ICS 33.160.40 SLOVENSKÁ TECHNICKÁ NORMA Október 2015

STN	**Špecifikácia rádiového dátového systému (RDS) pre rozhlasové vysielanie VHF/FM vo frekvenčnom pásme od 87,5 MHz do 108,0 MHz.**	**STN EN 62106** 36 7050

Specification of the radio data system (RDS) for VHF/FM sound broadcasting in the frequency range from 87,5 MHz to 108,0 MHz

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 09/15

Obsahuje: EN 62106:2015, IEC 62106:2015

Oznámením tejto normy sa od 04.05.2018 ruší
STN EN 62106 (36 7050) z júna 2010

121584

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 62106

May 2015

ICS 33.160.40

Supersedes EN 62106:2009

English Version

Specification of the radio data system (RDS) for VHF/FM sound broadcasting in the frequency range from 87,5 MHz to 108,0 MHz (IEC 62106:2015)

Spécification du système de radiodiffusion de données (RDS) pour la radiodiffusion sonore VHF/FM dans la bande de fréquences de 87,5 MHz à 108,0 MHz (IEC 62106:2015)

Spezifikation des Radio-Daten-Systems (RDS) für den VHF/FM-Tonrundfunk im Frequenzbereich 87,5 MHz bis 108,0 MHz (IEC 62106:2015)

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 62106:2015 E

Foreword

The text of document 100/2122A/CDV, future edition 3 of IEC 62106, prepared by Technical Area 1 "Terminals for audio, video and data services and contents" of IEC/TC 100 "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62106:2015.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2016-02-04
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2018-05-04

This document supersedes EN 62106:2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 62106:2015 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated :

IEC 62634	NOTE	Harmonized as EN 62634.
ISO 3166 Series	NOTE	Only Part 1 harmonized as EN ISO 3166-1.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu

Publication	Year	Title	EN/HD	Year
ISO/IEC 10646	2014	Information technology - Universal Coded Character Set (UCS)	-	-
ISO 14819	Series	Intelligent transport systems - Traffic and travel information messages via traffic message coding	EN ISO 14819	Series
ITU-R Recommendation BS.450-3	-	Transmission standards for FM sound broadcasting at VHF	-	-
ITU-R Recommendation BS.643-3	-	Radio data system for automatic tuning and other applications in FM radio receivers for use with pilot-tone system	-	-
ITU-T Recommendation E.212	-	The international identification plan for public networks and subscriptions: For the three digit Mobile Country Codes used in Annex M of this RDS specification refer to Complement to ITU-T Rec. E.212 (05/2004) published by ITU Geneva as Annex to ITU Operational Bulletin 897, dated 2007-12-01	-	-
US NRSC-4-B		National Radio Systems Committee - NRSC-4-A: United States RBDS standard		
ETSI EN 301 700	-	Digital Audio Broadcasting (DAB);VHF/FM Broadcasting: cross-referencing to simulcast DAB services by RDS-ODA 147	-	-

IEC 62106

Edition 3.0 2015-03

INTERNATIONAL STANDARD

Specification of the radio data system (RDS) for VHF/FM sound broadcasting in the frequency range from 87,5 MHz to 108,0 MHz

IEC 62106:2015-03(en)

IEC Central Office
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

IEC 62106

Edition 3.0 2015-03

INTERNATIONAL STANDARD

Specification of the radio data system (RDS) for VHF/FM sound broadcasting in the frequency range from 87,5 MHz to 108,0 MHz

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 33.160.40

ISBN 978-2-8322-2544-8

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

_____

SPECIFICATION OF THE RADIO DATA SYSTEM (RDS) FOR VHF/FM SOUND BROADCASTING IN THE FREQUENCY RANGE FROM 87,5 MHz TO 108,0 MHz

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
6) All users should ensure that they have the latest edition of this publication.
7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62106 has been prepared by technical area 1: Terminals for audio, video and data services and contents, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

This third edition cancels and replaces the second edition, published in 2009 and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- for the RDS feature EON and the use of group types 14A and 14B some additional explanations were added;
- in Annex E, containing the character code tables to be used in RDS, the explanation for Table E.1 and Table E.2 was extended;
- several small typing errors were corrected;
- to Enhanced RadioText in Annex Q an additional explanation was added.

The text of this standard is based on the following documents:

CDV	Report on voting
100/2122A/CDV	100/2418/RVC

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.[1]

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

[1] For technical reasons equations and some figures had to be left unchanged and are not in accordance with the ISO/IEC Directives, Part 2:2011.

INTRODUCTION

IEC 62106:2000 (first edition) and IEC 62106:2009 (second edition) have the same main text and annex structure. However, the main text of this edition is slightly restructured to more closely conform to ISO/IEC Directives, Part 2:2011. Nevertheless, cross-referencing between this edition and the previous editions remains possible. To find the corresponding subclause quickly between this edition and the first edition, it is basically sufficient to subtract 3 clauses. Example: see 3.1.5.1 in the first edition, published in 2000 becomes, see 6.1.5.1.

SPECIFICATION OF THE RADIO DATA SYSTEM (RDS) FOR VHF/FM SOUND BROADCASTING IN THE FREQUENCY RANGE FROM 87,5 MHz TO 108,0 MHz

1 Scope

This International Standard describes the Radio Data System, RDS, intended for application to VHF/FM sound broadcasts in the range 87,5 MHz to 108,0 MHz which may carry either stereophonic (pilot-tone system) or monophonic programmes (as stated in ITU-R Recommendation BS 450-3 and ITU-R Recommendation BS.643-3). The main objectives of RDS are to enable improved functionality for FM receivers and to make them more user-friendly by using features such as Programme Identification, Programme Service name display and, where applicable, automatic tuning for portable and car radios, in particular. The relevant basic tuning and switching information therefore has to be implemented by the type 0 group (see 6.1.5.1), and it is not optional unlike many of the other possible features in RDS.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 10646:2014, *Information technology – Universal Coded Character Set (UCS)*

ISO 14819 (all parts), *Intelligent transport systems – Traffic and travel information messages via traffic message coding*

ITU-R Recommendation BS.450-3, *Transmission standards for FM sound broadcasting at VHF*

ITU-R Recommendation BS.643-3, *Radio data system for automatic tuning and other applications in FM radio receivers for use with pilot-tone system*

ITU-T Recommendation E.212, *For the three digit Mobile Country Codes used in Annex M of this RDS specification refer to Complement to ITU-T Rec. E.212 (05/2004) published by ITU Geneva as Annex to ITU Operational Bulletin 897, dated 2007-12-01*

US NRSC-4-B, *National Radio Systems Committee – NRSC-4-A: United States RBDS standard*

ETSI EN 301 700, *Digital Audio Broadcasting (DAB); VHF/FM broadcasting: cross referencing to simulcast DAB services by RDS-ODA 147*