

DEĊIŻJONIJIET

DEĊIŻJONI TAL-KUMMISSJONI

tas-6 ta' Novembru 2012

li temenda d-Deciżjoni tal-Kummissjoni 2012/88/UE dwar l-ispeċifikazzjoni teknika għall-interoperabbiltà relatata mas-subsistema tal-“kontroll-kmand u sinjalazzjoni” tas-sistema ferrovjarja trans-Ewropea

(notifikata bid-dokument C(2012) 7325)

(Test b'relevanza għaż-ŻEE)

(2012/696/UE)

IL-KUMMISSJONI EWROPEA,

Wara li kkunsidrat it-Trattat dwar il-Funzjonament tal-Unjoni Ewropea,

Wara li kkunsidrat id-Direttiva 2008/57/KE tal-Parlament Ewropew u tal-Kunsill tas-17 ta' Ġunju 2008 dwar l-interoperabbiltà tas-sistema ferrovjarja fil-Komunità ⁽¹⁾, u b'mod partikolari t-tieni subparagrafu tal-Artikolu 6(1) tagħha,

Billi:

- (1) Fis-16 ta' April 2012 l-Aġenzija Ferrovjarja Ewropea harġet ir-rakkomandazzjoni tagħha ERA/REC/03-2012/ERTMS. Din id-Deciżjoni hija bbażata fuq dik ir-rakkomandazzjoni.
- (2) L-iżvilupp ta' funzjonalitajiet addizzjonali għas-Sistema Ewropea għall-Ġestjoni tat-Traffiku Ferrovjarju/Sistema Ewropea għall-Kontroll tal-Ferroviji (“ERTMS/ETCS”), bil-ħsieb li tiġi ffaċilitata l-implimentazzjoni rapida tal-ETCS fuq linji konvenzjonali eżistenti, kien mitlub mis-settur u ddefinit fil-Memorandum ta' Ftehim iffirmat f'Lulju 2008 mill-Kummissjoni Ewropea u Assoċjazzjonijiet tas-settur. Din id-Deciżjoni għandha tinkludi dawn il-funzjonalitajiet f'bażi ta' referenza [baseline] ġdida tal-ispeċifikazzjonijiet imsejha “Bażi ta' Referenza 3”, li l-applikanti jistgħu japplikaw bis-siġġ minflok l-ispeċifikazzjonijiet ERTMS/ETCS stabbiliti fid-Deciżjoni tal-Kummissjoni 2012/88/UE tal-25 ta' Jannar 2012 dwar l-ispeċifikazzjoni teknika għall-interoperabbiltà relatata mas-subsistema tal-“kontroll-kmand u sinjalazzjoni” tas-sistema ferrovjarja trans-Ewropea ⁽²⁾ (l-aħħar verżjoni tal-Baži ta' Referenza 2, magħrufa wkoll bħala 2.3.0d). Element essenzjali tal-Baži ta' Referenza 3 huwa li l-ferroviji mġhamra b'ERTMS/ETCS konformi mal-Baži ta' Referenza 3 għandhom ikunu kapaci jiċċirkolaw fuq linji ERTMS/ETCS konformi mal-Baži ta' Referenza 2 mingħajr ebda restrizzjonijiet tekniċi jew operattivi addizzjonali kkawżati mill-ERTMS/ETCS. Għandu jkun possibbli wkoll li tiġi kkonfigurata l-Baži ta' Referenza 3 fuq linji sabiex tiġi żgurata l-kompatibbiltà ma' ferroviji mġhamra b'ERTMS/ETCS konformi

mal-Baži ta' Referenza 2 (użu tal-funzjonijiet tal-verżjoni 2.3.0d biss). Baži ta' Referenza 3 tagħlaq ukoll il-punti miftuħin tal-ERTMS/ETCS bħall-kurvi tal-ibbrejtkjar u aspetti ergonomiċi tad-DMI.

- (3) Ġie rikonnoxxut li l-ispeċifikazzjonijiet tal-Baži ta' Referenza 2 ilhom stabbli mill-adozzjoni tad-Deciżjoni tal-Kummissjoni 2008/386/KE tat-23 ta' April 2008 li timmodifika l-Anness A għad-Deciżjoni 2006/679/KE dwar l-ispeċifikazzjoni teknika għall-interoperabbiltà fir-rigward tas-subsistema ta' kontroll u ta' sinjalar tas-sistema ferrovjarja konvenzjonali trans-Ewropea u l-Anness A għad-Deciżjoni 2006/860/KE dwar l-ispeċifikazzjoni teknika għall-interoperabbiltà fir-rigward tas-subsistema ta' kontroll u ta' sinjalar tas-sistema ferrovjarja trans-Ewropea ta' veloċità għolja ⁽³⁾. Għaldaqstant, għandu jkun possibbli li dawn jibqgħu jintużaw. Madankollu, għall-ERTMS/ETCS abbord, għandhom jiġu applikati l-ispeċifikazzjonijiet riveduti tat-test (imsemmija fl-Indiċi 37b u 37c tat-Tabella A2 fl-Anness A). Barra minn hekk, peress li l-Baži ta' Referenza 3 tagħlaq għadd ta' punti miftuħa, l-implimentazzjoni tal-Baži ta' Referenza 2 għal dawn il-punti għandha tkun bbażata fuq l-ispeċifikazzjonijiet rilevanti tal-Baži ta' Referenza 3 msemmija fl-Anness A.
- (4) L-Aġenzija Ferrovjarja Ewropea rrevediet l-ispeċifikazzjonijiet tal-ERTMS għas-Sistema Globali għall-Komunikazzjoni Mobbli Ferrovjarja (GSM-R) (imsemmija fl-indiċijiet 32, 33, 34 u 65 tat-Tabella A2 fl-Anness A). L-ispeċifikazzjonijiet riveduti ma jibdlux ir-rekwiżiti, iżda jipprovdu klassifikazzjoni ċara u mhux ambigwa tar-rekwiżiti mandatorji eżistenti fid-dokumenti tan-Netzwerk Ewropew Integrat Imsaħħah bir-Radju (EIRENE - European Integrated Radio Enhanced Network), u b'hekk jiffaċilitaw iċ-ċertifikazzjoni, il-konformità u l-proċessi ta' verifika.
- (5) Fir-rigward tal-ispeċifikazzjonijiet indikati bħala “reserved (riżervati)” fit-Tabella A2 tal-Anness A, il-Memorandum ta' Ftehim bejn il-Kummissjoni Ewropea, l-Aġenzija Ferrovjarja Ewropea u l-assoċjazzjonijiet tas-settur ferrovjarju Ewropew dwar it-tishih tal-kooperazzjoni għall-ġestjoni tal-ERTMS iffirmat fis-16 ta' April 2012 jinkludi

⁽¹⁾ ĠU L 191, 18.7.2008, p. 1.

⁽²⁾ ĠU L 51, 23.2.2012, p. 1.

⁽³⁾ ĠU L 136, 24.5.2008, p. 11.

dispożizzjonijiet, inkluża d-definizzjoni ta' skeda ta' żmien mill-Aġenzija Ferrovjarja Ewropea, li jiżguraw li speċifikazzjonijiet tat-test huma vvalidati u daww l-ispeċifikazzjonijiet "riżervati" huma pprovduti f'waqthom.

- (6) Id-Deciżjoni 2012/88/UE għandha għaldaqstant tiġi emendata skont dan.
- (7) Il-miżuri previsti f'din id-Deciżjoni huma konformi mal-opinjoni tal-Kumitat stabbilit skont l-Artikolu 29(1) tad-Direttiva 2008/57/KE.

ADOTTAT DIN ID-DECIŻJONI:

Artikolu 1

Id-Deciżjoni 2012/88/UE hija emendata kif ġej:

- (1) Jithassar l-Artikolu 6.
- (2) Jiddahhal l-Artikolu li ġej:

"Artikolu 6a

Meta jiġu implimentati l-ispeċifikazzjonijiet tekniċi għall-interoperabbiltà [TSI] stabbiliti fl-Anness III għal din id-Deciżjoni, għandu jiġi applikat wiehed miż-żewġ settijiet ta' speċifikazzjonijiet elenkati fit-Tabella A-2 tal-Anness A.

L-ispeċifikazzjonijiet tal-Bażi ta' Referenza 3 għandhom jinżammu sabiex jiġi żgurat li l-ferroviji mghammra b'ERTMS/ETCS konformi mal-Bażi ta' Referenza 3 jkunu jistgħu jithaddmu fuq linji ERTMS/ETCS konformi mal-Bażi ta' Referenza 2 mingħajr l-ebda restrizzjonijiet tekniċi jew operattivi addizzjonali."

- (3) L-Anness A huwa sostitwit bl-Anness I għal din id-Deciżjoni.
- (4) L-Anness G huwa sostitwit bl-Anness II għal din id-Deciżjoni.

Artikolu 2

Din id-Deciżjoni għandha tapplika mill-1 ta' Jannar 2013.

Artikolu 3

Din id-Deciżjoni hija indirizzata lill-Istati Membri.

Magħmul fi Brussell, is-6 ta' Novembru 2012.

Għall-Kummissjoni

Siim KALLAS

Vici President

ANNEX I

“ANNEX A

References

For each reference made in the basic parameters (Chapter 4 of this TSI) the following table indicates the corresponding mandatory specifications, via the index in table A-2.

Table A 1

Reference in Chapter 4	Index number (see Table A 2)	Reference in Chapter 4	Index number (see Table A 2)
4.1		4.2.4 c	67
4.1a	1, 4	4.2.4 d	68
4.1b	32	4.2.4 e	73, 74
4.1c	3	4.2.4 f	32, 33
		4.2.4 g	48
4.2.1		4.2.4 h	69, 70
4.2.1 a	27, 78	4.2.4 j	71, 72
4.2.1 b	28	4.2.4 k	75, 76
4.2.2		4.2.5	
4.2.2.a	14	4.2.5 a	64, 65
4.2.2.b	1, 4, 13, 15, 60	4.2.5 b	10, 39, 40
4.2.2.c	31, 37b, c, d	4.2.5c	19, 20
4.2.2.d	18, 20	4.2.5 d	9, 43
4.2.2.e	6	4.2.5 e	16, 50
4.2.2.f	7		
		4.2.6	
4.2.3		4.2.6 a	8, 25, 26, 36 c, 49, 52
4.2.3 a	14	4.2.6 b	29, 45
4.2.3 b	1, 4, 13, 15, 60	4.2.6 c	46
4.2.3 c	31, 37 b, c, d	4.2.6 d	34
4.2.3 d	18, 21	4.2.6 e	20
		4.2.6 f	44
4.2.4			
4.2.4 a	64, 65	4.2.7	
4.2.4 b	66	4.2.7 a	12

Reference in Chapter 4	Index number (see Table A 2)	Reference in Chapter 4	Index number (see Table A 2)
4.2.7 b	62, 63	4.2.11	
4.2.7 c	34	4.2.11 a	77 (section 3.2)
4.2.7 d	9		
4.2.7 e	16	4.2.12	
		4.2.12 a	6, 51
4.2.8			
4.2.8 a	11, 79	4.2.13	
		4.2.13 a	32, 33, 51, 80
4.2.9			
4.2.9 a	23	4.2.14	
		4.2.14 a	5
4.2.10			
4.2.10 a	77 (section 3.1)	4.2.15	
		4.2.15 a	38

Specifications

One of the two sets of specifications listed in Table A-2 of this Annex shall be applied.

Documents referred to within a specification listed in Table A-2 shall be considered as being for information only, unless otherwise stated in Table A-2.

Note: specifications indicated as 'Reserved' in table A-2 are also listed as open points in Annex G when there is a need for notification of national rules to close the corresponding open points. Reserved documents not listed as open points are intended as improvements to the system.

Table A 2

List of mandatory specifications

Index N	Set of specifications # 1 (ETCS baseline 2 and GSM-R baseline 0)				Set of specifications # 2 (ETCS baseline 3 and GSM-R baseline 0)			
	Reference	Name of Specification	Version	Notes	Reference	Name of Specification	Version	Notes
1	ERA/ ERTMS/ 003204	ERTMS/ETCS Functional require- ment specification	5.0		Intentionally deleted			
2	Intentionally deleted				Intentionally deleted			
3	UNISIG SUBSET-023	Glossary of Terms and Abbreviations	2.0.0		UNISIG SUBSET-023	Glossary of Terms and Abbreviations	3.0.0	
4	UNISIG SUBSET-026	System Require- ments Specifica- tion	2.3.0		UNISIG SUBSET-026	System Require- ments Specifica- tion	3.3.0	

Index N	Set of specifications # 1 (ETCS baseline 2 and GSM-R baseline 0)				Set of specifications # 2 (ETCS baseline 3 and GSM-R baseline 0)			
	Reference	Name of Specification	Version	Notes	Reference	Name of Specification	Version	Notes
5	UNISIG SUBSET-027	FFIS Juridical recorder-downloa- ding tool	2.3.0	Note 1	UNISIG SUBSET-027	FIS Juridical Recording	3.0.0	
6	UNISIG SUBSET-033	FIS for man- machine interface	2.0.0		ERA_ERTMS_ 015560	ETCS Driver Machine interface	3.3.0	
7	UNISIG SUBSET-034	FIS for the train interface	2.0.0		UNISIG SUBSET-034	Train Interface FIS	3.0.0	
8	UNISIG SUBSET-035	Specific Transmission Module FFFIS	2.1.1		UNISIG SUBSET-035	Specific Transmission Module FFFIS	3.0.0	
9	UNISIG SUBSET-036	FFIS for Euroba- lise	2.4.1		UNISIG SUBSET-036	FFIS for Euroba- lise	3.0.0	
10	UNISIG SUBSET-037	EuroRadio FIS	2.3.0		UNISIG SUBSET-037	EuroRadio FIS	3.0.0	
11	UNISIG SUBSET-038	Offline key mana- gement FIS	2.3.0		UNISIG SUBSET-038	Offline key mana- gement FIS	3.0.0	
12	UNISIG SUBSET-039	FIS for the RBC/RBC hando- ver	2.3.0		Reserved UNISIG SUBSET-039	FIS for the RBC/RBC hando- ver		
13	UNISIG SUBSET-040	Dimensioning and Engineering rules	2.3.0		UNISIG SUBSET-040	Dimensioning and Engineering rules	3.2.0	
14	UNISIG SUBSET-041	Performance Requirements for Interoperability	2.1.0		UNISIG SUBSET-041	Performance Requirements for Interoperability	3.1.0	
15	ERA SUBSET-108	Interoperability related consolida- tion on TSI Annex A documents	1.2.0		Intentionally deleted			
16	UNISIG SUBSET-044	FFIS for Euroloop	2.3.0		UNISIG SUBSET-044	FFIS for Euroloop	2.4.0	
17	Intentionally deleted				Intentionally deleted			
18	UNISIG SUBSET-046	Radio infill FFFS	2.0.0		Intentionally deleted			
19	UNISIG SUBSET-047	Trackside- Trainborne FIS for Radio infill	2.0.0		UNISIG SUBSET-047	Trackside- Trainborne FIS for Radio infill	3.0.0	
20	UNISIG SUBSET-048	Trainborne FFFIS for Radio infill	2.0.0		UNISIG SUBSET-048	Trainborne FFFIS for Radio infill	3.0.0	

Index N	Set of specifications # 1 (ETCS baseline 2 and GSM-R baseline 0)				Set of specifications # 2 (ETCS baseline 3 and GSM-R baseline 0)			
	Reference	Name of Specification	Version	Notes	Reference	Name of Specification	Version	Notes
21	UNISIG SUBSET-049	Radio infill FIS with LEU/ interlocking	2.0.0		Intentionally deleted			
22	Intentionally deleted				Intentionally deleted			
23	UNISIG SUBSET-054	Responsibilities and rules for the assignment of values to ETCS variables	2.1.0		UNISIG SUBSET-054	Responsibilities and rules for the assignment of values to ETCS variables	3.0.0	
24	Intentionally deleted				Intentionally deleted			
25	UNISIG SUBSET-056	STM FFFIS Safe time layer	2.2.0		UNISIG SUBSET-056	STM FFFIS Safe time layer	3.0.0	
26	UNISIG SUBSET-057	STM FFFIS Safe link layer	2.2.0		UNISIG SUBSET-057	STM FFFIS Safe link layer	3.0.0	
27	UNISIG SUBSET-091	Safety Require- ments for the Technical Inter- operability of ETCS in Levels 1 and 2	2.5.0		UNISIG SUBSET-091	Safety Require- ments for the Technical Inter- operability of ETCS in Levels 1 and 2	3.2.0	
28	Reserved	Reliability — avai- lability require- ments			Reserved	Reliability — avai- lability require- ments		
29	UNISIG SUBSET-102	Test specification for interface “K”	1.0.0		UNISIG SUBSET-102	Test specification for interface “K”	2.0.0	
30	Intentionally deleted				Intentionally deleted			
31	UNISIG SUBSET-094	Functional require- ments for an on- board reference test facility	2.0.2		Reserved UNISIG SUBSET-094	Functional require- ments for an on- board reference test facility		
32	EIRENE FRS	GSM-R Functional requirements specification	7.3.0		EIRENE FRS	GSM-R Functional requirements specification	7.3.0	
33	EIRENE SRS	GSM-R System requirements specification	15.3.0		EIRENE SRS	GSM-R System requirements specification	15.3.0	
34	A11T6001	(MORANE) Radio Transmission FFFIS for EuroRadio	12.4		A11T6001	(MORANE) Radio Transmission FFFIS for EuroRadio	12.4	

Index N	Set of specifications # 1 (ETCS baseline 2 and GSM-R baseline 0)				Set of specifications # 2 (ETCS baseline 3 and GSM-R baseline 0)			
	Reference	Name of Specification	Version	Notes	Reference	Name of Specification	Version	Notes
35	Intentionally deleted				Intentionally deleted			
36 a	Intentionally deleted				Intentionally deleted			
36 b	Intentionally deleted				Intentionally deleted			
36 c	UNISIG SUBSET-074-2	FFFIS STM Test cases document	1.0.0		Reserved UNISIG SUBSET-074-2	FFFIS STM Test cases document		
37 a	Intentionally deleted				Intentionally deleted			
37 b	UNISIG SUBSET-076-5-2	Test cases related to features	2.3.3		Reserved UNISIG SUBSET-076-5-2	Test cases related to features		
37 c	UNISIG SUBSET-076-6-3	Test sequences	2.3.3		Reserved UNISIG SUBSET-076-6-3	Test sequences		
37 d	UNISIG SUBSET-076-7	Scope of the test specifications	1.0.2		Reserved UNISIG SUBSET-076-7	Scope of the test specifications		
37 e	Intentionally deleted				Intentionally deleted			
38	06E068	ETCS Marker-board definition	2.0		06E068	ETCS Marker-board definition	2.0	
39	UNISIG SUBSET-092-1	ERTMS EuroRadio Conformance Requirements	2.3.0		UNISIG SUBSET-092-1	ERTMS EuroRadio Conformance Requirements	3.0.0	
40	UNISIG SUBSET-092-2	ERTMS EuroRadio test cases safety layer	2.3.0		UNISIG SUBSET-092-2	ERTMS EuroRadio test cases safety layer	3.0.0	
41	Intentionally deleted				Intentionally deleted			
42	Intentionally deleted				Intentionally deleted			
43	UNISIG SUBSET 085	Test specification for Eurobalise FFFIS	2.2.2		UNISIG SUBSET 085	Test specification for Eurobalise FFFIS	3.0.0	
44	Reserved	Odometry FIS			Reserved	Odometry FIS		

Index N	Set of specifications # 1 (ETCS baseline 2 and GSM-R baseline 0)				Set of specifications # 2 (ETCS baseline 3 and GSM-R baseline 0)			
	Reference	Name of Specification	Version	Notes	Reference	Name of Specification	Version	Notes
45	UNISIG SUBSET-101	Interface "K" Specification	1.0.0		UNISIG SUBSET-101	Interface "K" Specification	2.0.0	
46	UNISIG SUBSET-100	Interface "G" Specification	1.0.1		UNISIG SUBSET-100	Interface "G" Specification	2.0.0	
47	Intentionally deleted				Intentionally deleted			
48	Reserved	Test specification for mobile equip- ment GSM-R			Reserved	Test specification for mobile equip- ment GSM-R		
49	UNISIG SUBSET-059	Performance requirements for STM	2.1.1		UNISIG SUBSET-059	Performance requirements for STM	3.0.0.	
50	UNISIG SUBSET-103	Test specification for Euroloop	1.0.0		UNISIG SUBSET-103	Test specification for Euroloop	1.1.0	
51	Reserved	Ergonomic aspects of the DMI			Intentionally deleted			
52	UNISIG SUBSET-058	FFIS STM Application layer	2.1.1		UNISIG SUBSET-058	FFIS STM Application layer	3.0.0	
53	Intentionally deleted				Intentionally deleted			
54	Intentionally deleted				Intentionally deleted			
55	Intentionally deleted				Intentionally deleted			
56	Intentionally deleted				Intentionally deleted			
57	Intentionally deleted				Intentionally deleted			
58	Intentionally deleted				Intentionally deleted			
59	Intentionally deleted				Intentionally deleted			
60	Intentionally deleted				UNISIG SUBSET-104	ETCS System Version Manage- ment	3.1.0	
61	Intentionally deleted				Intentionally deleted			

Index N	Set of specifications # 1 (ETCS baseline 2 and GSM-R baseline 0)				Set of specifications # 2 (ETCS baseline 3 and GSM-R baseline 0)			
	Reference	Name of Specification	Version	Notes	Reference	Name of Specification	Version	Notes
62	Reserved	RBC-RBC Test specification for safe communication interface			Intentionally deleted			
63	UNISIG SUBSET-098	RBC-RBC Safe Communication Interface	1.0.0		UNISIG SUBSET-098	RBC-RBC Safe Communication Interface	3.0.0	
64	EN 301 515	Global System for Mobile Communication (GSM); Requirements for GSM operation on railways	2.3.0	Note 2	EN 301 515	Global System for Mobile Communication (GSM); Requirements for GSM operation on railways	2.3.0	Note 2
65	TS 102 281	Detailed requirements for GSM operation on railways	2.2.0	Note 3	TS 102 281	Detailed requirements for GSM operation on railways	2.2.0	Note 3
66	(MORANE) A 01 T 0004 1	ASCI Options for Interoperability	1		(MORANE) A 01 T 0004 1	ASCI Options for Interoperability	1	
67	(MORANE) P 38 T 9001	FFIS for GSM-R SIM Cards	4.1		(MORANE) P 38 T 9001	FFIS for GSM-R SIM Cards	4.1	
68	ETSI TS 102 610	Railway Telecommunication; GSM; Usage of the UUUE for GSM operation on railways	1.1.0		ETSI TS 102 610	Railway Telecommunication; GSM; Usage of the UUUE for GSM operation on railways	1.1.0	
69	(MORANE) F 10 T 6002	FFFS for Confirmation of High Priority Calls'	4		(MORANE) F 10 T 6002	FFFS for Confirmation of High Priority Calls'	4	
70	(MORANE) F 12 T 6002	FIS for Confirmation of High Priority Calls	4		(MORANE) F 12 T 6002	FIS for Confirmation of High Priority Calls	4	
71	(MORANE) E 10 T 6001	FFFS for Functional Addressing	4		(MORANE) E 10 T 6001	FFFS for Functional Addressing	4	
72	(MORANE) E 12 T 6001	FIS for Functional Addressing	5.1		(MORANE) E 12 T 6001	FIS for Functional Addressing	5.1	
73	(MORANE) F 10 T 6001	FFFS for Location Dependent Addressing	4		(MORANE) F 10 T 6001	FFFS for Location Dependent Addressing	4	
74	(MORANE) F 12 T 6001	FIS for Location Dependent Addressing	3		(MORANE) F 12 T 6001	FIS for Location Dependent Addressing	3	

Index N	Set of specifications # 1 (ETCS baseline 2 and GSM-R baseline 0)				Set of specifications # 2 (ETCS baseline 3 and GSM-R baseline 0)			
	Reference	Name of Specification	Version	Notes	Reference	Name of Specification	Version	Notes
75	(MORANE) F 10 T 6003	FFFS for Presentation of Functional Numbers to Called and Calling Parties	4		(MORANE) F 10 T 6003	FFFS for Presentation of Functional Numbers to Called and Calling Parties	4	
76	(MORANE) F 12 T 6003	FIS for Presentation of Functional Numbers to Called and Calling Parties	4		(MORANE) F 12 T 6003	FIS for Presentation of Functional Numbers to Called and Calling Parties	4	
77	ERA/ERTMS/ 033281	Interfaces between CCS track-side and other subsystems	1.0		ERA/ERTMS/ 033281	Interfaces between CCS track-side and other subsystems	1.0	
78	Reserved	Safety requirements for ETCS DMI functions			Reserved	Safety requirements for ETCS DMI functions		
79	Not applicable	Not applicable			UNISIG SUBSET-114	KMC-ETCS Entity Off-line KM FIS	1.0.0	
80	Not applicable	Not applicable			Reserved	GSM-R Driver Machine Interface		

Note 1: only the functional description of information to be recorded is mandatory, not the technical characteristics of the interface.

Note 2: the specifications listed in section 2.1 of EN 301 515 are mandatory.

Note 3: the change requests (CRs) listed in table 1 and 2 of TR 102 281 are mandatory.

Table A 3

List of mandatory standards

The standards listed in this table shall be applied in the certification process, without prejudice to chapter 4 and chapter 6 of this TSI.

No	Reference	Document name and comments	Version
A1	EN 50126	Railway applications — The specification and demonstration of reliability, availability, maintainability and safety (RAMS)	1999
A2	EN 50128	Railway applications — Communication, signalling and processing systems — Software for railway control and protection systems	2001
A3	EN 50129	Railway applications — Communication, signalling and processing systems — Safety related electronic systems for signalling	2003
A4	EN 50159-1	Railway applications - Communication, signalling and processing systems – Part 1 Safety related communication in closed transmission systems	2001
A5	EN 50159-2	Railway applications - Communication, signalling and processing systems – Part 2: Safety related communication in open transmission systems	2001"

ANNEX II

“ANNEX G

OPEN POINTS

Open Point	Notes
Braking aspects	It only applies to ERTMS/ETCS Baseline 2 (see Annex A, Table A2, Index 15). Resolved for ERTMS/ETCS Baseline 3 (see Annex A, Table A 2, Indexes 4 and 13).
Index 28 – Reliability/availability requirements	Frequent occurrences of degraded situations caused by failures of control-command and signalling equipment will decrease the system safety.
Minimum wheel diameter for speed greater than 350 km/h	See Annex A, Table A 2, Index 77
Minimum axle distance for speed greater than 350 km/h	See Annex A, Table A 2, Index 77
Metal and inductive components free space between wheels	See Annex A, Table A 2, Index 77 This is not an open point for freight wagons
Characteristics of sand applied to tracks	See Annex A, Table A 2, Index 77
Vehicle metal mass	See Annex A, Table A 2, Index 77
Combination of rolling stock characteristics influencing shunting impedance	See Annex A, Table A 2, Index 77
Electromagnetic interferences (traction current)	See Annex A, Table A 2, Index 77
Electromagnetic interferences (electromagnetic fields)	See Annex A, Table A 2, Index 77 This is not an open point for power systems other than DC
Vehicle Impedance	See Annex A, Table A 2, Index 77
DC and low frequency components of traction current	See Annex A, Table A 2, Index 77
Use of magnetic/eddy current brakes	See Annex A, Table A 2, Index 77
Index 78 - Safety requirements for ETCS DMI functions	This open point is related to the interface between ETCS on-board and the driver, i.e. errors in displaying information and in entering data and commands.”