than area of indicator position, - icon and text, icon without qualifier 'caption upon icon', icon filling area of indicator position, - icon and text, icon without qualifier 'caption upon icon', icon smaller than area of indicator position,



	<ul style="list-style-type: none"> - icon and text, icon with qualifier 'caption upon icon', icon filling area of indicator position, - icon and text, icon with qualifier 'caption upon icon', icon smaller than area of indicator position.
ERTMS/ETCS on-board requirements tested	SUBSET-035 15.1.1.1 b)
	ERA ERTMS 015560 (DMI Spec) 9.3.4.1, 9.3.4.2.1, 9.3.4.2.2, 9.3.4.2.3, 9.3.4.4, 9.3.4.5, 9.4.1.3
STM requirements tested	
Packets transmitted via FFFIS STM	STM - 15, STM - 35
ERTMS/ETCS on-board configuration	Customisable DMI service: 7a.9
Comments and constraints	Starting and end conditions as for test case 7b6.1

ERTMS/ETCS on-board Test Case

Step	Description/Comments	Input I/F	Input time	Input Action	Output I/F	Output time limit	Output action
1	STM requests display of 24 indicator(s) with text only	PROF	T0	connection of active DMI channel: Message-S1	DMI		24 indicator(s) are displayed with text only
2	STM requests display of 21 indicator(s) with icon only with icon filling indicator area	PROF	T0+5s	connection of active DMI channel: Message-S2	DMI		21 indicator(s) are displayed with icon only
3	STM requests display of 1 indicator(s) with icon only with icon smaller than indicator area	PROF	T0+10s	connection of active DMI channel: Message-S3	DMI		1 indicator(s) are displayed with icon only. The icon(s) are displayed centred in button area surrounded by white background colour.
4	STM requests display of 21 indicator(s) with text and icon without caption upon icon and with icon filling indicator area	PROF	T0+15s	connection of active DMI channel: Message-S4	DMI		21 indicator(s) are displayed with Icon only
5	STM requests display of 1	PROF	T0+20s	connection of active DMI channel:	DMI		1 indicator(s) are displayed with Icon



	indicator(s) with text and icon without caption upon icon and with icon smaller than indicator area			Message-S5			only. The icon(s) are displayed centred in button area surrounded by white background colour.
6	STM requests display of 24 indicator(s) with text and icon with caption upon icon and with icon filling indicator area	PROF	T0+25s	connection of active DMI channel: Message-S6	DMI		24 indicator(s) are displayed with text and icon
7	STM requests display of 1 indicator(s) with text and icon with caption upon icon and with icon smaller than indicator area	PROF	T0+30s	connection of active DMI channel: Message-S7	DMI		1 indicator(s) are displayed with text and icon. The icon(s) are displayed centred in button area surrounded by white background colour.

Message-S1: STM requests display of 24 indicator(s) with text only			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	159	Message Length
NID_PACKET	8	15	State report from STM (STM-15)
L_PACKET	13	25	Packet Length
NID_STMSTATE	4	7	State DA
NID_PACKET	8	35	Indicator request from STM (STM-35)
L_PACKET	13	1226	Packet Length
N_ITER	5	24	Request for 24 indicators
NID_INDICATOR(1)	8	1	Indicator 1
NID_INDPOS(1)	5	1	
NID_ICON(1)	8	0	
M_IND_ATTRIB(1)	10	1000001000b	black on white, No flashing
L_CAPTION(1)	6	1	Caption="1"

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X_CAPTION(1,1)	8	"1"	
NID_INDICATOR(2)	8	2	Indicator 2
NID_INDPOS(2)	5	2	
NID_ICON(2)	8	0	
M_IND_ATTRIB(2)	10	1000001000b	black on white, No flashing
L_CAPTION(2)	6	1	Caption="2"
X_CAPTION(2,1)	8	"2"	
NID_INDICATOR(3)	8	3	Indicator 3
NID_INDPOS(3)	5	3	
NID_ICON(3)	8	0	
M_IND_ATTRIB(3)	10	1000001000b	black on white, No flashing
L_CAPTION(3)	6	1	Caption="3"
X_CAPTION(3,1)	8	"3"	
NID_INDICATOR(4)	8	4	Indicator 4
NID_INDPOS(4)	5	4	
NID_ICON(4)	8	0	
M_IND_ATTRIB(4)	10	1000001000b	black on white, No flashing
L_CAPTION(4)	6	1	Caption="4"
X_CAPTION(4,1)	8	"4"	
NID_INDICATOR(5)	8	5	Indicator 5
NID_INDPOS(5)	5	5	
NID_ICON(5)	8	0	
M_IND_ATTRIB(5)	10	1000001000b	black on white, No flashing



L_CAPTION(5)	6	1	Caption="5"
X_CAPTION(5,1)	8	"5"	
NID_INDICATOR(6)	8	6	Indicator 6
NID_INDPOS(6)	5	6	
NID_ICON(6)	8	0	
M_IND_ATTRIB(6)	10	1000001000b	black on white, No flashing
L_CAPTION(6)	6	1	Caption="6"
X_CAPTION(6,1)	8	"6"	
NID_INDICATOR(7)	8	7	Indicator 7
NID_INDPOS(7)	5	7	
NID_ICON(7)	8	0	
M_IND_ATTRIB(7)	10	1000001000b	black on white, No flashing
L_CAPTION(7)	6	1	Caption="7"
X_CAPTION(7,1)	8	"7"	
NID_INDICATOR(8)	8	8	Indicator 8
NID_INDPOS(8)	5	8	
NID_ICON(8)	8	0	
M_IND_ATTRIB(8)	10	1000001000b	black on white, No flashing
L_CAPTION(8)	6	1	Caption="8"
X_CAPTION(8,1)	8	"8"	
NID_INDICATOR(9)	8	9	Indicator 9
NID_INDPOS(9)	5	9	
NID_ICON(9)	8	0	



M_IND_ATTRIB(9)	10	1000001000b	black on white, No flashing
L_CAPTION(9)	6	1	Caption="9"
X_CAPTION(9,1)	8	"9"	
NID_INDICATOR(10)	8	10	Indicator 10
NID_INDPOS(10)	5	10	
NID_ICON(10)	8	0	
M_IND_ATTRIB(10)	10	1000001000b	black on white, No flashing
L_CAPTION(10)	6	2	Caption="10"
X_CAPTION(10,1)	8	"1"	
X_CAPTION(10,2)	8	"0"	
NID_INDICATOR(11)	8	11	Indicator 11
NID_INDPOS(11)	5	11	
NID_ICON(11)	8	0	
M_IND_ATTRIB(11)	10	1000001000b	black on white, No flashing
L_CAPTION(11)	6	2	Caption="11"
X_CAPTION(11,1)	8	"1"	
X_CAPTION(11,2)	8	"1"	
NID_INDICATOR(12)	8	12	Indicator 12
NID_INDPOS(12)	5	12	
NID_ICON(12)	8	0	
M_IND_ATTRIB(12)	10	1000001000b	black on white, No flashing
L_CAPTION(12)	6	2	Caption="12"
X_CAPTION(12,1)	8	"1"	



X_CAPTION(12,2)	8	"2"	
NID_INDICATOR(13)	8	13	Indicator 13
NID_INDPOS(13)	5	13	
NID_ICON(13)	8	0	
M_IND_ATTRIB(13)	10	1000001000b	black on white, No flashing
L_CAPTION(13)	6	2	Caption="13"
X_CAPTION(13,1)	8	"1"	
X_CAPTION(13,2)	8	"3"	
NID_INDICATOR(14)	8	14	Indicator 14
NID_INDPOS(14)	5	14	
NID_ICON(14)	8	0	
M_IND_ATTRIB(14)	10	1000001000b	black on white, No flashing
L_CAPTION(14)	6	2	Caption="14"
X_CAPTION(14,1)	8	"1"	
X_CAPTION(14,2)	8	"4"	
NID_INDICATOR(15)	8	15	Indicator 15
NID_INDPOS(15)	5	15	
NID_ICON(15)	8	0	
M_IND_ATTRIB(15)	10	1000001000b	black on white, No flashing
L_CAPTION(15)	6	2	Caption="15"
X_CAPTION(15,1)	8	"1"	
X_CAPTION(15,2)	8	"5"	
NID_INDICATOR(16)	8	16	Indicator 16



NID_INDPOS(16)	5	16	
NID_ICON(16)	8	0	
M_IND_ATTRIB(16)	10	1000001000b	black on white, No flashing
L_CAPTION(16)	6	2	Caption="16"
X_CAPTION(16,1)	8	"1"	
X_CAPTION(16,2)	8	"6"	
NID_INDICATOR(17)	8	17	Indicator 17
NID_INDPOS(17)	5	17	
NID_ICON(17)	8	0	
M_IND_ATTRIB(17)	10	1000001000b	black on white, No flashing
L_CAPTION(17)	6	2	Caption="17"
X_CAPTION(17,1)	8	"1"	
X_CAPTION(17,2)	8	"7"	
NID_INDICATOR(18)	8	18	Indicator 18
NID_INDPOS(18)	5	18	
NID_ICON(18)	8	0	
M_IND_ATTRIB(18)	10	1000001000b	black on white, No flashing
L_CAPTION(18)	6	2	Caption="18"
X_CAPTION(18,1)	8	"1"	
X_CAPTION(18,2)	8	"8"	
NID_INDICATOR(19)	8	19	Indicator 19
NID_INDPOS(19)	5	19	
NID_ICON(19)	8	0	



M_IND_ATTRIB(19)	10	1000001000b	black on white, No flashing
L_CAPTION(19)	6	2	Caption="19"
X_CAPTION(19,1)	8	"1"	
X_CAPTION(19,2)	8	"9"	
NID_INDICATOR(20)	8	20	Indicator 20
NID_INDPOS(20)	5	20	
NID_ICON(20)	8	0	
M_IND_ATTRIB(20)	10	1000001000b	black on white, No flashing
L_CAPTION(20)	6	2	Caption="20"
X_CAPTION(20,1)	8	"2"	
X_CAPTION(20,2)	8	"0"	
NID_INDICATOR(21)	8	21	Indicator 21
NID_INDPOS(21)	5	21	
NID_ICON(21)	8	0	
M_IND_ATTRIB(21)	10	1000001000b	black on white, No flashing
L_CAPTION(21)	6	2	Caption="21"
X_CAPTION(21,1)	8	"2"	
X_CAPTION(21,2)	8	"1"	
NID_INDICATOR(22)	8	22	Indicator 22
NID_INDPOS(22)	5	22	
NID_ICON(22)	8	0	
M_IND_ATTRIB(22)	10	1000001000b	black on white, No flashing
L_CAPTION(22)	6	2	Caption="22"



X_CAPTION(22,1)	8	"2"	
X_CAPTION(22,2)	8	"2"	
NID_INDICATOR(23)	8	23	Indicator 23
NID_INDPOS(23)	5	23	
NID_ICON(23)	8	0	
M_IND_ATTRIB(23)	10	1000001000b	black on white, No flashing
L_CAPTION(23)	6	2	Caption="23"
X_CAPTION(23,1)	8	"2"	
X_CAPTION(23,2)	8	"3"	
NID_INDICATOR(24)	8	24	Indicator 24
NID_INDPOS(24)	5	24	
NID_ICON(24)	8	0	
M_IND_ATTRIB(24)	10	1000001000b	black on white, No flashing
L_CAPTION(24)	6	2	Caption="24"
X_CAPTION(24,1)	8	"2"	
X_CAPTION(24,2)	8	"4"	
Padding bits	5	00000b	

Message-S2: STM requests display of 21 indicator(s) with icon only with icon filling indicator area			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	106	Message Length
STM-15: PL=25, ST=7, (State DA)			



STM-35: PL=803, N=21, ID=1, P=1, IC=9, MI=1000001000b (black on white, No flashing), L=0	
(2): ID=2, P=2, IC=10, MI=1000001000b, L=0	(3): ID=3, P=3, IC=11, MI=1000001000b, L=0
(4): ID=4, P=4, IC=12, MI=1000001000b, L=0	(5): ID=5, P=5, IC=13, MI=1000001000b, L=0
(6): ID=6, P=6, IC=14, MI=1000001000b, L=0	(7): ID=7, P=7, IC=15, MI=1000001000b, L=0
(8): ID=8, P=8, IC=16, MI=1000001000b, L=0	(9): ID=9, P=9, IC=17, MI=1000001000b, L=0
(10): ID=10, P=10, IC=18, MI=1000001000b, L=0	(11): ID=12, P=12, IC=20, MI=1000001000b, L=0
(12): ID=13, P=13, IC=21, MI=1000001000b, L=0	(13): ID=14, P=14, IC=22, MI=1000001000b, L=0
(14): ID=17, P=17, IC=25, MI=1000001000b, L=0	(15): ID=18, P=18, IC=26, MI=1000001000b, L=0
(16): ID=19, P=19, IC=27, MI=1000001000b, L=0	(17): ID=20, P=20, IC=28, MI=1000001000b, L=0
(18): ID=21, P=21, IC=29, MI=1000001000b, L=0	(19): ID=22, P=22, IC=30, MI=1000001000b, L=0
(20): ID=23, P=23, IC=31, MI=1000001000b, L=0	(21): ID=24, P=24, IC=32, MI=1000001000b, L=0

Message-S3: STM requests display of 1 indicator(s) with icon only with icon smaller than indicator area			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	13	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=63, N=1, ID=21, P=21, IC=9, MI=1000001000b (black on white, No flashing), L=0			

Message-S4: STM requests display of 21 indicator(s) with text and icon without caption upon icon and with icon filling indicator area			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	139	Message Length



STM-15: PL=25, ST=7, (State DA)	
STM-35: PL=1067, N=21, ID=1, P=1, IC=9, MI=1000001000b (black on white, No flashing), L=1, T="1"	
(2): ID=2, P=2, IC=10, MI=1000001000b, L=1, T="2"	(3): ID=3, P=3, IC=11, MI=1000001000b, L=1, T="3"
(4): ID=4, P=4, IC=12, MI=1000001000b, L=1, T="4"	(5): ID=5, P=5, IC=13, MI=1000001000b, L=1, T="5"
(6): ID=6, P=6, IC=14, MI=1000001000b, L=1, T="6"	(7): ID=7, P=7, IC=15, MI=1000001000b, L=1, T="7"
(8): ID=8, P=8, IC=16, MI=1000001000b, L=1, T="8"	(9): ID=9, P=9, IC=17, MI=1000001000b, L=1, T="9"
(10): ID=10, P=10, IC=18, MI=1000001000b, L=2, T="10"	(11): ID=12, P=12, IC=20, MI=1000001000b, L=2, T="12"
(12): ID=13, P=13, IC=21, MI=1000001000b, L=2, T="13"	(13): ID=14, P=14, IC=22, MI=1000001000b, L=2, T="14"
(14): ID=17, P=17, IC=25, MI=1000001000b, L=2, T="17"	(15): ID=18, P=18, IC=26, MI=1000001000b, L=2, T="18"
(16): ID=19, P=19, IC=27, MI=1000001000b, L=2, T="19"	(17): ID=20, P=20, IC=28, MI=1000001000b, L=2, T="20"
(18): ID=21, P=21, IC=29, MI=1000001000b, L=2, T="21"	(19): ID=22, P=22, IC=30, MI=1000001000b, L=2, T="22"
(20): ID=23, P=23, IC=31, MI=1000001000b, L=2, T="23"	(21): ID=24, P=24, IC=32, MI=1000001000b, L=2, T="24"

Message-S5: STM requests display of 1 indicator(s) with text and icon without caption upon icon and with icon smaller than indicator area			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	15	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=79, N=1, ID=21, P=21, IC=9, MI=1000001000b (black on white, No flashing), L=2, T="21"			

Message-S6: STM requests display of 24 indicator(s) with text and icon with caption upon icon and with icon filling indicator area			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM



L_MESSAGE	8	187	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=1450, N=24, ID=145, P=1, IC=201, MI=1000001000b (black on white, No flashing), L=3, T="145"			
(2): ID=170, P=2, IC=202, MI=1000001000b, L=3, T="170"	(3): ID=195, P=3, IC=203, MI=1000001000b, L=3, T="195"		
(4): ID=196, P=4, IC=204, MI=1000001000b, L=3, T="196"	(5): ID=125, P=5, IC=205, MI=1000001000b, L=3, T="125"		
(6): ID=126, P=6, IC=206, MI=1000001000b, L=3, T="126"	(7): ID=55, P=7, IC=207, MI=1000001000b, L=2, T="55"		
(8): ID=56, P=8, IC=208, MI=1000001000b, L=2, T="56"	(9): ID=201, P=9, IC=209, MI=1000001000b, L=3, T="201"		
(10): ID=202, P=10, IC=210, MI=1000001000b, L=3, T="202"	(11): ID=203, P=11, IC=211, MI=1000001000b, L=3, T="203"		
(12): ID=156, P=12, IC=212, MI=1000001000b, L=3, T="156"	(13): ID=133, P=13, IC=213, MI=1000001000b, L=3, T="133"		
(14): ID=158, P=14, IC=214, MI=1000001000b, L=3, T="158"	(15): ID=207, P=15, IC=215, MI=1000001000b, L=3, T="207"		
(16): ID=208, P=16, IC=216, MI=1000001000b, L=3, T="208"	(17): ID=65, P=17, IC=217, MI=1000001000b, L=2, T="65"		
(18): ID=162, P=18, IC=218, MI=1000001000b, L=3, T="162"	(19): ID=139, P=19, IC=219, MI=1000001000b, L=3, T="139"		
(20): ID=68, P=20, IC=220, MI=1000001000b, L=2, T="68"	(21): ID=165, P=21, IC=221, MI=1000001000b, L=3, T="165"		
(22): ID=70, P=22, IC=222, MI=1000001000b, L=2, T="70"	(23): ID=167, P=23, IC=223, MI=1000001000b, L=3, T="167"		
(24): ID=216, P=24, IC=224, MI=1000001000b, L=3, T="216"			

Message-S7: STM requests display of 1 indicator(s) with text and icon with caption upon icon and with icon smaller than indicator area			
VARIABLE	Length	VALUE	COMMENT
NID_STM	8	FINITE_VALUE	NID_STM of the active STM
L_MESSAGE	8	16	Message Length
STM-15: PL=25, ST=7, (State DA)			
STM-35: PL=87, N=1, ID=165, P=21, IC=201, MI=1000001000b (black on white, No flashing), L=3, T="165"			