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# Uniform Resource Name (URN) Namespace Registration Transition draft-ietf-urnbis-ns-reg-transition-08

#### Abstract

The original registration procedure for formal Uniform Resource Name (URN) namespaces required IETF Consensus. That requirement discouraged some registrations and increased the risk for problems that could occur as a result. The requirements have now been changed by RFC 8141, which adopts a different model, focusing on encouraging registration and publication of information for all appropriate namespaces. This document clarifies the status of relevant older RFCs and confirms and documents advice to IANA about selected existing registrations.

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### 1. Introduction

As a part of the initial development of the Uniform Resource Name (URN) system in the late 1990s, the IETF URN working group agreed that it was important to demonstrate that the URN syntax could accommodate existing identifier systems. RFC 2288 [RFC2288] showed the feasibility of using International Standard Book Number (ISBN), International Standard Serial Number (ISSN), and Serial Item and Contribution Identifier (SICI) [ANSI-SICI]) as URNs; however, it did not formally register corresponding URN namespaces. This was in part due to the still evolving process to formalize criteria for namespace definition documents and registration, consolidated later by the IETF into successive Namespace Definition Mechanism documents [RFC2611] [RFC3406].

URN Namespaces were subsequently registered for ISBN [RFC3187] and ISSN [RFC3044] as well as for a fairly large collection of other identifiers including National Bibliography Number (NBN) [RFC3188]. The comprehensive list can be found in the IANA registry [IANA-Namespace-Registry] (see also Section 4).

While a URN namespace for SICI could be registered at any time, the SICI Standard has not gained broad international acceptance and has not had a namespace defined to date.

The predecessor registration procedure for Uniform Resource Name (URN) namespaces [RFC3406] required IETF Consensus for formal namespaces. That requirement discouraged some registrations and increased the risk for problems, including use of names without registration ("squatting"). Those potential problems included the possibility of the same name being used to identify different namespaces with different rules. The requirements have now been changed in RFC 8141 [RFC8141] to adopt a different model that focuses more on encouraging registration of all namespaces that follow the formal namespace syntax, with as much information collected as possible consistent with that goal.

Therefore this document does the following:

- o Describes the instructions developed with IANA to adapt selected existing registrations to the new model. Those registration updates have been completed for ISBN and ISSN NIDs and URN namespaces.
- o Obsoletes the separate RFCs that specify the namespaces for ISSNs and ISBNs to eliminate any ambiguity about the status of new templates and updated registrations.
- o Provides information about the status of NBNs under the new definitions.
- o Provides suggestions to IANA about the handling of other existing registrations not explicitly discussed in this document.

# 2. Obsoleting Older Registration RFCs for ISSNs and ISBNs

The existing RFCs that describe URN namespaces for ISSNs [RFC3044] and ISBNs [RFC3187] should be identified as "Historic" after this document is approved. The new registration templates for those namespaces have already been submitted and incorporated into the URN Namespace registry by IANA.

Those updated templates reflect not only the new template formats but substantive changes to the definitions of the namespaces. The significant changes are summarized in the subsections that follow.

For both ISSN and ISBN URNs, it is intended that the registrations track the evolution of ISO standardization without requiring resubmission of the templates or other formal IETF or IANA registration update approval procedures. The subsections that follow clarify the relationship between the original URN namespace registrations for ISBN and ISSN and the newly-registered templates that follow the principles of RFC 8141. Approval and registration of those new templates makes the older templates obsolete.

# 2.1. ISBN URN Changes

The revised ISBN namespace reflects the latest version of the ISO ISBN Standard, ISO 2108:2017 [ISO-ISBN-b]. The namespace allows for the use of both the old ten character ISBN numbers described in RFC 3187 and ISO 2108:1992 [ISO-ISBN-a] (formerly known as ISBN-10) and the 13 character identifiers introduced in ISO 2108:2005 [ISO-ISBN-c] (formerly known as ISBN-13).

For more details, review the new ISBN registration template and associated documentation [ISBN-Template].

# 2.2. ISSN URN Changes

The updated ISSN namespace reflects the changes between the current ISSN standard [ISO-ISSN] and its predecessor on which RFC 3044 was based. ISO 3297:2007 introduced the linking ISSN (ISSN-L), which is designated for all media of a serial publication, irrespective of how many there are. Traditional ISSN applies to single media only, such as printed version of a serial.

For more details, review the new ISSN registration template and associated documentation [ISSN-Template].

# 3. The Older Registration RFC for NBNs

NBN is not a formal international standard or even a single identifier system, but an umbrella concept which covers all of the identifier systems the adopting national libraries and their partners use to identify resources that do not have other identifiers. For instance, if a book received via legal deposit does not have an ISBN, the national library gives it a local identifier. The NBN specification provides simple means of expressing these local identifiers so that they become globally unique URNs, such as urn:nbn:fi-fe19981001.

In addition to the namespace registration itself, <u>RFC 3188</u> provides some generic information about NBNs and their use, and specifies the syntax of URN:NBNs. That syntax guarantees uniqueness by requiring the usage of country codes and institutional identifiers as a part of the NSS. When <u>RFC 3188</u> is revised, it should be accompanied with a template which revises the registration of the URN:NBN namespace.

# 4. Other Existing URN Registrations and RFCs

The RFC Series and IANA Registry contain many URN namespace registrations in addition to those for which this document calls out explicit actions. In general, those existing registrations are still appropriate but omit some information called for in RFC 8141 [RFC8141]. Reregistration with new templates is recommended, but not required. Until and unless those registrations are updated as provided for in RFC 8141, the existing registration templates should be read as not requiring or allowing any features that were not allowed and specified by the earlier URN [RFC2141] and registration [RFC3406] specifications.

# **5**. Registration Examples

For examples of registrations using the new model and for information and help in understanding other parts of this document, review the new ISBN and ISSN registration templates and associated documentation in the IANA registry [ISBN-Template] [ISSN-Template].

#### 6. IANA Considerations

IANA has completed updates for the registry entries for URN ISSN and ISBN namespaces to reflect the new, RFC 8141-compliant, templates. With respect to namespaces other than those listed above, when registrations and templates are available that conform to the newer rules, they may be substituted for the older ones. However, neither this document nor RFC 8141 supersedes any existing registrations (those for ISBN and ISSN are superceded by the newly-registered templates). Therefore, IANA needs to be prepared to maintain a registry whose contents reflect old-style templates for some namespaces and the newer ones for others.

IANA should also note that the portions of the ISBN and ISSN registrations that point to ISO Standards are intended to identify current versions (which may change) rather than only the versions that are active at the time this document is approved (see <a href="Section 2">Section 2</a>). That provision relies on ISO and the ISBN and ISSN Centres to maintain stability of URN references.

# 7. Security Considerations

While particular URN namespaces and their registrations might conceivably have security implications, this specification merely specifies a transition of a set of namespace registrations and does not have such implications. The security implications associated with particular namespaces are expected to be listed in registration templates as specified in RFC 8141.

### 8. Acknowledgements

This document draws heavily on discussions in the IETF URNbis Working Group in the second and third quarters of 2013, particularly during IETF 87 in August 2013, and on informal discussions during the plenary meeting of ISO TC 46 in June 2013. The efforts of those who participated in those discussions are greatly appreciated. It also draws on internet-drafts that were developed to update the older registrations before that approach was replaced by the new extended template model. Those drafts were prepared by Pierre Godefroy, Juha Hakala, Alfred Hoenes, and Maarit Huttunen.

The current draft benefits significantly from a careful reading and suggestions for editorial changes by Peter Saint-Andre and from considerable work by Stella Griffiths of the ISBN international Centre to refine the ISBN discussion and develop the corresponding template and from Gaelle Bequet, Pierre Godefroy, and Clement Oury of the ISSN International Centre for similar refinements of the ISSN discussion and template.

# 9. Contributors

Alfred Hoenes was the editor and co-author of two of the documents from which this one is, in part, derived. This document would not have been possible without his contributions.

### 10. References

### 10.1. Normative References

[RFC8141] Saint-Andre, P. and J. Klensin, "Uniform Resource Names (URNs)", RFC 8141, DOI 10.17487/RFC8141, April 2017, <a href="http://www.rfc-editor.org/info/rfc8141">http://www.rfc-editor.org/info/rfc8141</a>.

### 10.2. Informative References

[ANSI-SICI]

ANSI/NISO, "Serial Item and Contribution Identifier, ANSI/NISO Z39.56-1996 (Version 2)", 1996.

# [IANA-Namespace-Registry]

IANA, "Uniform Resource Names (URN) Namespaces", 2017, <a href="http://www.iana.org/assignments/urn-namespaces/">http://www.iana.org/assignments/urn-namespaces/</a> urn-namespaces.xhtml>.

# [ISBN-Template]

ISBN International Centre, "Namespace Registration for International Standard Book Number (ISBN) ISO 2108:2017", June 2017, <a href="https://www.iana.org/assignments/urn-formal/isbn">https://www.iana.org/assignments/urn-formal/isbn</a>.

# [ISO-ISBN-a]

ISO, "Information and documentation - The International Standard Book Number (ISBN)", ISO 2108:1992, 1992.

# [ISO-ISBN-b]

ISO, "Information and documentation - The International Standard Book Number (ISBN)", ISO 2108:2017, 2017.

Note to RFC Editor: As of early July 2017, the 2017 version is awaiting publication, but the ISBN International Centre strongly prefers that we reference it and not some earlier version. If this note is still present when the document is otherwise ready for AUTH48, please see <a href="https://www.iso.org/standard/65483.html">https://www.iso.org/standard/65483.html</a> and discuss status with the authors.

# [ISO-ISBN-c]

ISO, "Information and documentation - The International Standard Book Number (ISBN)", ISO 2108:2005, 2005.

# [ISO-ISSN]

ISO, "Information and documentation - International standard serial number (ISSN)", ISO 3297:2007, 2007.

# [ISSN-Template]

ISSN International Centre, "Namespace Registration for International Standard Serial Number (ISSN) and Linking ISSN (ISSN-L) based on ISO 3297:2007", June 2017, <a href="https://www.iana.org/assignments/urn-formal/issn">https://www.iana.org/assignments/urn-formal/issn</a>.

- [RFC2141] Moats, R., "URN Syntax", <u>RFC 2141</u>, DOI 10.17487/RFC2141, May 1997, <a href="http://www.rfc-editor.org/info/rfc2141">http://www.rfc-editor.org/info/rfc2141</a>.
- [RFC2288] Lynch, C., Preston, C., and R. Daniel, "Using Existing Bibliographic Identifiers as Uniform Resource Names", <a href="https://www.rfc-editor.org/info/rfc2288">RFC 2288</a>, DOI 10.17487/RFC2288, February 1998, <a href="http://www.rfc-editor.org/info/rfc2288">http://www.rfc-editor.org/info/rfc2288</a>.

- [RFC2611] Daigle, L., van Gulik, D., Iannella, R., and P. Faltstrom,
   "URN Namespace Definition Mechanisms", BCP 33, RFC 2611,
   DOI 10.17487/RFC2611, June 1999,
   <a href="http://www.rfc-editor.org/info/rfc2611">http://www.rfc-editor.org/info/rfc2611</a>>.
- [RFC3044] Rozenfeld, S., "Using The ISSN (International Serial Standard Number) as URN (Uniform Resource Names) within an ISSN-URN Namespace", RFC 3044, DOI 10.17487/RFC3044, January 2001, <a href="http://www.rfc-editor.org/info/rfc3044">http://www.rfc-editor.org/info/rfc3044</a>.
- [RFC3188] Hakala, J., "Using National Bibliography Numbers as Uniform Resource Names", <u>RFC 3188</u>, DOI 10.17487/RFC3188, October 2001, <a href="http://www.rfc-editor.org/info/rfc3188">http://www.rfc-editor.org/info/rfc3188</a>>.
- [RFC3406] Daigle, L., van Gulik, D., Iannella, R., and P. Faltstrom,
   "Uniform Resource Names (URN) Namespace Definition
   Mechanisms", RFC 3406, DOI 10.17487/RFC3406, October 2002,
   <a href="http://www.rfc-editor.org/info/rfc3406">http://www.rfc-editor.org/info/rfc3406</a>.

# Appendix A. Change Log

RFC Editor: Please remove this appendix.

### A.1. Changes from version -00 to -01

- o Modified the introduction to <u>Section 2</u> and <u>Section 6</u> to make it clear that registry update procedures should not be required to keep the registrations current with ISO Standard reaffirmations or replacments.
- o Many editorial changes to improve readability and clarity.

# A.2. Changes from version -01 to -02

- o Several small editorial changes and clarifications suggested by Peter Saint-Andre.
- o Updated acknowledgments.

# A.3. Changes from version -02 to -03

- o Updated to prevent expiration
- o New text to allow for other already-registered namespaces and to better explain relationships.
- o Some small editorial changes.

# A.4. Changes from version -03 to -04

- o Updated references and, where needed, discussion to point to the new, consolidated, 2141bis rather than to the formerly separate and now obsolete 3406bis.
- o Some small editorial changes.

# A.5. Changes from version -04 to -05

- o Reissued to keep draft alive; no substantive changes.
- o Updated references.

# A.6. Changes from version -05 to -06

- o Reissued to keep draft alive; some editorial updates but no substantive changes.
- o Updated references.

# A.7. Changes from version -06 (2016-02-07) to -07

- o Removed old CREFs. Added a new one, but only as a forward-looking note to the RFC Editor.
- o Moved expansions of ISBN, ISSN, SICI, and NBN to the first uses of those terms, after which the abbreviations are used exclusively.
- o Removed text that made promises about the content and schedule for RFC 3188bis.
- o Rewrote or removed several paragraphs that seemed to confuse the status of various documents and registrations.
- o Added a cross-reference and additional detail for existing registrations not specifically discussed in this document.

- o Modified the IANA Considerations section to improve clarity and remove references to the expected template appendices. Because RFC 8141 (2141bis) has been published and the new registration procedures are in effect, there is presumably no reason to add length and confusion to this document by including preliminary versions of those templates.
- o Updated references, including the reference to the recently-published RFC 8141 (aka 2141bis).
- o Added placeholder references for the registrations of the new IANA templates.
- o Corrected minor typographical errors.

# A.8. Changes from version -07 (2017-05-09) to -08

- o Inserted references for the new, updated, registrations for ISBN and ISSN.
- o Corrected or completed several references.
- o Many editorial changes, including being clear about actions already completed (including removing various temporary notes) and better alignment of the I-D with RFC Series stylistic conventions.
- o With the exception of the one at the beginning of this appendix, remaining instructions and advice to the RFC Editor have been converted to notes in the XML source.

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