

TECHNICAL REPORT



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

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CONTENTS

| | |
|---|----|
| FOREWORD..... | 6 |
| INTRODUCTION..... | 8 |
| 1 Scope..... | 10 |
| 2 Normative references | 10 |
| 3 Terms and definitions | 10 |
| 4 Abbreviations | 13 |
| 5 Purpose and justification of this Technical Report..... | 13 |
| 5.1 General..... | 13 |
| 5.2 Purpose | 13 |
| 6 Services covered in the study | 13 |
| 6.1 General..... | 13 |
| 6.2 iTUNES STORE™ | 14 |
| 6.3 Amazon.com™ | 14 |
| 6.4 AcTVila™ | 14 |
| 6.5 TSUTAYA TV™ | 14 |
| 6.6 mora win™ | 14 |
| 6.7 MAGASTORE™ | 14 |
| 6.8 Spotify™ | 15 |
| 6.9 NETFLIX™ | 15 |
| 7 Relationship between permission and the content usage contract..... | 15 |
| 7.1 General..... | 15 |
| 7.2 What is permission?..... | 15 |
| 7.3 What is a content usage contract? | 16 |
| 8 Value chain in the distribution of digital content | 16 |
| 8.1 General..... | 16 |
| 8.2 Rights holder | 17 |
| 8.3 Content holder | 17 |
| 8.4 Content provider | 17 |
| 8.5 Service provider..... | 17 |
| 8.6 User..... | 17 |
| 9 Basic contract and individual contract for each link in the value chain in the distribution of digital content..... | 17 |
| 9.1 General..... | 17 |
| 9.1.1 Contracts..... | 17 |
| 9.1.2 Basic contract..... | 18 |
| 9.1.3 Individual contract | 18 |
| 9.2 Basic contract between the content holder and the content provider (content usage contract) | 18 |
| 9.3 Individual contract between content holder and content provider (catalog) | 19 |
| 9.4 Basic contract between content or service provider and user (terms of use of service)..... | 19 |
| 9.5 Individual contract relating to the purchase or free-of-charge use of content by users | 20 |
| 10 Examples of content usage contracts and DRPC in digital content distribution..... | 20 |
| 10.1 General..... | 20 |
| 10.2 iTUNES STORE..... | 20 |
| 10.2.1 Basic contract..... | 20 |

| | | | |
|------|---|--|----|
| | 10.2.2 | Individual contract | 21 |
| 10.3 | Amazon.com | | 21 |
| | 10.3.1 | Basic contract..... | 21 |
| | 10.3.2 | Individual contract | 22 |
| 10.4 | AcTVila | | 22 |
| | 10.4.1 | Basic contract..... | 22 |
| | 10.4.2 | Individual contract | 23 |
| 10.5 | TSUTAYA TV | | 23 |
| | 10.5.1 | Basic contract..... | 23 |
| | 10.5.2 | Individual contract | 24 |
| 10.6 | mora win | | 24 |
| | 10.6.1 | Basic contract..... | 24 |
| | 10.6.2 | Individual contract | 24 |
| 10.7 | MAGASTORE | | 25 |
| | 10.7.1 | Basic contract..... | 25 |
| | 10.7.2 | Individual contract | 25 |
| 10.8 | Spotify | | 25 |
| | 10.8.1 | Basic contract..... | 25 |
| | 10.8.2 | Individual contract | 26 |
| 10.9 | NETFLIX..... | | 26 |
| | 10.9.1 | Basic contract..... | 26 |
| | 10.9.2 | Individual contract | 27 |
| 11 | Applicability of DRPC to content usage contracts for digital content distribution | | 27 |
| 11.1 | General..... | | 27 |
| 11.2 | Status and challenges of countermeasures against illegal content distribution | | 27 |
| | 11.2.1 | General | 27 |
| | 11.2.2 | Current countermeasure 1: Content check function on the website..... | 28 |
| | 11.2.3 | Current countermeasure 2: Validation of poster | 29 |
| | 11.2.4 | Current countermeasure 3: Use of alert system | 29 |
| 11.3 | Countermeasures against illegal content distribution based on the content usage contract..... | | 30 |
| | 11.3.1 | General | 30 |
| | 11.3.2 | Case 1: Authorized use of content in accordance with the terms of the use agreement..... | 30 |
| | 11.3.3 | Case 2: Unauthorized use of content contrary to the terms of the use agreement..... | 31 |
| | 11.3.4 | Case 3: Use of unauthorized content downloaded illegally from other websites | 31 |
| 11.4 | DRPC-based countermeasures against illegal distribution of content | | 31 |
| | 11.4.1 | General | 31 |
| | 11.4.2 | Case 1: Authorized use of content (embedded with DRPC) in accordance with the terms of the use agreement | 31 |
| | 11.4.3 | Case 2: Unauthorized use of content (embedded with DRPC) contrary to the terms of the use agreement..... | 32 |
| | 11.4.4 | Case 3: Use of unauthorized content (embedded with DRPC) downloaded illegally from another website..... | 32 |
| 11.5 | Direction for countermeasures against illegal distribution of content | | 32 |
| 12 | Applicability of DRPC to the allocation of royalties earned from the distribution of digital content..... | | 33 |

| | | |
|--|--|----|
| 12.1 | General..... | 33 |
| 12.2 | Status and challenges concerning the allocation of royalties | 33 |
| 12.3 | Possible royalty allocation system based on DPCR..... | 34 |
| 12.4 | Roles of DRPC in the allocation of royalties..... | 34 |
| Annex A (informative) Content matrix for various service agreements..... | | 36 |
| Bibliography..... | | 48 |
| | | |
| Figure 1 | – Permission based on legal analysis..... | 16 |
| Figure 2 | – The making of a contract..... | 16 |
| Figure 3 | – Value chain of the digital content business..... | 17 |
| Figure 4 | – Basic contract and individual contract | 18 |
| Figure 5 | – Content uploaded onto posting sites | 28 |
| Figure 6 | – Validation through a content check function provided by the site administrator..... | 28 |
| Figure 7 | – Judgment based on validation of the poster by the site administrator | 29 |
| Figure 8 | – Judgment based on notification by a third party..... | 30 |
| Figure 9 | – Uploading of content whose secondary use is authorized by the content usage contract..... | 30 |
| Figure 10 | – Uploading of content whose secondary use is prohibited by the content usage contract..... | 31 |
| Figure 11 | – Uploading of illegal content without a content usage contract..... | 31 |
| Figure 12 | – Uploading of content whose secondary use is approved by the content usage contract..... | 32 |
| Figure 13 | – Uploading of content whose secondary use is prohibited by the content usage contract..... | 32 |
| Figure 14 | – Uploading of illegal content without a content usage contract..... | 32 |
| Figure 15 | – Overall picture of content identification on posting sites with or without DRPC | 33 |
| Figure 16 | – Royalty allocation scheme based on using content name or ID alone | 34 |
| Figure 17 | – Royalty allocation scheme based on DPCR..... | 34 |
| Figure 18 | – Overall picture of the allocation of royalties based on DPCR..... | 35 |
| | | |
| Table 1 | – Elements of the content usage contract as summarized by IEC 62227:2008..... | 19 |
| Table 2 | – Elements of an individual contract (catalog) as summarized by IEC 62227:2008 | 19 |
| Table 3 | – Elements of the terms of use of service as summarized by IEC 62227:2008..... | 19 |
| Table 4 | – Elements of an individual contract for downloading (streaming) content as summarized by IEC 62227:2008 | 20 |
| Table 5 | – Basic contract of the iTUNES STORE as summarized by IEC 62227:2008 | 20 |
| Table 6 | – Individual contract of the iTUNES STORE as summarized by IEC 62227:2008 | 21 |
| Table 7 | – Individual contract of the iTUNES STORE as summarized by IEC 62227:2008 – Third Party..... | 21 |
| Table 8 | – Basic contract of Amazon.com as summarized by IEC 62227:2008 | 21 |
| Table 9 | – Individual contract of Amazon.com as summarized by IEC 62227:2008 – Music..... | 22 |

| | |
|---|----|
| Table 10 – Individual contract of Amazon.com as summarized by IEC 62227:2008 – PC software | 22 |
| Table 11 – Basic Contract of AcTVila as summarized by IEC 62227:2008 | 22 |
| Table 12 – Individual contract of AcTVila as summarized by IEC 62227:2008 | 23 |
| Table 13 – Individual contract for content provided through “AcTVila Basic” as summarized by IEC 62227:2008 | 23 |
| Table 14 – Basic contract of TSUTAYA TV as summarized by IEC 62227:2008 | 23 |
| Table 15 – Individual contract of TSUTAYA TV as summarized by IEC 62227:2008 | 24 |
| Table 16 – Basic contract of mora win as summarized by IEC 62227:2008 | 24 |
| Table 17 – Individual contract of mora win as summarized by IEC 62227:2008 | 24 |
| Table 18 – Individual contract of mora win as summarized by IEC 62227:2008 – Music provider | 25 |
| Table 19 – Basic contract of MAGASTORE as summarized by IEC 62227:2008 | 25 |
| Table 20 – Individual contract of MAGASTORE as summarized by IEC 62227:2008 | 25 |
| Table 21 – Basic contract of spotify as summarized by IEC 62227:2008 | 26 |
| Table 22 – Individual contract of Spotify as summarized by IEC 62227:2008 | 26 |
| Table 23 – Basic contract of NETFLIX as summarized by IEC 62227:2008 | 26 |
| Table 24 – Individual contract of NETFLIX as summarized by IEC 62227:2008 | 27 |

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

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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.

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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.

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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*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

allocation of royalties

act of royalty payments

3.2

child permission code

permission code issued for an individual piece of content belonging to a larger group

3.3

compliant device

device that possesses functions to control content access as specified in a compliant license

3.4

content identifier

identifier that uniquely identifies content

3.5

content usage contract

contract that specifies a type of usage, a way of usage and a term of usage which are concluded by content distributors

3.6

copy

usage type that permits the copying of content to a compliant medium under a reuse permission

Note 1 to entry: Permission conditions are further specified in the condition parameters.

3.7**coupon**

fee-based permission that uses coupons, a form of alternative currency that can be exchanged for a given piece of content

Note 1 to entry: Coupons are distributed to users by the content sponsor in order to increase user contact with that sponsor.

3.8**data management**

permission condition that describes conditions that pertain to saving the original content or re-issuing permission codes

3.9**data output condition**

permission condition that describes conditions that pertain to exporting original content to non-compliant objects

3.10**disclaimer**

refusal of the responsibility of a service provider in a specified case pertaining to a service agreement

3.11**domain**

set of devices, users, storage media or other entities to which a common set of rules applies in the context of content management

3.12**export**

usage type that permits the exporting of content to a noncompliant medium under a reuse permission

Note 1 to entry: Permission conditions are further specified in the condition parameters.

3.13**general usage condition**

permission condition that describes conditions on a usage mode basis

3.14**home server**

client device that serves as a gateway to a home domain

3.15**illegal distribution**

content is illegally distributed over the Internet

3.16**issuer identifier**

identifier that uniquely identifies a rights holder, a service provider and a home server

3.17**move**

usage type that permits the moving of content to a compliant medium under a reuse permission

Note 1 to entry: Permission conditions are further specified in the condition parameters.

3.18

narrowly-defined permission code

code system that expresses various sets of permission information and permission conditions necessary for content transmission

3.19

parent permission code

permission code issued for a group of content

3.20

permission

act by a certain issuing entity that authorizes the use of content by a certain receiving entity under a certain set of permission classifications and usage conditions

Note 1 to entry: The issuing entity and/or the receiving entity may be not only human but may also be a device, storage medium, organization, domain, or another entity.

3.21

permission classification

permission type that expresses stipulations about what is being granted

3.22

permission code

code system that represents codes through a common system so that permissions from two parties with differing DRM implementations can interact with each other

3.23

posting sites

website which enables people to upload and share their contents with others

3.24

prohibited matters

description that defines matters which a service provider forbids a content user to do based on a service agreement

3.25

provider's rights

statement that refers to rights of a service provider which are granted by a service agreement

3.26

receiver identifier

identifier that uniquely identifies an end-user, a device and a set of end-users

3.27

royalties

dividend that is distributed from a permission receiver to a permission issuer

3.28

service agreement

contract that specifies various kinds of agreements about using services between a permission issuer and a permission receiver

3.29

service description

statement that defines a service content, for example a service name and a service period, etc., based on a service agreement

3.30**subscription**

fee-based permission that charges per time period

3.31**user's rights**

statement that refers to a right of a content user which is granted on a service agreement

4 Abbreviations

For the purposes of this Technical Report, the following abbreviations apply.

| | |
|-------|--|
| CD | Compact Disc |
| CH | Content Holder |
| CP | Content Provider |
| CPRM | Content Protection for Recordable Media |
| CSP | Content Service Provider |
| DCF | DRM Content Format |
| DRM | Digital Rights Management (System) |
| DRPC | Digital Rights Permission Code |
| DVD | Digital Versatile Disc |
| HD | High Definition |
| HDD | Hard Disk Drive |
| ID | Identifier |
| SAFIA | Security Architecture For Intelligent Attachment |
| WMT | Windows Media Technology |

5 Purpose and justification of this Technical Report**5.1 General**

This Technical Report provides a guide to possible applications of DRPC to content usage permission in business fields, aiming at people engaged in the management of permission, including those working in the information processing sector and in the legal arena.

5.2 Purpose

This Technical Report aims to achieve the following.

- Analyze the relationship between a content usage contract and DRPC.
- Present a guide to generating DRPC based on a content usage contract that is managed by a permission management platform.

6 Services covered in the study**6.1 General**

This Technical Report studied the terms of service of the following seven major digital content distribution services of Japan and the US as explicit examples of contracts regarding digital content distribution, the results of which are shown below.

6.2 iTUNES STORE™¹

An online content store operated by iTunes Inc. It initially started as an online music store; now it also offers movies for purchase and downloading, as well as a Podcasting services. Portable devices for playback are limited to Apple's iPod™, iPhone™, and iPad™, although these services are compatible with Windows machines on an operating system level.

See (<http://www.apple.com/jp/itunes/>).

6.3 Amazon.com™²

An EC site run by Amazon.com. The product range on offer has expanded from books to home appliances, audio-visual equipment, clothing, and even food and beverages. Its offerings of digital content are limited to e-books, MP3-formatted music, and some PC software.

See (<http://www.amazon.com/>).

6.4 AcTVila™³

A service that distributes movies and dramas through AcTVila-compatible TVs and recorders, operated by Actvila Corporation. The content on offer also includes weather information, news, and traffic information. This service is available only in Japan.

See (<http://actvila.jp/>).

6.5 TSUTAYA TV™⁴

A video distribution service operated by TSUTAYA.com Co., Ltd. The content on offer includes movies, dramas, cartoons, and sports/music videos. The service is available only in Japan.

See (<http://tsutaya-tv.jp/>).

6.6 mora win™⁵

A Windows Media-compatible music distribution service operated by Label Gate Co., Ltd. Companies supplying content include major Japanese labels such as avex, Columbia, and Sony Music Entertainment. This service is available only in Japan.

See (<http://morawin.jp/>).

6.7 MAGASTORE™⁶

An online e-magazine store that Dentsu Inc. operates using technology developed by YAPPA Corporation. Its e-magazine catalog contains major magazines published in Japan whose

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content can be read on PCs, iOSTM⁷ devices, and AndroidTM⁸ terminals. This service is available only in Japan.

See (<http://www.magastore.jp/>).

6.8 SpotifyTM⁹

A music streaming service offered in nine countries, namely, Sweden, Denmark, Finland, Norway, the UK, France, the Netherlands, Spain, and the US. Its content is provided by EMI, Sony Music Entertainment, Universal Music, and Warner Music. There are two membership categories: free membership with ad inserts and paid membership without ads.

See (<http://www.spotify.com/>).

6.9 NETFLIXTM¹⁰

A video distribution service provided by NETFLIX Inc. Movies and TV programs are distributed via such devices as PCs, iOS devices, Android terminals and WiiTM¹¹, PlayStation 3TM¹², XBOX360TM¹³, and other game machines. Started in the US, the service area has expanded to Canada, Latin America, and Caribbean countries.

See (<https://signup.netflix.com/global>).

7 Relationship between permission and the content usage contract

7.1 General

The following subclauses explain the difference between permission and a content usage contract in digital content distribution.

7.2 What is permission?

In a general interpretation based on legal concepts, permission refers to a unilateral manifestation of the intention of a rights holder regarding the content under her/his ownership.

The permission details are unilaterally expressed by the rights holder and as such do not require a mutual consensus between two parties.

If the person holding the rights is called the content holder (CH, rights holder) and the person receiving the permission is called the content provider (CP, or content service provider (CSP)), then their relationship can be illustrated as shown in Figure 1.

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¹¹ WiiTM is a trademark of Nintendo. This information is given for the convenience of users of this document and does not constitute and endorsement by IEC of the product named.

¹² Play StationTM is a trademark of Sony Computer Entertainment Inc. This information is given for the convenience of users of this document and does not constitute and endorsement by IEC of the product named.

¹³ XBOX360TM is a trademark of Microsoft Corporation. This information is given for the convenience of users of this document and does not constitute and endorsement by IEC of the product named.

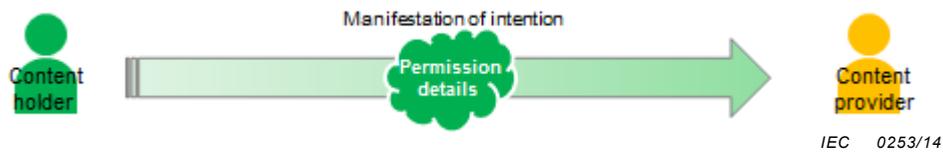


Figure 1 – Permission based on legal analysis

7.3 What is a content usage contract?

A contract is an agreement entered into by two or more parties based on mutual consensus, as shown in Figure 2. A content usage contract for digital content distribution describes details that have been agreed upon and concluded between the concerned parties (e.g., between a rights holder and a content holder, between a content holder and a content provider, etc.) regarding details of transactions, including usage permission based on the manifestation of intention regarding content usage expressed by the rights holder of that content. The content of the contract becomes more specific based on discussions by the concerned parties and this normally takes the shape of a written agreement in the end. IEC 62227 enables the encoding of the minimum usage permission information required on devices for the distribution of each digital content based on a content usage contract.

According to legal concepts, oral consent is essentially considered a valid contract. However, normal business practices include such actions as drafting/signing/binding an agreement and affixing a seal over two edges in order to maintain physical evidence as well as to reconfirm the understanding of the concerned parties.

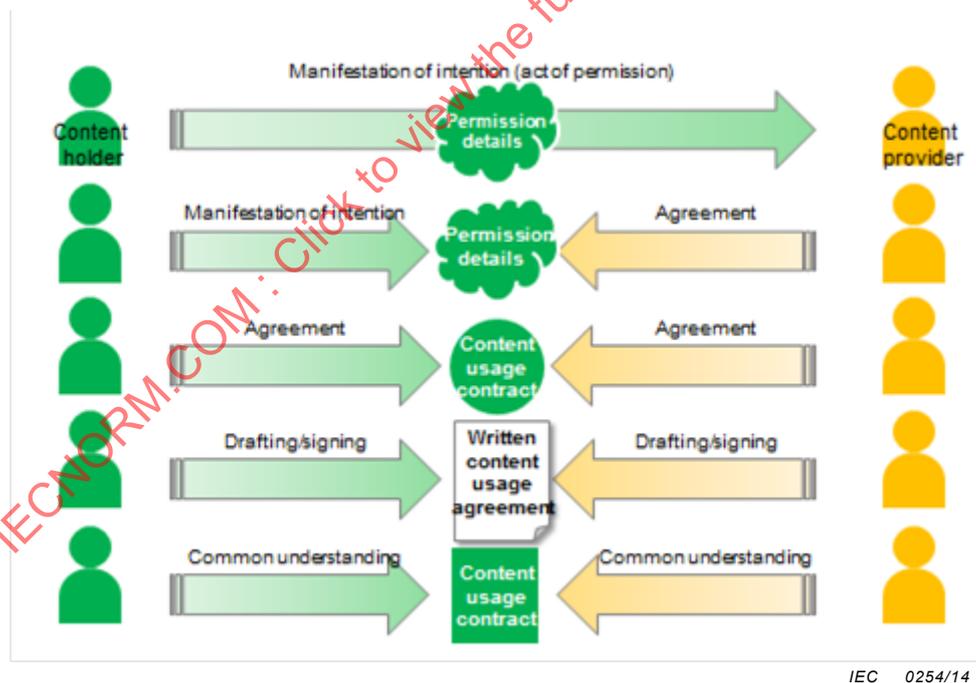


Figure 2 – The making of a contract

8 Value chain in the distribution of digital content

8.1 General

The following subclauses explain the structure of the value chain and the stakeholders in the distribution of digital content, as shown in Figure 3.

8.2 Rights holder

A rights holder is any individual, organization, or group that is involved in the production of content in any way and recognized as holding part of the rights to the relevant content.

A rights holder may be a songwriter and/or composer of a musical piece, a screenwriter, director, assistant director, and/or performer of a movie, an author and/or editor of a book, or a developer of software. However, the rights holder is beyond the scope of this Technical Report, which focuses on the value chain from the content holder onward.

8.3 Content holder

A content holder is any corporation, organization, or group that possesses usage rights to an individual content, including its reproduction and/or publishing rights. A typical content holder may be a record company, publishing company, or distribution company. A content holder assumes the role of allocating revenues from the content among the rights holders.

8.4 Content provider

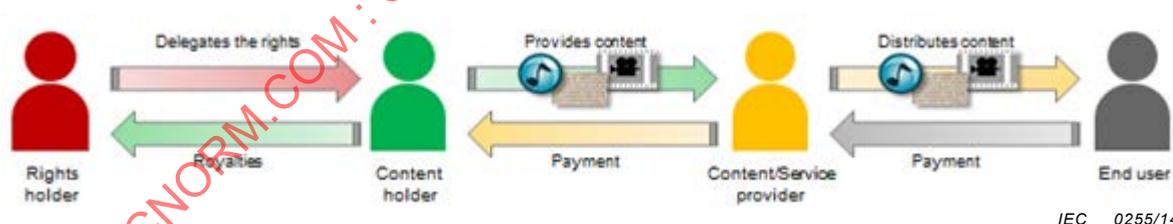
A content provider is a company that distributes content purchased from a content holder (or developed internally) on its own platform or the platform of others. A content provider may be a service provider, because it distributes the content on its own platform in some cases.

8.5 Service provider

A service provider is a company that provides a platform for distributing content as its service. A service provider may be positioned as a content provider because service providers distribute their own content in some cases.

8.6 User

A user is an end user, i.e., an individual who downloads content from various content/service providers onto his/her own device. She/he accesses each content/service provider after agreeing to the terms of service and downloads each content on the platform provided by the corresponding content/service provider, either free of charge or on a paid basis.



IEC 0255/14

Figure 3 – Value chain of the digital content business

9 Basic contract and individual contract for each link in the value chain in the distribution of digital content

9.1 General

9.1.1 Contracts

There are two types of contracts in the value chain of digital content distribution, as shown in Figure 4 and as specified in 9.1.2 and 9.1.3.

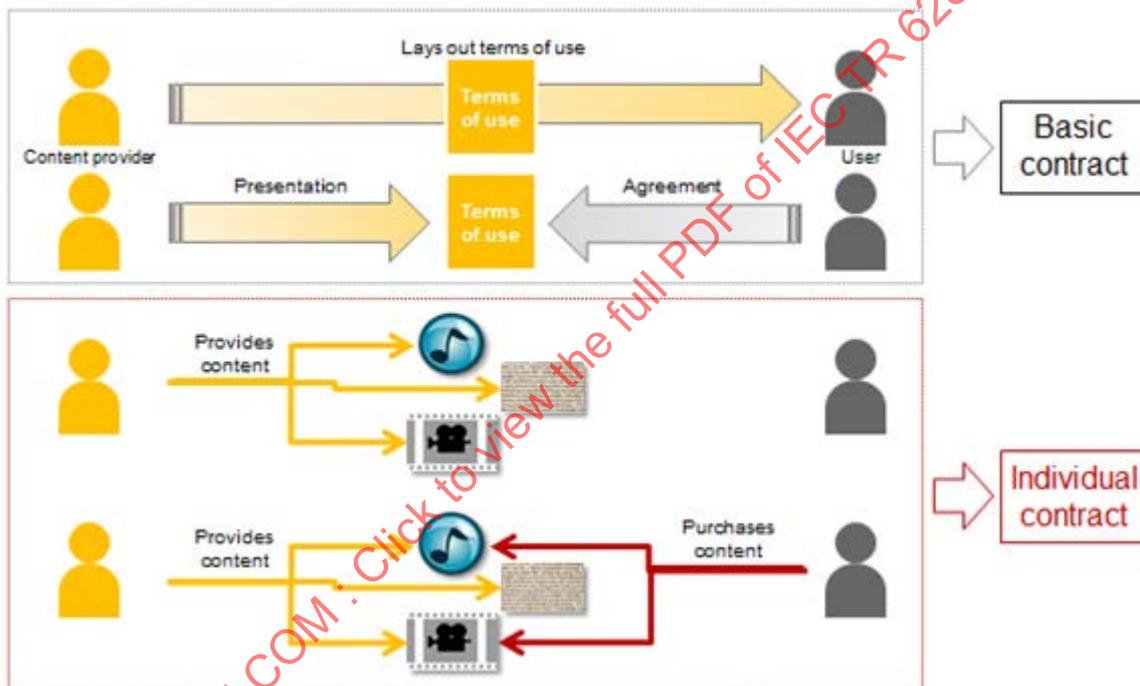
9.1.2 Basic contract

A general agreement on a transaction, including the details of content usage permission. (A content usage contract is concluded between the content holder and the content/service provider. A service agreement is concluded between the content/service provider and the end user.)

9.1.3 Individual contract

An agreement regarding the usage of each content. (It is a catalog of conditions applied to each content in the case of a contract between a content holder and a content/service provider and the act of purchasing through downloading or rental-based streaming in the case of a transaction between a content/service provider and an end user.)

The two types of contract involving content/service providers and end users can be summarized as shown in Figure 4.



IEC 0256/14

Figure 4 – Basic contract and individual contract

9.2 Basic contract between the content holder and the content provider (content usage contract)

A “content usage agreement” is entered into as a basic contract between a content holder and a content provider.

The basic contract stipulates among others the period of permitted use, the amount of payment for the use, matters related to termination of the contract, matters for consultation, applicable laws, and court of jurisdiction. Nevertheless, there exists a wide variety of forms, names, details, and measures, all of which are defined by the concerned parties depending in part on the covered content and the method of distribution.

Because this contract is signed between corporations, it can be regarded as a “B2B” type contract, whose elements are shown in Table 1 by using the DRPC system in IEC 62227.

Table 1 – Elements of the content usage contract as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code |
|-------------------|---------------------|--------------------------|---------------------------------------|
| Content holder | Content provider | Content for distribution | Basic conditions for usage permission |

9.3 Individual contract between content holder and content provider (catalog)

For each content, the content holder and the content provider conclude an individual contract in the form of a catalog. Its contents are governed by the above-mentioned basic contract and various permission conditions applied to individual cases are defined in it, e.g., name, type (music, book, or video; in the case of video, whether it is a music video or a movie, etc.), period of permitted use, form of service provided (rental streaming, purchase by download, etc.).

That is to say, there exists a basic contract valid for one year or any given period as the base upon which an individual contract describing more detailed permission conditions applicable to each single content is concluded.

Because this contract is signed between businesses, it can be regarded as a “B2B” type contract, whose elements are expressed in Table 2 by using the DRPC system in IEC 62227.

Table 2 – Elements of an individual contract (catalog) as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code |
|-------------------|---------------------|---|---|
| Content holder | Content provider | Each content for which use is permitted | Permission conditions applied to each content |

9.4 Basic contract between content or service provider and user (terms of use of service)

A content provider or a service provider (see NOTE below) prepares “terms of use of service” for users. The terms of use are neither drafted nor agreed upon by mutual discussion and therefore are different from a “content usage agreement”. Nevertheless, this is regarded as a basic contract.

Terms of use of service are unilaterally presented by the content/service provider when a user wishes to start using the service and she/he can choose to either “agree” or “not agree.” If the choice is “not agree,” she/he cannot use the service.

Matters mainly described in the terms of use of service specify permitted and prohibited acts by a user, as well as the rights claimed by the content/service provider.

Because this contract is signed between a business and a user, it can be regarded as a “B2C” type contract, whose elements are expressed in Table 3 by using the DRPC system in IEC 62227.

NOTE They are considered similar in kind here for the sake of convenience because they can be interchangeable depending on whether the company distributes the content on its own platform or not.

Table 3 – Elements of the terms of use of service as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code |
|--------------------------|---------------------|--------------------------|---|
| Content/Service provider | Individual user | Content for distribution | Permission conditions serving as the base |

9.5 Individual contract relating to the purchase or free-of-charge use of content by users

For the purchase or free-of-charge use of content on the provider’s platform by users, an individual contract is concluded for each case. That is to say, the act by a user of selecting specific content available on the provider’s platform and buying or using the content free of charge is considered to constitute an individual contract.

Unlike the catalog of a B2B type contract, this individual contract does not take the form of a written document. Nevertheless, the user’s act of purchasing content or using content free of charge is interpreted as the user’s agreeing to the usage conditions applied to the content offered by the provider and therefore an individual contract is considered to have been concluded.

Elements contained in an individual contract of a “B2C” type are shown in Table 4 by using the DRPC system in IEC 62227.

Table 4 – Elements of an individual contract for downloading (streaming) content as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code |
|--------------------------|---------------------|--|--|
| Content/Service provider | Individual user | Each individual content selected by the user | Permission conditions applied to each individual content |

10 Examples of content usage contracts and DRPC in digital content distribution

10.1 General

As actual examples of basic contracts and individual contracts, the following subclauses summarize the terms of service as well as digital content to be downloaded of seven major services offered in Japan and the US by using elements of DRPC.

10.2 iTUNES STORE

10.2.1 Basic contract

Elements contained in a basic contract of iTunes store are shown in Table 5 by using the DRPC system in IEC 62227.

Table 5 – Basic contract of the iTUNES STORE as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|-------------------|---------------------|-----------------------------------|---------------------------|--|-----------------|-----------------------|---|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| iTunes store | Individual user | Content on offer for distribution | none | Playback period ^a Playback time limit ^a Dual output limit Age limit | none | none | Service description Disclaimer Provider’s rights User’s rights Prohibited matters |

^a Applicable only to movies.

10.2.2 Individual contract

Elements contained in an individual contract of an iTunes store are shown in Table 6 by using the DRPC system in IEC 62227.

Table 6 – Individual contract of the iTUNES STORE as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|-------------------|---------------------|---|---------------------------|-------------------------|-----------------|-----------------------|--------|
| | | | Permission Classification | General usage condition | Data management | Data output condition | |
| Apple | Individual user | Cool Struttin' (The Rudy Van Gelder Edition Remastered) | ○ | ○ | ○ | ○ | none |

Regarding the apps produced/provided by a third party [i.e., other than Apple] and offered on Mac App Store/App Store, the user is required to have entered into a Licensed Application End User License Agreement with the third party. In such a case, the issuer identifier and the receiver identifier are the “application provider” and the “user” respectively, as shown in Table 7.

Table 7 – Individual contract of the iTUNES STORE as summarized by IEC 62227:2008 – Third Party

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|----------------------|---------------------|--------------------|---------------------------|-------------------------|-----------------|-----------------------|--------|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| Application provider | Individual user | – | ○ | ○ | ○ | ○ | none |

10.3 Amazon.com

10.3.1 Basic contract

Elements contained in a basic contract of Amazon.com are shown in Table 8 by using the DRPC system in IEC 62227.

Table 8 – Basic contract of Amazon.com as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|-------------------|---------------------|-----------------------------------|---------------------------|-------------------------|-----------------|-----------------------|---|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| Amazon.com | Individual user | Content on offer for distribution | none | Age limit | none | none | Service description Disclaimer Provider's rights User's rights Prohibited matters |

10.3.2 Individual contract

Elements contained in an individual contract of Amazon.com for a music content are shown in Table 9 by using the DRPC system in IEC 62227.

Table 9 – Individual contract of Amazon.com as summarized by IEC 62227:2008 – Music

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|--------------------------------------|---------------------|--------------------|---------------------------|-------------------------|-----------------|-----------------------|--------|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| Amazon.com International Sales, Inc. | Individual user | – | ○ | ○ | ○ | ○ | none |

Elements contained in an individual contract of Amazon.com for a PC software are shown in Table 10 by using the DRPC system in IEC 62227.

Table 10 – Individual contract of Amazon.com as summarized by IEC 62227:2008 – PC software

| Issuer identifier | Receiver identifier | Content identifier | N Permission code | | | | Others |
|-------------------------------------|---------------------|--------------------|---------------------------|-------------------------|-----------------|-----------------------|--------|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| Amazon Services International, Inc. | Individual user | - | ○ | ○ | ○ | ○ | none |

10.4 AcTVila

10.4.1 Basic contract

Elements contained in a basic contract of AcTVila are shown in Table 11 by using the DRPC system in IEC 62227.

Table 11 – Basic Contract of AcTVila as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|-------------------|---------------------|----------------------------------|---------------------------|-------------------------|-----------------|-----------------------|---|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| AcTVila | Individual user | Movies on offer for distribution | none | none | none | none | Service description Disclaimer Provider's rights User's rights Prohibited matters |

10.4.2 Individual contract

Elements contained in an individual contract of AcTVila are shown in Table 12 by using the DRPC system in IEC 62227.

Table 12 – Individual contract of AcTVila as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|-------------------|---------------------|--------------------|---------------------------|-------------------------|-----------------|-----------------------|--------|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| AcTVila | Individual user | - | ○ | ○ | ○ | ○ | none |

When the content is distributed through AcTVila Basic, the Issuer identifier is “AcTVila partner’s website” or “other partner’s service”, as shown in Table 13.

Table 13 – Individual contract for content provided through “AcTVila Basic” as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|--|---------------------|--------------------|---------------------------|-------------------------|-----------------|-----------------------|--------|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| AcTVila Partner’s website or other partner’s service | Individual user | — | ○ | ○ | ○ | ○ | none |

10.5 TSUTAYA TV

10.5.1 Basic contract

Elements contained in a basic contract of TSUTAYA TV are shown in Table 14 by using the DRPC system in IEC 62227.

Table 14 – Basic contract of TSUTAYA TV as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|-------------------|---------------------|----------------------------------|---------------------------|-------------------------|-----------------|-----------------------|---|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| TSUTAYA.com | Individual user | Movies on offer for distribution | none | Age limit | none | none | Service description Disclaimer Provider’s rights User’s rights Prohibited matters |

10.5.2 Individual contract

Elements contained in an individual contract of TSUTAYA TV are shown in Table 15 by using the DRPC system in IEC 62227.

Table 15 – Individual contract of TSUTAYA TV as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|-------------------|---------------------|--------------------|---------------------------|-------------------------|-----------------|-----------------------|--------|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| TSUTAYA.com | Individual user | - | ○ | ○ | ○ | ○ | none |

10.6 mora win

10.6.1 Basic contract

Elements contained in a basic contract of mora win are shown in Table 16 by using the DRPC system in IEC 62227.

Table 16 – Basic contract of mora win as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|-------------------|---------------------|---------------------------------|---------------------------|-------------------------|-----------------|-----------------------|---|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| Label gate | Individual user | Music on offer for distribution | none | none | none | none | Service description Disclaimer Provider's rights User's rights Prohibited matters |

10.6.2 Individual contract

Elements contained in an individual contract of mora win are shown in Table 17 by using the DRPC system in IEC 62227.

For mora win also, the issuer identifier may be either “Label Gate” or “music provider” depending on the content.

Table 17 – Individual contract of mora win as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|-------------------|---------------------|--------------------|---------------------------|-------------------------|-----------------|-----------------------|--------|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| Label Gate | Individual user | - | ○ | ○ | ○ | ○ | none |

Elements contained in an individual contract of mora win for a music provider are shown in Table 18 by using the DRPC system in IEC 62227.

Table 18 – Individual contract of mora win as summarized by IEC 62227:2008 – Music provider

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|-------------------|---------------------|--------------------|---------------------------|-------------------------|-----------------|-----------------------|--------|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| Music provider | Individual user | – | ○ | ○ | ○ | ○ | none |

10.7 MAGASTORE

10.7.1 Basic contract

Elements contained in a basic contract of MAGASTORE are shown in Table 19 by using the DRPC system in IEC 62227.

Table 19 – Basic contract of MAGASTORE as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N Permission code | | | | Others |
|-------------------|---------------------|---|---------------------------|-------------------------|-----------------|-----------------------|---|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| Dentsu | Individual user | Digital magazines on offer for distribution | none | none | none | Copy limit | Service description Disclaimer Provider's rights User's rights Prohibited matters |

10.7.2 Individual contract

Elements contained in an individual contract of MAGASTORE are shown in Table 20 by using the DRPC system in IEC 62227.

Table 20 – Individual contract of MAGASTORE as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|-------------------|---------------------|--------------------|---------------------------|-------------------------|-----------------|-----------------------|--------|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| Dentsu | Individual user | – | ○ | ○ | ○ | ○ | none |

10.8 Spotify

10.8.1 Basic contract

Elements contained in a basic contract of Spotify are shown in Table 21 by using the DRPC system in IEC 62227.

Table 21 – Basic contract of spotify as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|-------------------|---------------------|---------------------------------|---------------------------|-------------------------|-----------------|-----------------------|---|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| Spotify | Individual user | Music on offer for distribution | none | none | none | none | Service description Disclaimer Provider's rights User's rights Prohibited matters |

10.8.2 Individual contract

Elements contained in an individual contract of Spotify are shown in Table 22 by using the DRPC system in IEC 62227.

Table 22 – Individual contract of Spotify as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N Permission code | | | | Others |
|-------------------|---------------------|--------------------|---------------------------|-------------------------|-----------------|-----------------------|--------|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| Spotify | Individual user | – | ○ | ○ | ○ | ○ | none |

10.9 NETFLIX

10.9.1 Basic contract

Elements contained in a basic contract of NETFLIX are shown in Table 23 by using the DRPC system in IEC 62227.

Table 23 – Basic contract of NETFLIX as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N Permission code | | | | Others |
|-------------------|---------------------|----------------------------------|---------------------------|-------------------------|-----------------|-----------------------|---|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| Netflix Inc. | Individual user | Movies on offer for distribution | none | Dual output restriction | none | none | Service description Disclaimer Provider's rights User's rights Prohibited matters |

10.9.2 Individual contract

Elements contained in an individual contract of NETFLIX are shown in Table 24 by using the DRPC system in IEC 62227.

Table 24 – Individual contract of NETFLIX as summarized by IEC 62227:2008

| Issuer identifier | Receiver identifier | Content identifier | N permission code | | | | Others |
|-------------------|---------------------|--------------------|---------------------------|-------------------------|-----------------|-----------------------|--------|
| | | | Permission classification | General usage condition | Data management | Data output condition | |
| Netflix Inc. | Individual user | – | ○ | ○ | ○ | ○ | none |

11 Applicability of DRPC to content usage contracts for digital content distribution

11.1 General

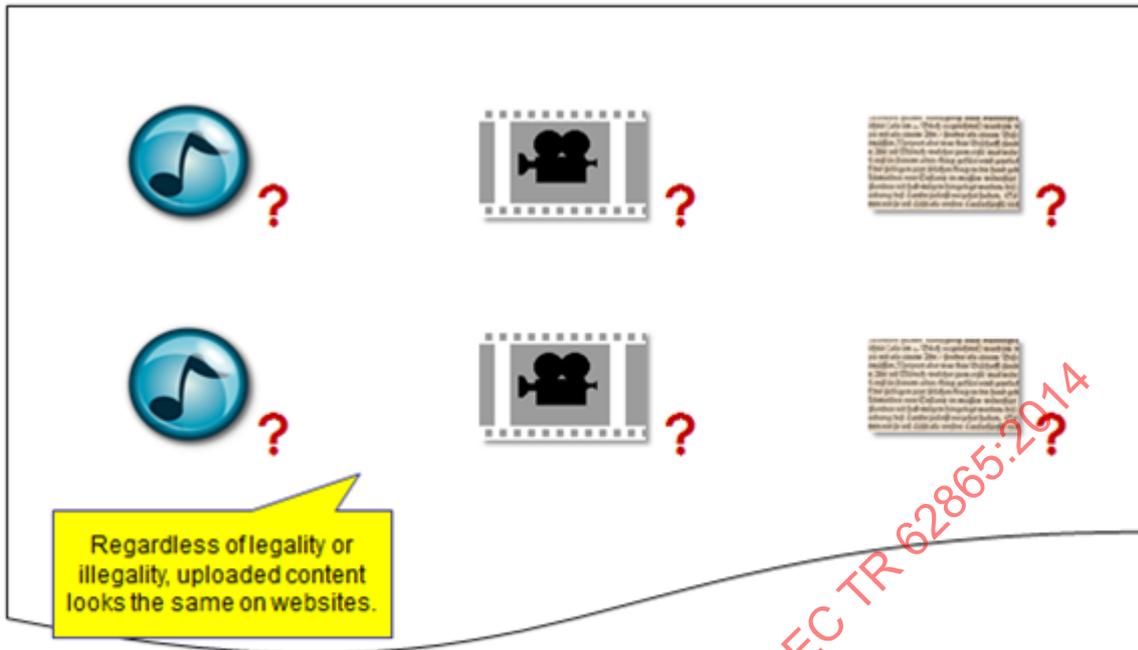
The following describes the status of measures against illegal distribution and the challenges they face, as well as expected benefits brought by DRPC as a solution to defeat piracy. Note that 11.2, 11.3 and 11.4 relate to the current distribution of content and the examples presented do not integrate DRPC. On the other hand, 11.5 introduces examples whose content is embedded with DRPC and whose distribution systems are capable of detecting the embedded DRPC.

11.2 Status and challenges of countermeasures against illegal content distribution

11.2.1 General

The current countermeasures against illegal distribution pose the problem of not being able to distinguish a legal product from an illegal product by looking at the content offered on websites. Generally, there exist no means of discerning the legality or illegality of content uploaded onto various posting sites, and it is therefore difficult to delete or request the deletion of illegally uploaded content.

Although several solutions to combat illegally uploaded content are available, none of them can eradicate unlawful content because each has some weak points, see Figure 5.



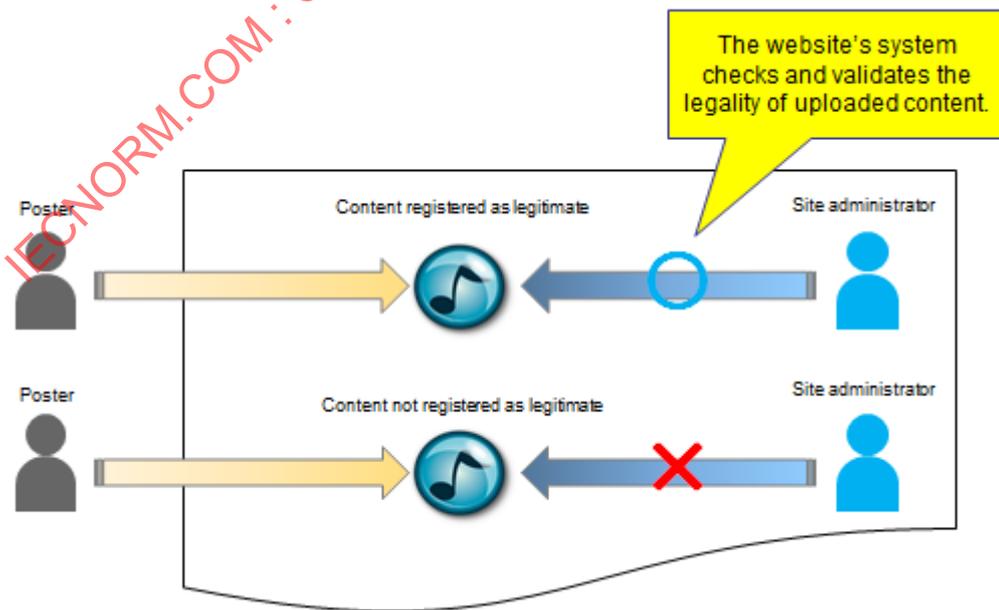
IEC 0257/14

Figure 5 – Content uploaded onto posting sites

11.2.2 Current countermeasure 1: Content check function on the website

One of the existing solutions is a method of judging the legality of uploaded content by a posting site's system. This method works by the site administrator comparing the uploaded content with content preregistered as legitimate, to control uploading.

However, there are cases where a poster or a posting site does not use or does not provide such a system, which makes it impossible to detect illegal content and eradicate illegally distributed content, see Figure 6.



IEC 0258/14

Figure 6 – Validation through a content check function provided by the site administrator

11.2.3 Current countermeasure 2: Validation of poster

Another solution currently in use is checking and validating the content poster in order to judge the legality/illegality of the content, whereby the site administrator checks if the poster is “official” when content is uploaded to the website.

However, this method does not allow the site administrator to declare the illegality of uploaded content when she/he cannot determine if the poster is “official” or not. Failing to confirm the legality of the uploaded content makes this countermeasure incomplete, see Figure 7.

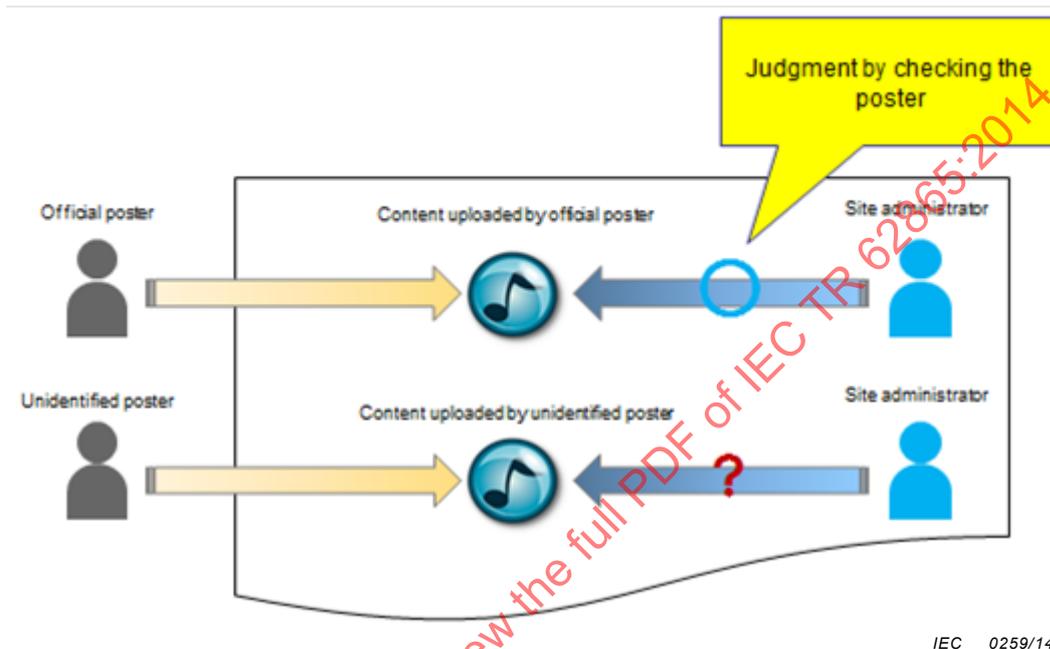


Figure 7 – Judgment based on validation of the poster by the site administrator

11.2.4 Current countermeasure 3: Use of alert system

Another method is an alert system that notifies posting sites. In this case, a user, a rights holder, or companies consigned by a rights holder notify the site administrator via an appropriate route when doubtful elements are found in uploaded content. The site administrator then decides whether or not to allow the uploaded content to remain on the site.

This method is also incomplete because it requires constant monitoring of posting sites and leaves open the possibility of the site administrator “ignoring” the notification. Moreover, it is difficult in practice for the site administrator to declare that the content in question is illegal unless sufficient information to determine its illegality is obtained from it, see Figure 8.

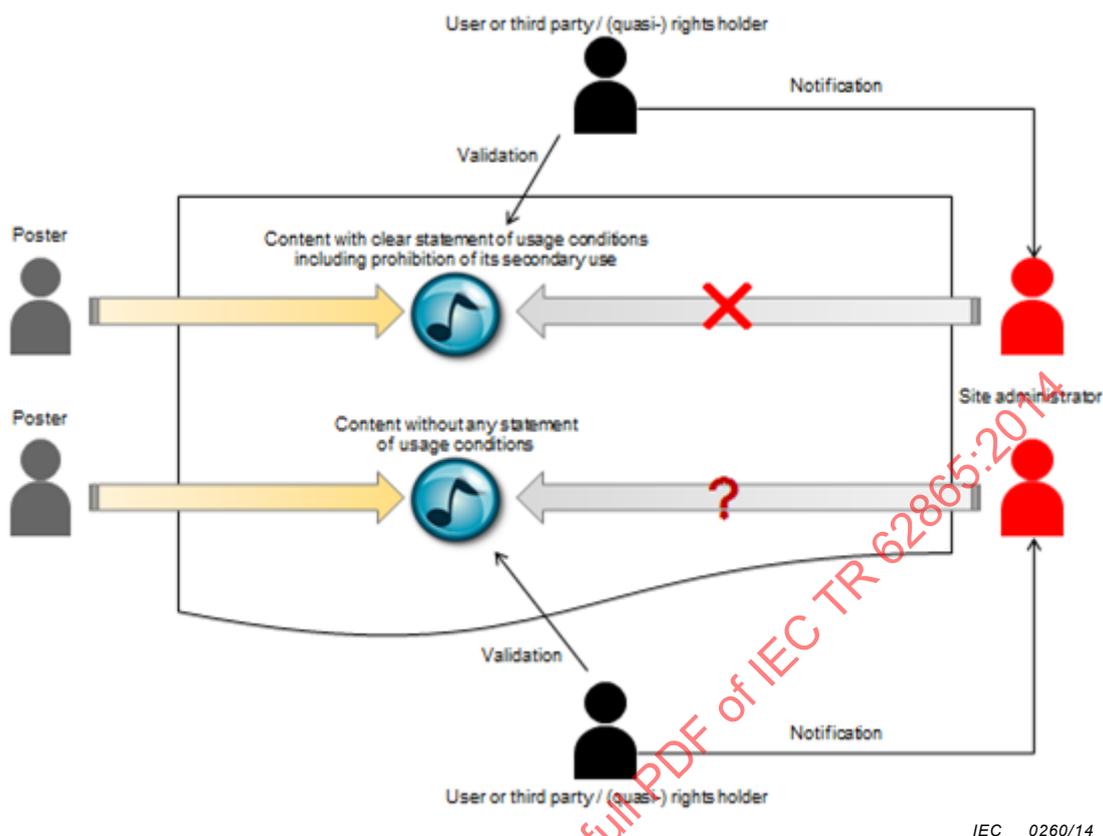


Figure 8 – Judgment based on notification by a third party

11.3 Countermeasures against illegal content distribution based on the content usage contract

11.3.1 General

The following subclauses present several cases of uploading of content based on the assumption that the posted content is NOT embedded with DRPC. The cases include uploading based on an appropriate content usage contract and uploading of content illegally downloaded from another site. Possible measures against illegal distribution are also discussed.

11.3.2 Case 1: Authorized use of content in accordance with the terms of the use agreement

In the event that a poster posts content for which permission for secondary use is granted by the content/service provider, including uploading the content to another posting site, the uploaded content should be treated as legal. However, due to the lack of DRPC, the content may not be considered legal by the posting site because it is impossible to make a judgment on the posting site even if the content is legal, see Figure 9.

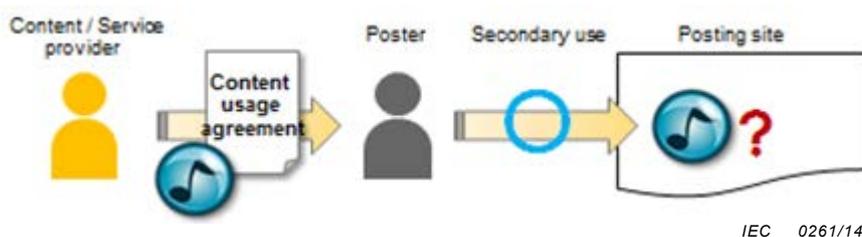


Figure 9 – Uploading of content whose secondary use is authorized by the content usage contract

11.3.3 Case 2: Unauthorized use of content contrary to the terms of the use agreement

In the event that a poster posts content for which secondary use is prohibited by the content/service provider, including uploading the content to another posting site, the uploaded content should be treated as illegal. However, due to the lack of DRPC, there is a risk that the content will not be identified as illegal by the posting site because it is impossible to make a judgment on the posting site, see Figure 10.

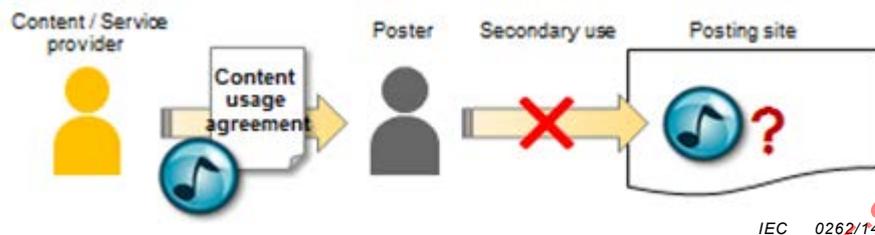


Figure 10 – Uploading of content whose secondary use is prohibited by the content usage contract

11.3.4 Case 3: Use of unauthorized content downloaded illegally from other websites

In the event that a poster downloads content from another website or service illegally and posts it to another posting site, the uploaded content should be treated as illegal. However, due to the lack of DRPC, there is a risk that the content will not be identified as illegal by the posting site because it is impossible to make a judgment on the posting site, see Figure 11.



Figure 11 – Uploading of illegal content without a content usage contract

11.4 DRPC-based countermeasures against illegal distribution of content

11.4.1 General

The following paragraphs present several cases of uploading of content based on the assumption that the posted content is embedded with DRPC describing content usage conditions that can be referred to. The cases include uploading based on an appropriate content usage contract and uploading of content illegally downloaded from another website. Possible measures against illegal distribution are also discussed.

11.4.2 Case 1: Authorized use of content (embedded with DRPC) in accordance with the terms of the use agreement

In the event that a poster posts content for which permission for secondary use is granted by the content/service provider, including uploading the content to another posting site, the uploaded content can be validated as legal by referring to the terms of use summarized in DRPC, see Figure 12.

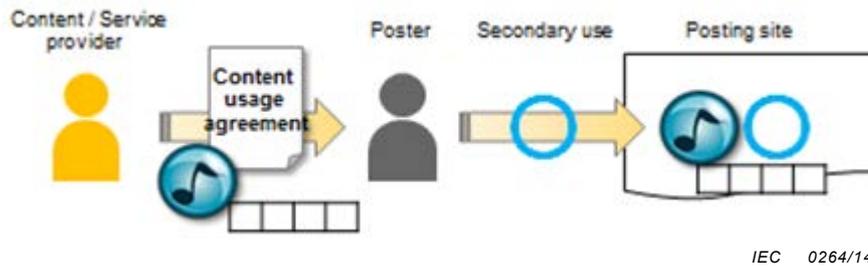


Figure 12 – Uploading of content whose secondary use is approved by the content usage contract

11.4.3 Case 2: Unauthorized use of content (embedded with DRPC) contrary to the terms of the use agreement

In the event that a poster posts content for which secondary use is prohibited by the content/service provider, including uploading the content to another posting site, it can be determined that secondary use is unauthorized and that uploading is therefore illegal by referring to the terms of use summarized in DRPC, see Figure 13.



Figure 13 – Uploading of content whose secondary use is prohibited by the content usage contract

11.4.4 Case 3: Use of unauthorized content (embedded with DRPC) downloaded illegally from another website

In the event that a poster downloads content embedded with DRPC from another website or service illegally and posts it to another posting site, the uploaded content can be identified as illegal by referring to the terms of use summarized in DRPC, see Figure 14.

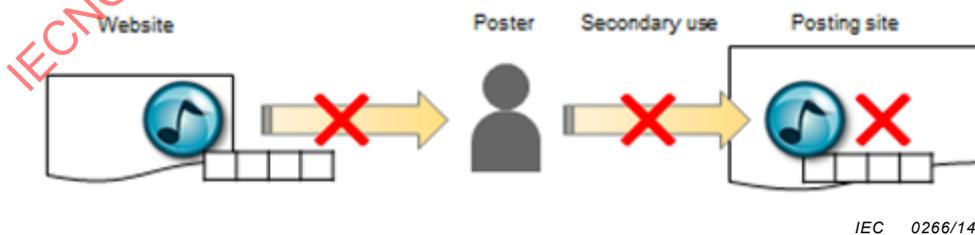


Figure 14 – Uploading of illegal content without a content usage contract

11.5 Direction for countermeasures against illegal distribution of content

As shown above, it is possible to determine whether content uploaded to various posting sites is legal or illegal by referring to the terms of use when the content is embedded with DRPC, see Figure 15.

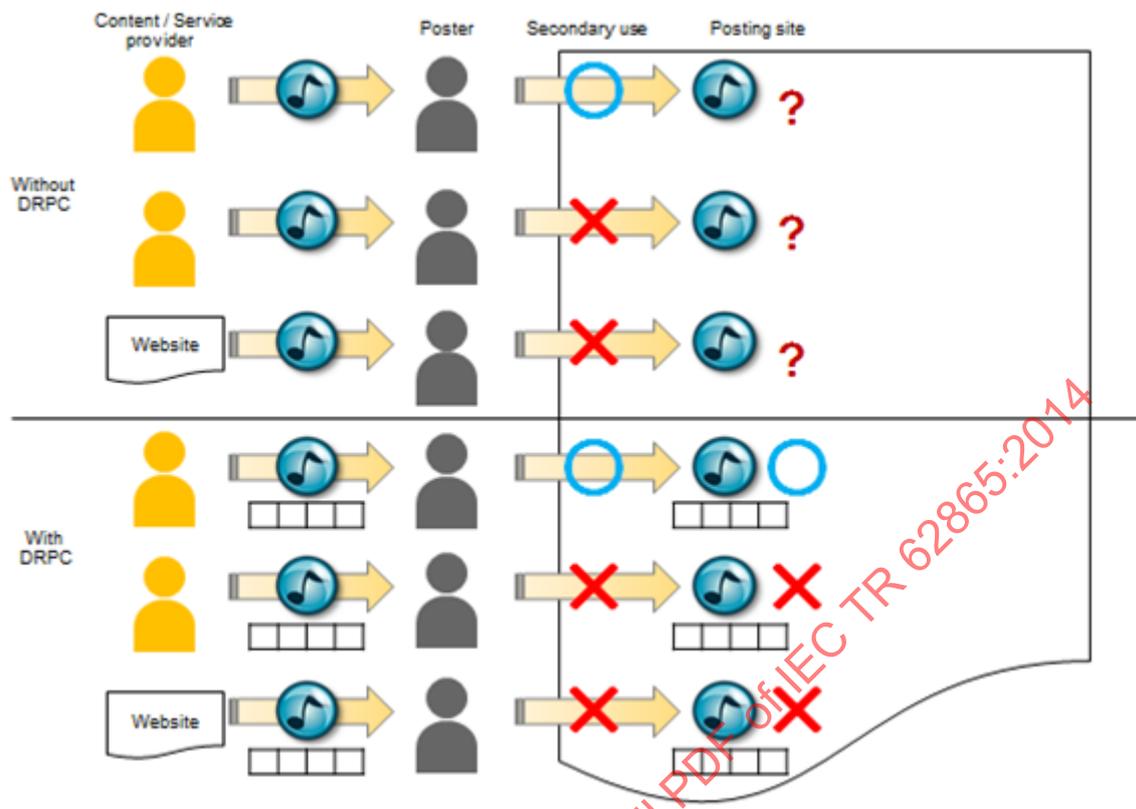


Figure 15 – Overall picture of content identification on posting sites with or without DRPC

12 Applicability of DRPC to the allocation of royalties earned from the distribution of digital content

12.1 General

The following subclauses explain the status and challenges of the allocation of royalties earned from the distribution of various types of content, as well as a simplified method of allocation that can be realized by using DRPC.

12.2 Status and challenges concerning the allocation of royalties

The current system of allocating usage fees for digital content to various rights holders involves a number of conditions defined by usage type, number of users, and the content name. Accordingly, a content holder always has to match the content name with the applicable conditions during the procedures for allocating royalties among the rights holders.

This process requires an increasing amount of time and work in relation to the increasing number of contents and related conditions of royalties, see Figure 16.

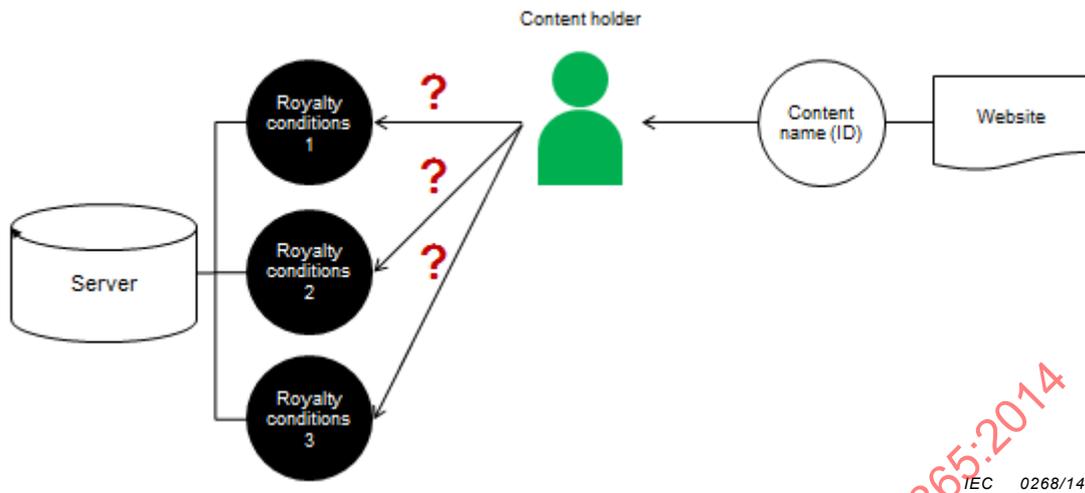


Figure 16 – Royalty allocation scheme based on using content name or ID alone

12.3 Possible royalty allocation system based on DPCR

The use of DRPC enables understanding of the relationship between usage type, number of users, and concerned rights holders, facilitating the determination of the applicable royalty conditions.

By using DRPC, a content holder can manage different royalty conditions applied to specific content under its control in its server and instantly retrieve different allocation conditions applicable to different rights holders, see Figure 17.

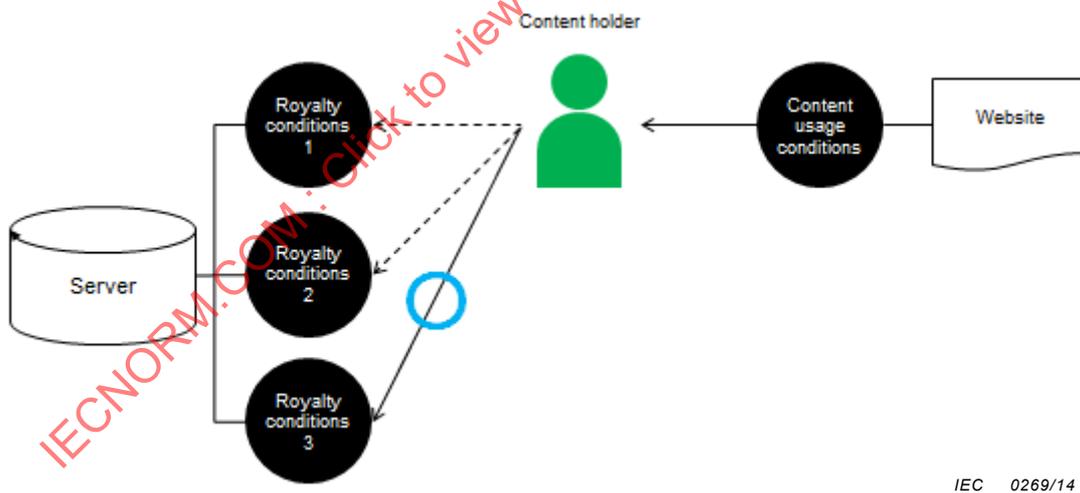
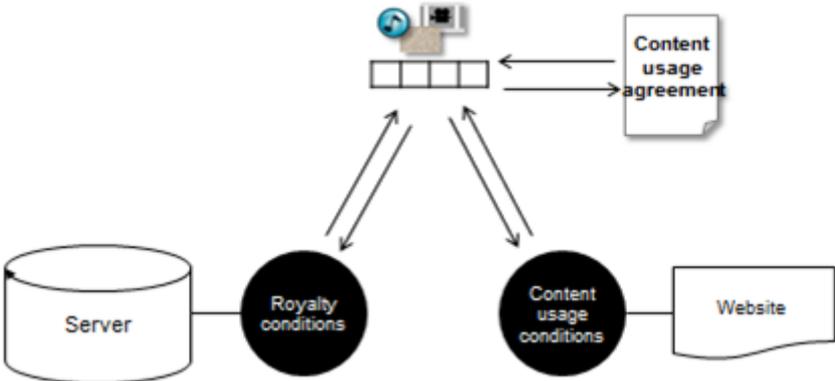


Figure 17 – Royalty allocation scheme based on DPCR

12.4 Roles of DRPC in the allocation of royalties

DRPC created on the basis of a content usage agreement defines usage conditions on devices and not only helps to manage content, its usage type, and the number of uses but also helps to simplify the matching of royalty conditions, all of which will save time and effort for the people in charge of these matters, see Figure 18.



IEC 0270/14

Figure 18 – Overall picture of the allocation of royalties based on DPCR

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Annex A
(informative)

Content matrix for various service agreements

Class

- Description of the service
- Description of user's rights
- Description of user's obligations (prohibited matters)
- Description of distributor's rights
- Disclaimer
- Permission condition of consumers
- Definition of words

Blue sentence = Elements of IEC 62227:2008

Red sentence = Possible elements of IEC 62227, second edition¹⁴

| Service name | Category 1 | Category 2 Clause | Content |
|--------------|---|--|--|
| iTUNES STORE | Terms of sale: ITUNES STORE, APP STORE and IBOOKSTORE | Condition of payment, tax and refund | Payment method restriction from service provider to user Disclaimer |
| | | 1-Click | Description of the service |
| | | Gift card, iTunes Card, allowance and content code | Description of the service |
| | | | Service area restriction from service provider to user Disclaimer |
| | | Gift | Description of the service |
| | | Pre-orders | Description of the service |
| | | Electronic contracting | Disclaimer |
| | ITUNES STORE TERMS AND CONDITIONS | iTunes Store service | Definition of words |
| | | Requirements for use of the itunes service | Age restrictions from the service to users |
| | | | Description of user's rights |
| | | | Disclaimer |
| | | Customer accounts | Description of the service |
| | | | Disclaimer |
| | | Privacy | Permission condition of consumers |
| | | Content availability | Description of distributor's rights about changing service contents |
| | | Use of purchased or rented content | Description of distributor's rights about changing usage rules of contents |
| | | | Description of user's obligations (prohibited matters) |
| Usage rules | Description of user's rights | | |

¹⁴ Under consideration.

| Service name | Category 1 | Category 2 Clause | Content |
|--------------|--|--|---|
| iTUNES STORE | | | Description of user's obligations (prohibited matters) |
| | | | Disclaimer |
| | | PING | Description of the service |
| | | | Disclaimer |
| | | iTunes Pass | Description of the service |
| | | | Disclaimer |
| | | Submissions to the itunes service | Description of distributor's rights to cancel the contract |
| | | Third-party materials | Disclaimer |
| | | Objectionable material | Disclaimer |
| | | Important safety information | Disclaimer |
| | | Intellectual property | Description of distributor's rights about intellectual property |
| | | Termination | Description of distributor's rights to cancel the contract |
| | | Disclaimer of warranties; liability limitation | Disclaimer |
| | | Waiver and indemnity | Disclaimer |
| | | Changes | Description of distributor's rights to change agreement |
| | | Disclaimer | |
| | Miscellaneous | Description of distributor's rights about severability clause | |
| | | Mac App Store, App Store and iBookstore terms and conditions | Definition of words |
| | | Requirements for use of the app and book services | Age restrictions from the service to users |
| | | | Disclaimer |
| | | Customer accounts | Description of the service |
| | | | Disclaimer |
| | | Automatic delivery and downloading previous purchases | Description of the service |
| | | | Disclaimer |
| | | | Description of user's rights |
| | | Privacy | Permission condition of consumers |
| | | | Disclaimer |
| | Use of app and book products and the app and book services | Description of distributor's rights about changing usage rules of contents | |
| | | Description of user's obligation (prohibited matters) | |
| | | Disclaimer | |
| | Submissions to the app and book services | Description of distributor's rights to cancel the contract | |
| | Objectionable material | Disclaimer | |

| Service name | Category 1 | Category 2 Clause | Content |
|---|--|--|--|
| | | Intellectual property | Description of distributor's rights about intellectual property |
| | | Termination | Description of distributor's rights to cancel the contract |
| | | Disclaimer of warranties; liability limitation | Disclaimer |
| | | Waiver and indemnity | Disclaimer |
| | | Changes | Description of distributor's rights to change agreement |
| | | Miscellaneous | Disclaimer |
| | Description of distributor's rights about severability clause | | |
| | Additional mac app store and app store terms and conditions | License of mac app store and app store products | Disclaimer |
| | | In-app purchases | Disclaimer |
| | | In-app subscriptions | Description of the service |
| | | | Disclaimer |
| | | | Return or refund conditions allowed from the "service" to the "user" |
| | | Genius for apps | Permission condition of consumers |
| | | | Disclaimer |
| | | Mac app store product usage rules | Description of user's rights |
| | | | Description of user's obligations (prohibited matters) |
| | | App store product usage rules | Description of user's rights |
| | | | Description of user's obligations (prohibited matters) |
| | | Important safety information | Disclaimer |
| | | iPod Games | Disclaimer |
| Mac app store and app store product maintenance and support | | Description of distributor's obligation (exceptional clause) | |
| Licensed application end user license agreement | Disclaimer | | |
| | Description of user's obligations (prohibited matters) | | |
| | (When the content is distributed from a third party, "From" will be "Application distributor" and "To" will be "User") ¹⁵ | | |
| Additional ibookstore terms | Disclaimer | | |

¹⁵ When downloading applications distributed in Mac App Store / App Store that is not produced nor provided by Apple, a licensed application end user license agreement is agreed between the third party and user, which is within prior approval. In this instance, "FromID" will be "Application provider" and "ToID" will be "User".

| Service name | Category 1 | Category 2 Clause | Content |
|----------------------|--|--------------------------------|---|
| iTUNES STORE | | and conditions | (When the contents are on iBookstore, "From" will be "Publisher" and "To" will be "User") ¹⁶ |
| | | iBookstore product usage rules | Description of user's rights |
| | | | Description of user's obligations (prohibited matters) |
| | Privacy policy | Omitted below | Permission condition of consumers |
| Amazon.com | PRIVACY | | Permission condition of consumers |
| | ELECTRONIC COMMUNICATIONS | | Description of user's obligations (prohibited matters) |
| | COPYRIGHT | | Description of distributor's copyrights |
| | TRADEMARKS | | Description of distributor's trademark |
| | PATENTS | | Description of distributor's patent |
| | LICENSE AND SITE ACCESS | | Description of user's rights |
| | | | Description of user's obligations (prohibited matters) |
| | | | Description of distributor's rights to manage the site |
| | YOUR ACCOUNT | | Description of user's obligations (prohibited matters) |
| | REVIEWS, COMMENTS, COMMUNICATIONS, AND OTHER CONTENT | | Description of user's rights |
| | | | Description of user's obligations (prohibited matters) |
| | | | Description of distributor's rights to edit or remove reviews or comments |
| | COPYRIGHT COMPLAINTS | | Description of the service |
| | RISK OF LOSS | | Disclaimer |
| | RETURNS, REFUNDS AND TITLE | | Disclaimer |
| PRODUCT DESCRIPTIONS | | Disclaimer | |
| PRICING | | Disclaimer | |
| OTHER BUSINESSES | | Disclaimer | |

¹⁶ The same is said in contents provided on iBookstore. iTunes store becomes an agent of the publisher. "FromID" becomes "Publisher" and "ToID" becomes "User".