

**Digital living network alliance (DLNA) home networked
device interoperability guidelines - Part 4: DRM
interoperability solutions (TA9)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 62481-4:2014 sisaldab Euroopa standardi EN 62481-4:2014 inglisekeelset teksti.	This Estonian standard EVS-EN 62481-4:2014 consists of the English text of the European standard EN 62481-4:2014.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 16.05.2014.	Date of Availability of the European standard is 16.05.2014.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 33.160, 35.100.05, 35.110

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Aru 10, 10317 Tallinn, Eesti; www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:
Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

ICS 33.160; 35.100.05; 35.110

English Version

Digital living network alliance (DLNA) home networked device
interoperability guidelines - Part 4: DRM interoperability solutions
(TA9)
(IEC 62481-4:2014)

Directives d'Interopérabilité des dispositifs de réseau
domestique DLNA (DIGITAL LIVING NETWORK
ALLIANCE) - Partie 4: Solutions d'interopérabilité de
gestion des droits numériques
(CEI 62481-4:2014)

Digital living network alliance (DLNA) Interoperabilitäts-
Richtlinien für Geräte im Heimnetzwerk - Teil 4: Digitale
Rechte Management (DRM) Interoperabilitätslösungen
(IEC 62481-4:2014)

This European Standard was approved by CENELEC on 2014-04-10. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

Foreword

The text of document 100/2250/FDIS, future edition 1 of IEC 62481-4, prepared by technical area 9, "Audio, video and multimedia applications for end-user network", 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 62481-4:2014.

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) 2015-01-10
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-04-10

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 62481-4:2014 was approved by CENELEC as a European Standard without any modification.

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62481-1	2013	Digital living network alliance (DLNA) home networked device interoperability guidelines -- Part 1: Architecture and protocols	EN 62481-1	2014
IEC 62481-2	2013	Digital living network alliance (DLNA) home networked device interoperability guidelines -- Part 2: DLNA media formats	EN 62481-2	2014
IEC 62481-3	2013	Digital living network alliance (DLNA) home networked device interoperability guidelines -- Part 3: Link protection	EN 62481-3	2014
ISO/IEC 29341-3-12	-	Information technology -- UPnP Device Architecture -- Part 3-12: Audio Video Device Control Protocol - Content Directory Service	-	-
DTCP Adopter Agreement	-	Digital Transmission Content Protection License Agreement	-	-
DTCP Volume 1 Supplement E	-	Mapping DCTP to IP	-	-
DTCP Volume 1	-	Digital transmission content protection specification	-	-

CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references	6
3 Terms, definitions and abbreviated terms	7
3.1 Terms and definitions	7
3.2 Abbreviated terms	7
3.3 Conventions	7
4 Networking architecture, device models and guideline conventions	7
4.1 DLNA home networking architecture.....	7
4.2 DLNA device model.....	7
4.3 Guideline terminology and conventions	8
5 Guideline requirements.....	8
5.1 General	8
5.2 Common DRM interoperability guidelines	8
5.2.1 General	8
5.2.2 Media management – MM/CP additional MM flags-param (flags parameter).....	8
5.2.3 DRM interoperability technology guidelines requirements – DTCP-IP DIS support	9
5.3 DTCP-IP DIS guidelines	9
5.3.1 General	9
5.3.2 Media management	9
5.3.3 Media Transport	11
5.3.4 DTCP profiling guidelines	14
5.3.5 DTCP-IP DIS requirements	15
Annex A (informative) DTCP-IP DIS behaviour explanations.....	19
Figure A.1 – Overview of DTCP-IP DIS Behavior	19
Figure A.2 – Example of Download Copy sequence	20
Figure A.3 – Example of Download Move sequence.....	21
Figure A.4 – Example of Upload Copy sequence.....	22
Figure A.5 – Example of Upload Move sequence	24

INTRODUCTION

Consumers are acquiring, viewing, and managing an increasing amount of digital media (photos, music, and video) on devices in the Consumer Electronics (CE), mobile, and Personal Computer (PC) domains. As such, they want to conveniently enjoy the content, regardless of the source, across different devices and locations in the home. The digital home vision integrates the Internet, mobile, and broadcast networks through a seamless, interoperable network, which will provide a unique opportunity for manufacturers and consumers alike. In order to cater for this need, a common set of industry design guidelines is needed that allows vendors to participate in a growing marketplace, leading to more innovation, simplicity, and value for consumers. This International Standard serves that purpose and provides vendors with the information needed to build interoperable networked platforms and devices for the digital home.