INTERNATIONAL STANDARD

ISO/IEC

21000-5

Information technology — Multimedia framework (MPEG-21) —

Part 5:
Rights Expression Language

AMENDMENT 3: OAC (Open Access Content) profile

Technologies de l'information — Cadre multimédia (MPEG-21) —

Partie 5: Langage d'expression des droits

AMENDEMENT 3: Profil OAC ("Open Access Content")

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Foreword

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The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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

Amendment 3 to ISO/IEC 21000-5:2004 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

Information technology — Multimedia framework (MPEG-21) —

Part 5:
Rights Expression Language

AMENDMENT 3: OAC (Open Access Content) profile

Insert two new subclauses 10.4 and 11.4 as follows and change references accordingly:

10.4 Multimedia extension three

10.4.1 General

This subclause specifies an additional extension, called the "multimedia extension three", of the REL specified in the previous clauses.

10.4.2 Normative namespace

The XML namespace for the extension types and new elements and attributes introduced in the REL multimedia extension three shall be `urn:mpeg:mpeg21:2006:01-REL-M3X-NS`, and this namespace is normative. Here, the `01` represents a serial number that is expected to change as this extension evolves.

10.4.3 Namespace prefixes

For convenience, this extension uses shorthand namespace prefixes when referring to XML elements and types. The actual prefix used is not important as long as the namespace URI is correct. The prefixes used in this extension are given in Table AMD3.1.

Table AMD3.1 — Prefixes of XML schemas

Prefix	Name	Namespace
r	REL Core	urn:mpeg:mpeg21:2003:01-REL-R-NS
sx	REL Standard Extension	urn:mpeg:mpeg21:2003:01-REL-SX-NS
mx	REL Multimedia Extension	urn:mpeg:mpeg21:2003:01-REL-MX-NS
dsig	XML Digital Signature	http://www.w3.org/2000/09/xmldsig#
xenc	XML Encryption	http://www.w3.org/2001/04/xmlenc#
m1x	REL Multimedia Extension One	urn:mpeg:mpeg21:2005:01-REL-M1X-NS
m3x	REL Multimedia Extension Three	urn:mpeg:mpeg21:2006:01-REL-M3X-NS

10.4.4 Definition of multimedia extension three

This subclause defines the extensions to the REL used in this profile. The syntax and the semantics of these extensions are presented here. The XML schema for the extension elements and types is listed in the Annex of this Part of ISO/IEC 21000.

10.4.4.1   Right extension elements

10.4.4.1.1 GovernedAdapt

10.4.4.1.1.1 Informative description

This element represents the right to adapt the resource and results in certain rights being associated with the adapted resource. The optional attribute @m1x:governanceRule of type QName indicates the name of a governance rule that determines how exactly the adaptation should be made and what rights should be associated and by whom. When the attribute is not specified, this right allows adaptation of the resource and results in identical adaptation of the r:license such that related grant in the license are associated with the adapted resource.

Figure AMD3.1 — m3x:GovernedAdapt right

A sample code fragment is provided below for illustration:

```
<r:license>
    <r:grant>
        <mx:play/>
        <r:digitalResource>
            <r:nonSecureIndirect URI="urn:movie:clips:hero_trailer.mpeg"/>
        </r:digitalResource>
    </r:grant>
    <r:grant>
        <m3x:governedAdapt/>
        <r:digitalResource>
            <r:nonSecureIndirect URI="urn:movie:clips:hero_trailer.mpeg"/>
        </r:digitalResource>
    </r:grant>
</r:license>
```

In the above example, any principal is granted the right to play a movie clip, and the right to adapt the clip together with the same license.

The following is another example license:

```
<r:license >
    <r:grant>
        <mx:play/>
        <r:digitalResource>
            <r:nonSecureIndirect URI="urn:movie:clips:hero_trailer.mpeg"/>
        </r:digitalResource>
    </r:grant>
    <r:grant>
        <m3x:governedAdapt governanceRule="m3x:adaptOnce"/>
        <r:digitalResource>
            <r:nonSecureIndirect URI="urn:movie:clips:hero_trailer.mpeg"/>
        </r:digitalResource>
    </r:grant>
    <r:issuer>
        <r:keyHolder>
            <r:info>
                <dsig:KeyName>Rights Issuer Public Key Name</dsig:KeyName>
            </r:info>
        </r:keyHolder>
    </r:issuer>
</r:license >
```

Suppose the governance rule named "m3x:adaptOnce" only allows exercising this right once to adapt of the resource and associating the other rights in the same license to the adapted resource by issuing another license by the same issuer. In this case, exercising the right m3x:governedAdapt in the license will result in an adapted resource, and the following license:

```
<r:license >
    <r:grant>
        <mx:play/>
        <r:digitalResource>
            <r:nonSecureIndirect URI="urn:movie:clips:hero_trailer.mpeg"/>
        </r:digitalResource>
    </r:grant>
    <r:issuer>
        <r:keyHolder>
            <r:info>
                <dsig:KeyName>Rights Issuer Public Key Name</dsig:KeyName>
            </r:info>
        </r:keyHolder>
    </r:issuer>
</r:license >
```

10.4.4.1.1.2 Normative specification

Let *r* be a `m3x:governedAdapt`. Then, if *r*/`@m3x:governanceRule` is present, *r* identifies the act of adapting and associating right expressions with that adapted resource in compliance with the compliance rules identified by *r*/`@m3x:governanceRule`. Otherwise, if *r*/`@m3x:governanceRule` is absent, *r* identifies the act of adapting and associating a right expression to that adapted resource that is Equal to the License in the authorizer in one of the authorization proofs for the authorization request for that adapting.

If *r* is used as the Right Member of an authorization request, then the Resource Member of that authorization request shall be present and shall identify the resource being adapted.

10.4.4.2   Condition extension elements

10.4.4.2.1 CopyrightNotice

10.4.4.2.1.1 Informative description

This element represents the condition to notice the copyright information to user while the right is exercised. The optional attribute `@m3x:noticeType` of type `QName` indicates the way how to make aware the notice to users. When the attribute is not specified, this condition is just machine-readable information.

Figure AMD3.2 — m3x:CopyrightNotice

All information described under the m3x:copyrightNotice element should be shown to users or inserted into resource while the right is exercised, according to the `@m3x:noticeType`.

A sample code fragment is provided below for illustration:

```
<r:license>
    <r:grant>
        <mx:play/>
        <r:digitalResource>
            <r:nonSecureIndirect URI="urn:movie:clips:hero_trailer.mpeg"/>
        </r:digitalResource>
        <m3x:copyrightNotice noticeType="ShowBeforeExercise">
            <m3x:copyrightString>Produced by AAA Entertainment, 2007.1.1</m3x:copyrightString>
        </m3x:CopyrightNotice >
    </r:grant>
    <r:grant>
        <mx:govenedCopy/>
        <r:digitalResource>
            <r:nonSecureIndirect URI="urn:movie:clips:hero_trailer.mpeg"/>
        </r:digitalResource>
        <m3x:copyrightNotice>
            <m3x:copyrightString>Produced by AAA Entertainment, 2007.1.1</m3x:copyrightString>
        </m3x:copyrightNotice>
    </r:grant>
</r:license>
```

In the above example, any principal is granted the right to play a movie clip, and the right to copy the clip together with the same license. And with the m3x:copyrightNotice condition, the rendering application is required to show copyrights notice before exercise.

10.4.4.2.1.2 Normative specification

Let *r* be an `m3x:copyrightNotice`. Then, if *r*/`@m3x:noticeType` is present, *r* identifies the act of notice with the compliance rules identified by *r*/`@m3x:noticeType`. Otherwise, if *r*/`@m3x:noticeType` is absent, *r* may do nothing.

If *r* is used as the Right Member of an authorization request, then the Resource Member of that authorization request shall be present and shall identify the resource being exercised.

10.4.4.2.2 NonCommercialUse

10.4.4.2.2.1 Informative description

This element represents the condition to inform the user that the resource is not for any commercial use while the right is exercised. The optional attribute `@m3x:noticeType` of type `QName` indicates the way how to make aware of the notice to the user. When the attribute is not specified, this condition is just machine-readable information.
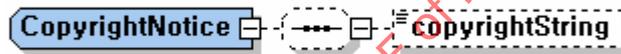

Figure AMD3.3 — m3x:NonCommercialUse

A sample code fragment is provided below for illustration:

```
<r:license>
    <r:grant>
        <mx:play/>
        <r:digitalResource>
            <r:nonSecureIndirect URI="urn:movie:clips:hero_trailer.mpeg"/>
        </r:digitalResource>
        <m3x:nonCommercialUse noticeType="ShowBeforeExercise"/>
    <r:grant>
</r:license>
```

In the above example, any principal is granted the right to play a movie clip. And with the `m3x:nonCommercialUse` condition, the rendering application is required to show non commercial use notice before exercise.

10.4.4.2.2.2 Normative specification

Let *r* be an `m3x:nonCommercialUse`. Then, if *r*/`@m3x:noticeType` is present, *r* identifies the act of notice with the compliance rules identified by *r*/`@m3x:noticeType`. Otherwise, if *r*/`@m3x:noticeType` is absent, *r* may do nothing.

If *r* is used as the Right Member of an authorization request, then the Resource Member of that authorization request shall be present and shall identify the resource being exercised.

10.4.4.2.3 SourceCode

10.4.4.2.3.1 Informative description

This element represents the condition to support the source code (or resource) for all derivate work. With this condition element, the adapted work should contain the original resource or at least its accessible location.

Figure AMD3.4 — m3x:SourceCode

A sample code fragment is provided below for illustration:

```
<r:license>
    <r:grant>
        <mx:play/>
        <r:digitalResource>
            <r:nonSecureIndirect URI="urn:movie:clips:hero_trailer.mpeg"/>
        </r:digitalResource>
    </r:grant>
    <r:grant>
        <m3x:govenedAdapt/>
        <r:digitalResource>
            <r:nonSecureIndirect URI="urn:movie:clips:hero_trailer.mpeg"/>
        </r:digitalResource>
        <m3x:sourceCode/>
    </r:grant>
</r:license>
```

In the above example, any principal is granted the right to play a movie clip, and the right to adapt the clip together with the same license. And with the `m3x:sourceCode` condition, the adapting application is required to insert the original resource or at least its accessible location into adapted work.

10.4.4.2.3.2 Normative specification

Let *r* be an `m3x:sourceCode`. Then if *r* is present, it is required to insert the original resource or at least its accessible location into adapted work, when the resource is adapted.

If *r* is used as the Right Member of an authorization request, then the Resource Member of that authorization request shall be present and shall identify the resource being adapted.

11.4 OAC profile

11.4.1 General

This subclause specifies a profile, called the "OAC (Open Access Content) profile", of the REL specified in the previous clauses.

11.4.2 OAC profile definition

The profile elements and their included child elements are listed in Table AMD3.2.

Table AMD3.2 — Profile elements

Element/Child Element	Comments
r:license	The definition of an r:license is restricted to contain the following elements: r:grant, and r:issuer.
R:grant	Each r:grant represents a rights expression.
R:issuer	This element indicates which principal issues the license.
@sx:profileCompliance @m1x:licenseType	The @sx:profileCompliance attribute indicates a profile that the license is compliant to. The value of urn:mpeg:mpeg21:2005:01-REL-M3X shall be used in a license to indicate compliance to this profile. The attribute @m1x:licenseType provides a further categorization of the license, which is useful in identifying what elements and attributes the license may contain.
r:grant	An r:grant is restricted to include the following child elements only: r:forAll, r:principal, r:right, r:resource and r:condition.
r:keyHolder m1x:identityHolder	This profile only supports these Principals.

mx:adapt
    mx:execute
    mx:play
    mx:print
    m1x:governedCopy
    m3x:governedAdapt
	This profile only supports these Rights.

r:digitalResource	This profile only supports these Resources.

r:allConditions
    sx:territory
    m3x:copyrightNotice
    m3x:nonCommercialUse
    m3x:sourceCode
	This profile only supports these Conditions.

r:keyHolder	This element is used as defined.
r:info	This element of type dsig:KeyInfoType specifies a key for the r:keyHolder. Used as defined.

`m1x:identityHolder`	This element is used as defined.
`r:digitalResource`	This element is restricted to include the following child elements only: `r:nonSecureIndirect` and `r:secureIndirect`.
`r:nonSecureIndirect` `r:secureIndirect`	`r:nonSecureIndirect` identifies a digital resource by reference. `r:secureIndirect` identifies a digital resource by reference and includes a hash to bind the content reference to the actual contents of the file. These two elements are used as defined.
`r:allConditions`	This element is used as defined.
`r:condition`	The `r:allConditions` element is retained in the profile, so that other conditions can be grouped together by it and used conjunctively. Used as defined.
`m3x:copyrightNotice`	This element is used as defined.
`@noticeType`	This attribute is used as defined.
`m3x:copyrightString`	This element is used as defined.
`m3x:nonCommercialUse`	This element is used as defined.
`@noticeType`	This attribute is used as defined.
`sx:territory`	This element includes the following child element only: `sx:location` and `sx:domain`, but with sx:location being restricted to `sx:country` and `sx:region`.
`sx:location`	This element is restricted to include the following child elements only: `sx:country` and `sx:region`.
`sx:country` `sx:region`	`sx:country` and `sx:region` are used to specify ISO-3166 country and region codes for identifying a country and region. Used as defined.
`m3x:sourceCode`	This element is used as defined.
`r:issuer`	This element is restricted to include the following child element only: `dsig:Signature` and `r:keyHolder`.
`dsig:Signature` `r:keyHolder`	`dsig:Signature`, used as defined, gives the hash of the license, the public key of the issuer, and the signature of the issuer over the license. `r:keyHolder` gives the public key of the issuer, and is used as defined.

Insert K.3 as follows:

K.3 OAC profile

K.3.1 Allowing free use and derivative work with copyrights notice

In this example, everyone and every device are granted the right to:

- Play the stated digital resource, only if copyrights notice is shown before rendering the resource.

- Print the stated digital resource, only if copyright notice is printed on the printed material.

- Copy the stated digital resource, only if existing copyright and license notices are kept intact.

- Derivative work of the stated digital resource, only if making clear the rights owner.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<license xmlns="urn:mpeg:mpeg21:2003:01-REL-R-NS" xmlns:sx="urn:mpeg:mpeg21:2003:01-REL-SX-NS"
xmlns:mx="urn:mpeg:mpeg21:2003:01-REL-MX-NS" xmlns:m1x="urn:mpeg:mpeg21:2005:01-REL-M1X-NS"
xmlns:m3x="urn:mpeg:mpeg21:2006:01-REL-M3X-NS" xmlns:enc="http://www.w3.org/2001/04/xmlenc#"
xmlns:dsig="http://www.w3.org/2000/09/xmldsig#" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:mpeg:mpeg21:2006:01-REL-M3X-NS rel-m3x-oac-v1.xsd">
    <grant>
        <mx:play/>
        <digitalResource licensePartId="news">
            <nonSecureIndirect URI="urn:newspaper:news:2005_07_10-12H-00M"/>
        </digitalResource>
        <m3x:copyrightNotice noticeType="ShowBeforeExercise">
            <m3x:copyrightString> Written by Tom, AAA News, 2007.1.1</m3x:copyrightString>
        </m3x:copyrightNotice>
    </grant>
    <grant>
        <mx:print/>
        <digitalResource licensePartIdRef="news"/>
        <m3x:copyrightNotice noticeType="BannerImage">
            <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1</m3x:copyrightString>
        </m3x:copyrightNotice>
    </grant>
    <grant>
        <m1x:governedCopy/>
        <digitalResource licensePartIdRef="news"/>
        <m3x:copyrightNotice>
            <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1</m3x:copyrightString>
        </m3x:copyrightNotice>
    </grant>
    <grant>
        <mx:adapt/>
        <digitalResource licensePartIdRef="news"/>
        <m3x:copyrightNotice>
            <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1</m3x:copyrightString>
        </m3x:copyrightNotice>
    </grant>
    <issuer>
        <keyHolder>
            <info>
                <dsig:KeyName>Rights Issuer Public Key Name</dsig:KeyName>
            </info>
        </keyHolder>
    </issuer>
</license>
```

K.3.2 Allowing free use with copyrights notice except modification

In this example, everyone and every device are granted the right to:

- Play the stated digital resource, only if copyrights notice is shown before rendering the resource.

- Print the stated digital resource, only if copyright notice is printed on the printed material.

- Copy the stated digital resource, only if making clear the rights owner and existing copyright and license notices are kept intact.

```
<?xml version="1.0" encoding="UTF-8"?>
<license xmlns="urn:mpeg:mpeg21:2003:01-REL-R-NS" xmlns:sx="urn:mpeg:mpeg21:2003:01-REL-SX-NS"
xmlns:mx="urn:mpeg:mpeg21:2003:01-REL-MX-NS" xmlns:m1x="urn:mpeg:mpeg21:2005:01-REL-M1X-NS"
xmlns:m3x="urn:mpeg:mpeg21:2006:01-REL-M3X-NS" xmlns:enc="http://www.w3.org/2001/04/xmlenc#"
xmlns:dsig="http://www.w3.org/2000/09/xmldsig#" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:mpeg:mpeg21:2006:01-REL-M3X-NS rel-m3x-oac-v1.xsd">
    <grant>
        <mx:play/>
        <digitalResource licensePartId="news">
            <nonSecureIndirect URI="urn:newspaper:news:2005_07_10-12H-00M"/>
        </digitalResource>
        <m3x:copyrightNotice noticeType="ShowBeforeExercise">
            <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1</m3x:copyrightString>
        </m3x:copyrightNotice>
    </grant>
    <grant>
        <mx:print/>
        <digitalResource licensePartIdRef="news"/>
        <m3x:copyrightNotice noticeType="BannerImage">
            <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1</m3x:copyrightString>
        </m3x:copyrightNotice>
    </grant>
    <grant>
        <m1x:governedCopy/>
        <digitalResource licensePartIdRef="news"/>
        <m3x:copyrightNotice>
            <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1</m3x:copyrightString>
        </m3x:copyrightNotice>
    </grant>
    <issuer>
        <keyHolder>
            <info>
                <dsig:KeyName>Rights Issuer Public Key Name</dsig:KeyName>
            </info>
        </keyHolder>
    </issuer>
</license>
```

K.3.3 Allowing free use with copyrights notice except commercial use and modification

This example shows a simple license instance using OAC Profile with a grant described in the table below.

In this example, everyone and every device are granted the right to:

- Play the stated digital resource, only if copyrights and non-commercial-use notes are shown before rendering.

- Print the stated digital resource, only if copyrights and non-commercial-use notes are printed on the printed material.

- Copy the stated digital resource, only if it is used for non-commercial-purpose, and existing copyright and license notices are kept intact.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<license xmlns="urn:mpeg:mpeg21:2003:01-REL-R-NS" xmlns:sx="urn:mpeg:mpeg21:2003:01-REL-SX-NS"
xmlns:mx="urn:mpeg:mpeg21:2003:01-REL-MX-NS" xmlns:m1x="urn:mpeg:mpeg21:2005:01-REL-M1X-NS"
xmlns:m3x="urn:mpeg:mpeg21:2006:01-REL-M3X-NS" xmlns:enc="http://www.w3.org/2001/04/xmlenc#"
xmlns:dsig="http://www.w3.org/2000/09/xmldsig#" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:mpeg:mpeg21:2006:01-REL-M3X-NS rel-m3x-oac-v1.xsd">
    <grant>
        <mx:play/>
        <digitalResource licensePartId="news">
            <nonSecureIndirect URI="urn: newspaper:news:2005_07_10-12H-00M"/>
        </digitalResource>
        <allConditions>
            <m3x:copyrightNotice noticeType="ShowBeforeExercise">
                <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1 </m3x:copyrightString>
            </m3x:copyrightNotice>
            <m3x:nonCommercialUse/>
        </allConditions>
    </grant>
    <grant>
        <mx:print/>
        <digitalResource licensePartIdRef="news"/>
        <allConditions>
            <m3x:copyrightNotice noticeType="BannerImage">
                <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1 </m3x:copyrightString>
            </m3x:copyrightNotice>
            <m3x:nonCommercialUse/>
        </allConditions>
    </grant>
    <grant>
        <m1x:governedCopy/>
        <digitalResource licensePartIdRef="news"/>
        <allConditions>
            <m3x:copyrightNotice>
                <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1 </m3x:copyrightString>
            </m3x:copyrightNotice>
            <m3x:nonCommercialUse/>
        </allConditions>
    </grant>
    <issuer>
        <keyHolder>
            <info>
                <dsig:KeyName>Rights Issuer Public Key Name</dsig:KeyName>
            </info>
        </keyHolder>
    </issuer>
</license>
```

K.3.4 Allowing derivative work with copyrights notice except commercial use

In this example, everyone and every device are granted the right to:

- Play the stated digital resource, only if copyrights and non-commercial-use notes are shown before rendering the resource.

- Print the stated digital resource, only if copyrights and non-commercial-use notes are printed on the printed material.

- Copy the stated digital resource, only if it is used for non-commercial-purpose, and existing copyright and license notices are kept intact.

- Derivative work of the stated digital resource, only if it is used for non-commercial-purpose, and making clear the rights owner.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<license xmlns="urn:mpeg:mpeg21:2003:01-REL-R-NS" xmlns:sx="urn:mpeg:mpeg21:2003:01-REL-SX-NS"
xmlns:mx="urn:mpeg:mpeg21:2003:01-REL-MX-NS" xmlns:m1x="urn:mpeg:mpeg21:2005:01-REL-M1X-NS"
xmlns:m3x="urn:mpeg:mpeg21:2006:01-REL-M3X-NS" xmlns:enc="http://www.w3.org/2001/04/xmlenc#"
xmlns:dsig="http://www.w3.org/2000/09/xmldsig#" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:mpeg:mpeg21:2006:01-REL-M3X-NS rel-m3x-oac-v1.xsd">
    <grant>
        <mx:play/>
        <digitalResource licensePartId="news">
            <nonSecureIndirect URI="urn:newspaper:news:2005_07_10-12H-00M"/>
        </digitalResource>
        <allConditions>
            <m3x:copyrightNotice noticeType="ShowBeforeExercise">
                <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1 </m3x:copyrightString>
            </m3x:copyrightNotice>
            <m3x:nonCommercialUse/>
        </allConditions>
    </grant>
    <grant>
        <mx:print/>
        <digitalResource licensePartIdRef="news"/>
        <allConditions>
            <m3x:copyrightNotice noticeType="BannerImage">
                <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1 </m3x:copyrightString>
            </m3x:copyrightNotice>
            <m3x:nonCommercialUse/>
        </allConditions>
    </grant>
    <grant>
        <m1x:governedCopy/>
        <digitalResource licensePartIdRef="news"/>
        <allConditions>
            <m3x:copyrightNotice>
                <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1 </m3x:copyrightString>
            </m3x:copyrightNotice>
            <m3x:nonCommercialUse/>
        </allConditions>
    </grant>
    <grant>
        <mx:adapt/>
        <digitalResource licensePartIdRef="news"/>
        <allConditions>
            <m3x:copyrightNotice>
                <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1 </m3x:copyrightString>
            </m3x:copyrightNotice>
            <m3x:nonCommercialUse/>
        </allConditions>
    </grant>
    <issuer>
        <keyHolder>
            <info>
                <dsig:KeyName>Rights Issuer Public Key Name</dsig:KeyName>
            </info>
        </keyHolder>
    </issuer>
</license>
```

K.3.5 Allowing derivative work with the same license except commercial use

In this example, everyone and every device are granted the right to:

- Play the stated digital resource, only if copyrights and non-commercial-use notes are shown before rendering the resource.

- Print the stated digital resource, only if copyrights and non-commercial-use notes are printed on the printed material.

- Copy the stated digital resource, only if it is used for non-commercial-purpose, and existing copyright and license notices are kept intact.

- Derivative work of the stated digital resource, only if it is used for non-commercial-purpose, and existing copyright and license notices are kept intact.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<license xmlns="urn:mpeg:mpeg21:2003:01-REL-R-NS" xmlns:sx="urn:mpeg:mpeg21:2003:01-REL-SX-NS"
xmlns:mx="urn:mpeg:mpeg21:2003:01-REL-MX-NS" xmlns:m1x="urn:mpeg:mpeg21:2005:01-REL-M1X-NS"
xmlns:m3x="urn:mpeg:mpeg21:2006:01-REL-M3X-NS" xmlns:enc="http://www.w3.org/2001/04/xmlenc#"
xmlns:dsig="http://www.w3.org/2000/09/xmldsig#" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:mpeg:mpeg21:2006:01-REL-M3X-NS rel-m3x-oac-v1.xsd">
    <grant>
        <mx:play/>
        <digitalResource licensePartId="news">
            <nonSecureIndirect URI="urn:newspaper:news:2005_07_10-12H-00M"/>
        </digitalResource>
        <allConditions>
            <m3x:copyrightNotice noticeType="ShowBeforeExercise">
                <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1 </m3x:copyrightString>
            </m3x:copyrightNotice>
            <m3x:nonCommercialUse/>
        </allConditions>
    </grant>
    <grant>
        <mx:print/>
        <digitalResource licensePartIdRef="news"/>
        <allConditions>
            <m3x:copyrightNotice noticeType="BannerImage">
                <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1 </m3x:copyrightString>
            </m3x:copyrightNotice>
            <m3x:nonCommercialUse/>
        </allConditions>
    </grant>
    <grant>
        <m1x:governedCopy/>
        <digitalResource licensePartIdRef="news"/>
        <allConditions>
            <m3x:copyrightNotice noticeType="BannerImage">
                <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1 </m3x:copyrightString>
            </m3x:copyrightNotice>
            <m3x:nonCommercialUse/>
        </allConditions>
    </grant>
    <grant>
        <m3x:governedAdapt/>
        <digitalResource licensePartIdRef="news"/>
        <allConditions>
            <m3x:copyrightNotice noticeType="BannerImage">
                <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1 </m3x:copyrightString>
            </m3x:copyrightNotice>
            <m3x:nonCommercialUse/>
        </allConditions>
    </grant>
```

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```
    <issuer>
        <keyHolder>
            <info>
                <dsig:KeyName>Rights Issuer Public Key Name</dsig:KeyName>
            </info>
        </keyHolder>
    </issuer>
</license>
```

K.3.6 Allowing derivative work with the same license

In this example, everyone and every device are granted the right to:

- Play the stated digital resource, only if copyrights notes are shown before rendering the resource.

- Print the stated digital resource, only if copyrights are printed on the printed material.

- Copy the stated digital resource, only if existing copyright and license notices are kept intact.

- Derivative work of the stated digital resource, only if existing copyright and license notices are kept intact.

```
<?xml version="1.0" encoding="UTF-8"?>
<license xmlns="urn:mpeg:mpeg21:2003:01-REL-R-NS" xmlns:sx="urn:mpeg:mpeg21:2003:01-REL-SX-NS"
xmlns:mx="urn:mpeg:mpeg21:2003:01-REL-MX-NS" xmlns:m1x="urn:mpeg:mpeg21:2005:01-REL-M1X-NS"
xmlns:m3x="urn:mpeg:mpeg21:2006:01-REL-M3X-NS" xmlns:enc="http://www.w3.org/2001/04/xmlenc#"
xmlns:dsig="http://www.w3.org/2000/09/xmldsig#" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:mpeg:mpeg21:2006:01-REL-M3X-NS rel-m3x-oac-v1.xsd">
    <grant>
        <mx:play/>
        <digitalResource licensePartId="news">
            <nonSecureIndirect URI="urn: newspaper:news:2005_07_10-12H-00M"/>
        </digitalResource>
        <m3x:copyrightNotice noticeType="ShowBeforeExercise">
            <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1 </m3x:copyrightString>
        </m3x:copyrightNotice>
    </grant>
    <grant>
        <mx:print/>
        <digitalResource licensePartIdRef="news"/>
        <m3x:copyrightNotice noticeType="BannerImage">
            <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1 </m3x:copyrightString>
        </m3x:copyrightNotice>
    </grant>
    <grant>
        <m1x:governedCopy/>
        <digitalResource licensePartIdRef="news"/>
        <m3x:copyrightNotice noticeType="BannerImage">
            <m3x:copyrightString>Written by Tom, AAA News, 2007.1.1 </m3x:copyrightString>
        </m3x:copyrightNotice>
    </grant>
    <grant>
        <m3x:governedAdapt/>
        <digitalResource licensePartIdRef="news"/>
        <m3x:copyrightNotice licensePartIdRef="notice"/>
    </grant>
    <issuer>
        <keyHolder>
            <info>
                <dsig:KeyName>Rights Issuer Public Key Name</dsig:KeyName>
            </info>
        </keyHolder>
    </issuer>
</license>
```

Insert L.3 as follows:

L.3   XML schema for elements and types of the multimedia extension three

```xml
<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema targetNamespace="urn:mpeg:mpeg21:2006:01-REL-M3X-NS"
xmlns:xenc="http://www.w3.org/2001/04/xmlenc#" xmlns:dsig="http://www.w3.org/2000/09/xmldsig#"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:sx="urn:mpeg:mpeg21:2003:01-REL-SX-NS"
xmlns:mx="urn:mpeg:mpeg21:2003:01-REL-MX-NS" xmlns:r="urn:mpeg:mpeg21:2003:01-REL-R-NS"
xmlns:m3x="urn:mpeg:mpeg21:2006:01-REL-M3X-NS" xmlns:m1x="urn:mpeg:mpeg21:2005:01-REL-M1X-NS"
elementFormDefault="qualified" attributeFormDefault="unqualified">
    <xsd:import namespace="http://www.w3.org/XML/1998/namespace"
schemaLocation="http://www.w3.org/2001/xml.xsd"/>
    <xsd:import namespace="urn:mpeg:mpeg21:2003:01-REL-R-NS" schemaLocation="rel-r-oac-v1.xsd"/>
    <xsd:import namespace="urn:mpeg:mpeg21:2003:01-REL-SX-NS" schemaLocation="rel-sx-oac-v1.xsd"/>
    <xsd:import namespace="urn:mpeg:mpeg21:2003:01-REL-MX-NS" schemaLocation="rel-mx-oac-v1.xsd"/>
    <xsd:import namespace="urn:mpeg:mpeg21:2005:01-REL-M1X-NS" schemaLocation="rel-m1x-oac-v1.xsd"/>
    <xsd:import namespace="http://www.w3.org/2001/04/xmlenc#" schemaLocation="http://www.w3.org/TR/2002/REC-
xmlenc-core-20021210/xenc-schema.xsd"/>
    <xsd:import namespace="http://www.w3.org/2000/09/xmldsig#" schemaLocation="http://www.w3.org/TR/2002/REC-
xmldsig-core-20020212/xmldsig-core-schema.xsd"/>
    <!-- Elements -->
    <xsd:element name="copyrightNotice" type="m3x:CopyrightNotice" substitutionGroup="r:condition"/>
    <xsd:element name="nonCommercialUse" type="m3x:NonCommercialUse" substitutionGroup="r:condition"/>
    <xsd:element name="sourceCode" type="m3x:SourceCode" substitutionGroup="r:condition"/>
    <xsd:element name="governedAdapt" type="m3x:GovernedAdapt" substitutionGroup="r:right"/>
    <xsd:complexType name="CopyrightNotice">
        <xsd:complexContent>
            <xsd:extension base="r:Condition">
                <xsd:sequence minOccurs="0">
                    <xsd:element name="copyrightString" type="xsd:string" minOccurs="0"/>
                </xsd:sequence>
                <xsd:attribute name="noticeType" type="xsd:QName" use="optional"/>
            </xsd:extension>
        </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="NonCommercialUse">
        <xsd:complexContent>
            <xsd:extension base="r:Condition"/>
        </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="SourceCode">
        <xsd:complexContent>
            <xsd:extension base="r:Condition"/>
        </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="GovernedAdapt">
        <xsd:complexContent>
            <xsd:extension base="r:Right"/>
        </xsd:complexContent>
    </xsd:complexType>
</xsd:schema>
```

Insert M.3 as follows:

M.3 OAC profile

M.3.1 XML schema for the profile elements and types of the multimedia extension three

See L.3.

M.3.2 XML schema for profile elements and types of the multimedia extension one

```
<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema targetNamespace="urn:mpeg:mpeg21:2005:01-REL-M1X-NS"
xmlns:xenc="http://www.w3.org/2001/04/xmlenc#" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:sx="urn:mpeg:mpeg21:2003:01-REL-SX-NS" xmlns:r="urn:mpeg:mpeg21:2003:01-REL-R-NS"
xmlns:mx="urn:mpeg:mpeg21:2005:01-REL-MX-NS" xmlns:m1x="urn:mpeg:mpeg21:2005:01-REL-M1X-NS"
elementFormDefault="qualified" attributeFormDefault="unqualified">
    <xsd:import namespace="http://www.w3.org/XML/1998/namespace"
schemaLocation="http://www.w3.org/2001/xml.xsd"/>
    <xsd:import namespace="urn:mpeg:mpeg21:2003:01-REL-R-NS" schemaLocation="rel-r-oac-v1.xsd"/>
    <xsd:import namespace="urn:mpeg:mpeg21:2003:01-REL-SX-NS" schemaLocation="rel-sx-oac-v1.xsd"/>
    <xsd:import namespace="urn:mpeg:mpeg21:2003:01-REL-MX-NS" schemaLocation="rel-mx-oac-v1.xsd"/>
    <xsd:import namespace="http://www.w3.org/2001/04/xmlenc#" schemaLocation="http://www.w3.org/TR/2002/REC-
xmlenc-core-20021210/xenc-schema.xsd"/>
    <!-- Elements -->
    <xsd:element name="delist" type="m1x:Delist" substitutionGroup="r:right"/>
    <xsd:element name="drmSystem" type="m1x:DrmSystem" substitutionGroup="r:condition"/>
    <xsd:element name="derivationConstraint" type="m1x:DerivationConstraint" substitutionGroup="r:condition"/>
    <xsd:element name="enlist" type="m1x:Enlist" substitutionGroup="r:right"/>
    <xsd:element name="governedCopy" type="m1x:GovernedCopy" substitutionGroup="r:right"/>
    <xsd:element name="governedMove" type="m1x:GovernedMove" substitutionGroup="r:right"/>
    <xsd:element name="identityHolder" type="m1x:IdentityHolder" substitutionGroup="r:principal"/>
    <xsd:element name="outputRegulation" type="m1x:OutputRegulation" substitutionGroup="r:condition"/>
    <xsd:element name="protectedResource" type="m1x:ProtectedResource" substitutionGroup="r:resource"/>
    <xsd:element name="seekPermission" type="m1x:SeekPermission" substitutionGroup="r:condition"/>
    <xsd:element name="serviceLocation" type="m1x:ServiceLocation" substitutionGroup="r:serviceDescription"/>
    <xsd:element name="startCondition" type="m1x:StartCondition" substitutionGroup="r:condition"/>
    <!--Complex Types-->
    <xsd:complexType name="Delist">
        <xsd:complexContent>
            <xsd:extension base="r:Right"/>
        </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="DrmSystem">
        <xsd:complexContent>
            <xsd:extension base="r:Condition">
                <xsd:sequence minOccurs="0">
                    <xsd:element name="identifier" type="xsd:anyURI"/>
                </xsd:sequence>
            </xsd:extension>
        </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="Enlist">
        <xsd:complexContent>
            <xsd:extension base="r:Right"/>
        </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="DerivationConstraint">
        <xsd:complexContent>
            <xsd:extension base="r:Condition">
                <xsd:sequence>
```

```xml
                    <xsd:element name="isPartOf" minOccurs="0" maxOccurs="unbounded">
                        <xsd:complexType>
                            <xsd:sequence maxOccurs="unbounded">
                                <xsd:element ref="m1x:protectedResource"/>
                            </xsd:sequence>
                        </xsd:complexType>
                    </xsd:element>
                    <xsd:element name="resourceInclusionList" minOccurs="0" maxOccurs="unbounded">
                        <xsd:complexType>
                            <xsd:sequence maxOccurs="unbounded">
                                <xsd:element ref="m1x:protectedResource"/>
                            </xsd:sequence>
                            <xsd:attribute name="temporalRelation" type="xsd:QName" use="optional"/>
                        </xsd:complexType>
                    </xsd:element>
                    <xsd:element name="resourceExclusionList" minOccurs="0" maxOccurs="unbounded">
                        <xsd:complexType>
                            <xsd:sequence maxOccurs="unbounded">
                                <xsd:element ref="m1x:protectedResource"/>
                            </xsd:sequence>
                            <xsd:attribute name="temporalRelation" type="xsd:QName" use="optional"/>
                        </xsd:complexType>
                    </xsd:element>
                    <xsd:element name="resourceReplacementList" minOccurs="0">
                        <xsd:complexType>
                            <xsd:sequence maxOccurs="unbounded">
                                <xsd:element ref="m1x:protectedResource"/>
                            </xsd:sequence>
                        </xsd:complexType>
                    </xsd:element>
                </xsd:sequence>
            </xsd:extension>
        </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="GovernedCopy">
        <xsd:complexContent>
            <xsd:extension base="r:Right">
                <xsd:attribute name="governanceRule" type="xsd:QName"/>
            </xsd:extension>
        </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="GovernedMove">
        <xsd:complexContent>
            <xsd:extension base="r:Right">
                <xsd:attribute name="governanceRule" type="xsd:QName"/>
            </xsd:extension>
        </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="IdentityHolder">
        <xsd:complexContent>
            <xsd:extension base="r:Principal">
                <xsd:sequence minOccurs="0">
                    <xsd:element name="idSystem" type="xsd:anyURI" minOccurs="0"/>
                    <xsd:element name="idValue">
                        <xsd:complexType mixed="true">
                            <xsd:sequence>
                                <xsd:any namespace="##any" minOccurs="0"/>
                            </xsd:sequence>
                        </xsd:complexType>
                    </xsd:element>
                </xsd:sequence>
            </xsd:extension>
        </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="OutputRegulation">
        <xsd:complexContent>
            <xsd:extension base="r:Condition">
```

```xml
                    <xsd:sequence minOccurs="0" maxOccurs="unbounded">
                        <xsd:element name="regulation">
                            <xsd:complexType mixed="true">
                                <xsd:attribute name="typeOfSignal" type="xsd:QName" use="optional"/>
                                <xsd:attribute name="qualityOfSignal" type="xsd:QName" use="optional"/>
                            </xsd:complexType>
                        </xsd:element>
                    </xsd:sequence>
                </xsd:extension>
            </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="ProtectedResource">
            <xsd:complexContent>
                <xsd:extension base="r:Resource">
                    <xsd:sequence minOccurs="0">
                        <xsd:element ref="r:digitalResource"/>
                        <xsd:choice minOccurs="0" maxOccurs="unbounded">
                            <xsd:element ref="xenc:EncryptedData"/>
                            <xsd:element ref="xenc:EncryptedKey"/>
                        </xsd:choice>
                        <xsd:element name="resourceLocator" type="xsd:anyURI" minOccurs="0"/>
                    </xsd:sequence>
                </xsd:extension>
            </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="SeekPermission">
            <xsd:complexContent>
                <xsd:extension base="r:Condition">
                    <xsd:sequence minOccurs="0">
                        <xsd:element ref="r:serviceReference"/>
                        <xsd:element name="cacheable" minOccurs="0">
                            <xsd:complexType>
                                <xsd:sequence>
                                    <xsd:element name="period" type="xsd:duration" minOccurs="0"/>
                                </xsd:sequence>
                            </xsd:complexType>
                        </xsd:element>
                    </xsd:sequence>
                </xsd:extension>
            </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="ServiceLocation">
            <xsd:complexContent>
                <xsd:extension base="r:ServiceDescription">
                    <xsd:sequence minOccurs="0">
                        <xsd:element name="url" type="xsd:anyURI"/>
                    </xsd:sequence>
                </xsd:extension>
            </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="StartCondition">
            <xsd:complexContent>
                <xsd:extension base="r:Condition">
                    <xsd:sequence minOccurs="0">
                        <xsd:element ref="r:condition"/>
                    </xsd:sequence>
                </xsd:extension>
            </xsd:complexContent>
        </xsd:complexType>
        <!-- Simple Types -->
        <xsd:simpleType name="LicenseType">
            <xsd:list itemType="xsd:QName"/>
        </xsd:simpleType>
        <!-- Attributes -->
        <xsd:attribute name="licenseType" type="m1x:LicenseType"/>
</xsd:schema>
```