

Network Working Group  
Internet-Draft  
Obsoletes: [7302](#) (if approved)  
Intended status: Informational  
Expires: January 6, 2017

P. Lemieux  
Sandflow Consulting LLC  
July 5, 2016

**Entertainment Identifier Registry (EIDR) URN Namespace Definition  
draft-pal-eidr-urn-2016-02**

**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.

This document revises Request For Comments (RFC) [7302](#) -- see [Appendix A](#) for a summary of changes.

**Status of This Memo**

This Internet-Draft is submitted in full conformance with the provisions of [BCP 78](#) and [BCP 79](#).

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF). Note that other groups may also distribute working documents as Internet-Drafts. The list of current Internet-Drafts is at <http://datatracker.ietf.org/drafts/current/>.

Internet-Drafts are draft documents valid for a maximum of six months and may be updated, replaced, or obsoleted by other documents at any time. It is inappropriate to use Internet-Drafts as reference material or to cite them other than as "work in progress."

This Internet-Draft will expire on January 6, 2017.

**Copyright Notice**

Copyright (c) 2016 IETF Trust and the persons identified as the document authors. All rights reserved.

This document is subject to [BCP 78](#) and the IETF Trust's Legal Provisions Relating to IETF Documents (<http://trustee.ietf.org/license-info>) in effect on the date of publication of this document. Please review these documents carefully, as they describe your rights and restrictions with respect to this document. Code Components extracted from this document must

include Simplified BSD License text as described in Section 4.e of the Trust Legal Provisions and are provided without warranty as described in the Simplified BSD License.

## **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 [[SMTPERP2079](#)]:

$$\begin{aligned} \text{RP2079-SUFFIX} &= 5(4\text{HEXDIG "-"}) \text{ CHECK} \\ \text{CHECK} &= \text{DIGIT} / \text{ALPHA} \end{aligned}$$

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.

[SMTPERP2079] 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](#)] and [[RFC2818](#)]):

"https://doi.org/" URN-EIDR

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: <https://doi.org/urn:eidr:10.5240:7791-8534-2C23-9030-8610-5>

NOTE: The web service uses the HTTP Accept header to determine the format of the response. When using a web browser to access the resource above, the query string "?locatt=type:Full" is appended to the URI to explicitly request an XML response.

EIDR Association operates additional services specifically tailored to EIDR users (see [[EIDR-SERVICES](#)] and [[DOI-EIDR-PROXY](#)]). These services include additional features, e.g. the ability to register EIDR Identifiers and web-based GUI tools.

#### Rules for Lexical Equivalence:





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

NOTE: URN-EIDR includes the "urn:eidr:" string, as specified under "Declaration of syntactic structure".

Conformance with URN Syntax:

As specified above, the syntax of URN-EIDR 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 URN-EIDR 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](http://www.rfc-editor.org/info/rfc2141), DOI 10.17487/RFC2141, May 1997, <<http://www.rfc-editor.org/info/rfc2141>>.
- [RFC5234] Crocker, D., Ed. and P. Overell, "Augmented BNF for Syntax Specifications: ABNF", STD 68, [RFC 5234](http://www.rfc-editor.org/info/rfc5234), DOI 10.17487/RFC5234, January 2008, <<http://www.rfc-editor.org/info/rfc5234>>.
- [SMPTERP2079] 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)>.

**[DOI-EIDR-PROXY]**

Entertainment Identifier Registry Association, "EIDR and the DOI Proxy", May 2015, <[http://eidr.org/documents/EIDR\\_and\\_the\\_DOI\\_Proxy.pdf](http://eidr.org/documents/EIDR_and_the_DOI_Proxy.pdf)>.

[RFC2818] Rescorla, E., "HTTP Over TLS", [RFC 2818](#), DOI 10.17487/RFC2818, May 2000, <<http://www.rfc-editor.org/info/rfc2818>>.

[RFC3406] Daigle, L., van Gulik, D., Iannella, R., and P. Faltstrom, "Uniform Resource Names (URN) Namespace Definition Mechanisms", [BCP 66](#), [RFC 3406](#), DOI 10.17487/RFC3406, October 2002, <<http://www.rfc-editor.org/info/rfc3406>>.

[RFC7231] Fielding, R., Ed. and J. Reschke, Ed., "Hypertext Transfer Protocol (HTTP/1.1): Semantics and Content", [RFC 7231](#), DOI 10.17487/RFC7231, June 2014, <<http://www.rfc-editor.org/info/rfc7231>>.

**[XMLSchema]**

Holstege, M. and A. Vedamuthu, "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>>.

[rfcdiff] "Rfcdiff Tool", <<https://tools.ietf.org/tools/rfcdiff/>>.

**[Appendix A](#). Summary of changes (informative)****[A.1](#). Introduction**

This Appendix summarizes changes across revisions of this specification. This summary is informative and not intended to be exhaustive. Readers seeking a definitive list of changes are instead encouraged to use tools such as [[rfcdiff](#)].



**A.2.** Changes from [RFC 7302](#)

- o "Process for identifier resolution" paragraph. The syntax for the URI supplied to the web service is modified to use (a) the 'https' scheme and (b) the URN-EIDR representation of the EIDR Identifier.

## Author's Address

Pierre-Anthony Lemieux  
Sandflow Consulting LLC

Email: [pal@sandflow.com](mailto:pal@sandflow.com)