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# TECHNICAL REPORT

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## Multimedia home server systems – Relationship between the content usage contract and the digital rights permission code

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

# MULTIMEDIA HOME SERVER SYSTEMS – RELATIONSHIP BETWEEN THE CONTENT USAGE CONTRACT AND THE DIGITAL RIGHTS PERMISSION CODE

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IEC/TR 62865, which is a technical report, has been prepared by technical area 8: Multimedia home server systems, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

The text of this technical report is based on the following documents:

| Enquiry draft | Report on voting |
|---|---|
| 100/2133/DTR | 100/2173/RVC |

Full information on the voting for the approval of this technical report 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.

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

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# INTRODUCTION

## Background

IEC 62227, which was published as an International Standard in 2008, provides technical specifications for encoding permission information by which rights holders grant consumers permission to use digital content in the field of digital content distribution. Since IEC 62227's publication, remarkable technological progress in this field has paved the way for new forms of content usage, such as content consumption using cloud technology and content sharing on social networks.

Given the ongoing technical evolution, TC 100, technical area 8, has been working on the second edition of IEC 62227 by taking into account the new modes of usage in this new edition.

For this task, in addition to the new modes of usage, separate reviews were carried out as to the relationship between the digital rights permission code (DRPC, the underlying technical specifications that were defined in IEC 62227) and the content usage contract, in order to identify items that should be reflected in the second edition. The content usage contract, which is made between the content rights holder(s) and the content users, serves as the basis for the contents of DRPC. It was concluded that the findings should be summarized as a Technical Report, i.e. this report.

At the same time, because few guiding material on IEC 62227 is available for the content rights holders who, in practice, grant permission by means of a Digital Rights Permission Code, this Technical Report has been prepared for these rights holders. This report starts therefore by referring to the content usage contract, with which they are familiar, followed by a discussion of its relationship with IEC 62227:2008.

Readers who are engineers may find this Technical Report lengthy, because it contains an explanation of the content usage contract in addition to technical descriptions.

## Overview

IEC 62227, which defines the DRPC system, is structured in such a way that the information required by engineers who are familiar with how permission information is coded can easily access it.

However, the present DRPC does not cover the entire content usage contract that stands behind usage permission conditions, because it focuses on encoding the usage permission conditions as the minimum requirement for the management of content usage on devices. Accordingly, DRPC does not encompass some stipulatory items (e.g., disclaimers, content guarantee, descriptions about confidentiality and cancellation, matters for consultation, applicable laws, etc.) that will be dealt with not by the devices but by the content providers and/or content users themselves.

On the other hand, people working on the frontlines of the content distribution business are faced with daily challenges, including taking countermeasures against illegal distribution of digital content, apportioning royalties among rights holders, and the like. It is fair to say that the above-mentioned content usage contract alone is neither sufficient to eradicate unauthorized distribution of content nor helpful in simplifying apportioning processes.

This Technical Report discusses content usage contracts that are actually used and shows how DRPC can be applied to them. In doing so, it clarifies the relationship between the content usage contract and DRPC and as such it can serve as a guide to solving the above-mentioned challenges.

This Technical Report also presents a guide to possible applications of DRPC to the management of content usage permission in real business fields, aiming at people engaged in the management of permission, including those working in the information processing sector

and in the legal arena, as well as engineers engaged in the generation and management of DRPC.

At the same time, this Technical Report seeks to improve convenience for people involved in any way in content usage permission by making DRPC-assisted management of usage permission more real life oriented, based on discussion of conditions that IEC 62227 lacks.

# MULTIMEDIA HOME SERVER SYSTEMS – RELATIONSHIP BETWEEN THE CONTENT USAGE CONTRACT AND THE DIGITAL RIGHTS PERMISSION CODE

## 1 Scope

This Technical Report provides a guide to implementing DRPC. Specifically, it defines the relationship between the content usage contract, which serves as the basis for permission management, and DRPC. The protection of content and the application of watermark technology are beyond the scope of this report.

## 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.

IEC 62227:2008, *Multimedia home server systems – Digital rights permission code*