COMMISSION DECISION

of 21 March 2001

on the basic parameters of the command-control and signalling subsystem of the trans-European high-speed rail system referred to as 'ERTMS characteristics' in Annex II(3) to Directive 96/48/EC

(notified under document number C(2001) 746)

(Text with EEA relevance)

(2001/260/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Directive 96/48/EC of 23 July 1996 on the interoperability of the trans-European high-speed rail system [1], and in particular Article 6(1) thereof,

Whereas:

(1) The first stage in developing technical specifications for interoperability (TSIs) is to establish the characteristics of the basic parameters referred to in Article 5(3)(b) of Directive 96/48/EC.

(2) The Committee set up by Directive 96/48/EC has appointed the European Association for Railway Interoperability (AEIF) as the joint representative body in accordance with Article 2(h) of that Directive.

(3) The AEIF has drafted a text that includes definitions and proposals for the basic parameters of the control-command and signalling subsystem referred to in Annex II(3) to Directive 96/48/EC as 'ERTMS [2] characteristics'.

(4) The first objective of this Decision is to guide the technical choices made by authorities responsible for planning, constructing, upgrading and operating the infrastructure and rolling stock to be put into service after the date on which this Decision takes effect, contributing to the operation of the rail system referred to in Directive 96/48/EC.

(5) The second objective of this Decision is to establish a common basis for the elaboration of the TSIs. It does not preclude the need to establish these parameters in the corresponding TSI, which will be adopted in accordance with Article 6(1) of Directive 96/48/EC. These parameters can also be updated as part of the review of the TSIs provided for in Article 6(2) of that Directive.

(6) The measures provided for in this Decision are in accordance with the opinion of the Committee set up by Directive 96/48/EC,

HAS ADOPTED THIS DECISION:

Article 1

The definitions and characteristics to be respected for the basic parameters of the control-command and signalling subsystem of the trans-European high-speed railway system referred to as 'ERTMS characteristics' in Annex II(3) to Directive 96/48/EC are given in the Annex to this Decision.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 21 March 2001.

For the Commission

Loyola DE PALACIO

Vice-President

[1] OJ L 235, 17.9.1996, p. 6.
[2] European Rail Traffic Management System.

ANNEX

ERTMS CHARACTERISTICS

1. DESCRIPTION OF THE PARAMETER

The unifed control/command and signalling subsystem (ERTMS — European rail traffic management system) comprises two elements:

— the control/command and signalling element (ERTMS/ETCS — European rail traffic management system/European train control system) covers both the onboard subsystems and trackside subsystems,

— the radio and telecommunication element (ERTMS/GSM-R — GSM for railways) is based on the standards applied to the public GSM network and also covers both trackside and onboard equiment. GSM-R is based on ETSI standard GSM phase 2+, including GPRS (global packet radio services), extended to railway-specific applications.

2. CHARACTERISTICS TO BE RESPECTED

2.1. ERTMS/ETCS:

The basis for the control-command and signalling subsystem shall be the set of specifications listed hereafter [1]. If necessary, these specifications will be revised after the ERMTS master plan pilot tests; such a revision will be prepared by the AEIF under a change control procedure, then submitted to the Committee as provided in Article 6 of Directive 96/48/EC.

Document name	Reference No	Version No	Mandatory/informative
ERTMS/ETCS functional requirements specification	—	4.29	Mandatory
ERTMS/ETCS functional statements	99E5362	2.00	Mandatory
ERTMS/ETCS system requirements specification	SUBSET-026	2.0.0	Mandatory
Clarification and amendment specification (*)	SUBSET-055	2.0.0	Mandatory
ERTMS/ETCS SSRS Part 1: system macro functions overview	SUBSET-030	2.0.0	Informative
ERTMS/ETCS SSRS Part 2: Onboard subsystem requirements specification	SUBSET-031	2.0.0	Informative
ERTMS/ETCS SSRS Part 3: trackside subsystem requirements specification	SUBSET-032	2.0.0	Informative
FFFIS for Eurobalise	SUBSET-036	2.0.0	Mandatory
Description for the Euroloop subsystem	SUBSET-050	2.0.0	Informative
FFFS for Euroloop subsystem	SUBSET-043	2.0.0	Mandatory
FFFIS 'A_L' Euroloop subsystem	SUBSET-044	2.0.0	Mandatory
FFFIS 'C_L' Euroloop subsystem	SUBSET-045	2.0.0	Mandatory
Euroradio FIS	SUBSET-037	2.0.0	Mandatory
Transmission of the MSISDN number to the application	037_0022a	29.3.2000	Informative
Version upgrade	037_0023a	29.3.2000	Informative
Euroradio FFFIS class 1 requirements	SUBSET-052	2.0.0	Mandatory

[1] The specifications are available at http://forum.europa.eu.int or from the EC services on request.

Document name	Reference No	Version No	Mandatory/informative
Radio infill FFFS	SUBSET-046	2.0.0	Mandatory
FIS for the man-machine interface	SUBSET-033	2.0.0	Mandatory
FIS for the train interface	SUBSET-034	2.0.0	Mandatory
Trackside-trainborne FIS for radio infill	SUBSET-047	2.0.0	Mandatory
Trainborne FFFIS for radio infill	SUBSET-048	2.0.0	Mandatory
Radio infill FIS with LEU/interlocking	SUBSET-049	2.0.0	Mandatory
Specific transmission module FFFIS	SUBSET-035	2.0.0	Mandatory
STM FFFIS safe time layer	SUBSET-056	2.0.0	Mandatory
STM FFFIS safe link layer	SUBSET-057	2.0.0	Mandatory
FFFIS STM application layer supervision connection	SUBSET-058	0.0.1	Informative
Performance requirements for STMs	SUBSET-059	0.0.6	Informative
Key management FIS	SUBSET-038	2.0.0	Mandatory
FIS key management second phase	SUBSET-051	2.0.0	Informative
Key management migration	SUBSET-060	1.1.1	Informative
FIS for RBC/RBC handover	SUBSET-039	2.0.0	Mandatory
Dimensioning and engineering rules	SUBSET-040	2.0.0	Mandatory
Performance requirements for interoperability	SUBSET-041	2.0.0	Mandatory
FFFIS juridical recorder downloading tool	SUBSET-027	2.0.0	Mandatory
Assignment of values to ETCS variables	SUBSET-054	2.0.0	Mandatory
Glossary of terms and abbreviations	SUBSET-023	2.0.0	Mandatory
Radio transmission FFFIS for Euroradio	A11 T6001 3	3	Mandatory
ERTMS driver machine interface part I ergonomic arrangement of ERTMS/ETCS information	PrEN 50XX6-1	March 2000	Informative
ERTMS driver machine interface part III data entry procedures	PrEN 50XX6-3	March 2000	Informative
ERTMS driver machine interface part IV symbols	PrEN 50XX6-4	March 2000	Informative
ERTMS driver machine interface part V audible information	PrEN 50XX6-5	March 2000	Informative
ERTMS driver machine interface part VI specific transmission modules	PrEN 50XX6-6	March 2000	Informative
RAM requirements (chapter 2 only)	96S126	6	Informative
Environmental conditions	97S066	5	Informative

(*) Including supplementary UNISIG letter of 21 April 2000.

2.2. ERTMS/GSM-R:

The train-ground communication system shall comply with the following list of specifications. If necessary, these specifications will be revised after the ERMTS master-plan pilot tests; such revision will be prepared by the AEIF under a change control procedure, then submitted to the Committee as provided in Article 6(1) of Directive 96/48/EC.

Document	Reference	Version	Status
UIC project Eirene — functional requirements specification	ITA078D017	4.00	Mandatory
UIC project Eirene — system requirements specification	ITA078D018	12.00	Mandatory
Morane FFFIS radio transmission FFFIS for Euroradio	A11 T6001 3	3.00	Mandatory
ERTMS driver machine interface part II Eirene information shown on an integrated ERTMS/Eirene DMI	PrEN 50XX6-2	March 2000	Informative

3. **LIST OF ACRONYMS**

DMI	driver machine interface
ERTMS	European rail traffic management system
FFFIS	form fit function interface specification
FIS	functional interface specification
LEU	lineside electronic unit
MSISDN	mobile subscriber ISDN (integrated services digital network)
RAM	reliability availability maintainability
RBC	radio block centre
SSRS	subsystem requirements specification
STM	specific transmission module