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## Entertainment Identifier Registry (EIDR) URN Namespace Definition

### Abstract

Entertainment Identifier Registry (EIDR) Identifiers are used for the globally unique identification of motion picture and television content. This document defines the formal Uniform Resource Name (URN) Namespace Identifier (NID) for EIDR Identifiers.

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## 1. Introduction

This document defines the formal Uniform Resource Name (URN) Namespace Identifier (NID) for EIDR Identifiers.

EIDR Identifiers are centrally registered, globally unique identifiers for audiovisual works and their variants, primarily film and television. A unique set of metadata parameters describing the associated work is bound to the EIDR Identifier at the time of registration.

EIDR Identifiers are a special kind of DOI Names allocated by EIDR Association specifically for audiovisual works. The Digital Object Identifier (DOI) system provides an infrastructure for persistent unique identification of objects of any type and is specified in [ISO26234]. A DOI name is the identifier that is permanently assigned to an object. The use of DOI Names ensures persistence, global uniqueness, and an open resolution infrastructure.

As a DOI Name, an EIDR Identifier has two components: a prefix assigned exclusively to EIDR Association by the DOI Registration Authority and a suffix defined by EIDR Association. Currently, EIDR Identifiers use the prefix "10.5240", but additional prefixes might be introduced in the future.

The following is an example of an EIDR Identifier in its canonical representation:

```
10.5240/7791-8534-2C23-9030-8610-5
```

where "10.5240" is the prefix and "7791-8534-2C23-9030-8610-5" is the suffix. The canonical URN representation of the same EIDR Identifier is:

```
urn:eidr:10.5240:7791-8534-2C23-9030-8610-5
```

Note that ":" is used as separator between prefix and suffix since "/" is a URN reserved character.

[EIDR-OVERVIEW] and [EIDR-INTRO] provide additional background information.

## 2. Completed URN Namespace Definition Template

The namespace definition according to the template in [RFC3406] is as follows:

Namespace ID:

eidr

Registration Information:

Version 1

2014-03-03

Declared registrant of the namespace:

Name:

Entertainment Identifier Registry Association

Address:

c/o Alliances Management  
544 Hillside Road  
Redwood City, CA 94062  
USA

Contact:

URL: <http://eidr.org/contact/>  
Email: [info@eidr.org](mailto:info@eidr.org)

Declaration of syntactic structure:

An EIDR Identifier is a special kind of DOI Name (see [ISO26234]) and, as such, consists of two components: a prefix denoted EIDR-PREFIX and a suffix denoted EIDR-SUFFIX. The URN representation URN-EIDR of an EIDR Identifier conforms to the syntax (expressed using [RFC5234]):

```
URN-EIDR = "urn:eidr:" EIDR-NSS
EIDR-NSS = EIDR-PREFIX ":" EIDR-SUFFIX
EIDR-PREFIX = 1*EIDR-CHARS
EIDR-SUFFIX = 1*EIDR-CHARS
EIDR-CHARS = ALPHA / DIGIT / "-" / "." / "_"
```

The only value of EIDR-PREFIX currently in use is "10.5240". Additional prefix values conforming to the EIDR-PREFIX syntax might be introduced by EIDR Association in the future. In all cases, each of these additional prefix values will be associated with suffix values that conform to a subset of the EIDR-SUFFIX syntax. These additional prefixes and their corresponding suffixes will be documented in future revisions to this registration.

An implementation can process an EIDR-NSS with an unknown prefix as an opaque string per the "Rules of Lexical Equivalence" below, and resolve it as a generic DOI Name per the "Process for identifier resolution" below.

When EIDR-PREFIX is equal to "10.5240", the syntax of EIDR-SUFFIX is further constrained according to the to RP2079-SUFFIX syntax specified in [SMPTERP2079]:

```
RP2079-SUFFIX = 5(4HEXDIG "-") CHECK
CHECK          = DIGIT / ALPHA
```

where CHECK is the Mod 37,36 check character as specified in [ISO7064], computed over the 20 hexadecimal digits HEXDIG of RP2079-SUFFIX.

EXAMPLE: urn:eidr:10.5240:7791-8534-2C23-9030-8610-5

Relevant ancillary documentation:

[ISO26234] specifies DOI Name syntax and registration.

[SMPTERP2079] specifies the syntax of the EIDR Identifier with the prefix "10.5240".

Identifier uniqueness considerations:

An EIDR Identifier is a DOI Name. The ISO 26324 Registration Authority ensures that DOI Name uniqueness; therefore, the URN-EIDR derived from an EIDR Identifier is guaranteed to be unique and never reassigned.

Furthermore, an EIDR Identifier is associated with a single URN-EIDR.

#### Identifier persistence considerations:

An EIDR Identifier is a DOI Name. The ISO 26324 Registration Authority ensures that a DOI Name remains valid indefinitely; therefore, the URN-EIDR derived from an EIDR Identifier remains valid indefinitely.

#### Process of identifier assignment:

EIDR Association registers each EIDR Identifier with the ISO 26324 Registration Authority.

Entities involved in the motion picture and television industry, either directly in the production of content or in its distribution and related services, are eligible to apply for registrant status. Registrants pay an annual membership fee that depends on the size of the company.

#### Process for identifier resolution:

As a DOI Name, the resolution of the EIDR Identifier associated with an EIDR-NSS is handled by the ISO 26324 Registration Authority.

The ISO 26324 Registration Authority operates a web service that allows the EIDR Identifier associated with an EIDR-NSS to be resolved by issuing an HTTP GET request to the following URI (see [RFC7231]):

```
"http://doi.org/" EIDR-PREFIX "/" EIDR-SUFFIX
```

If the EIDR Identifier exists, then an XML Schema instance document (see [XMLSchema]) containing metadata associated with the EIDR Identifier is returned; otherwise, the HTTP status code "404 Not Found" is returned.

EXAMPLE: `http://doi.org/10.5240/7791-8534-2C23-9030-8610-5`

NOTE: At the time of this writing, this service of the ISO 26324 Registration Authority is not available over TLS, and hence the confidentiality of queries is not protected.

EIDR Association operates additional services specifically tailored to EIDR users (see [EIDR-SERVICES]). These services include additional features, e.g., confidential lookup using TLS and the ability to register EIDR Identifiers.

#### Rules for Lexical Equivalence:

Lexical equivalence of EIDR-URN is defined by case-insensitive string match.

#### Conformance with URN Syntax:

As specified above, the syntax of EIDR-URN is a subset of the URN syntax specified in [RFC2141].

#### Validation mechanism:

The validity of an EIDR-NSS can only be guaranteed by completing the resolution process.

For EIDR-NSS with an EIDR-PREFIX equal to "10.5240", the CHECK value can be used for integrity checking, as specified above.

#### Scope:

EIDR Identifiers are centrally registered, globally unique identifiers for use with audiovisual works worldwide.

### 3. Namespace Considerations

EIDR Identifiers are intended for use in Internet applications, where URNs are routinely used to identify audiovisual resources. There is no direct mapping from EIDR Identifiers to existing URN namespaces.

### 4. Community Considerations

The primary registrants of EIDR Identifiers are producers and distributors of audiovisual works, metadata aggregators, and audiovisual archives. Any bona fide member of the ecosystem can become an EIDR member and register any work. EIDR Identifiers can be used by anyone to unambiguously identify an audiovisual asset and retrieve underlying metadata. The primary benefits of their use are associated with works in wide distribution, management of long or complex distribution chains, and aggregation of information from multiple sources.

### 5. IANA Considerations

IANA has registered the Formal URN Namespace 'eidr' in the "Uniform Resource Names (URN) Namespaces" registry, using the registration template in Section 2 of this document.

## 6. Security Considerations

This document specifies the syntax of the EIDR-URN namespace and makes no security representations. Furthermore, the details of assignment and resolution processes are defined external to this document by EIDR Association and the ISO 26324 Registration Authority, and thus are outside the scope of this document. Note, however, that failure to conform to the syntactic and lexical equivalence rules in this specification when using an EIDR Identifier as a criteria for accessing restricted resources can result in granting unauthorized access to these resources.

## 7. References

### 7.1. Normative References

- [ISO26234] International Organization for Standardization, "Information and documentation - Digital object identifier system", ISO Standard 26324, 2012.
- [ISO7064] International Organization for Standardization, "Information technology - Security techniques - Check character systems", ISO Standard 7064, 2003.
- [RFC2141] Moats, R., "URN Syntax", RFC 2141, May 1997.
- [RFC5234] Crocker, D. and P. Overell, "Augmented BNF for Syntax Specifications: ABNF", STD 68, RFC 5234, January 2008.
- [SMPTE2079] Society of Motion Picture and Television Engineers, "Digital Object Identifier (DOI) Name and Entertainment ID Registry (EIDR) Identifier Representations", SMPTE RP 2079, 2014.

### 7.2. Informative References

- [EIDR-INTRO] Entertainment Identifier Registry Association, "EIDR: ID Format Ver. 1.1", August 2013, <[http://eidr.org/documents/EIDR\\_ID\\_Format\\_v1.1.pdf](http://eidr.org/documents/EIDR_ID_Format_v1.1.pdf)>.
- [EIDR-OVERVIEW] Entertainment Identifier Registry Association, "EIDR Overview", November 2013, <[http://eidr.org/documents/2013-11-01\\_EIDR\\_Overview\\_FINAL.pdf](http://eidr.org/documents/2013-11-01_EIDR_Overview_FINAL.pdf)>.

## [EIDR-SERVICES]

Entertainment Identifier Registry Association, "EIDR System Version 2.0: Registry User's Guide", August 2013, <[http://eidr.org/documents/EIDR\\_2.0\\_Registry\\_User\\_Guide.pdf](http://eidr.org/documents/EIDR_2.0_Registry_User_Guide.pdf)>.

[RFC3406] Daigle, L., van Gulik, D., Iannella, R., and P. Faltstrom, "Uniform Resource Names (URN) Namespace Definition Mechanisms", BCP 66, RFC 3406, October 2002.

[RFC7231] Fielding, R. and J. Reschke, "Hypertext Transfer Protocol (HTTP/1.1): Semantics and Content", RFC 7231, June 2014.

## [XMLSchema]

Holstege, M. and A. Veda-muthu, "W3C XML Schema Definition Language (XSD): Component Designators", W3C Candidate Recommendation CR-xmlschema-ref-20100119, January 2010, <<http://www.w3.org/TR/2010/CR-xmlschema-ref-20100119>>.

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