DEĊIŻJONIJIET

DEĊIŻJONI TAL-KUMMISSJONI (UE) 2015/14

tal-5 ta' Jannar 2015

li temenda d-Deċiżjoni 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(2014) 9909)

(Test b'rilevanza għaż-ŻEE)

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-interoperabilità tas-sistema ferrovjarja fil-Komunità [1], u b'mod partikolari l-Artikolu (6) tagħha,

Billi:

(1) Bid-Deċiżjoni C (2010) 2576 [2], il-Kummissjoni tat lill-Aġenzija Ferrovjarja Ewropea (l-Aġenzija) mandat biex tiżviluppa u tirrevedi l-ispeċifikazzjonijiet tekniċi għall-interoperabbiltà (TSI) bil-għan li testendi l-kamp ta' applikazzjoni tagħhom għas-sistema ferrovjarja kollha fl-Unjoni skont l-Artikolu 1(4) tad-Direttiva 2008/57/KE. Fl-10 ta' Jannar 2013, l-Aġenzija ressqet ir-rakkomandazzjoni tagħha li temenda l-ispeċifikazzjoni teknika għall-interoperabbiltà relatata mas-subsistemi tal-kontroll-kmand u s-sinjalazzjoni tas-sistema ferrovjarja trans-Ewropea.

(2) Skont l-Artikolu 8(4) tad-Direttiva 2008/57/KE dwar l-estensjoni tal-kamp tal-applikazzjoni ta' TSIs, Stat Membru m'għandux japplika t-TSI riveduta fil-każ ta' proġetti fi stat avvanzat ta' żvilupp jew li jkunu suġġetti għal xi kuntratt li jkun qed jitwettaq, li kien barra mill-kamp tal-applikazzjoni tat-TSIs preċedenti.

(3) It-TSI riveduta dwar il-kontroll-kmand u s-sinjalazzjoni (CCS TSI) għandha tapplika għal netwerks b'wisa' nominali ta' bejn il-linji ta' 1 435 mm, 1 520 mm, 1 524 mm, 1 600 mm, and 1 668 mm Dan jipprovdi għall-interoperabilità fi ħdan sistemi b'wisa' waħda (one-track-gauge) u jagħmilha possibbli li jiġu żviluppati u operati vetturi għal wisgħat metriċi multipli. Jagħmilha wkoll possibbli li jiġu żviluppati u użati subsistemi tal-kontroll-kmand u tas-sinjalizzazzjoni u l-kostitwenti tal-interoperabilità indipendentement mill-wisa' bejn il-linji. Perċentwal għoli ta' vetturi jivjaġġaw sew fuq in-netwerk ferrovjarju trans-Ewropew u fuq in-netwerk ferrovjarju li mhuwiex parti mit-TEN. Il-parametri tas-subsistemi tal-kontroll-kmand u tas-sinjalazzjoni abbord u mal-binarji għandhom għalhekk ikunu l-istess għan-netwerk kollu.

(4) Ċerti punti miftuħa relatati mal-kompatibilità tas-sistemi tal-lokalizzazzjoni tal-ferroviji jistgħu jingħalqu, filwaqt li jiġu kkunsidrati r-rekwiżiti għall-qisien standard tal-binarju differenti (speċifikazzjoni referenzjata bħala indiċi 77 fl-Anness A). Il-punt miftuħ dwar ir-rekwiżiti tas-sikurezza għall-funzjoni tal-Interfaċċa ECTS Sewwieq-Magna (DMI) jista' jingħalaq u sar progress biex jiġi ċċarat il-punt miftuħ dwar l-"affidabbiltà/disponibbiltà".

(5) Id-dispożizzjonijiet dwar il-valutazzjoni tal-kostitwenti tal-interoperabilità u tas-subsistemi, fil-każ fejn ir-rekwiżiti huma parzjalment sodisfati, jeħtieġ li jiġu ċċarati.

(6) Fir-rwol ta' awtorità tas-sistema għas-Sistema Ewropea tal-Ġestjoni tat-Traffiku Ferrovjarju (ERTMS), l-Aġenzija ħejjiet aġġornament tal-ispeċifikazzjonijiet ERTMS obbligatorji referenzjati fl-Anness A tat-TSI tas-CCS. Sakemm l-ispeċifikazzjonijiet relatati mal-interfaċċa ferrovjarja (FFFIS) jilħqu, fuq iż-żewġ naħat tal-interfaċċa, livell ta' kunsens fost il-partijiet ikkonċernati kollha biex jitqiesu bħala obbligatorji, l-Aġenzija għandha tirreferi għalihom fil-gwida għall-applikazzjoni sabiex ikunu jistgħu jintużaw fis-sejħa għall-offerti.

[1] ĠU L 191, 18.7.2008, p. 1.

[2] Id-Deċiżjoni tal-Kummissjoni C(2010) 2576 final tad-29 ta' April 2010 dwar mandat lill-Aġenzija Ferrovjarja Ewropea biex tiżviluppa u tirrevedi l-Ispeċifikazzjonijiet Tekniċi tal-Interoperabbiltà bil-għan li testendi l-kamp ta' applikazzjoni tagħhom għas-sistema ferrovjarja kollha tal-Unjoni Ewropea.

(7) L-Aġenzija għandha tippubblika speċifikazzjonijiet tat-testijiet relatati mal-linja bażi 3 malajr kemm jista' jkun.

(8) Instabu żbalji fit-test tad-Deċiżjoni tal-Kummissjoni 2012/88/UE [1] u jeħtieġ li jiġu kkoreġuti.

(9) Id-disponibbiltà u l-kwalità ta' sinjali GSM-R hija essenzjali għall-operazzjonijiet ferrovjarji.

(10) Ir-roaming GSM-R għal netwerks pubbliċi hija funzjoni fakultattiva. Jekk jintuża fi Stat Membru, l-implimentazzjoni tiegħu għandha tkun indikata fil-linja numru 1.1.1.3.3.3 tar-reġistru tal-infrastruttura ferrovjarja skont id-Deċiżjoni ta' Implimentazzjoni tal-Kummissjoni 2014/880/EU [2].

(11) Il-miżuri stipulati f'din id-Deċiżjoni huma konformi mal-opinjoni tal-Kumitat stabbilit skont l-Artikolu 29(1) tad-Direttiva 2008/57/KE,

ADOTTAT DIN ID-DEĊIŻJONI:

Artikolu 1

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

(1) It-titlu jinbidel b'dan li ġej: "**Deċiżjoni tal-Kummissjoni 2012/88/UE tal-25 ta' Jannar 2012 dwar l-ispeċifikazzjoni teknika għall-interoperabbiltà relatata mas-subsistemi tal-kontroll-kmand u s-sinjalazzjoni tas-sistema ferrovjarja trans-Ewropea**"

(2) L-Anness III hu emendat kif ġej:

(a) It-test li ġej jiżdied fl-aħħar tat-Taqsima 1.1:

"Din it-TSI hija applikabbli għal subsistemi tal-kmand tal-kontroll u s-sinjalazzjoni maġenb il-binarji tan-netwerk ferrovjarju definiti fit-Taqsima 1.2. (Geographical scope) ta' din it-TSI u għas-subsistemi tal-kmand tal-kontroll u s-sinjalazzjoni abbord il-vetturi li huma (jew maħsuba li jiġu) mħaddma fuqu. Dawn il-vetturi huma ta' wieħed mit-tipi li ġejjin (kif definit fl-Anness I, taqsimiet 1.2. u 2.2. tad-Direttiva 2008/57/KE):

(1) ferroviji b'awtopropulsjoni termali jew elettrika;

(2) unitajiet tal-ġbid termali jew elettriċi;

(3) vaguni tal-passiġġieri, jekk mgħammra b'kabina tas-sewqan;

(4) tagħmir mobbli għall-bini u l-manutenzjoni ta' infrastruttura ferrovjarja, jekk mgħammar b'kabina tas-sewqan u maħsub biex jintuża f'mod ta' trasport fuq ir-roti tiegħu stess.";

(b) It-test tat-Taqsima 1.2 huwa sostitwit b'dan li ġej:

"the geographical scope of this TSI is the network of the whole rail system, composed of:

(1) the trans-European conventional rail system network (TEN) as described in Annex I section 1.1 'Network' of Directive 2008/57/KE;

(2) the trans-European high-speed rail system network (TEN) as described in Annex I section 2.1 'Network' of Directive 2008/57/KE;

(3) other parts of the network of the whole rail system, following the extension of scope as described in Annex I section 4 of Directive 2008/57/KE.

and excludes the cases referred to in Article 1(3) of Directive 2008/57/KE.

The TSI shall apply to networks with 1 435 mm, 1 520 mm, 1 524 mm, 1 600 mm and 1 668 mm track gauges. However, it shall not apply to short border crossing lines with 1 520 mm track gauges that are connected to the network of third countries";

(c) It-test tal-ħames paragrafu tat-Taqsima 2.2 qiegħed jiġi mibdul b'dan li ġej:

"Class B systems for the trans-European rail system network are a limited set of legacy control-command and signalling systems that were in use in the trans- European rail network before 20 April 2001.

[1] Id-Deċiżjoni tal-Kummissjoni 2012/88/KE tal-25 ta' Jannar 2012 dwar l-ispeċifikazzjoni teknika għall-interoperabbiltà relatata mas-subsistema tal-kontroll-kmand u sinjalazzjoni tas-sistema ferrovjarja trans-Ewropea (ĠU L 51, 23.2.2012, p. 1).

[2] Deċiżjoni ta' Implimentazzjoni tal-Kummissjoni 2014/880/UE tas-26 ta' Novembru 2014 dwar l-ispeċifikazzjonijiet komuni tar-reġistru tal-infrastruttura ferrovjarja u li tħassar id-Deċiżjoni ta' Implimentazzjoni 2011/633/UE (ĠU L 356, 12.12.2014, p. 489)

Class B systems for other parts of the network of the rail system in the European Union are a limited set of legacy control-command and signalling systems that were in use in that networks before 1 July 2015.

The list of Class B systems is established in the European Railway Agency technical documents 'List of CCS Class B systems', ERA/TD/2011-11, version 2.0"

(d) Fit-tabella tat-Taqsima 4.1., tiżdied "4.2.1" mal-parametri bażiċi relatati mas-subsistema tal-kmand tal-kontroll u s-sinjalazzjoni maġenb il-binarji, il-parti tal-protezzjoni tal-ferrovija ("train protection") u tiżdied "4.2.1.2" mal-parametri bażiċi relatati mas-subsistema tal-kmand tal-kontroll u s-sinjalazzjoni abbord, il-parti tal-komunikazzjoni bir-radju ("radio communication"), u lis-subsistema tal-kmand tal-kontroll u s-sinjalazzjoni maġenb il-binarji, il-parti tal-komunikazzjoni bir-radju ("radio communication");

(e) It-test tat-Taqsima 4.2.1.2 hu mibdul bit-test li ġej:

"4.2.1.2 Availability/Reliability

This section refers to the occurrence of failure modes not causing safety hazards but creating degraded situations, the management of which could decrease the overall safety of the system.

In the context of this parameter, 'failure' means the termination of the ability of an item to perform a required function with the required performance and 'failure mode' means the effect by which the failure is observed.

To ensure that the relevant infrastructure managers and railway undertakings are given all the information they need to define appropriate procedures for managing degraded situations, the technical file accompanying the EC declaration of verification for an on-board or track-side CCS subsystem shall contain the calculated availability/reliability values related to failure modes having an impact on the capability of the CCS subsystem to supervise the safe movement of one or more vehicles or to establish radio voice communication between traffic control and the train drivers.

Compliance with the following calculated values shall be ensured:

(1) Mean time of hours of operation between failures of a CCS on-board subsystem requiring the isolation of the train protection functions: [open point];

(2) Mean time of hours of operation between failures of a CCS on-board subsystem preventing radio voice communication between traffic control and the train driver: [open point].

To allow the infrastructure managers and railway undertakings to monitor, during the life of the subsystems, the level of risk and the respect of the reliability/availability values used for the definition of procedures to manage degraded situations, the requirements for maintenance stated in Section 4.5 (Maintenance rules) shall be respected"

(f) It-tieni ringiela tat-tabella fit-Taqsima 4.3.2 "Interface to the rolling stock subsystem" hija emendata kif ġej:

"Electromagnetic compatibility between rolling stock and Control-Command and Signalling track-side equipment	4.2.11	Rolling stock characteristics to be compatible with train detection systems based on track circuits	HS RS TSI LOC & PAS TSI Wagon TSI	4.2.6.6.1 4.2.3.3.1.1 None
		Rolling stock characteristics to be compatible with train detection systems based on axle counters	HS RS TSI LOC & PAS TSI Wagon TSI	4.2.6.6.1 4.2.3.3.1.2 None"

(g) It-test li ġej jiżdied fl-aħħar tat-Taqsima 6.1.1.:

"With regard to checking if essential requirements are fulfilled through compliance with the basic parameters, and without prejudice to the obligations set out in Chapter 7 of this TSI, control-command and signalling interoperability constituents and subsystems that do not implement all functions, performance and interfaces as

specified in Chapter 4 (including the specifications referred to in Annex A), can obtain EC certificates of conformity or, respectively, EC certificates of verification, under the following conditions for issuing and using the certificates:

(1) The applicant for EC verification of a track-side control-command and signalling subsystem is responsible for deciding which functions, performance and interfaces need to be implemented to meet the objectives for the service and to ensure that no requirements contradicting or exceeding the TSIs are exported to the on-board control-command and signalling subsystems;

(2) The operation of an on-board control-command and signalling subsystem, that does not implement all functions, performance and interfaces specified in this TSI, may be subject to conditions or restrictions due to compatibility and/or safe integration with track-side control-command and signalling subsystems. Without prejudice to the tasks of a notified body described in respective EU legislation and related documents, the applicant for EC verification is responsible for ensuring that the technical file provides all the information that an operator needs to identify such conditions and restrictions;

(3) The Member State may refuse for duly justified reasons the authorisation for placing in service, or place conditions and restrictions on the operation, of control-command and signalling subsystems that do not implement all functions, performance and interfaces specified in this TSI.

If some essential requirements are fulfilled by national rules or if a control-command and signalling interoperability constituent or subsystem does not implement all functions, performance and interfaces specified in this TSI, the provisions of section 6.4.2 shall apply."

(h) It-test tat-tielet paragrafu tat-Taqsima 6.1.2 huwa emendat kif ġej: fis-subparagrafu 2 "See Annex A 4.2.2c" titħassar u fis-subparagrafu 3 "unless otherwise specified in Annex A 4.2.2c" titħassar.

(i) It-test tat-Taqsima 6.4 huwa sostitwit b'dan li ġej:

"6.4 **Provisions in case of the partial fulfilment TSI requirements**

6.4.1 *Assessment of parts of control-command and signalling subsystems*

Pursuant to Article 18(5) of the Railway Interoperability Directive, the notified body may issue certificates of verification for certain parts of a subsystem, if allowed to do so under the relevant TSI.

As pointed out in section 2.2 (Scope) of this TSI, the track-side control-command and signalling subsystem contains three parts, while the on-board control-command and signalling subsystem contains two parts, specified in section 4.1 (Introduction).

A certificate of verification may be issued for each part specified in this TSI; the notified body only checks if that particular part fulfils the TSI requirements.

Regardless of which module is chosen, the notified body shall check that:

(1) the TSI requirements for the part in question have been fulfilled and

(2) the TSI requirements already assessed for other parts of the same subsystem are still fulfilled.

6.4.2 *Control-command and signalling subsystems' partial fulfilment of the requirements due to limited application of the TSI.*

If some essential requirements are fulfilled by national rules, the EC certificate of conformity for an interoperability constituent and the EC certificate of verification for a subsystem shall make precise reference to the parts of this TSI whose conformity has been assessed and the parts whose conformity has not been assessed.

If an interoperability constituent does not implement all functions, performance and interfaces specified in this TSI, an EC certificate of conformity may only be issued if the unimplemented functions, interfaces or performance are not required to integrate the interoperability constituent into a subsystem for the use indicated by the applicant, for example (*),

(a) the on-board ERTMS/ETCS interface to STM if the interoperability constituent is intended for installation on vehicles in which no external STM is needed,

(b) the RBC interface to other RBCs, if the RBC is intended for use in an application for which no neighbouring RBCs are planned.

The EC certificate of conformity (or accompanying documents) for the interoperability constituent shall fulfil all the following requirements:

(a) it indicates which functions, interfaces or performance are not implemented,

(b) it provides enough information to make it possible to identify the conditions under which the interoperability constituent can be used,

(c) it provides enough information to make it possible to identify the conditions of and restriction on the use that will apply to the interoperability of a subsystem incorporating it.

If a control-command and signalling subsystem does not implement all functions, performance and interfaces of this TSI (e.g. because they are not implemented by an interoperability constituent integrated into it), the EC certificate of verification shall indicate which requirements have been assessed and the corresponding conditions and restrictions on the use of the subsystem and its compatibility with other subsystems.

In any event, notified bodies shall coordinate with the Agency the way in which conditions and limits of use of interoperability constituents and subsystems are managed in the relevant certificates and technical files in the working group set up under Article 21a (5) of Regulation (EC) No 881/2004 of the European Parliament and of the Council (**).

6.4.3 *Intermediate Statement of Verification.*

If conformity is assessed for parts of subsystems specified by the applicant and different from the parts allowed by section 4.1 (Introduction) of this TSI, or if only certain stages of the verification procedure have been performed, only an intermediate statement of verification may be issued.

(*) The procedures described in this Chapter do not prejudice the possibility of grouping constituents together.

(**) Regulation (EC) No 881/2004 of the European Parliament and of the Council of 29 April 2004 establishing a European Railway Agency (Agency Regulation) (OJ L 164, 30.4.2004, p. 1).”

(j) Fit-Taqsima 7.2.9.3, jiżdiedu r-ringieli li ġejjin fl-aħħar tat-tabella::

“4.2.10 Track-side Train Detection Systems Index 77, Section 3.1.3.1: The minimum wheel rim width (B_R) for 1 600 mm track gauge network is 127 mm	T3	Applicable in North Ireland
4.2.10 Track-side Train Detection Systems Index 77, Section 3.1.3.3: The minimum flange thickness (S_d) for 1 600 mm track gauge network is 24 mm	T3	Applicable in North Ireland”

(k) It-titolu tat-Taqsima 7.2.9.6 huwa mibdul b’ “‘Lithuania, Latvia and Estonia”

(l) It-tabella fit-taqsima 7.2.9.6 hija mibdula b’dan li ġej:

Specific case	Category	Notes
“4.2.10 Track-side Train Detection Systems Index 77, Section 3.1.3.3: The minimum flange thickness (S_d) for 1 520 mm track gauge network is 20 mm	T3	This specific case is needed as long as ČME locomotives operate on 1 520 mm network

Specific case	Category	Notes
4.2.10 Track-side Train Detection Systems Index 77, Section 3.1.3.4: The minimum flange height (S_h) for 1 520 mm track gauge network is 26,25 mm	T3	This specific case is needed as long as ČME locomotives operate on 1 520 mm network"

(m) Fit-Taqsima 7.2.9.7, "index 65" hija mibdula bi "index 33";

(n) It-test tat-Taqsima 7.3.3. huwa mibdul b'li ġej:

"7.3.3. *ERTMS on-board implementation*

7.3.3.1. New vehicles

New vehicles authorised to be placed in service for the first time shall be equipped with ERTMS in line either with the set of specifications #1 or the set of specifications #2 listed in Table A2 of Annex A.

From 1 January 2018, new vehicles authorised to be placed in service for the first time shall be equipped with ERTMS only in line with the set of specifications # 2 listed in Table A2 of Annex A.

The requirement to be equipped with ERTMS does not apply to new mobile railway infrastructure construction and maintenance equipment, new shunting locomotives or other new vehicles not intended for high speed service, if they are intended exclusively for national service operated outside the corridors defined in section 7.3.4 and outside the lines ensuring the connections to the main European ports, marshalling yards, freight terminals and freight transport areas defined in section 7.3.5., or if they are intended for off-TEN cross-border service, i.e. service until the first station in the neighbouring country or to the first station where there are connections further in the neighbouring country.

7.3.3.2. Upgrading and renewal of existing vehicles

It is mandatory to fit ERTMS/ETCS on-board existing vehicles if installing any new train protection part of a control-command and signalling on-board subsystem on existing vehicles intended for high-speed service

7.3.3.3. Additional requirements

Member States may introduce additional requirements at national level, in particular with a view to

(1) allowing only ERTMS-equipped vehicles to access ERTMS-equipped lines, so that existing national systems can be decommissioned;

(2) requesting that new and upgraded or renewed mobile railway infrastructure construction and maintenance equipment, shunting locomotives and/or other vehicles, even if intended exclusively for national service, be equipped with ERTMS."

(o) L-Anness A jiġi emendat b'konformità mal-Anness ta' din id-Deċiżjoni;

(p) It-tabella fl-Anness G hija emendata kif ġej:

(1) Il-linja relatata ma' "Vehicle metal mass" titħassar;

(2) Il-linja relatata ma' "DC and low frequency components of traction current" titħassar;

(3) Il-linja relatata ma' "safety requirements for ETCS DMI functions" titħassar.

Artikolu 2

L-Artikolu li ġej jiżdied mad-Deċiżjoni 2012/88/UE:

"Artikolu 7a

1. Sal-1 ta' Lulju 2015, l-Aġenzija Ferrovjarja Ewropea għandha tippubblika l-ispeċifikazzjonijiet obbligatorji msemmija fit-Tabella A2 tal-Anness A għal din id-Deċiżjoni, fl-Indiċi 37b u 37c, kolonna 'Set of specifications # 2'.

Qabel il-pubblikazzjoni tagħhom, għandha tibgħat lill-Kummissjoni opinjoni teknika dwar l-inklużjoni ta' dawn id-dokumenti fit-Tabella A2 tal-Anness A għal din id-Deċiżjoni, b'referenza, l-isem u l-verżjoni. Il-Kummissjoni għandha tgħarraf skont dan lill-Kumitat stabbilit skont l-Artikolu 29 tad-Direttiva 2008/57/KE.

2. L-Aġenzija Ferrovjarja Ewropea għandha tippubblika l-ispeċifikazzjonijiet relatati mal-interfaċċa tal-ferroviji (FFFIS — Form Fit Functional Interface Specification — Indiċi 81 u 82 tat-Tabella A2 tal-Anness A għal din id-Deċiżjoni) meta tqis li huma maturi. L-Aġenzija Ferrovjarja Ewropea għandha tirrapporta regolarment dwar l-istima ta' din il-maturità lill-Kumitat stabbilit taħt l-Artikolu 29 tad-Direttiva 2008/57/KE. Qabel il-pubblikazzjoni tagħhom, għandha tibgħat lill-Kummissjoni opinjoni teknika dwar l-inklużjoni ta' dawn id-dokumenti fit-Tabella A2 tal-Anness A għal din id-Deċiżjoni, b'referenza, l-isem u l-verżjoni. Il-Kummissjoni għandha tgħarraf skont dan lill-Kumitat stabbilit skont l-Artikolu 29 tad-Direttiva 2008/57/KE."

Artikolu 3

Din id-Deċiżjoni għandha tapplika mill-1 ta' Lulju 2015.

Din id-Deċiżjoni hija indirizzata lill-Istati Membri u lill-Aġenzija Ferrovjarja Ewropea.

Magħmul fi Brussell, il-5 ta' Jannar 2015.

Għall-Kummissjoni

Violeta BULC

Membru tal-Kummissjoni

ANNESS

Annex A to Decision 2012/88/EU is amended as follows:

(1) The following line is deleted in Table A1:

"4.2.1 b	28"

(2) The following line in Table A1 is modified as follows:

"4.2.2.f	7, 81, 82"

(3) Table A2 is replaced by the following table and related notes:

"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 requirement specification	5.0		Intentionally deleted			
2	Intentionally deleted				Intentionally deleted			
3	SUBSET-023	Glossary of Terms and Abbreviations	2.0.0		SUBSET-023	Glossary of Terms and Abbreviations	3.1.0	
4	SUBSET-026	System Requirements Specification	2.3.0		SUBSET-026	System Requirements Specification	3.4.0	
5	SUBSET-027	FFFIS Juridical recorder-downloading tool	2.3.0	Note 1	SUBSET-027	FIS Juridical Recording	3.1.0	
6	SUBSET-033	FIS for man-machine interface	2.0.0		ERA_ERTMS_015560	ETCS Driver Machine interface	3.4.0	
7	SUBSET-034	FIS for the train interface	2.0.0		SUBSET-034	Train Interface FIS	3.1.0	
8	SUBSET-035	Specific Transmission Module FFFIS	2.1.1		SUBSET-035	Specific Transmission Module FFFIS	3.1.0	
9	SUBSET-036	FFFIS for Eurobalise	2.4.1		SUBSET-036	FFFIS for Eurobalise	3.0.0	
10	SUBSET-037	EuroRadio FIS	2.3.0		SUBSET-037	EuroRadio FIS	3.1.0	
11	SUBSET-038	Offline key management FIS	2.3.0		SUBSET-038	Offline key management FIS	3.0.0	
12	SUBSET-039	FIS for the RBC/RBC handover	2.3.0		SUBSET-039	FIS for the RBC/RBC handover	3.1.0	

"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
13	SUBSET-040	Dimensioning and Engineering rules	2.3.0		SUBSET-040	Dimensioning and Engineering rules	3.3.0	
14	SUBSET-041	Performance Requirements for Interoperability	2.1.0		SUBSET-041	Performance Requirements for Interoperability	3.1.0	
15	SUBSET-108	Interoperability related consolidation on TSI Annex A documents	1.2.0		Intentionally deleted			
16	SUBSET-044	FFFIS for Euroloop	2.3.0		SUBSET-044	FFFIS for Euroloop	2.4.0	
17	Intentionally deleted				Intentionally deleted			
18	SUBSET-046	Radio infill FFFS	2.0.0		Intentionally deleted			
19	SUBSET-047	Trackside-Trainborne FIS for Radio infill	2.0.0		SUBSET-047	Trackside-Trainborne FIS for Radio infill	3.0.0	
20	SUBSET-048	Trainborne FFFIS for Radio infill	2.0.0		SUBSET-048	Trainborne FFFIS for Radio infill	3.0.0	
21	SUBSET-049	Radio infill FIS with LEU/interlocking	2.0.0		Intentionally deleted			
22	Intentionally deleted				Intentionally deleted			
23	SUBSET-054	Responsibilities and rules for the assignment of values to ETCS variables	2.1.0		SUBSET-054	Responsibilities and rules for the assignment of values to ETCS variables	3.0.0	
24	Intentionally deleted				Intentionally deleted			
25	SUBSET-056	STM FFFIS Safe time layer	2.2.0		SUBSET-056	STM FFFIS Safe time layer	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
26	SUBSET-057	STM FFFIS Safe link layer	2.2.0		SUBSET-057	STM FFFIS Safe link layer	3.0.0	
27	SUBSET-091	Safety Requirements for the Technical Interoperability of ETCS in Levels 1 and 2	2.5.0		SUBSET-091	Safety Requirements for the Technical Interoperability of ETCS in Levels 1 and 2	3.3.0	
28	Intentionally deleted			Note 8	Intentionally deleted			Note 8
29	SUBSET-102	Test specification for interface 'K'	1.0.0		SUBSET-102	Test specification for interface 'K'	2.0.0	
30	Intentionally deleted				Intentionally deleted			
31	SUBSET-094	Functional requirements for an onboard reference test facility	2.0.2		SUBSET-094	Functional requirements for an onboard reference test facility	3.0.0	
32	EIRENE FRS	GSM-R Functional requirements specification	7.4.0	Note 10	EIRENE FRS	GSM-R Functional requirements specification	7.4.0	Note 10
33	EIRENE SRS	GSM-R System requirements specification	15.4.0	Note 10	EIRENE SRS	GSM-R System requirements specification	15.4.0	Note 10
34	A11T6001	(MORANE) Radio Transmission FFFIS for EuroRadio	12.4		A11T6001	(MORANE) Radio Transmission FFFIS for EuroRadio	12.4	
35	Intentionally deleted				Intentionally deleted			
36 a	Intentionally deleted				Intentionally deleted			
36 b	Intentionally deleted				Intentionally deleted			
36 c	SUBSET-074-2	FFFIS STM Test cases document	1.0.0		SUBSET-074-2	FFFIS STM Test cases document	3.0.0	
37 a	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
37 b	SUBSET-076-5-2	Test cases related to features	2.3.3		SUBSET-076-5-2	Test cases related to features		Note 11
37 c	SUBSET-076-6-3	Test sequences	2.3.3		Reserved	Test sequences generation: methodology and rules		Note 11
37 d	SUBSET-076-7	Scope of the test specifications	1.0.2		SUBSET-076-7	Scope of the test specifications	3.0.0	
37 e	Intentionally deleted				Intentionally deleted			
38	06E068	ETCS Markerboard definition	2.0		06E068	ETCS Markerboard definition	2.0	
39	SUBSET-092-1	ERTMS EuroRadio Conformance Requirements	2.3.0		SUBSET-092-1	ERTMS EuroRadio Conformance Requirements	3.0.0	
40	SUBSET-092-2	ERTMS EuroRadio test cases safety layer	2.3.0		SUBSET-092-2	ERTMS EuroRadio test cases safety layer	3.0.0	
41	Intentionally deleted				Intentionally deleted			
42	Intentionally deleted				Intentionally deleted			
43	SUBSET 085	Test specification for Eurobalise FFFIS	2.2.2		SUBSET 085	Test specification for Eurobalise FFFIS	3.0.0	
44	Intentionally deleted				Intentionally deleted			Note 9
45	SUBSET-101	Interface 'K' Specification	1.0.0		SUBSET-101	Interface 'K' Specification	2.0.0	
46	SUBSET-100	Interface 'G' Specification	1.0.1		SUBSET-100	Interface 'G' Specification	2.0.0	
47	Intentionally deleted				Intentionally deleted			
48	Reserved	Test specification for mobile equipment GSM-R		Note 4	Reserved	Test specification for mobile equipment GSM-R		Note 4
49	SUBSET-059	Performance requirements for STM	2.1.1		SUBSET-059	Performance requirements for STM	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
50	SUBSET-103	Test specification for Euroloop	1.0.0		SUBSET-103	Test specification for Euroloop	1.1.0	
51	Reserved	Ergonomic aspects of the DMI			Intentionally deleted			
52	SUBSET-058	FFFIS STM Application layer	2.1.1		SUBSET-058	FFFIS STM Application layer	3.1.0	
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				SUBSET-104	ETCS System Version Management	3.2.0	
61	Intentionally deleted				Intentionally deleted			
62	Reserved	RBC-RBC Test specification for safe communication interface			Intentionally deleted			
63	SUBSET-098	RBC-RBC Safe Communication Interface	1.0.0		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	2.3.0	Note 3	TS 102 281	Detailed requirements for GSM operation on railways	2.3.0	Note 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
66	TS 103169	ASCI Options for Interoperability	1.1.1		TS 103169	ASCI Options for Interoperability	1.1.1	
67	(MORANE) P 38 T 9001	FFFIS for GSM-R SIM Cards	4.2		(MORANE) P 38 T 9001	FFFIS for GSM-R SIM Cards	4.2	
68	ETSI TS 102 610	Railway Telecommunication; GSM; Usage of the UUIE for GSM operation on railways	1.3.0		ETSI TS 102 610	Railway Telecommunication; GSM; Usage of the UUIE for GSM operation on railways	1.3.0	
69	(MORANE) F 10 T 6002	FFFS for Confirmation of High Priority Calls	5.0		(MORANE) F 10 T 6002	FFFS for Confirmation of High Priority Calls	5.0	
70	(MORANE) F 12 T 6002	FIS for Confirmation of High Priority Calls	5.0		(MORANE) F 12 T 6002	FIS for Confirmation of High Priority Calls	5.0	
71	(MORANE) E 10 T 6001	FFFS for Functional Addressing	4.1		(MORANE) E 10 T 6001	FFFS for Functional Addressing	4.1	
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 T6001	FFFS for Location Dependent Addressing	4		(MORANE) F 10 T6001	FFFS for Location Dependent Addressing	4	
74	(MORANE) F 12 T6001	FIS for Location Dependent Addressing	3		(MORANE) F 12 T6001	FIS for Location Dependent Addressing	3	
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	2.0	Note 7	ERA/ERTMS/033281	Interfaces between CCS track-side and other subsystems	2.0	Note 7

"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
78	Reserved	Safety requirements for ETCS DMI functions			Intentionally deleted			Note 6
79	Not applicable	Not applicable			SUBSET-114	KMC-ETCS Entity Off-line KM FIS	1.0.0	
80	Not applicable	Not applicable			Intentionally deleted			Note 5
81	Not applicable	Not applicable			SUBSET-119	Train Interface FFFIS		Note 12
82	Not applicable	Not applicable			SUBSET-120	FFFIS TI — Safety Analysis		Note 12

Note 1: only the functional description of information to be recorded is mandatory, not the technical characteristics of the interface.
Note 2: the clauses of the specifications listed in section 2.1 of EN 301 515 which are referenced in Index 32 and Index 33 as 'MI' are mandatory.
Note 3: the change requests (CRs) listed in table 1 and 2 of TS 102 281 which affect clauses referenced in Index 32 and Index 33 as 'MI' are mandatory.
Note 4: Index 48 refers only to test cases for GSM-R mobile equipment. It is kept 'reserved' for the time being. The application guide will contain a catalogue of available harmonised test cases for the assessment of mobile equipment and networks, according to the steps indicated in section 6.1.2 of this TSI.
Note 5: the products which are on the market are already tailored to the needs of the RU related to GSM-R Driver Machine Interface and fully interoperable so there is no need for a standard in the TSI CCS.
Note 6: information that was intended for index 78 is now incorporated in Index 27 (SUBSET-091).
Note 7: this document is ETCS and GSM-R baseline independent.
Note 8: the requirements on reliability/availability are now in the TSI (section 4.2.1.2).
Note 9: ERA analysis showed there is no need for a mandatory specification for odometry interface.
Note 10: Only the (MI) requirements are mandated by TSI CCS.
Note 11: Specifications to be managed through a Technical opinion of the European Railway Agency
Note 12: Reference to these specifications will be published in the Application Guide, waiting for clarifications on the rolling stock side of the interface."

(4) Table A 3 is replaced by the following table and a related note.

"No	Reference	Document name and comments	Version	Note
1	EN 50126	Railway applications —The specification and demonstration of reliability, availability, maintainability and safety (RAMS)	1999	1
2	EN 50128	Railway applications — Communication, signalling and processing systems — Software for railway control and protection systems	2011 or 2001	

"No	Reference	Document name and comments	Version	Note
3	EN 50129	Railway applications — Communication, signalling and processing systems — Safety related electronic systems for signalling	2003	1
4	EN 50159	Railway applications — Communication, signalling and processing systems — Safety-related communication in transmission systems	2010	1

Note 1: this standard is harmonised, see Commission Communication in the framework of the implementation of the Directive 2008/57/KE of the European Parliament and of the Council of 17 June 2008 on the interoperability of the rail system within the Community (ĠU C 345, 26.11.2013, p. 3), where also published editorial corrigenda are indicated."