



ERTMS/ETCS

FFFIS STM Test cases of Functional identity 007

DMI FUNCTION: CONFIGURATIONS

Total: 9 Test cases

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2.1 Configuration

The test cases in this chapter describe possible DMI configurations for an STM in the ERTMS/ETCS on-board. These configurations are not considered ergonomic or typical for existing STMs, but only intended to test the DMI function, including boundary tests. The configuration-test cases are used as precondition for the test cases in the other chapters of SUBSET-074-2-7. The configuration test cases only consist of the configuration data for an STM and have no starting or end conditions and no executable test sequences.

For each test case in the chapters 2.2 – 2.9 it is specified in the test case header in the line ‘ERTMS/ETCS ON-BOARD configuration’, which configurations can be used to perform the tests. Some test cases are only applicable to a single configuration, because they use a set of DMI elements only specified for this configuration. Some are applicable to a list of configurations. In that case it is also specified with what configurations the test shall be performed to prove interoperability. This can be an arbitrary configuration out of the list of applicable configurations, a sub set of that list or all configurations, depending how far the differences between the configurations are relevant for the tested feature.

2.1.1 Test Case (configuration) 7a.1

TEST CASE HEADER	
Test case identification	DMI Function
	7a1.0.1
	STM with Unified DMI service
ERTMS/ETCS ON-BOARD requirements tested	SUBSET-035 13.1.1.2, 13.1.1.4
	ERA ERTMS 015560 (DMI Spec) 9.5
STM requirements tested	
Packets transmitted via FFFIS STM	
ERTMS/ETCS ON-BOARD configuration	



Comments and constraints	No DMI configuration provided by STM.
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2.1.2 Test Case (configuration) 7a.2

TEST CASE HEADER	
Test case identification	DMI Function
	7a1.0.2.0.0.(7a2.0.1.1.1.1.1).0.(7a3.0.1).0.1.1.(7a4.0.1).0
	STM with Customisable DMI service, no DMI objects used: No indicator nor indicator position, no button nor button position, no icons, no sound, no speed display. This configuration may be used for an STM with a DMI of its own, where ETCS speed display is unwanted in SN mode.
ERTMS/ETCS ON-BOARD requirements tested	SUBSET-035 13.1.1.2, 13.1.1.3, 13.5.1.1.1, 13.5.1.1.2 (no indicators), 13.5.1.1.3 (no ind. positions), 13.5.1.1.4 (no buttons), 13.5.1.1.5 (no button positions), 13.5.1.1.6 (no icons), 13.5.1.1.7 a) - b), 13.5.1.1.9 (no sounds), 13.5.1.1.10 a) (no moved area)
STM requirements tested	
Packets transmitted via FFFIS STM	
ERTMS/ETCS ON-BOARD configuration	
Comments and constraints	

STM Configuration Data		
Description	Value(s)	Comments
NID_STM of the STM	FINITE_VALUE	NID_STM of the STM with this configuration as specified in test cases of following chapters



Number of Indicators	0	
Number of Indicator positions	0	
Number of Buttons	0	
Number of Button positions for touchscreen technology	0	
Number of Button positions for softkey technology	0	
Number of Icons	0	
ETCS speed and distance supervision	No display	
ETCS speed dial range	Not applicable	
Slow flashing frequency for Buttons and Indicators	1 Hz	Not applicable
Fast flashing frequency for Buttons and Indicators	2 Hz	Not applicable
Flashing style	Yellow Frame	Not applicable
Number of Sounds	0	
Number of moved areas of the ETCS layout	0	

2.1.3 Test Case (configuration) 7a.3

TEST CASE HEADER	
Test case identification	DMI Function

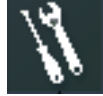









	7a1.0.2.0.0.(7a2.0.2.2.2.2.2).0.(7a3.0.1).0.3.2.(7a4.0.1).0
	STM with Customisable DMI service, small configuration: 3 Indicators at positions B3, B4, B5 with 6 icons, 2 buttons at F8, F9 with 2 icons, flashing as for unified DMI, no moved areas, 140km/h speed dial range, two simple sounds,
ERTMS/ETCS ON-BOARD requirements tested	SUBSET-035 13.1.1.2, 13.1.1.3, 13.5.1.1.1, 13.5.1.1.2 a) – d), 13.5.1.1.3 a) – c), 13.5.1.1.4 a) – d), 13.5.1.1.5 a) – d), 13.5.1.1.6 a) – c), 13.5.1.1.7 a) – c), 13.5.1.1.8 a) – b), 13.5.1.1.9 a) – b), 13.5.1.1.10 a) (no moved area), 15.1.1.2, 15.1.1.3
	ERA ERTMS 015560 (DMI Spec) 9.3.2.1, 9.3.2.2, 9.3.4.2.2, 9.3.4.2.3, 9.4.1.1, 9.3.7.1
STM requirements tested	
Packets transmitted via FFFIS STM	
ERTMS/ETCS ON-BOARD configuration	
Comments and constraints	

STM Configuration Data							
Description	Value(s)						Comments
NID_STM of the STM	FINITE_VALUE						NID_STM of the STM with this configuration as specified in test cases of following chapters
Number of Indicators	3						
	Identifier	Font size	Horizontal text alignment	Vertical text alignment			
Indicator 1	1	10	Centred	Centred			



2	2	10	Centred	Centred			
3	3	10	Centred	Centred			
Number of Indicator positions		3					
	Identifier	X offset	Y offset (SK)	Y offset (TS)	Horizontal size	Vertical size	
Indicator position 1	1	140	257	272	36	36	B3
2	2	176	257	272	36	36	B4
3	3	212	257	272	36	36	B5
Number of Buttons		2					
	Identifier	Font size	Horizontal text alignment	Vertical text alignment			
Button 1	1	12	left	Upper part			
2	2	12	left	Upper part			
Number of Button positions for touchscreen technology		2					
	Identifier	X offset	Y offset	Horizontal size	Vertical size		
Button position 1	1	580	365	60	50		F8
2	2	580	415	60	50		F9
Number of Button positions for softkey technology		2					
	Identifier	X offset	Y offset	Horizontal size	Vertical size	Linked soft key	

Button position	1	1	448	430	64	50	F8	
	2	2	512	430	64	50	F9	
Number of Icons		8						
		Identifier	File name	Horizontal size	Vertical size	Text upon icon		
Icon	1	1	Icon15.bmp	36	36	no		For indicator 1, BW
	2	2	Icon47.bmp	36	36	no		For indicator 1, red
	3	3	Icon79.bmp	36	36	no		For indicator 1, green
	4	4	Icon143.bmp	36	36	no		For indicator 1, yellow
	5	5	Icon16.bmp	36	36	no		For indicator 2
	6	6	Icon27.bmp	36	36	yes		For indicator 3
	7	127	Icon2.bmp	60	50	no		For button 1

8	128	Icon3.bmp	60	50	no	 For button 2
ETCS speed and distance supervision	Display yes					
ETCS speed dial range	0-140 km/h					
Slow flashing frequency for Buttons and Indicators	1Hz					
Fast flashing frequency for Buttons and Indicators	2 Hz					
Flashing style	Yellow frame					
Number of Sounds	2					
	Identifier	File name				
Sound 1	1	S1_toofast.wav				
2	2	S2_warning.wav				
Number of moved areas of the ETCS layout	0					

2.1.4 Test Case (configuration) 7a.4

TEST CASE HEADER	
Test case identification	DMI Function
	7a1.0.2.0.0.(7a2.0.3.3.3.3.1).0.(7a3.0.1).0.2.1.(7a4.0.1).0
	STM with Customisable DMI service, configuration as for Unified DMI service:



	<p>20 indicators and buttons, all with 10 cells font size, centred horizontal and vertical;</p> <p>For touchscreen technology: 18 indicator positions and 17 button positions as for unified DMI service,</p> <p>For soft key technology: 19 indicator positions and 6 button positions as for unified DMI service;</p> <p>no icons, flashing with yellow frame as for unified DMI service, no moved areas, speed dial range as for ETCS, no sounds</p>
ERTMS/ETCS ON-BOARD requirements tested	<p>SUBSET-035 13.1.1.2, 13.1.1.3, 13.5.1.1.1, 13.5.1.1.2 a) – d), 13.5.1.1.3 a) – c), 13.5.1.1.4 a) – d), 13.5.1.1.5 a) – d), 13.5.1.1.6 (no icons), 13.5.1.1.7 a) – c), 13.5.1.1.8 a) – b), 13.5.1.1.9 (no sounds), 13.5.1.1.10 a) (no moved area),</p> <p>15.1.1.2, 15.1.1.3</p> <p>ERA ERTMS 015560 (DMI Spec) 9.3.2.1, 9.3.2.2, 9.3.4.2.2, 9.3.4.2.3, 9.4.1.1, 9.3.7.1</p>
STM requirements tested	
Packets transmitted via FFFIS STM	
ERTMS/ETCS ON-BOARD configuration	
Comments and constraints	

STM Configuration Data							
Description	Value(s)						Comments
NID_STM of the STM	FINITE_VALUE						NID_STM of the STM with this configuration as specified in test cases of following chapters
Number of Indicators	20						
	Identifier	Font size	Horizontal	Vertical text			



			text alignment	alignment			
Indicator 1	1	10	centred	centred			
2	2	10	centred	centred			
3	3	10	centred	centred			
4	4	10	centred	centred			
5	5	10	centred	centred			
6	6	10	centred	centred			
7	7	10	centred	centred			
8	8	10	centred	centred			
9	9	10	centred	centred			
10	1	10	centred	centred			
11	11	10	centred	centred			
12	12	10	centred	centred			
13	13	10	centred	centred			
14	14	10	centred	centred			
15	15	10	centred	centred			
16	16	10	centred	centred			
17	17	10	centred	centred			
18	18	10	centred	centred			
19	19	10	centred	centred			
20	20	10	centred	centred			



Number of Indicator positions	18 for touchscreen, 19 for softkey						
	Identifier	X offset	Y offset (SK)	Y offset (TS)	Horizontal size	Vertical size	
Indicator position 1	1	140	257	272	36	36	B3
2	2	176	257	272	36	36	B4
3	3	212	257	272	36	36	B5
4	4	600	0		40	28	H1, not for touchscreen technology
5	5	54	300	315	37	50	C2
6	6	91	300	315	37	50	C3
7	7	128	300	315	37	50	C4
8	8	223	300	315	37	50	C5
9	9	260	300	315	37	50	C6
10	10	334	300	315	49	50	G1
11	11	383	300	315	49	50	G2
12	12	432	300	315	49	50	G3
13	13	481	300	315	49	50	G4
14	14	530	300	315	50	50	G5
15	15	334	350	365	49	50	G6
16	16	383	350	365	49	50	G7
17	17	432	350	365	49	50	G8
18	18	481	350	365	49	50	G9
19	19	530	350	365	50	50	G10

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Number of Buttons	20						
	Identifier	Font size	Horizontal text alignment	Vertical text alignment			
Button 1	1	10	centred	centred			
2	2	10	centred	centred			
3	3	10	centred	centred			
4	4	10	centred	centred			
5	5	10	centred	centred			
6	6	10	centred	centred			
7	7	10	centred	centred			
8	8	10	centred	centred			
9	9	10	centred	centred			
10	1	10	centred	centred			
11	11	10	centred	centred			
12	12	10	centred	centred			
13	13	10	centred	centred			
14	14	10	centred	centred			
15	15	10	centred	centred			
16	16	10	centred	centred			
17	17	10	centred	centred			
18	18	10	centred	centred			



19	19	10	centred	centred			
20	20	10	centred	centred			
Number of Button positions for touchscreen technology	17						
	Identifier	X offset	Y offset	Horizontal size	Vertical size		
Button position 1	1	580	365	60	50		F8
2	2	580	415	60	50		F9
3	3	54	315	37	50		C2
4	4	91	315	37	50		C3
5	5	128	315	37	50		C4
6	6	223	315	37	50		C5
7	7	260	315	37	50		C6
8	8	334	315	49	50		G1
9	9	383	315	49	50		G2
10	10	432	315	49	50		G3
11	11	481	315	49	50		G4
12	12	530	315	50	50		G5
13	13	334	365	49	50		G6
14	14	383	365	49	50		G7
15	15	432	365	49	50		G8
16	16	481	365	49	50		G9



17	17	530	365	50	50		G10
Number of Button positions for softkey technology	6						
	Identifier	X offset	Y offset	Horizontal size	Vertical size	Linked soft key	
Button position 1	1	448	430	64	50	F8	
2	2	512	430	64	50	F9	
3	3	576	430	64	50	F10	
4	4	600	28	40	64	H2	
5	5	600	92	40	64	H3	
6	6	600	156	40	64	H4	
Number of Icons	0						
ETCS speed and distance supervision	Display yes						
ETCS speed dial range	As for ETCS						
Slow flashing frequency for Buttons and Indicators	1Hz						
Fast flashing frequency for Buttons and Indicators	2 Hz						
Flashing style	Yellow frame						
Number of Sounds	0						
Number of moved areas of the ETCS layout	0						

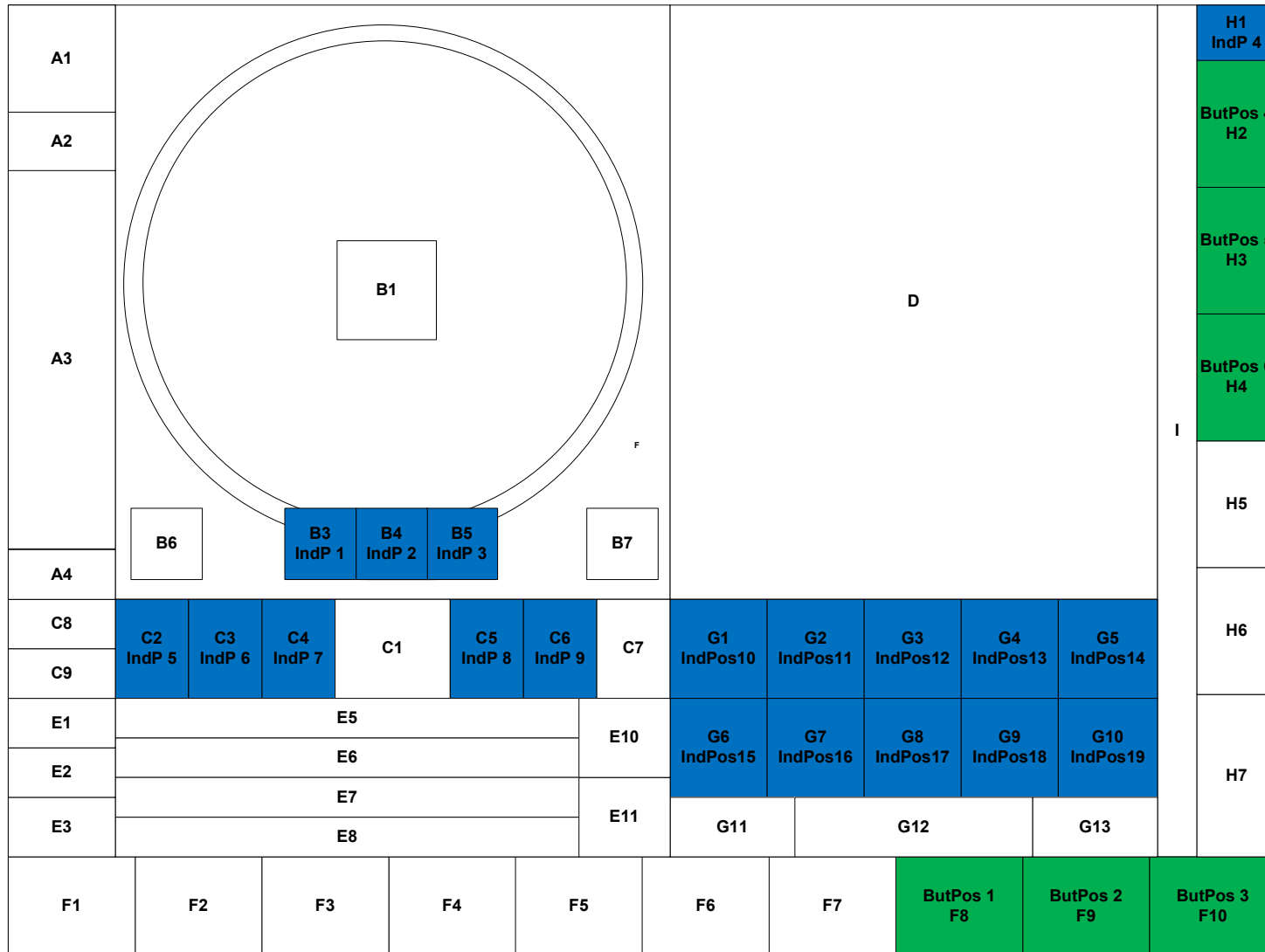


Figure 1: Indicator and Button positions for soft key technology

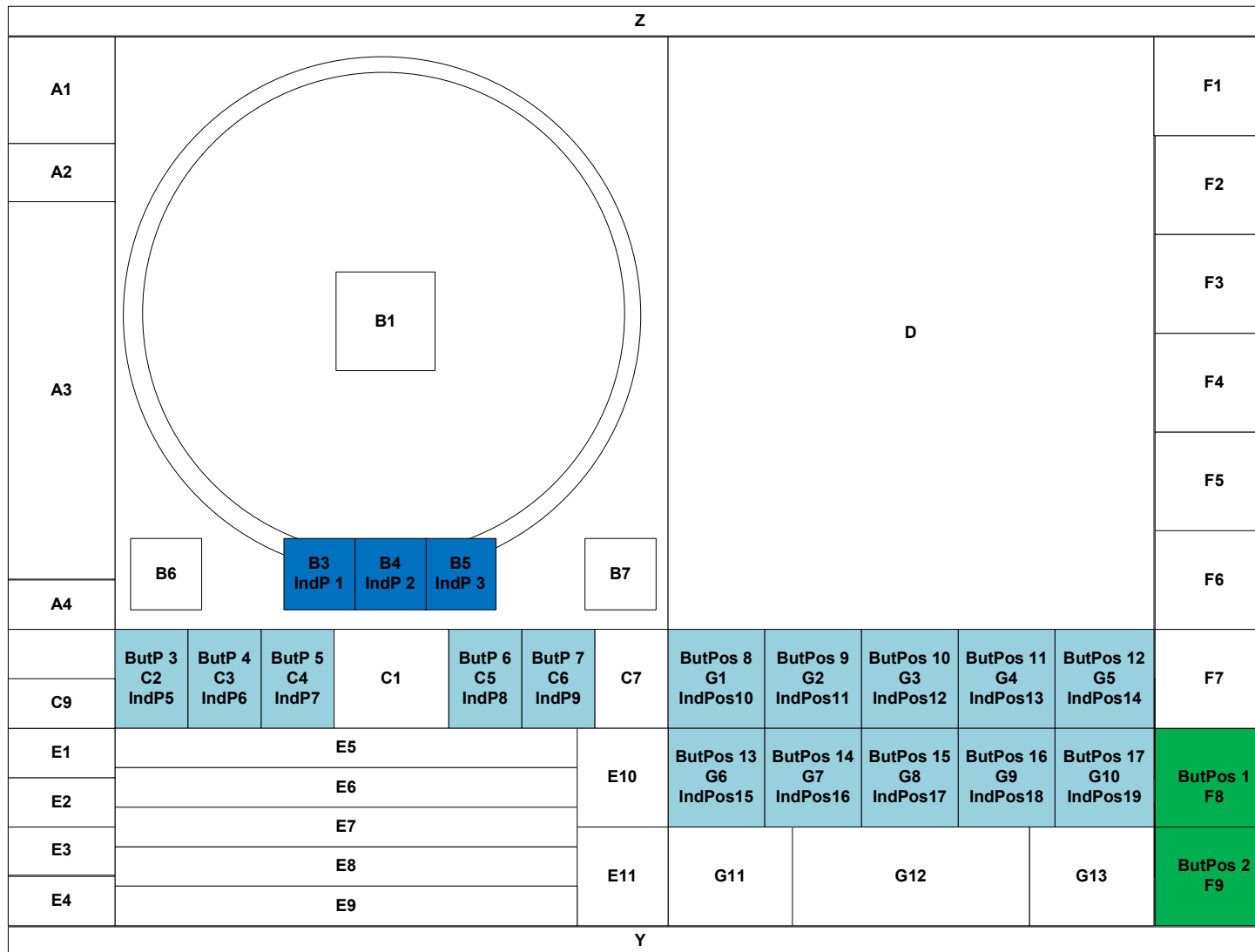


Figure 2: Indicator and Button positions for touchscreen technology



2.1.5 Test Case (configuration) 7a.5

TEST CASE HEADER	
Test case identification	DMI Function
	7a1.0.2.0.0.(7a2.0.4.4.4.4.3).0.(7a3.0.1).0.3.2.(7a4.0.1).0
	STM with Customisable DMI service, medium size configuration, 140 km/h CSG: 16 buttons and indicators with different size and alignment, 8 positions for buttons and indicators each, 16 icons, flashing as for Unified DMI service, no moved areas, speed dial range = 140km/h, 2 simple sounds
ERTMS/ETCS ON-BOARD requirements tested	SUBSET-035 13.1.1.2, 13.1.1.3, 13.5.1.1.1, 13.5.1.1.2 a) – d), 13.5.1.1.3 a) – c), 13.5.1.1.4 a) – d), 13.5.1.1.5 a) – d), 13.5.1.1.6 a) – c), 13.5.1.1.7 a) – c), 13.5.1.1.8 a) – b), 13.5.1.1.9 a) – b), 13.5.1.1.10 a) (no moved area), 15.1.1.2, 15.1.1.3
	ERA ERTMS 015560 (DMI Spec) 9.3.2.1, 9.3.2.2, 9.3.4.2.2, 9.3.4.2.3, 9.4.1.1, 9.3.7.1
STM requirements tested	
Packets transmitted via FFFIS STM	
ERTMS/ETCS ON-BOARD configuration	
Comments and constraints	

STM Configuration Data		
Description	Value(s)	Comments
NID_STM of the STM	FINITE_VALUE	NID_STM of the STM with this configuration as specified in test cases of following chapters



Number of Indicators	16						
	Identifier	Font size	Horizontal text alignment	Vertical text alignment			
Indicator 1	1	10	left	upper part			
2	2	12	left	centred			
3	3	14	left	lower part			
4	4	8	centred	centred			
5	5	10	right	upper part			
6	6	12	right	centred			
7	7	14	right	lower part			
8	8	10	centred	upper part			
9	9	12	centred	centred			
10	10	14	centred	lower part			
11	11	20	left	centred			
12	12	20	right	centred			
13	13	20	centred	centred			
14	14	40	left	centred			
15	15	40	right	centred			
16	16	40	centred	centred			
Number of Indicator positions	8						
	Identifier	X offset	Y offset	Y offset	Horizontal size	Vertical size	


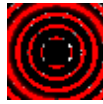



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			(SK)	(TS)			
Indicator position	1	334	300	315	49	50	G1
	2	383	300	315	49	50	G2
	3	432	300	315	49	50	G3
	4	481	300	315	49	50	G4
	5	530	300	315	50	50	G5
	6	334	350	365	49	50	G6
	7	383	350	365	49	50	G7
	8	432	350	365	49	50	G8
Number of Buttons	16						
	Identifier	Font size	Horizontal text alignment	Vertical text alignment			
Button	1	8	left	upper part			
	2	12	left	centred			
	3	16	left	lower part			
	4	20	centred	upper part			
	5	40	centred	centred			
	6	60	centred	lower part			
	7	8	right	upper part			
	8	12	right	centred			
	9	16	20	left	upper part		



10	32	24	left	centred			
11	48	32	left	lower part			
12	64	20	centred	upper part			
13	80	40	centred	centred			
14	96	60	centred	lower part			
15	112	12	right	centred			
16	128	16	right	lower part			
Number of Button positions for touchscreen technology	8						
	Identifier	X offset	Y offset	Horizontal size	Vertical size		
Button position 1	1	580	365	60	50		F8
2	2	580	415	60	50		F9
3	3	54	315	37	50		C2
4	4	91	315	37	50		C3
5	5	128	315	37	50		C4
6	6	223	315	37	50		C5
7	7	260	315	37	50		C6
8	8	530	365	50	50		G10
Number of Button positions for softkey technology	8						
	Identifier	X offset	Y offset	Horizontal size	Vertical size	Linked soft key	

Button position	1	1	448	430	64	50	F8	
	2	2	512	430	64	50	F9	
	3	3	576	430	64	50	F10	
	4	4	600	28	40	64	H2	
	5	5	600	92	40	64	H3	
	6	6	600	156	40	64	H4	
	7	7	320	430	64	50	F6	
	8	8	384	430	64	50	F7	
Number of Icons		16						
		Identifier	File name	Horizontal size	Vertical size	Text upon icon		
Icon	1	1	Icon18.bmp	49	50	no		'Radiation' BW for Indicator
	2	2	Icon50.bmp	49	50	no		'Radiation' red for Indicator
	3	10	Icon95.bmp	49	50	no		'Loop' green for indicator
	4	11	Icon127.bmp	49	50	no		'Loop' blue for indicator
	5	12	Icon159.bmp	49	50	no		'Loop' yellow for indicator

6	13	Icon63.bmp	49	50	no	 'Loop' red for indicator
7	20	Icon32.bmp	49	50	no	 'RBC' BW for indicator
8	21	Icon96.bmp	49	50	no	 'RBC' green for indicator
9	30	Icon2.bmp	60	50	no	 For wide button
10	31	Icon3.bmp	60	50	no	 For wide button
11	32	Icon4.bmp	60	50	no	 For wide button
12	40	Icon58.bmp	37	50	no	 For slim button, 'Speed limit 100% of STM max"
13	41	Icon90.bmp	37	50	no	 For slim button, 'Speed limit 70% of STM max"

14	42	Icon154.bmp	37	50	no	 For slim button, 'Speed limit 90% of STM max'
15	43	Icon218.bmp	37	50	yes	 For slim button, 'Speed limit as proposed'
16	44	Icon250.bmp	37	50	no	 For slim button, 'Speed limit automatic'
ETCS speed and distance supervision	Display yes					
ETCS speed dial range	0 – 140 km/h					
Slow flashing frequency for Buttons and Indicators	1Hz					
Fast flashing frequency for Buttons and Indicators	2 Hz					
Flashing style	Yellow frame					
Number of Sounds	2					
	Identifier	File name				
Sound 1	1	S1_toofast.wav				
2	2	S2_warning.wav				
Number of moved areas of	0					



the ETCS layout		
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2.1.6 Test Case (configuration) 7a.6

TEST CASE HEADER	
Test case identification	DMI Function
	7a1.0.2.0.0.(7a2.0.4.4.4.4.3).0.(7a3.0.2).0.4.2.(7a4.0.1).0
	STM with Customisable DMI service, medium size configuration, 180 km/h CSG: 16 buttons and indicators with different size and alignment, 8 positions for buttons and indicators each, 16 icons, slow flashing frequencies with whole area, no moved areas, speed dial range = 180km/h, 2 simple sounds
ERTMS/ETCS ON-BOARD requirements tested	SUBSET-035 13.1.1.2, 13.1.1.3, 13.5.1.1.1, 13.5.1.1.2 a) – d), 13.5.1.1.3 a) – c), 13.5.1.1.4 a) – d), 13.5.1.1.5 a) – d), 13.5.1.1.6 a) – c), 13.5.1.1.7 a) – c), 13.5.1.1.8 a) – b), 13.5.1.1.9 a) – b), 13.5.1.1.10 a) (no moved area), 15.1.1.2, 15.1.1.3
	ERA ERTMS 015560 (DMI Spec) 9.3.2.1, 9.3.2.2, 9.3.4.2.2, 9.3.4.2.3, 9.4.1.1, 9.3.7.1
STM requirements tested	
Packets transmitted via FFFIS STM	
ERTMS/ETCS ON-BOARD configuration	
Comments and constraints	

STM Configuration Data		
Description	Value(s)	Comments







NID_STM of the STM	FINITE_VALUE						NID_STM of the STM with this configuration as specified in test cases of following chapters
Number of Indicators	16						
	Identifier	Font size	Horizontal text alignment	Vertical text alignment			
Indicator 1	1	10	left	upper part			
2	2	12	left	centred			
3	3	14	left	lower part			
4	4	8	centred	centred			
5	5	10	right	upper part			
6	6	12	right	centred			
7	7	14	right	lower part			
8	8	10	centred	upper part			
9	9	12	centred	centred			
10	10	14	centred	lower part			
11	11	20	left	centred			
12	12	20	right	centred			
13	13	20	centred	centred			
14	14	40	left	centred			
15	15	40	right	centred			
16	16	40	centred	centred			












Number of Indicator positions	8						
	Identifier	X offset	Y offset (SK)	Y offset (TS)	Horizontal size	Vertical size	
Indicator position 1	1	334	300	315	49	50	G1
2	2	383	300	315	49	50	G2
3	3	432	300	315	49	50	G3
4	4	481	300	315	49	50	G4
5	5	530	300	315	50	50	G5
6	6	334	350	365	49	50	G6
7	7	383	350	365	49	50	G7
8	8	432	350	365	49	50	G8
Number of Buttons	16						
	Identifier	Font size	Horizontal text alignment	Vertical text alignment			
Button 1	1	8	left	upper part			
2	2	12	left	centred			
3	3	16	left	lower part			
4	4	20	centred	upper part			
5	5	40	centred	centred			
6	6	60	centred	lower part			
7	7	8	right	upper part			



8	8	12	right	centred			
9	16	20	left	upper part			
10	32	24	left	centred			
11	48	32	left	lower part			
12	64	20	centred	upper part			
13	80	40	centred	centred			
14	96	60	centred	lower part			
15	112	12	right	centred			
16	128	16	right	lower part			
Number of Button positions for touchscreen technology		8					
	Identifier	X offset	Y offset	Horizontal size	Vertical size		
Button position 1	1	580	365	60	50		F8
2	2	580	415	60	50		F9
3	3	54	315	37	50		C2
4	4	91	315	37	50		C3
5	5	128	315	37	50		C4
6	6	223	315	37	50		C5
7	7	260	315	37	50		C6
8	8	530	365	50	50		G10
Number of Button positions for softkey technology		8					

	Identifier	X offset	Y offset	Horizontal size	Vertical size	Linked soft key	
Button position	1	1	448	430	64	50	F8
	2	2	512	430	64	50	F9
	3	3	576	430	64	50	F10
	4	4	600	28	40	64	H2
	5	5	600	92	40	64	H3
	6	6	600	156	40	64	H4
	7	7	320	430	64	50	F6
	8	8	384	430	64	50	F7
Number of Icons	16						
	Identifier	File name	Horizontal size	Vertical size	Text upon icon		
Icon	1	1	Icon18.bmp	49	50	no	 'Radiation' BW for Indicator
	2	2	Icon50.bmp	49	50	no	 'Radiation' red for Indicator
	3	10	Icon95.bmp	49	50	no	 'Loop' green for indicator
	4	11	Icon127.bmp	49	50	no	 'Loop' blue for indicator

5	12	Icon159.bmp	49	50	no	 'Loop' yellow for indicator
6	13	Icon63.bmp	49	50	no	 'Loop' red for indicator
7	20	Icon32.bmp	49	50	no	 'RBC' BW for indicator
8	21	Icon96.bmp	49	50	no	 'RBC' green for indicator
9	30	Icon2.bmp	60	50	no	 For wide button
10	31	Icon3.bmp	60	50	no	 For wide button
11	32	Icon4.bmp	60	50	no	 For wide button
12	40	Icon58.bmp	37	50	no	 For slim button, 'Speed limit 100% of STM max"
13	41	Icon90.bmp	37	50	no	 For slim button,

						'Speed limit 70% of STM max'
14	42	Icon154.bmp	37	50	no	 For slim button, 'Speed limit 90% of STM max'
15	43	Icon218.bmp	37	50	yes	 For slim button, 'Speed limit as proposed'
16	44	Icon250.bmp	37	50	no	 For slim button, 'Speed limit automatic'
ETCS speed and distance supervision	Display yes					
ETCS speed dial range	0 – 180 km/h					
Slow flashing frequency for Buttons and Indicators	0,5 Hz					
Fast flashing frequency for Buttons and Indicators	1 Hz					
Flashing style	Whole area					
Number of Sounds	2					
	Identifier	File name				
Sound 1	1	S1_toofast.wav				
2	2	S2_warning.wav				



Number of moved areas of the ETCS layout	0	
--	---	--

2.1.7 Test Case (configuration) 7a.7

TEST CASE HEADER	
Test case identification	DMI Function
	7a1.0.2.0.0.(7a2.0.4.4.4.4.3).0.(7a3.0.3).0.5.2.(7a4.0.1).0
	STM with Customisable DMI service, medium size configuration, 250 km/h CSG: 16 buttons and indicators with different size and alignment, 8 positions for buttons and indicators each, 16 icons, fast flashing frequencies with yellow frame, no moved areas, speed dial range = 250km/h, 2 simple sounds
ERTMS/ETCS ON-BOARD requirements tested	SUBSET-035 13.1.1.2, 13.1.1.3, 13.5.1.1.1, 13.5.1.1.2 a) – d), 13.5.1.1.3 a) – c), 13.5.1.1.4 a) – d), 13.5.1.1.5 a) – d), 13.5.1.1.6 a) – c), 13.5.1.1.7 a) – c), 13.5.1.1.8 a) – b), 13.5.1.1.9 a) – b), 13.5.1.1.10 a) (no moved area), 15.1.1.2, 15.1.1.3
	ERA ERTMS 015560 (DMI Spec) 9.3.2.1, 9.3.2.2, 9.3.4.2.2, 9.3.4.2.3, 9.4.1.1, 9.3.7.1
STM requirements tested	
Packets transmitted via FFFIS STM	
ERTMS/ETCS ON-BOARD configuration	
Comments and constraints	
STM Configuration Data	




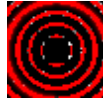

Description	Value(s)						Comments
NID_STM of the STM	FINITE_VALUE						NID_STM of the STM with this configuration as specified in test cases of following chapters
Number of Indicators	16						
	Identifier	Font size	Horizontal text alignment	Vertical text alignment			
Indicator 1	1	10	left	upper part			
2	2	12	left	centred			
3	3	14	left	lower part			
4	4	8	centred	centred			
5	5	10	right	upper part			
6	6	12	right	centred			
7	7	14	right	lower part			
8	8	10	centred	upper part			
9	9	12	centred	centred			
10	10	14	centred	lower part			
11	11	20	left	centred			
12	12	20	right	centred			
13	13	20	centred	centred			
14	14	40	left	centred			
15	15	40	right	centred			







16	16	40	centred	centred			
Number of Indicator positions	8						
	Identifier	X offset	Y offset (SK)	Y offset (TS)	Horizontal size	Vertical size	
Indicator position 1	1	334	300	315	49	50	G1
2	2	383	300	315	49	50	G2
3	3	432	300	315	49	50	G3
4	4	481	300	315	49	50	G4
5	5	530	300	315	50	50	G5
6	6	334	350	365	49	50	G6
7	7	383	350	365	49	50	G7
8	8	432	350	365	49	50	G8
Number of Buttons	16						
	Identifier	Font size	Horizontal text alignment	Vertical text alignment			
Button 1	1	8	left	upper part			
2	2	12	left	centred			
3	3	16	left	lower part			
4	4	20	centred	upper part			
5	5	40	centred	centred			
6	6	60	centred	lower part			



7	7	8	right	upper part			
8	8	12	right	centred			
9	16	20	left	upper part			
10	32	24	left	centred			
11	48	32	left	lower part			
12	64	20	centred	upper part			
13	80	40	centred	centred			
14	96	60	centred	lower part			
15	112	12	right	centred			
16	128	16	right	lower part			
Number of Button positions for touchscreen technology	8						
	Identifier	X offset	Y offset	Horizontal size	Vertical size		
Button position 1	1	580	365	60	50		F8
2	2	580	415	60	50		F9
3	3	54	315	37	50		C2
4	4	91	315	37	50		C3
5	5	128	315	37	50		C4
6	6	223	315	37	50		C5
7	7	260	315	37	50		C6
8	8	530	365	50	50		G10

Number of Button positions for softkey technology		8						
		Identifier	X offset	Y offset	Horizontal size	Vertical size	Linked soft key	
Button position	1	1	448	430	64	50	F8	
	2	2	512	430	64	50	F9	
	3	3	576	430	64	50	F10	
	4	4	600	28	40	64	H2	
	5	5	600	92	40	64	H3	
	6	6	600	156	40	64	H4	
	7	7	320	430	64	50	F6	
	8	8	384	430	64	50	F7	
Number of Icons		16						
		Identifier	File name	Horizontal size	Vertical size	Text upon icon		
Icon	1	1	Icon18.bmp	49	50	no		'Radiation' BW for Indicator
	2	2	Icon50.bmp	49	50	no		'Radiation' red for Indicator
	3	10	Icon95.bmp	49	50	no		'Loop' green for indicator

4	11	Icon127.bmp	49	50	no		'Loop' blue for indicator
5	12	Icon159.bmp	49	50	no		'Loop' yellow for indicator
6	13	Icon63.bmp	49	50	no		'Loop' red for indicator
7	20	Icon32.bmp	49	50	no		'RBC' BW for indicator
8	21	Icon96.bmp	49	50	no		'RBC' green for indicator
9	30	Icon2.bmp	60	50	no		For wide button
10	31	Icon3.bmp	60	50	no		For wide button
11	32	Icon4.bmp	60	50	no		For wide button
12	40	Icon58.bmp	37	50	no		For slim button, 'Speed limit 100% of STM max"

13	41	Icon90.bmp	37	50	no	 For slim button, 'Speed limit 70% of STM max'
14	42	Icon154.bmp	37	50	no	 For slim button, 'Speed limit 90% of STM max'
15	43	Icon218.bmp	37	50	yes	 For slim button, 'Speed limit as proposed'
16	44	Icon250.bmp	37	50	no	 For slim button, 'Speed limit automatic'
ETCS speed and distance supervision	Display yes					
ETCS speed dial range	0 – 250 km/h					
Slow flashing frequency for Buttons and Indicators	4 Hz					
Fast flashing frequency for Buttons and Indicators	8 Hz					
Flashing style	Yellow frame					
Number of Sounds	2					



	Identifier	File name				
Sound 1	1	S1_toofast.wav				
2	2	S2_warning.wav				
Number of moved areas of the ETCS layout	0					

2.1.8 Test Case (configuration) 7a.8

TEST CASE HEADER	
Test case identification	DMI Function
	7a1.0.2.0.0.(7a2.0.4.5.4.5.2).0.(7a3.0.1).0.1.3.(7a4.0.2).0
	STM with Customisable DMI service, large size configuration, no speed display, CSG area used: 21 indicator positions with 10 in CSG area and 16 indicators, 8 button positions for SK, 19 for TS technology, 16 buttons, C7 and B7 moved and used by STM, no speed display, 5 sounds as spoken texts, flashing as for unified DMI service
ERTMS/ETCS ON-BOARD requirements tested	SUBSET-035 13.1.1.2, 13.1.1.3, 13.5.1.1.1, 13.5.1.1.2 a) – d), 13.5.1.1.3 a) – c), 13.5.1.1.4 a) – d), 13.5.1.1.5 a) – d), 13.5.1.1.6 (no icons), 13.5.1.1.7 a) – c), 13.5.1.1.8 a) – b), 13.5.1.1.9 a) – b), 13.5.1.1.10 a) (no moved area), 13.5.1.1.10 a) with B7 and C7 , b), c), 15.1.1.2, 15.1.1.3
	ERA ERTMS 015560 (DMI Spec) 9.3.2.1, 9.3.2.2, 9.3.4.2.2, 9.3.4.2.3, 9.4.1.1, 9.3.7.1
STM requirements tested	
Packets transmitted via FFFIS STM	
ERTMS/ETCS ON-BOARD configuration	
Comments and constraints	



STM Configuration Data							
Description	Value(s)						Comments
NID_STM of the STM	FINITE_VALUE						NID_STM of the STM with this configuration as specified in test cases of following chapters
Number of Indicators	16						
	Identifier	Font size	Horizontal text alignment	Vertical text alignment			
Indicator 1	1	10	left	upper part			
2	2	12	left	centred			
3	3	14	left	lower part			
4	4	8	centred	centred			
5	5	10	right	upper part			
6	6	12	right	centred			
7	7	14	right	lower part			
8	8	10	centred	upper part			
9	9	12	centred	centred			
10	10	14	centred	lower part			
11	11	20	left	centred			
12	12	20	right	centred			
13	13	20	centred	centred			



14	14	40	left	centred			
15	15	40	right	centred			
16	16	40	centred	centred			
Number of Indicator positions		21					
	Identifier	X offset	Y offset (SK)	Y offset (TS)	Horizontal size	Vertical size	
Indicator position 1	1	128	250	265	37	50	B3 extended
2	2	165	250	265	58	50	B4 extended
3	3	223	250	265	37	50	B5 extended
4	4	600	0		40	28	H1 for SK
4	4	415		23	40	28	For TS (in upper D area)
5	5	54	300	315	37	50	C2
6	6	91	300	315	37	50	C3
7	7	128	300	315	37	50	C4
8	8	223	300	315	37	50	C5
9	9	260	300	315	37	50	C6
10	10	81	84	99	49	50	The positions 10-19 form a block of 10 (nearly) equal sized areas like G1-G10 but in B area.
11	11	130	84	99	49	50	
12	12	179	84	99	49	50	
13	13	228	84	99	49	50	
14	14	277	84	99	50	50	



15	15	81	134	149	49	50	
16	16	130	134	149	49	50	
17	17	179	134	149	49	50	
18	18	228	134	149	49	50	
19	19	277	134	149	50	50	
20	20	297	250	265	37	50	B7 ext
21	21	297	300	315	37	50	C7
Number of Buttons		16					
	Identifier	Font size	Horizontal text alignment	Vertical text alignment			
Button 1	1	8	left	upper part			
2	2	12	left	centred			
3	3	16	left	lower part			
4	4	20	centred	upper part			
5	5	40	centred	centred			
6	6	60	centred	lower part			
7	7	8	right	upper part			
8	8	12	right	centred			
9	16	20	left	upper part			
10	32	24	left	centred			
11	48	32	left	lower part			



12	64	20	centred	upper part			
13	80	40	centred	centred			
14	96	60	centred	lower part			
15	112	12	right	centred			
16	128	16	right	lower part			
Number of Button positions for touchscreen technology		19					
	Identifier	X offset	Y offset	Horizontal size	Vertical size		
Button position 1	1	580	365	60	50		F8
2	2	580	415	60	50		F9
3	3	54	315	37	50		C2
4	4	91	315	37	50		C3
5	5	128	315	37	50		C4
6	6	223	315	37	50		C5
7	7	260	315	37	50		C6
8	8	81	99	49	50		The positions 10-19 form a block of 10 (nearly) equal sized areas like G1-G10 but in B area.
9	9	130	99	49	50		
10	10	179	99	49	50		
11	11	228	99	49	50		
12	12	277	99	50	50		



13	13	81	149	49	50		
14	14	130	149	49	50		
15	15	179	149	49	50		
16	16	228	149	49	50		
17	17	277	149	50	50		
18	18	297	265	37	50		B7 extended
19	19	297	315	37	50		C7
Number of Button positions for softkey technology		8					
	Identifier	X offset	Y offset	Horizontal size	Vertical size	Linked soft key	
Button position	1	1	448	430	64	50	F8
	2	2	512	430	64	50	F9
	3	3	576	430	64	50	F10
	4	4	600	28	40	64	H2
	5	5	600	92	40	64	H3
	6	6	600	156	40	64	H4
	7	7	320	430	64	50	F6
	8	8	384	430	64	50	F7
Number of Icons		0					
ETCS speed and distance supervision		display no					
ETCS speed dial range		Not applicable					



Slow flashing frequency for Buttons and Indicators	1 Hz						
Fast flashing frequency for Buttons and Indicators	2 Hz						
Flashing style	Yellow frame						
Number of Sounds	5						
	Identifier	File name					
Sound 1	1	Antennafailure.wav					BE male speaker for all
2	2	Odometerfailure.wav					
3	3	Pressuresensorfailure.wav					
4	4	SBfailure.wav					
5	5	EBfailure.wav					
Number of moved areas of the ETCS layout	2						
	Identifier	X offset	Y offset	Linked soft key			
Area 1	B7	415	50	-			
2	C7	415	92	-			

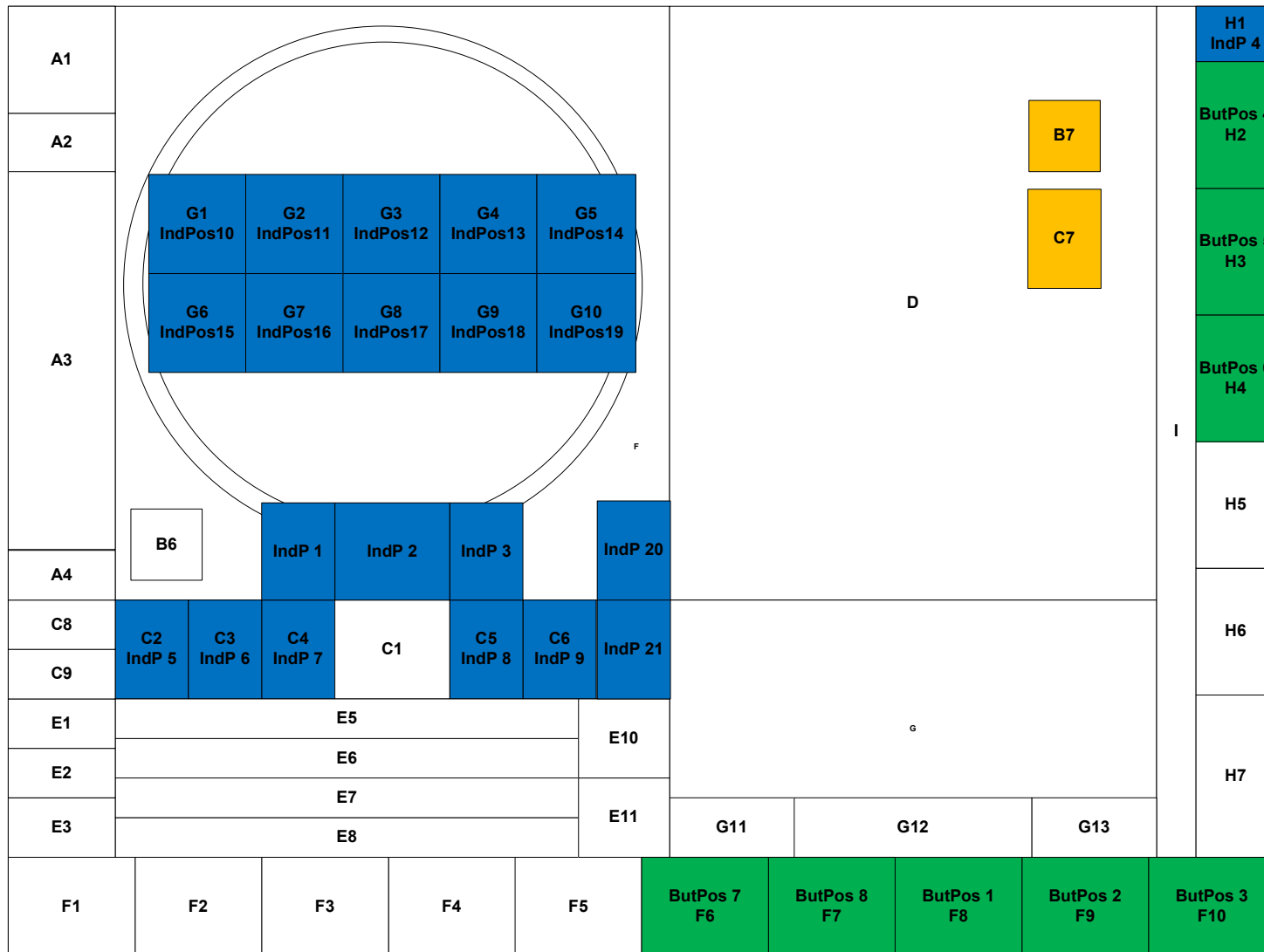


Figure 3: Indicator and Button positions for soft key technology

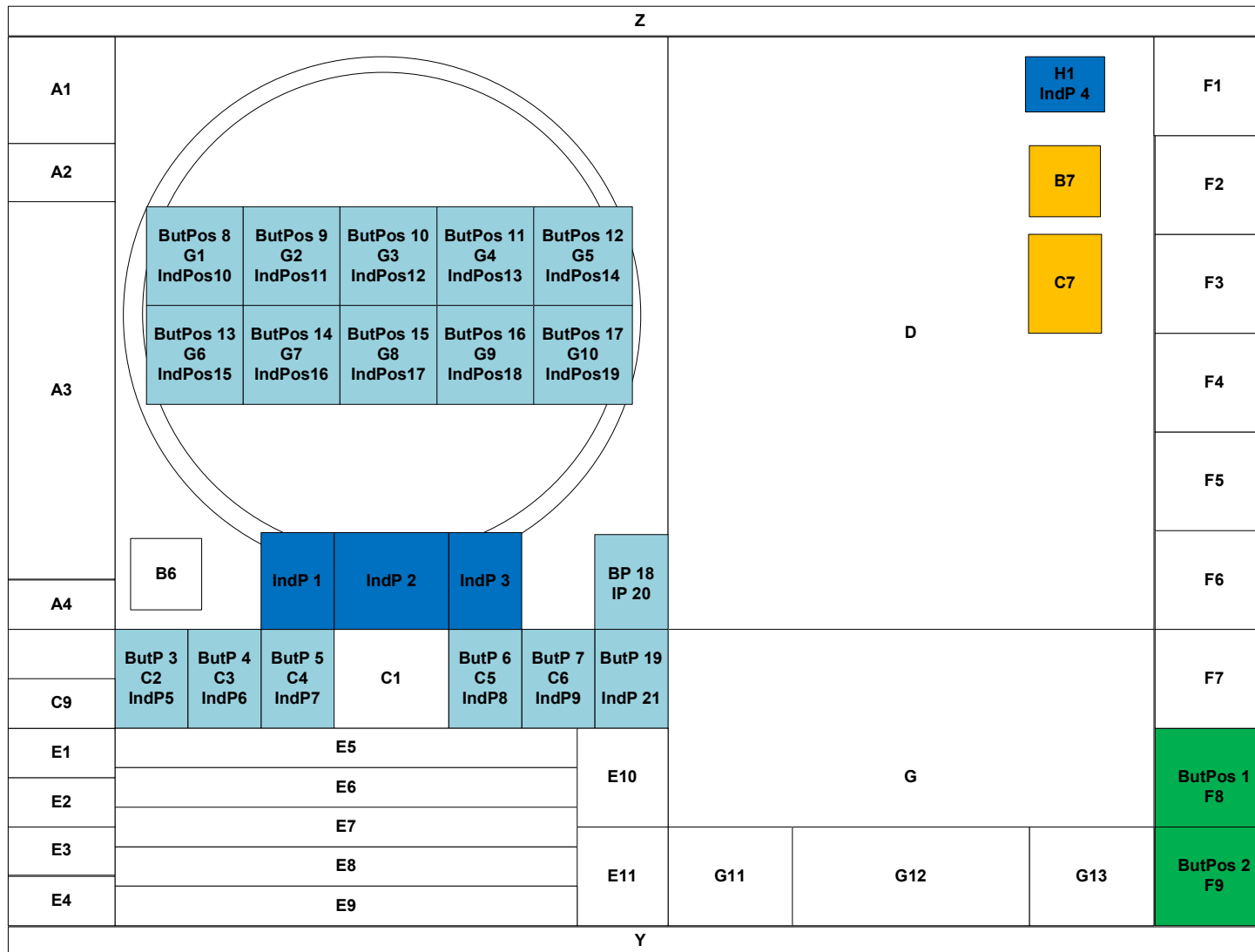


Figure 4: Indicator and button positions for touchscreen technology



2.1.9 Test Case (configuration) 7a.9

TEST CASE HEADER	
Test case identification	DMI Function
	7a1.0.2.0.0.(7a2.0.5.6.5.6.4).0.(7a3.0.3).0.6.4.(7a4.0.3).0
	STM with Customisable DMI service, maximum configuration: Maximum number of configurable elements, i.e. 255 indicators, 255 buttons for TS, 16 for SK technology, 255 icons and sounds, 24 positions for indicators, 24 positions for buttons for TS technology, 8 positions for buttons for SK technology, all possible ETCS areas moved, maximum speed dial range, fast flashing frequencies
ERTMS/ETCS ON-BOARD requirements tested	SUBSET-035 13.1.1.2, 13.1.1.3, 13.5.1.1 (all sub clauses) 15.1.1.2, 15.1.1.3
	ERA ERTMS 015560 (DMI Spec) 9.3.2.1, 9.3.2.2, 9.3.4.2.2, 9.3.4.2.3, 9.4.1.1, 9.3.7.1
STM requirements tested	
Packets transmitted via FFFIS STM	
ERTMS/ETCS ON-BOARD configuration	
Comments and constraints	

STM Configuration Data		
Description	Value(s)	Comments
NID_STM of the STM	FINITE_VALUE	NID_STM of the STM with this configuration as specified in test cases of following chapters
Number of Indicators	255	



	Identifier	Font size	Horizontal text alignment	Vertical text alignment			
Indicator	1	1	8	right	upper part		Group 1: size level 1, right, upper part
	2	2	8	right	upper part		
	3	3	8	right	upper part		
	4	4	8	right	upper part		
	5	5	8	right	upper part		
	6	6	8	right	upper part		
	7	7	8	right	upper part		
	8	8	8	right	upper part		
	9	9	8	right	upper part		
	10	10	8	right	upper part		
	11	11	8	right	upper part		
	12	12	8	right	upper part		
	13	13	8	right	upper part		
	14	14	8	right	upper part		
	15	15	8	right	upper part		
	16	16	8	right	upper part		
	17	17	8	right	upper part		
	18	18	8	right	upper part		
	19	19	8	right	upper part		



20	20	8	right	upper part			
21	21	8	right	upper part			
22	22	8	right	upper part			
23	23	8	right	upper part			
24	24	8	right	upper part			
25	25	10	right	lower part			Group 2: size level 2, right, lower part
26	26	9	right	lower part			
27	27	9	right	lower part			
28	28	9	right	lower part			
29	29	9	right	lower part			
30	30	11	right	lower part			
31	31	10	right	lower part			
32	32	10	right	lower part			
33	33	9	right	lower part			
34	34	11	right	lower part			
35	35	11	right	lower part			
36	36	11	right	lower part			
37	37	9	right	lower part			
38	38	9	right	lower part			
39	39	11	right	lower part			
40	40	11	right	lower part			
41	41	11	right	lower part			

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42	42	11	right	lower part			
43	43	10	right	lower part			
44	44	9	right	lower part			
45	45	26	right	lower part			
46	46	11	right	lower part			
47	47	11	right	lower part			
48	48	11	right	lower part			
49	49	12	right	centred			Group 3: size level 3, right, centred
50	50	10	right	centred			
51	51	10	right	centred			
52	52	10	right	centred			
53	53	10	right	centred			
54	54	14	right	centred			
55	55	12	right	centred			
56	56	12	right	centred			
57	57	10	right	centred			
58	58	14	right	centred			
59	59	14	right	centred			
60	60	14	right	centred			
61	61	10	right	centred			
62	62	10	right	centred			
63	63	14	right	centred			

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64	64	14	right	centred			
65	65	14	right	centred			
66	66	14	right	centred			
67	67	12	right	centred			
68	68	10	right	centred			
69	69	44	right	centred			
70	70	14	right	centred			
71	71	14	right	centred			
72	72	14	right	centred			
73	73	14	left	upper part			Group 4: size level 4, left, upper part
74	74	11	left	upper part			
75	75	11	left	upper part			
76	76	11	left	upper part			
77	77	11	left	upper part			
78	78	17	left	upper part			
79	79	14	left	upper part			
80	80	14	left	upper part			
81	81	11	left	upper part			
82	82	17	left	upper part			
83	83	17	left	upper part			
84	84	17	left	upper part			
85	85	11	left	upper part			

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86	86	11	left	upper part			
87	87	17	left	upper part			
88	88	17	left	upper part			
89	89	17	left	upper part			
90	90	17	left	upper part			
91	91	14	left	upper part			
92	92	11	left	upper part			
93	93	60	left	upper part			
94	94	17	left	upper part			
95	95	17	left	upper part			
96	96	17	left	upper part			
97	97	16	left	lower part			Group 5: size level 5, left, lower part
98	98	12	left	lower part			
99	99	12	left	lower part			
100	100	12	left	lower part			
101	101	12	left	lower part			
102	102	20	left	lower part			
103	103	16	left	lower part			
104	104	16	left	lower part			
105	105	12	left	lower part			
106	106	20	left	lower part			
107	107	20	left	lower part			

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108	108	20	left	lower part			
109	109	12	left	lower part			
110	110	12	left	lower part			
111	111	20	left	lower part			
112	112	20	left	lower part			
113	113	20	left	lower part			
114	114	20	left	lower part			
115	115	16	left	lower part			
116	116	12	left	lower part			
117	117	60	left	lower part			
118	118	20	left	lower part			
119	119	20	left	lower part			
120	120	20	left	lower part			
121	121	18	left	centred			Group 6: size level 6, left, centred
122	122	13	left	centred			
123	123	13	left	centred			
124	124	13	left	centred			
125	125	13	left	centred			
126	126	23	left	centred			
127	127	18	left	centred			
128	128	18	left	centred			
129	129	13	left	centred			



130	130	23	left	centred			
131	131	23	left	centred			
132	132	23	left	centred			
133	133	13	left	centred			
134	134	13	left	centred			
135	135	23	left	centred			
136	136	23	left	centred			
137	137	23	left	centred			
138	138	23	left	centred			
139	139	18	left	centred			
140	140	13	left	centred			
141	141	60	left	centred			
142	142	23	left	centred			
143	143	23	left	centred			
144	144	23	left	centred			
145	145	20	centred	upper part			Group 7: size level 7, centred, upper part
146	146	14	centred	upper part			
147	147	14	centred	upper part			
148	148	14	centred	upper part			
149	149	14	centred	upper part			
150	150	26	centred	upper part			
151	151	20	centred	upper part			



152	152	20	centred	upper part			
153	153	14	centred	upper part			
154	154	26	centred	upper part			
155	155	26	centred	upper part			
156	156	26	centred	upper part			
157	157	14	centred	upper part			
158	158	14	centred	upper part			
159	159	26	centred	upper part			
160	160	26	centred	upper part			
161	161	26	centred	upper part			
162	162	26	centred	upper part			
163	163	20	centred	upper part			
164	164	14	centred	upper part			
165	165	60	centred	upper part			
166	166	26	centred	upper part			
167	167	26	centred	upper part			
168	168	26	centred	upper part			
169	169	22	centred	lower part			Group 8: size level 8, centred, lower part
170	170	15	centred	lower part			
171	171	15	centred	lower part			
172	172	15	centred	lower part			
173	173	15	centred	lower part			



174	174	29	centred	lower part			
175	175	22	centred	lower part			
176	176	22	centred	lower part			
177	177	15	centred	lower part			
178	178	29	centred	lower part			
179	179	29	centred	lower part			
180	180	29	centred	lower part			
181	181	15	centred	lower part			
182	182	15	centred	lower part			
183	183	29	centred	lower part			
184	184	29	centred	lower part			
185	185	29	centred	lower part			
186	186	29	centred	lower part			
187	187	22	centred	lower part			
188	188	15	centred	lower part			
189	189	60	centred	lower part			
190	190	29	centred	lower part			
191	191	29	centred	lower part			
192	192	29	centred	lower part			
193	193	24	centred	centred			Group 9: size level 9, centred, centred
194	194	16	centred	centred			
195	195	16	centred	centred			



196	196	16	centred	centred			
197	197	16	centred	centred			
198	198	32	centred	centred			
199	199	24	centred	centred			
200	200	24	centred	centred			
201	201	16	centred	centred			
202	202	32	centred	centred			
203	203	32	centred	centred			
204	204	32	centred	centred			
205	205	16	centred	centred			
206	206	16	centred	centred			
207	207	32	centred	centred			
208	208	32	centred	centred			
209	209	32	centred	centred			
210	210	32	centred	centred			
211	211	24	centred	centred			
212	212	16	centred	centred			
213	213	60	centred	centred			
214	214	32	centred	centred			
215	215	32	centred	centred			
216	216	32	centred	centred			
217	217	26	right	upper part			Group 10: size level 10, right, upper part



218	218	17	right	upper part			
219	219	17	right	upper part			
220	220	17	right	upper part			
221	221	17	right	upper part			
222	222	35	right	upper part			
223	223	26	right	upper part			
224	224	26	right	upper part			
225	225	17	right	upper part			
226	226	35	right	upper part			
227	227	35	right	upper part			
228	228	35	right	upper part			
229	229	17	right	upper part			
230	230	17	right	upper part			
231	231	35	right	upper part			
232	232	35	right	upper part			
233	233	35	right	upper part			
234	234	35	right	upper part			
235	235	26	right	upper part			
236	236	17	right	upper part			
237	237	60	right	upper part			
238	238	35	right	upper part			
239	239	35	right	upper part			

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240	240	35	right	upper part				
241	241	28	centred	centred			Group 11: size level 11, centred, centred	
242	242	18	centred	centred				
243	243	18	centred	centred				
244	244	18	centred	centred				
245	245	18	centred	centred				
246	246	38	centred	centred				
247	247	28	centred	centred				
248	248	28	centred	centred				
249	249	18	centred	centred				
250	250	38	centred	centred				
251	251	38	centred	centred				
252	252	38	centred	centred				
253	253	18	centred	centred				
254	254	18	centred	centred				
255	255	38	centred	centred				
Number of Indicator positions		24						
	Identifier	X offset	Y offset (SK)	Y offset (TS)	Horizontal size	Vertical size		
Indicator position	1	1	176	257	272	36	36	B4
	2	2	54	300	315	74	25	C2+C3 upper part
	3	3	54	325	340	74	25	C2+C3 lower part

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4	4	128	300	315	37	25	C4 upper part
5	5	128	325	340	37	25	C4 lower part
6	6	223	300	315	74	50	C5+C6
7	7	64	257	272	36	36	B6
8	8	140	257	272	36	36	B3
9	9	0	400	415	54	30	E3
10	10	481	350	365	49	50	G9
11	11	530	350	365	50	50	G10
12	12	580	100	115	30	50	left to H3
13	13	397	400	415	60	30	G12 left
14	14	457	400	415	60	30	G12 right
15	15	0	275	290	54	50	C8 ext
16	16	0	325	340	54	50	C9+E1
17	17	165	300	315	58	50	C1
18	18	297	300	315	37	50	C7
19	19	290	257	272	36	36	B7
20	20	517	400	415	63	30	G13
21	21	334	0	15	246	200	D upper part
22	22	334	200	215	246	50	D lower part
23	23	334	250	265	49	50	D lower part
24	24	383	250	265	49	50	D lower part
Number of Buttons		255					



	Identifier	Font size	Horizontal text alignment	Vertical text alignment			
Button 1	1	8	left	upper part			Group 1a: Common part for SK and TS technology
2	2	8	right	upper part			
3	3	12	left	centred			
4	4	12	right	centred			
5	5	16	left	lower part			
6	6	20	centred	upper part			
7	7	40	centred	centred			
8	8	60	centred	lower part			
9	9	12	right	centred			
10	10	16	right	lower part			
11	11	20	left	upper part			
12	12	20	centred	upper part			
13	13	24	left	centred			
14	14	32	left	lower part			
15	15	40	centred	centred			
16	16	60	centred	lower part			
17	17	8	right	upper part			All following buttons are for TS technology only



							Group 1b: level 1 size, right, upper part
18	18	8	right	upper part			
19	19	8	right	upper part			
20	20	8	right	upper part			
21	21	8	right	upper part			
22	22	8	right	upper part			
23	23	8	right	upper part			
24	24	8	right	upper part			
25	25	9	right	lower part			Group 2: size level 2, right, lower part
26	26	9	right	lower part			
27	27	11	right	lower part			
28	28	11	right	lower part			
29	29	11	right	lower part			
30	30	11	right	lower part			
31	31	12	right	lower part			
32	32	16	right	lower part			
33	33	9	right	lower part			
34	34	9	right	lower part			
35	35	9	right	lower part			
36	36	10	right	lower part			
37	37	11	right	lower part			
38	38	11	right	lower part			

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39	39	11	right	lower part			
40	40	26	right	lower part			
41	41	11	right	lower part			
42	42	11	right	lower part			
43	43	11	right	lower part			
44	44	11	right	lower part			
45	45	11	right	lower part			
46	46	11	right	lower part			
47	47	11	right	lower part			
48	48	11	right	lower part			
49	49	10	right	centred			Group 3: size level 3, right, centred
50	50	10	right	centred			
51	51	14	right	centred			
52	52	14	right	centred			
53	53	14	right	centred			
54	54	14	right	centred			
55	55	16	right	centred			
56	56	24	right	centred			
57	57	10	right	centred			
58	58	10	right	centred			
59	59	10	right	centred			
60	60	12	right	centred			



61	61	14	right	centred			
62	62	14	right	centred			
63	63	14	right	centred			
64	64	44	right	centred			
65	65	14	right	centred			
66	66	14	right	centred			
67	67	14	right	centred			
68	68	14	right	centred			
69	69	14	right	centred			
70	70	14	right	centred			
71	71	14	right	centred			
72	72	14	right	centred			
73	73	11	left	upper part			Group 4: size level 4, left, upper part
74	74	11	left	upper part			
75	75	17	left	upper part			
76	76	17	left	upper part			
77	77	17	left	upper part			
78	78	17	left	upper part			
79	79	20	left	upper part			
80	80	32	left	upper part			
81	81	11	left	upper part			
82	82	11	left	upper part			



83	83	11	left	upper part			
84	84	14	left	upper part			
85	85	17	left	upper part			
86	86	17	left	upper part			
87	87	17	left	upper part			
88	88	60	left	upper part			
89	89	17	left	upper part			
90	90	17	left	upper part			
91	91	17	left	upper part			
92	92	17	left	upper part			
93	93	17	left	upper part			
94	94	17	left	upper part			
95	95	17	left	upper part			
96	96	17	left	upper part			
97	97	12	left	lower part			Group 5: size level 5, left, lower part
98	98	12	left	lower part			
99	99	20	left	lower part			
100	100	20	left	lower part			
101	101	20	left	lower part			
102	102	20	left	lower part			
103	103	24	left	lower part			
104	104	40	left	lower part			

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105	105	12	left	lower part			
106	106	12	left	lower part			
107	107	12	left	lower part			
108	108	16	left	lower part			
109	109	20	left	lower part			
110	110	20	left	lower part			
111	111	20	left	lower part			
112	112	60	left	lower part			
113	113	20	left	lower part			
114	114	20	left	lower part			
115	115	20	left	lower part			
116	116	20	left	lower part			
117	117	20	left	lower part			
118	118	20	left	lower part			
119	119	20	left	lower part			
120	120	20	left	lower part			
121	121	13	left	centred			Group 6: size level 6, left, centred
122	122	13	left	centred			
123	123	23	left	centred			
124	124	23	left	centred			
125	125	23	left	centred			
126	126	23	left	centred			



127	127	28	left	centred			
128	128	48	left	centred			
129	129	13	left	centred			
130	130	13	left	centred			
131	131	13	left	centred			
132	132	18	left	centred			
133	133	23	left	centred			
134	134	23	left	centred			
135	135	23	left	centred			
136	136	60	left	centred			
137	137	23	left	centred			
138	138	23	left	centred			
139	139	23	left	centred			
140	140	23	left	centred			
141	141	23	left	centred			
142	142	23	left	centred			
143	143	23	left	centred			
144	144	23	left	centred			
145	145	14	centred	upper part			Group 7: size level 7, centred, upper part
146	146	14	centred	upper part			
147	147	26	centred	upper part			
148	148	26	centred	upper part			



149	149	26	centred	upper part			
150	150	26	centred	upper part			
151	151	32	centred	upper part			
152	152	56	centred	upper part			
153	153	14	centred	upper part			
154	154	14	centred	upper part			
155	155	14	centred	upper part			
156	156	20	centred	upper part			
157	157	26	centred	upper part			
158	158	26	centred	upper part			
159	159	26	centred	upper part			
160	160	60	centred	upper part			
161	161	26	centred	upper part			
162	162	26	centred	upper part			
163	163	26	centred	upper part			
164	164	26	centred	upper part			
165	165	26	centred	upper part			
166	166	26	centred	upper part			
167	167	26	centred	upper part			
168	168	26	centred	upper part			
169	169	15	centred	lower part			
170	170	15	centred	lower part			Group 8: size level 8, centred, lower part

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171	171	29	centred	lower part			
172	172	29	centred	lower part			
173	173	29	centred	lower part			
174	174	29	centred	lower part			
175	175	36	centred	lower part			
176	176	60	centred	lower part			
177	177	15	centred	lower part			
178	178	15	centred	lower part			
179	179	15	centred	lower part			
180	180	22	centred	lower part			
181	181	29	centred	lower part			
182	182	29	centred	lower part			
183	183	29	centred	lower part			
184	184	60	centred	lower part			
185	185	29	centred	lower part			
186	186	29	centred	lower part			
187	187	29	centred	lower part			
188	188	29	centred	lower part			
189	189	29	centred	lower part			
190	190	29	centred	lower part			
191	191	29	centred	lower part			
192	192	29	centred	lower part			

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193	193	16	centred	centred			Group 9: size level 9, centred, centred
194	194	16	centred	centred			
195	195	32	centred	centred			
196	196	32	centred	centred			
197	197	32	centred	centred			
198	198	32	centred	centred			
199	199	40	centred	centred			
200	200	60	centred	centred			
201	201	16	centred	centred			
202	202	16	centred	centred			
203	203	16	centred	centred			
204	204	24	centred	centred			
205	205	32	centred	centred			
206	206	32	centred	centred			
207	207	32	centred	centred			
208	208	60	centred	centred			
209	209	32	centred	centred			
210	210	32	centred	centred			
211	211	32	centred	centred			
212	212	32	centred	centred			
213	213	32	centred	centred			
214	214	32	centred	centred			

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215	215	32	centred	centred			
216	216	32	centred	centred			
217	217	17	right	upper part			Group 10: size level 10, right, upper part
218	218	17	right	upper part			
219	219	35	right	upper part			
220	220	35	right	upper part			
221	221	35	right	upper part			
222	222	35	right	upper part			
223	223	44	right	upper part			
224	224	60	right	upper part			
225	225	17	right	upper part			
226	226	17	right	upper part			
227	227	17	right	upper part			
228	228	26	right	upper part			
229	229	35	right	upper part			
230	230	35	right	upper part			
231	231	35	right	upper part			
232	232	60	right	upper part			
233	233	35	right	upper part			
234	234	35	right	upper part			
235	235	35	right	upper part			
236	236	35	right	upper part			

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237	237	35	right	upper part			
238	238	35	right	upper part			
239	239	35	right	upper part			
240	240	35	right	upper part			
241	241	18	centred	centred			Group 11: size level 11, centred, centred
242	242	18	centred	centred			
243	243	38	centred	centred			
244	244	38	centred	centred			
245	245	38	centred	centred			
246	246	38	centred	centred			
247	247	48	centred	centred			
248	248	60	centred	centred			
249	249	18	centred	centred			
250	250	18	centred	centred			
251	251	18	centred	centred			
252	252	28	centred	centred			
253	253	38	centred	centred			
254	254	38	centred	centred			
255	255	38	centred	centred			
Number of Button positions for touchscreen technology	24						
	Identifier	X offset	Y offset	Horizontal	Vertical		














				size	size		
Button position	1	1	610	115	30	25	F3 upper part
	2	2	610	140	30	25	F3 lower part
	3	3	165	315	58	50	C1
	4	4	0	290	54	50	C8 extended
	5	5	0	340	54	50	C9+E1
	6	6	297	315	37	50	C7
	7	7	580	165	60	60	F4
	8	8	580	15	60	100	F1+F2
	9	9	517	415	63	30	G13
	10	10	0	390	54	30	E2
	11	11	334	415	63	30	G11
	12	12	290	272	36	36	B7
	13	13	334	265	49	50	D lower part
	14	14	383	265	49	50	D lower part
	15	15	432	265	49	50	D lower part
	16	16	334	15	246	200	D upper part
	17	17	334	215	246	50	D lower part
	18	18	481	265	24	50	D lower part
	19	19	505	265	25	50	D lower part
	20	20	530	265	25	50	D lower part
	21	21	555	265	25	50	D lower part
















22	22	334	365	49	50		G8
23	23	383	365	49	50		G9
24	24	432	365	49	50		G10
Number of Button positions for softkey technology		8					
	Identifier	X offset	Y offset	Horizontal size	Vertical size	Linked soft key	
Button position	1	1	120	430	80	50	F3
	2	2	0	430	60	50	F1
	3	3	60	430	60	50	F2
	4	4	200	430	60	50	F5
	5	5	260	430	60	50	F6
	6	6	610	92	30	64	H3
	7	7	580	156	60	64	H4
	8	8	580	0	60	92	H2
Number of Icons		255					
	Identifier	File name	Horizontal size	Vertical size	Text upon icon		
Icon	1						Group 1: black and white for buttons (SK)
	1	icon1.bmp	80	50	no		
	2	icon2.bmp	60	50	no		

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3	3	icon3.bmp	60	50	no	
4	4	icon4.bmp	60	50	no	
5	5	icon5.bmp	60	50	no	
6	6	icon6.bmp	30	64	no	
7	7	icon7.bmp	60	64	no	
8	8	icon8.bmp	60	92	no	
9	9	icon9.bmp	36	36	no	 For indicators
10	10	icon10.bmp	74	25	no	
11	11	icon11.bmp	74	25	no	
12	12	icon12.bmp	37	25	no	
13	13	icon13.bmp	37	25	no	

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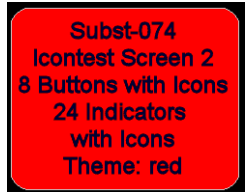


14	14	icon14.bmp	74	50	no	
15	15	icon15.bmp	36	36	no	
16	16	icon16.bmp	36	36	no	
17	17	icon17.bmp	54	30	no	
18	18	icon18.bmp	49	50	no	
19	19	icon19.bmp	50	50	yes	
20	20	icon20.bmp	30	50	no	
21	21	icon21.bmp	60	30	no	
22	22	icon22.bmp	60	30	no	
23	23	icon23.bmp	54	50	yes	
24	24	icon24.bmp	54	50	yes	
25	25	icon25.bmp	58	50	no	
26	26	icon26.bmp	37	50	no	
27	27	icon27.bmp	36	36	no	



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28	28	icon28.bmp	63	30	no	
29	29	icon29.bmp	246	200	no	Subst-074 Icontest Screen 1 8 Buttons with Icons 24 Indicators with Icons Theme: black&white
30	30	icon30.bmp	246	50	no	
31	31	icon31.bmp	49	50	no	
32	32	icon32.bmp	49	50	no	
33	33	icon33.bmp	80	50	no	 Group 2: red for buttons (SK)
34	34	icon34.bmp	60	50	no	
35	35	icon35.bmp	60	50	no	
36	36	icon36.bmp	60	50	no	
37	37	icon37.bmp	60	50	no	
38	38	icon38.bmp	30	64	no	
39	39	icon39.bmp	60	64	no	

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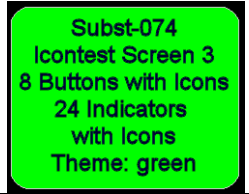








40						
	40	Icon40.bmp	60	92	no	
41						 For indicators
	41	Icon41.bmp	36	36	no	
42						
	42	Icon42.bmp	74	25	no	
43						
	43	Icon43.bmp	74	25	no	
44						
	44	Icon44.bmp	37	25	no	
45						
	45	Icon45.bmp	37	25	no	
46						
	46	Icon46.bmp	74	50	no	
47						
	47	Icon47.bmp	36	36	no	
48						
	48	Icon48.bmp	36	36	no	
49						
	49	Icon49.bmp	54	30	no	

50	50	icon50.bmp	49	50	no	
51	51	icon51.bmp	50	50	yes	
52	52	icon52.bmp	30	50	no	
53	53	icon53.bmp	60	30	no	
54	54	icon54.bmp	60	30	no	
55	55	icon55.bmp	54	50	yes	
56	56	icon56.bmp	54	50	yes	
57	57	icon57.bmp	58	50	no	
58	58	icon58.bmp	37	50	no	
59	59	icon59.bmp	36	36	no	
60	60	icon60.bmp	63	30	no	
61	61	icon61.bmp	246	200	no	
62	62	icon62.bmp	246	50	no	
63	63	icon63.bmp	49	50	no	

64	64	icon64.bmp	49	50	no	
65	65	icon65.bmp	80	50	no	 Group 3: green for buttons (SK)
66	66	icon66.bmp	60	50	no	
67	67	icon67.bmp	60	50	no	
68	68	icon68.bmp	60	50	no	
69	69	icon69.bmp	60	50	no	
70	70	icon70.bmp	30	64	no	
71	71	icon71.bmp	60	64	no	
72	72	icon72.bmp	60	92	no	
73	73	icon73.bmp	36	36	no	 For indicators










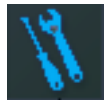
74	74	icon74.bmp	74	25	no	
75	75	icon75.bmp	74	25	no	
76	76	icon76.bmp	37	25	no	
77	77	icon77.bmp	37	25	no	
78	78	icon78.bmp	74	50	no	
79	79	icon79.bmp	36	36	no	
80	80	icon80.bmp	36	36	no	
81	81	icon81.bmp	54	30	no	
82	82	icon82.bmp	49	50	no	
83	83	icon83.bmp	50	50	yes	
84	84	icon84.bmp	30	50	no	
85	85	icon85.bmp	60	30	no	
86	86	icon86.bmp	60	30	no	
87	87	icon87.bmp	54	50	yes	
88	88	icon88.bmp	54	50	yes	

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89	89	icon89.bmp	58	50	no	
90	90	icon90.bmp	37	50	no	
91	91	icon91.bmp	36	36	no	
92	92	icon92.bmp	63	30	no	
93	93	icon93.bmp	246	200	no	
94	94	icon94.bmp	246	50	no	
95	95	icon95.bmp	49	50	no	
96	96	icon96.bmp	49	50	no	
97	97	icon97.bmp	80	50	no	
98	98	icon98.bmp	60	50	no	
99	99	icon99.bmp	60	50	no	
100	100	icon100.bmp	60	50	no	
101	101	icon101.bmp	60	50	no	

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102						
	102	icon102.bmp	30	64	no	
103						
	103	icon103.bmp	60	64	no	
104						
	104	icon104.bmp	60	92	no	
105						
	105	icon105.bmp	36	36	no	For indicators
106						
	106	icon106.bmp	74	25	no	
107						
	107	icon107.bmp	74	25	no	
108						
	108	icon108.bmp	37	25	no	
109						
	109	icon109.bmp	37	25	no	
110						
	110	icon110.bmp	74	50	no	
111						
	111	icon111.bmp	36	36	no	














112	112	icon112.bmp	36	36	no	
113	113	icon113.bmp	54	30	no	
114	114	icon114.bmp	49	50	no	
115	115	icon115.bmp	50	50	yes	
116	116	icon116.bmp	30	50	no	
117	117	icon117.bmp	60	30	no	
118	118	icon118.bmp	60	30	no	
119	119	icon119.bmp	54	50	yes	
120	120	icon120.bmp	54	50	yes	
121	121	icon121.bmp	58	50	no	
122	122	icon122.bmp	37	50	no	
123	123	icon123.bmp	36	36	no	
124	124	icon124.bmp	63	30	no	











125						<div>Subst-074 Iconset Screen 4 8 Buttons with Icons 24 Indicators with Icons Theme: blue</div>
	125	icon125.bmp	246	200	no	
126	126	icon126.bmp	246	50	no	
127	127	icon127.bmp	49	50	no	
128	128	icon128.bmp	49	50	no	
129	129	icon129.bmp	80	50	no	 Group 5: yellow for buttons (SK)
130	130	icon130.bmp	60	50	no	
131	131	icon131.bmp	60	50	no	
132	132	icon132.bmp	60	50	no	
133	133	icon133.bmp	60	50	no	
134	134	icon134.bmp	30	64	no	
135	135	icon135.bmp	60	64	no	



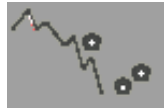











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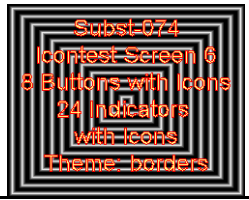






136						
	136	icon136.bmp	60	92	no	
137						 For indicators
	137	icon137.bmp	36	36	no	
138						Shunting
	138	icon138.bmp	74	25	no	
139						
	139	icon139.bmp	74	25	no	
140						
	140	icon140.bmp	37	25	no	
141						
	141	icon141.bmp	37	25	no	
142						
	142	icon142.bmp	74	50	no	
143						
	143	icon143.bmp	36	36	no	
144						
	144	icon144.bmp	36	36	no	
145						
	145	icon145.bmp	54	30	no	
146						
	146	icon146.bmp	49	50	no	
147						
	147	icon147.bmp	50	50	yes	

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148	148	icon148.bmp	30	50	no	
149	149	icon149.bmp	60	30	no	
150	150	icon150.bmp	60	30	no	
151	151	icon151.bmp	54	50	yes	
152	152	icon152.bmp	54	50	yes	
153	153	icon153.bmp	58	50	no	
154	154	icon154.bmp	37	50	no	
155	155	icon155.bmp	36	36	no	
156	156	icon156.bmp	63	30	no	
157	157	icon157.bmp	246	200	no	<div>Subst-074 Icontest Screen 5 8 Buttons with Icons 24 Indicators with Icons Theme: yellow</div>
158	158	icon158.bmp	246	50	no	
159	159	icon159.bmp	49	50	no	
160	160	icon160.bmp	49	50	no	
161	161	icon161.bmp	80	50	no	 Group 6: border (grey background)

						for buttons (SK)
162	162	icon162.bmp	60	50	no	
163	163	icon163.bmp	60	50	no	
164	164	icon164.bmp	60	50	no	
165	165	icon165.bmp	60	50	no	
166	166	icon166.bmp	30	64	no	
167	167	icon167.bmp	60	64	no	
168	168	icon168.bmp	60	92	no	
169	169	icon169.bmp	36	36	no	 For indicators
170	170	icon170.bmp	74	25	no	
171	171	icon171.bmp	74	25	no	















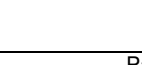
172	172	icon172.bmp	37	25	no	
173	173	icon173.bmp	37	25	no	
174	174	icon174.bmp	74	50	no	
175	175	icon175.bmp	36	36	no	
176	176	icon176.bmp	36	36	no	
177	177	icon177.bmp	54	30	no	
178	178	icon178.bmp	49	50	no	
179	179	icon179.bmp	50	50	yes	
180	180	icon180.bmp	30	50	no	
181	181	icon181.bmp	60	30	no	
182	182	icon182.bmp	60	30	no	
183	183	icon183.bmp	54	50	yes	
184	184	icon184.bmp	54	50	yes	
185	185	icon185.bmp	58	50	no	

186	186	icon186.bmp	37	50	no	
187	187	icon187.bmp	36	36	no	
188	188	icon188.bmp	63	30	no	
189	189	icon189.bmp	246	200	no	
190	190	icon190.bmp	246	50	no	
191	191	icon191.bmp	49	50	no	
192	192	icon192.bmp	49	50	no	
193	193	icon193.bmp	80	50	yes	 Group 7: text upon icon for buttons (SK)
194	194	icon194.bmp	60	50	yes	
195	195	icon195.bmp	60	50	yes	
196	196	icon196.bmp	60	50	yes	
197	197	icon197.bmp	60	50	yes	











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198						
	198	icon198.bmp	30	64	yes	
199						
	199	Icon199.bmp	60	64	yes	
200						
	200	Icon200.bmp	60	92	yes	
201						
	201	icon201.bmp	36	36	yes	For indicators
202						
	202	icon202.bmp	74	25	yes	
203						
	203	icon203.bmp	74	25	yes	
204						
	204	icon204.bmp	37	25	yes	
205						
	205	icon205.bmp	37	25	yes	
206						
	206	icon206.bmp	74	50	yes	
207						
	207	icon207.bmp	36	36	yes	











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208	208	icon208.bmp	36	36	yes	
209	209	icon209.bmp	54	30	yes	
210	210	icon210.bmp	49	50	yes	
211	211	icon211.bmp	50	50	yes	
212	212	icon212.bmp	30	50	yes	
213	213	icon213.bmp	60	30	yes	
214	214	icon214.bmp	60	30	yes	
215	215	icon215.bmp	54	50	yes	
216	216	icon216.bmp	54	50	yes	
217	217	icon217.bmp	58	50	yes	
218	218	icon218.bmp	37	50	yes	
219	219	icon219.bmp	36	36	yes	
220	220	icon220.bmp	63	30	yes	
221	221	icon221.bmp	246	200	yes	
222	222	icon222.bmp	246	50	yes	

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223	223	icon223.bmp	49	50	yes	
224	224	icon224.bmp	49	50	yes	
225	225	icon225.bmp	80	50	no	 Group 8: coloured for buttons (SK)
226	226	icon226.bmp	60	50	no	
227	227	icon227.bmp	60	50	no	
228	228	icon228.bmp	60	50	no	
229	229	icon229.bmp	60	50	no	
230	230	icon230.bmp	30	64	no	
231	231	icon231.bmp	60	64	no	
232	232	icon232.bmp	60	92	no	

233						
	233	icon233.bmp	36	36	no	For indicators
234	234	icon234.bmp	74	25	no	
235	235	icon235.bmp	74	25	no	
236	236	icon236.bmp	37	25	no	
237	237	icon237.bmp	37	25	no	
238	238	icon238.bmp	74	50	no	
239	239	icon239.bmp	36	36	no	
240	240	icon240.bmp	36	36	no	
241	241	icon241.bmp	54	30	no	
242	242	icon242.bmp	49	50	no	
243	243	icon243.bmp	50	50	yes	
244	244	icon244.bmp	30	50	no	
245	245	icon245.bmp	60	30	no	

246	246	icon246.bmp	60	30	no	
247	247	icon247.bmp	54	50	yes	
248	248	icon248.bmp	54	50	yes	
249	249	icon249.bmp	58	50	no	
250	250	icon250.bmp	37	50	no	
251	251	icon251.bmp	36	36	no	
252	252	icon252.bmp	63	30	no	
253	253	icon253.bmp	246	200	no	
254	254	icon254.bmp	246	50	no	
255	255	icon255.bmp	49	50	no	
ETCS speed and distance supervision	Display yes					
ETCS speed dial range	0 – 400 km/h					
Slow flashing frequency for Buttons and Indicators	4 Hz					
Fast flashing frequency for Buttons and Indicators	8 Hz					



Flashing style	Yellow frame					
Number of Sounds	255					
	Identifier	File name	Duration (s)			
Sound 1	1	S1_toofast.wav	2.05			As specified for ETCS
2	2	S2_warning.wav	3.55			As specified for ETCS
3	3	Antennafailure.wav	1.35			Spoken text, British English speaker
4	4	Odometerfailure.wav	1.45			Spoken text, British English speaker
5	5	Pressuresensorfailure.wav	1.60			Spoken text, British English speaker
6	6	SBfailure.wav	1.55			Spoken text, British English speaker
7	7	EBfailure.wav	1.80			Spoken text, British English speaker
8	8	Ringing.wav	4.00			Ringing sound
9	9	Single1.wav	0.10			Single tone (c4, 261,6Hz), 100ms
10	10	Single2.wav	0.20			Single tone (d4, 293,7Hz), 200ms
11	11	Single3.wav	0.30			Single tone (e4, 329,6Hz), 300ms
12	12	Single4.wav	0.40			Single tone (f4, 349,2Hz), 400ms
13	13	Single5.wav	0.50			Single tone (g4, 392,0Hz), 500ms
14	14	Single6.wav	0.60			Single tone (a4, 440,0Hz), 600ms
15	15	Single7.wav	0.70			Single tone (b4, 493,9Hz), 700ms
16	16	Single8.wav	0.80			Single tone (c5, 523,3Hz), 800ms
17	17	Double1.wav	0.20			Two intermitting tones (c4, g4), 100ms
18	18	Double2.wav	0.40			Two intermitting tones (d4, a4), 200ms



19	19	Double3.wav	0.60			Two intermitting tones (e4, b4), 300ms
20	20	Double4.wav	0.80			Two intermitting tones (f4, c5), 400ms
21	21	Double5.wav	1.00			Two intermitting tones (g4, d5), 500ms
22	22	Double6.wav	1.20			Two intermitting tones (a4, e5), 600ms
23	23	Double7.wav	1.40			Two intermitting tones (b4, f5), 700ms
24	24	Double8.wav	1.60			Two intermitting tones (c5, g5), 800ms
25	25	Triple1.wav	0.30			Three intermitting tones (c4, e4,g4), 100ms
26	26	Triple2.wav	0.60			Three intermitting tones (d4, f4, a4), 200ms
27	27	Triple3.wav	0.90			Three intermitting tones (e4, g4, b4), 300ms
28	28	Triple4.wav	1.20			Three intermitting tones (f4, a4, c5), 400ms
29	29	Triple5.wav	1.50			Three intermitting tones (g4, b4, d5), 500ms
30	30	Triple6.wav	1.80			Three intermitting tones (a4, c5, e5), 600ms
31	31	Triple7.wav	2.10			Three intermitting tones (b4, d5, f5), 700ms
32	32	Triple8.wav	2.40			Three intermitting tones (c5, e5, g5), 800ms
33	33	Greatbritain.wav	63			National hymn
34	34	France.wav	79			National hymn
35	35	Germany.wav	74			National hymn
36	36	Belgium.wav	63			National hymn
37	37	Sweden.wav	87			National hymn
38	38	Italy.wav	98			National hymn
39	39	Spain.wav	62			National hymn



40	40	CzechRep.wav	64			National hymn
41-120	41-120	Message<N>.wav	1.65 – 2.95			Spoken text, British English speaker, "Message number <N>", N= 41 ...120
121-200	121-200	Message<N>.wav	1.90 – 2.80			Spoken text, French speaker, "Message numero <N>", N= 121 ...200
201-255	201-255	Message<N>.wav	2.50 – 3.45			Spoken text, German speaker, "Meldung Nummer <N>", N= 201 ...255
Number of moved areas of the ETCS layout		13				
	Identifier	X offset	Y offset	Linked soft key		
Area	1 A4	334	300	-		
	2 B7	541	307	-		
	3 C1	442	300	-		
	4 C7	500	300	-		
	5 C8	334	325	-		
	6 C9	388	300	-		
	7 E1	338	325	-		
	8 F1	320	430	F6		
	9 F2	384	430	F7		
	10 F3	448	430	F8		
	11 F4	512	430	F9		
	12 F5	576	430	F10		
	13 G13	0	0	-		



1	A4	334	300	-			
2	B7	541	307	-			

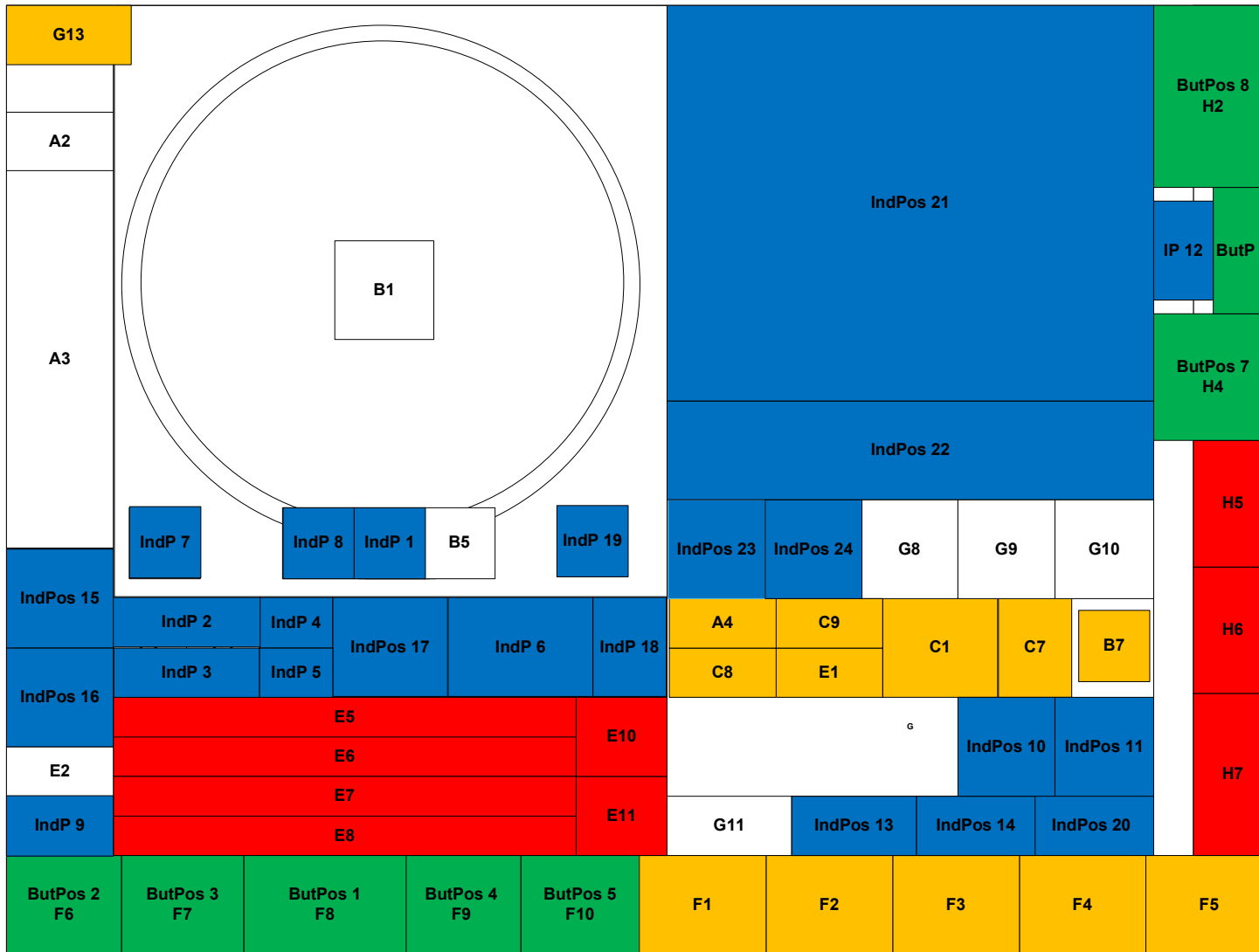


Figure 5: Indicator and Button Positions for soft key technology

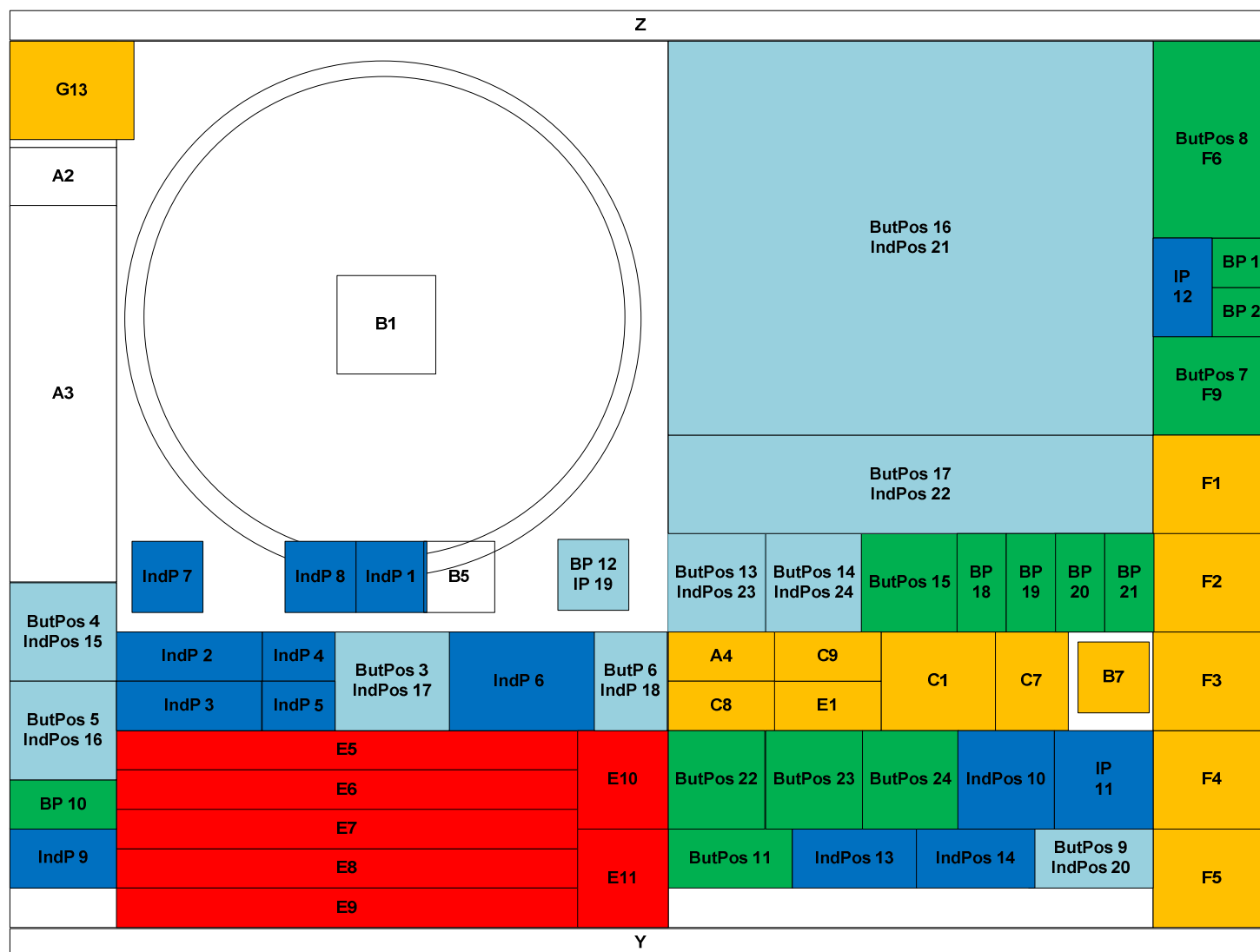


Figure 6: Indicator and Button positions for touchscreen technology