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Information et documentation — Code international normalisé des textes (ISTC)

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member 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 shall not be held responsible for identifying any or all such patent rights.

ISO 21047 was prepared by Technical Committee ISO/TC 46, *Information and documentation*, Subcommittee SC 9, *Identification and description*.

Introduction

The purpose of the International Standard Text Code (ISTC) is to enable the efficient identification of textual works. The ISTC provides a means of uniquely and persistently identifying textual works in information systems and of facilitating the exchange of information about those textual works between authors, agents, publishers, retailers, libraries, rights administrators and other interested parties, on an international level.

Information and documentation — International Standard Text Code (ISTC)

1   Scope

This International Standard specifies the International Standard Text Code (ISTC) which is applicable to any textual work, whenever there is an intention to produce such a textual work in the form of one or more manifestations. It provides an identification data element for applications that record and exchange information about textual works and related manifestations. For example, the ISTC can be used for the purposes of collocating subsequent manifestations of the same textual work or derivations of the same textual work in applications involving electronic rights administration or information retrieval.

The ISTC is not applicable to manifestations of a textual work, including any physical products (e.g. a printed article) or electronic formats (e.g. an electronic book). Manifestations of textual works are the subject of separate identification systems.

The allocation of an ISTC to a textual work gives no meaning or value as legal evidence regarding the copyright status of, or any intellectual property rights in, the textual work.

2   Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 639-2, *Codes for the representation of names of languages — Part 2: Alpha-3 code*

ISO/IEC 7064, *Information technology — Security techniques — Check character systems*

3   Terms and definitions

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

3.1
administrative metadata
data collected for the management of the ISTC registration process [including data about the **registrant** (3.10)]

3.2
author
creator (3.5) wholly or partly responsible for the intellectual content of a **textual work** (3.12)

3.3
check digit
added digit that may be used to verify the accuracy of a standard number through a mathematical relationship with the digits contained in that number

3.4
contributor
person or organization contributing to the making of a **textual work** (3.12) in whole or in part

3.5
creator
contributor (3.4) responsible for originating content in a **textual work** (3.12)

3.6
derivation
distinctive **textual work** (3.12) made predominantly out of material from another **textual work** (3.12) or works

3.7
ISTC metadata
descriptive data declared and recorded as part of the ISTC registration process that allows one **textual work** (3.12) identified with an ISTC to be distinguished from any other **textual work** (3.12) identified with an ISTC

3.8
textual manifestation
tangible or intangible fixation of a **textual work** (3.12) in one or more copies

EXAMPLE   A manuscript, a printed publication, an electronic text file, a spoken word recording.

3.9
register
structured records of registered ISTC and their associated metadata

3.10
registrant
person or organization that has requested and received an ISTC for a **textual work** (3.12) from a designated **ISTC Registration Authority** (3.11) within the ISTC system

3.11
ISTC Registration Authority
organization appointed by ISO for the purposes of administering the ISTC system and managing its deployment

3.12
textual work
distinct, abstract creation of intellectual or artistic content composed predominantly of a combination of words, whose existence is revealed or intended to be revealed through one or more **textual manifestations** (3.8)

NOTE   For the purposes of ISTC registration, the term **textual work** (3.12) also encompasses the various categories of expression of intellectual or artistic content in textual form (e.g. a novel, a play, a translation) but excludes any aspects of physical form (e.g. print, electronic) in which such expressions are made manifest. See **textual manifestation** (3.8).

3.13
title
word, phrase, character or group of characters, usually appearing on **textual manifestations** (3.8) of a **textual work** (3.12), that names the textual work and normally distinguishes it from others

NOTE   Adapted from ISO 690-2:1997, definition 3.17, and ISO 5127:2001, definition 4.2.1.4.01.

4 Structure and syntax of the ISTC

4.1 Basic structure and syntax

An ISTC shall consist of 16 hexadecimal digits using numerals 0 to 9 and letters A to F. It shall be made up of the following parts:

— registration element;

— year element;

— textual work element;

— check digit.

When an ISTC is displayed in written or printed form, the letters ISTC shall precede it. To assist in accurate transcription of the ISTC, all parts should be separated from each other by hyphens or spaces, as shown in the following examples.

EXAMPLES

ISTC 0A9 2002 12B4A105 7

ISTC 0A9-2002-12B4A105-7

4.2 Registration element

The first part of an ISTC shall be the registration element. The registration element shall consist of three hexadecimal digits. The registration element shall be allocated by the ISTC Registration Authority for its internal identification purposes.

4.3 Year element

The second part of an ISTC shall be the year element. The year element shall consist of the four digits representing the year in which the ISTC is allocated.

4.4 Textual work element

The third part of an ISTC shall be the textual work element. The textual work element shall consist of eight hexadecimal digits.

The textual work element shall be allocated by the ISTC Registration Authority to the textual work.

4.5 Check digit

The fourth and final part of an ISTC shall be the check digit. The check digit shall be calculated on a MOD 16-3 system defined in accordance with ISO/IEC 7064. See Annex A for further details.

5 Allocation of an ISTC

See Annex B for the principles for the allocation and use of ISTC.

6 Administration of the ISTC system

The ISTC system shall be administered by the ISTC Registration Authority for this International Standard (hereafter referred to as the ISTC Registration Authority).

The principal tasks of the ISTC Registration Authority are outlined in Annex C.

7 Association of an ISTC with ISTC metadata

An ISTC shall be associated with ISTC metadata (see Annex D) about the textual work it identifies by means of a register. The ISTC Registration Authority shall maintain the register.

8 Relationship with other identifiers

Examples of the relationship between an ISTC and other ISO identification systems such as the International Standard Book Number (ISBN) and International Standard Serial Number (ISSN) are given in Annex E.

Annex A
(normative)

Method for calculation of the check digit for an ISTC

The algorithm for calculating the check digit for an ISTC shall be based on ISO/IEC 7064 but uses a MOD 16-3 to handle the hexadecimal character of the ISTC, as shown in Table A.1.

Table A.1 — Hexadecimal (MOD 16-3) check digit routine for the ISTC

Parameter	ISTC component elements															Check digit
	Registration element			Year element				Textual work element								
n = ISTC number input value	**0**	**A**	**9**	**2**	**0**	**0**	**2**	**1**	**2**	**2**	**3**	**F**	**3**	**3**	**2**	0
i = Position index	16	15	14	**13**	**12**	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**	**1**
w_i = Weight for MOD 16-3 using pure system weights	11	9	3	1	11	9	3	1	11	9	3	1	11	9	3	**1**
h = Hex conversion of n	0	10	9	2	0	0	2	1	2	2	3	15	3	3	2	0
p = **Product** ($h \times w_i$)	0	90	27	**2**	**0**	**0**	**6**	**1**	**22**	**18**	**9**	**15**	**33**	**27**	**6**	
s = Sum of products	256															
c_d = Decimal check digit (MOD 16 of 256)	0															
c = ISTC check digit based on the hexadecimal of c_d	0															

Annex B
(normative)

Principles for the allocation and use of ISTC

B.1 Allocation of ISTC

B.1.1   The ISTC Registration Authority shall allocate an ISTC to a textual work upon request from an author or other person or organization responsible for the creation of that textual work (a "creator"), or from any person or organization authorized to represent the creator. Where reasonable investigation has not located and could not locate a creator or an authorized representative of a creator, any person or organization may request an ISTC.

B.1.2   The same ISTC shall not be allocated to more than one textual work.

B.1.3   The same textual work shall not be allocated more than one ISTC.

B.1.4   Registrants shall supply metadata about the textual work being registered in accordance with the specifications established by the ISTC Registration Authority. See B.2 and Annex D.

B.1.5   Textual works that are eligible for an ISTC include any distinct abstract entity, predominantly composed of a combination of words, that can be described to satisfy the ISTC metadata requirements.

B.1.6   In order to be assigned an ISTC, the declared metadata for any textual work at the time of registration shall contain at least one element pertaining to the work itself that distinguishes it from every other textual work to which an ISTC has already been assigned. If two entities share identical ISTC metadata, they shall be treated as the same textual work and shall have the same ISTC.

B.1.7   An ISTC may be allocated to a textual work at any time; this includes retrospective allocation of an ISTC to textual works already in existence before the implementation of this International Standard.

B.1.8   Any derivation of a textual work can be allocated an ISTC as long as it is distinguished from, and referenced to, the textual work from which it is derived through ISTC metadata.

B.1.9   Once allocated, an ISTC shall never be re-used for another textual work even if it is found to have been issued in error.

B.2 ISTC metadata

Elements of essential metadata for each ISTC registration shall include, at a minimum, the following:

a)   at least one title for the textual work with the appropriate title type indicated (see D.2);

b)   the name of at least one author or other creator of the textual work if on record. If not, the name of at least one other contributor to the textual work with their respective roles indicated (see D.3);

c)   whether or not the textual work is derived from another textual work and, if so, the type of derivation (see D.4.1);

d)   in the case of a derived textual work, the ISTC of the source textual work(s) or, where no ISTC exists for the source textual work(s), the title(s) and the author(s) or other creator(s) of the source textual work(s) (see D.4.2);

e)   the language(s) of the textual work (see D.5);

f)   the registrant of the ISTC, the role of the registrant, and the date of registration (see D.6);

g)   the ISTC allocated to the textual work by the ISTC Registration Authority.

B.3 Administrative metadata

The ISTC Registration Authority shall record administrative metadata considered essential for the efficient management of the registration process.

Annex C
(normative)

Administration of the ISTC system

C.1 General

The ISTC system is an identification system for textual works. The ISTC system shall be administered by the ISTC Registration Authority in accordance with the specifications outlined in C.2.

The Technical Management Board has appointed the International ISTC Agency Limited[1] to be the ISTC Registration Authority for the implementation of this International Standard.

C.2 ISTC Registration Authority

The ISTC Registration Authority shall provide the following services.

a) Promote, co-ordinate and supervise the ISTC system in compliance with the specifications of this International Standard.

b) Allocate unique ISTC registration elements for use within ISTC assignments and maintain an accurate register of the ISTC registration elements that have been assigned.

c) Maintain registers of ISTC numbers and their associated ISTC metadata and administrative metadata.

d) Develop, implement, monitor and enforce policies and procedures governing its operations and the process of ISTC registration.

e) Develop, implement, monitor and enforce policies and procedures regarding access to the ISTC registers that it maintains. Every effort shall be made to maintain the confidentiality of administrative data.

f) Facilitate the review and resolution of duplicate applications for, or registration of, textual works.

g) Review and decide on appeals of decisions made in such matters as:

  1) rejection of ISTC applications;

  2) disputes concerning the accuracy of the ISTC metadata for a textual work.

h) Develop documentation for users of the ISTC system.

i) Process applications for ISTC allocations.

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1) At the time of publication of this International Standard, the ISTC Registration Authority is held by:

International ISTC Agency Limited
c/o 19 Cavendish Square
London W1A 2AW, United Kingdom

ISO maintains an on-line database of Maintenance Agencies and Registration Authorities relevant to their standards at http://www.iso.org/rama#21047. Users are encouraged to consult this database for the most up-to-date information concerning Maintenance Agencies and Registration Authorities.

j)   Issue notification of the issuance of an ISTC to the registrant for that textual work.

k)   Issue notification of the application and/or allocation of an ISTC for a textual work that is a derivation of a textual work that has already been issued an ISTC:

1)   to the registrant of the textual work from which the new textual work is derived;

2)   at the discretion of the ISTC Registration Authority, any other person or organization that requests such notification.

l)   Correct inaccurate ISTC metadata if appropriate proof of such inaccuracy is provided.

m)   Enter into registers the details of each allocated ISTC and its associated ISTC metadata and administrative metadata.

n)   Manage and maintain the registers of ISTC, ISTC metadata and administrative metadata in a secure fashion and in compliance with the specifications established by the ISTC Registration Authority.

o)   Make ISTC and their associated ISTC metadata available to users of the ISTC system in accordance with the policies laid down by the ISTC Registration Authority.

p)   Compile and maintain statistical data on its ISTC-related operations.

q)   Promote, educate and train others in the use of the ISTC system in compliance with the specifications of this International Standard.

Annex D
(normative)

ISTC metadata for registration of textual works

D.1 General

The ISTC Registration Authority shall record ISTC metadata considered essential for the identification of the textual work before allocating the ISTC to that textual work as specified in B.2.

Tables of metadata elements are subject to change at the discretion of the ISTC Registration Authority. In particular, the ISTC Registration Authority may establish rules for the registration of different genres of textual work and the specific data elements that shall be registered before allocating an ISTC to a textual work in that genre.

Further details regarding the ISTC metadata for the registration of textual works are available in the ISTC registration agencies' manual.

D.2 Title information

The ISTC metadata considered to be essential shall identify at least one title for every textual work and, where appropriate, may identify more than one title. The type of title shall be indicated according to the categories and associated coding specifications established by the ISTC Registration Authority. Table D.1 shows the categories defined by the ISTC Registration Authority at the time of publication of this International Standard.

Table D.1 — Types of titles

Type of title	Description	Remarks
Original title	A title given to the textual work by the person or organization responsible for its creation.	
Distinctive title of manifestation	Title as given on a manifestation, including any set or series title and enumeration within a set that is necessary to make it distinctive.	This data element does not pertain to the textual work itself. It is included, when available, as useful information.
Parallel title	A title of the textual work in another language or script, as supplied by the person or organization responsible for its creation (especially in bilingual textual works or in textual works with an abstract in a language other than that of the body of the text).	
Uniform title	Consistent form of title (of a textual work), used in library practice for collocation, differentiation and identification.	
First words of text	Up to ten opening words of a text.	To be taken from the text itself, ignoring any prefatory material such as a foreword.
Undefined title	Title, type undefined.	

Any title may be supplemented with an optional enumeration element, which shall be qualified by a type of enumeration. Table D.2 specifies the types of enumeration that apply to this element.

Table D.2 — Types of enumeration

Types of enumeration	Description	Remarks
Nominal date	The nominal date of the textual work (where a date in combination with the title distinguishes between successive textual works with the same title or successive modifications of a textual work).	
Publication date	The date of publication of the first published manifestation of the textual work.	This data element does not pertain to the textual work itself. It is included, when available, as useful information.
Edition or version designation	Numerical or other designation from a scheme (which is not related to the date) that is used to distinguish between successive modifications of a textual work.	

D.3 Information about contributors

The essential ISTC metadata should identify at least one author or other creator of the textual work if on record and, as far as practicable, all of the contributors to a textual work (wherever possible using a unique identifier). If the name of an author or other creator of the textual work is not on record, at least one other contributor to the textual work shall be included. The role of each contributor shall be indicated according to the categories listed and in accordance with the coding specifications established by the ISTC Registration Authority. Table D.3 shows the categories applied by the ISTC Registration Authority at the time of publication of this International Standard.

Table D.3 — Contributor roles

Contributor role	Description	Remarks
Author	A creator wholly or partly responsible for the intellectual content of a textual work.	
Author of supplementary text	A creator of supplementary textual content (e.g. annotations, commentaries).	
Other content creator	A creator of supplementary non-textual content (e.g. illustrations) included in a textual work.	
Editor	A person or organization responsible for revisions or expansions in the making of a modification, or in the preparation of a textual work from unpublished drafts.	
Translator	A person or organization responsible for the translation of a textual work into another language.	
Compiler	A person or organization that selects and sequences, and may abridge or create linking text for, a compilation of pre-existing textual works (or parts of pre-existing textual works) but does not otherwise modify the content of the pre-existing textual works.	
Excerpter	A person or organization that excerpts from, but does not otherwise modify, a pre-existing textual work.	
Publisher	A person or organization responsible for the production and issue of one or more manifestations of a textual work for distribution and/or sale.	This data element does not pertain to the textual work itself. It is included, when available, as useful information, particularly in cases where creator(s) or other contributors for a textual work cannot be determined.
Unspecified	A contributor with an unspecified role.	

D.4 Textual work origination information

D.4.1 Type of textual work

The essential ISTC metadata shall identify whether the textual work has been derived from another textual work. The type of textual work derivation shall be indicated according to the categories and attendant coding specifications established by the ISTC Registration Authority. Table D.4 shows the categories applied by the ISTC Registration Authority at the time of publication of this International Standard.

Table D.4 — Types of textual work

Type of textual work	Description
Original	The first established form of a textual work.
Abridgement	The content of a pre-existing textual work has been shortened.
Annotated	The content of a pre-existing textual work has been augmented by the addition of notes.
Critical	The content of a pre-existing textual work has been augmented by critical commentary on the text.
Expurgated	Content deemed to be offensive or otherwise unacceptable has been removed from a pre-existing textual work.
Additional non-textual content	The content of a pre-existing textual work has been augmented by significant non-textual elements.
Translation	The textual work is a translation of a pre-existing textual work in another language.
Revision	The content of a pre-existing textual work has been revised, adapted and/or expanded.
Compilation	The textual work consists of two or more pre-existing textual works.
Excerpt	The textual work is an excerpt from a pre-existing textual work.
Unknown	The origination status of the textual work is unknown.
Unspecified modification	The content has been changed in an unspecified manner.

A textual work may have more than one work type value (for example, it can be both an abridgement and a revision), but these may not conflict (for example, a textual work may not simultaneously be an original and a derivation). Similarly, the validity of contributor role values is dependent on the type of textual work value(s) attributed to the textual work.

D.4.2 Information about the source textual work(s)

In the case of a derived textual work, the ISTC(s) of the source textual work(s) shall be recorded in the essential ISTC metadata. Where no ISTC exists for the source textual work, the title of that source textual work, its author(s) or other creator(s) and, so far as is possible, all other elements specified in D.2 and D.3 shall be recorded to support unambiguous identification of the source textual work.

D.5 Language of the textual work

The essential ISTC metadata shall identify the language of the textual work, using ISO 639-2/B language codes. It shall be possible for a multilingual textual work to have multiple language values.

D.6 Information about the registrant

The essential ISTC metadata shall uniquely identify the registrant of the ISTC, the role of the registrant and the date of registration. The role of the registrant with respect to the textual work shall be indicated according to the categories and in accordance with the coding specifications established by the ISTC Registration Authority. Table D.5 shows the categories applied by the ISTC Registration Authority at the time of publication of this International Standard.

Table D.5 — Types of ISTC registrant

Registrant type	Description	Remarks
Author	A creator wholly or partly responsible for the intellectual content of a textual work.	
Creator of derived textual work	A person or organization responsible for making a new textual work (or part of a textual work) predominantly out of material from a pre-existing textual work or works (e.g. a translator, a compiler).	
Agent	A person or organization authorized by a contributor to act on behalf of that contributor in matters related to his or her textual works.	This category excludes collective rights societies and publishers, which are covered by separate registrant types.
Collective rights society	An organization collectively administering rights on behalf of authors or publishers.	
Publisher	A person or organization responsible for the production and issue of one or more manifestations of a textual work for distribution and/or sale.	
Library	An organization in which organized collections of textual documents, selected and possessed for use by a predefined target population, are built up, maintained and made available by the services of a staff.	
Other	A registrant not covered by any of the types specified above.	

Annex E
(informative)

# Relationships between ISTC and other ISO publication identifiers

E.1 General

Figures E.1 to E.13 illustrate the way that ISTC and other International Standard identifiers relate to each other. Readers should keep in mind that these are *examples*; their purpose is informative, not normative, and they are not intended to be exhaustive. These figures are intended to show that, in some cases, it is possible to choose between two alternative structures. For instance, the same textual work may be given an ISTC according to either Figure E.5 or Figure E.7, depending on whether the registrant wishes to stress the intellectual autonomy of textual works occasionally gathered in one manifestation or the whole/part structure that unites them.

E.2 Relationships between ISTC and publication identifiers

E.2.1 Monographic textual works (ISTC in relation to ISBN)

Figure E.1 illustrates the relationship between an ISTC and an ISBN for a monograph that is published only once and in only one format and that is neither derived from another textual work nor the source for any derivations.
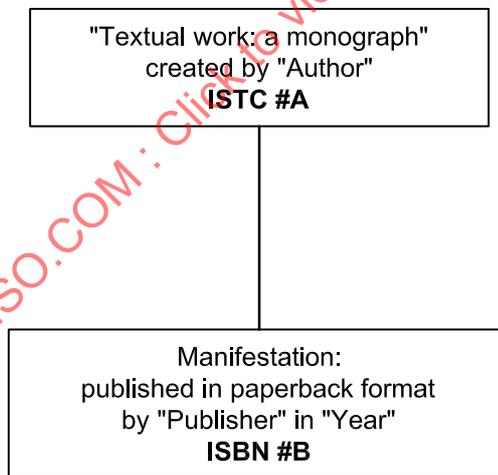
Figure E.1 — A monograph published once in a single format

Figure E.2 illustrates the relationship between an ISTC and various ISBNs for a monograph that is published (simultaneously or at various times) in two printed formats (paperback, hardcover) and two digital formats (HTML, PDF).
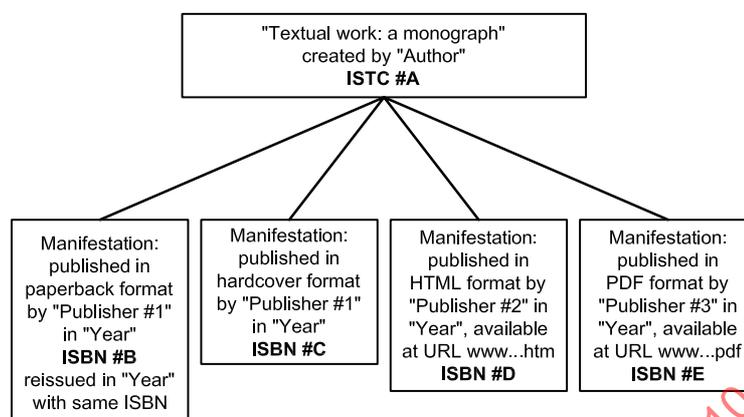

Figure E.2 — A monograph published several times and in different formats

E.2.2 Articles in continuing resources (ISTC in relation to ISSN and SICI)

Figure E.3 illustrates the relationship between an ISTC and the ISSN and SICI for an article that is published only once in a continuing resource such as a journal or other serial publication.

NOTE   A SICI (Serial Issue and Contribution Identifier) uniquely identifies an issue of a serial title or a specific contribution (e.g. an article) contained within a serial, regardless of the distribution medium.
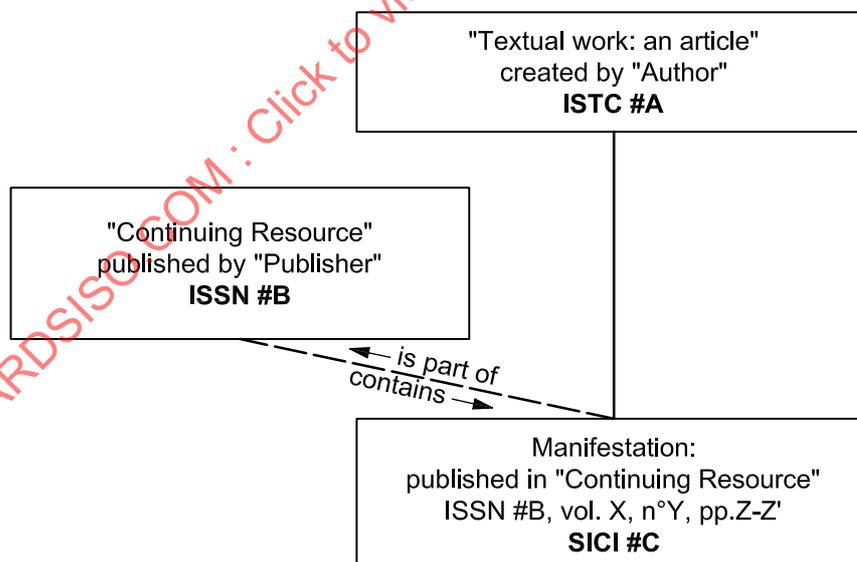
Figure E.3 — An article published once in a single format

Figure E.4 illustrates the relationship between an ISTC and several ISSNs and SICIs for an article that is published (simultaneously or at various times) in a continuing resource in paper format and as an electronic PDF file, and also reissued in another continuing resource in paper format and in HTML format online.
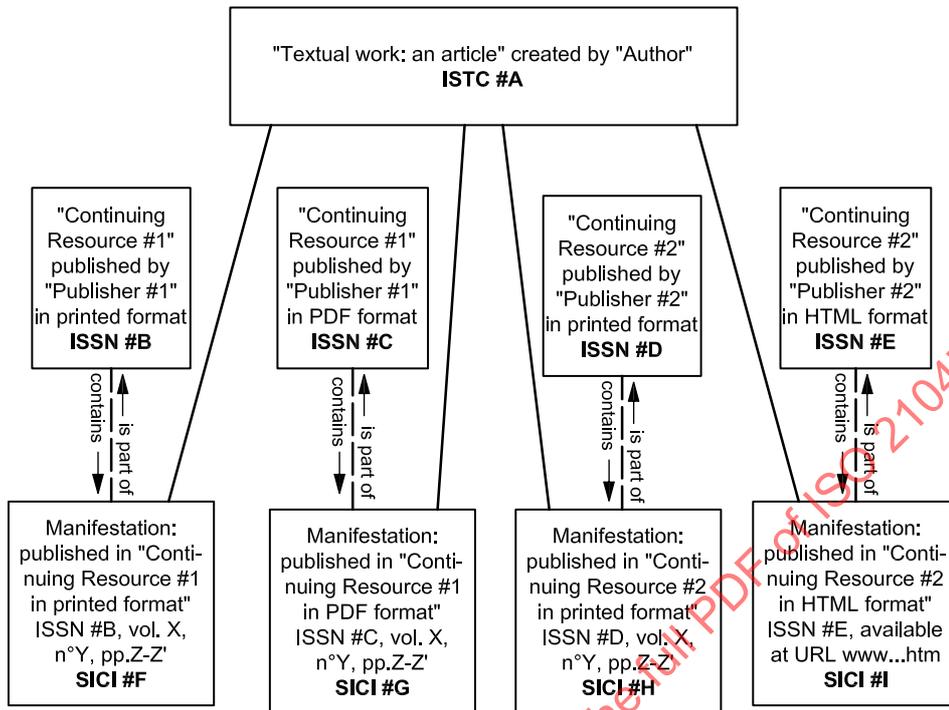

Figure E.4 — An article published several times and in different formats

E.2.3 Several ISTC in relation to one publication identifier

Figure E.5 illustrates the relationship between several ISTC and a single ISBN in a situation where three textual works have been published together as a single edition of a book.

NOTE   The same situation is shown in Figure E.7 where it is alternately structured to show the whole/part relationships between the textual works involved.
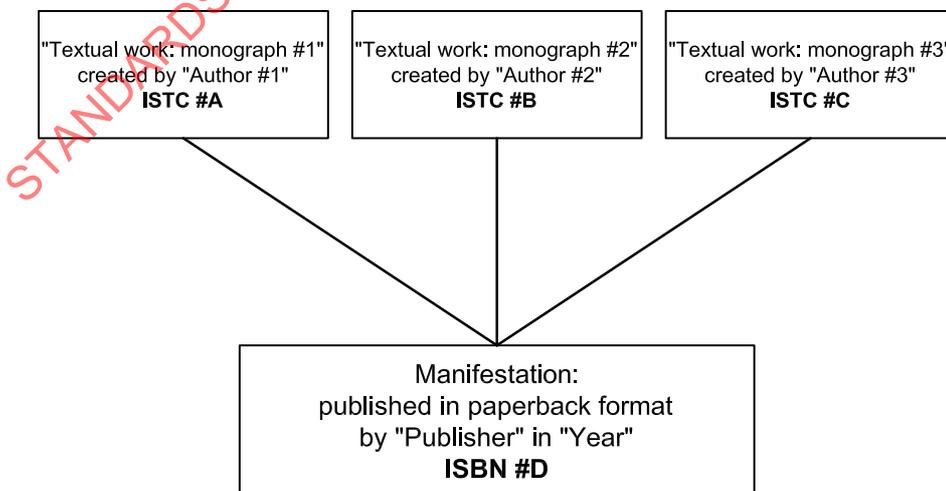

Figure E.5 — Several textual works published together in a single format

E.3 Whole/part relationships between textual works

Figure E.6 illustrates the relationships between several ISTCs in the case of a textual work which consists of several other textual works (e.g. a compilation), one of which also consists of other textual works, etc.
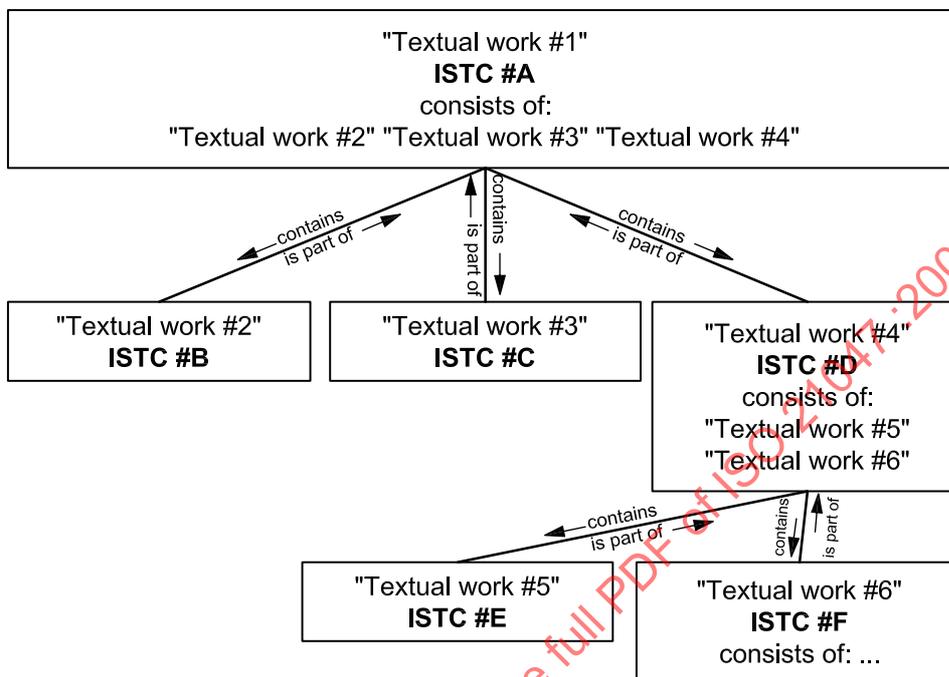

Figure E.6 — A textual work consisting of several textual works

Figure E.7 illustrates the whole/part relationships between several ISTCs and an ISBN in a situation where several textual works are gathered together as a new textual work (e.g. a compilation) which is published in a single edition.

NOTE   This same situation is shown in Figure E.5 without the whole/part relationships between textual works.
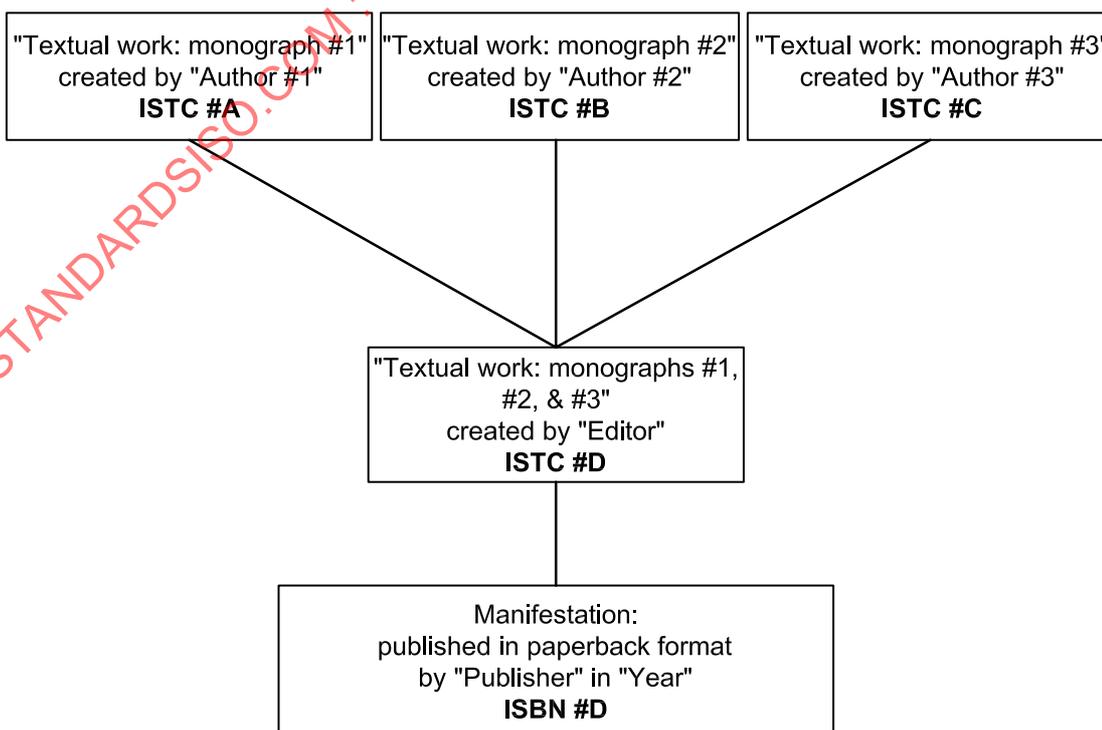

Figure E.7 — Several textual works combined as a new textual work published in a single format

E.4 Modification relationships between textual works

Figure E.8 illustrates the relationships between a textual work and several textual works that are derived from it, i.e. a revised version, a translation, a critical edition and an adaptation.
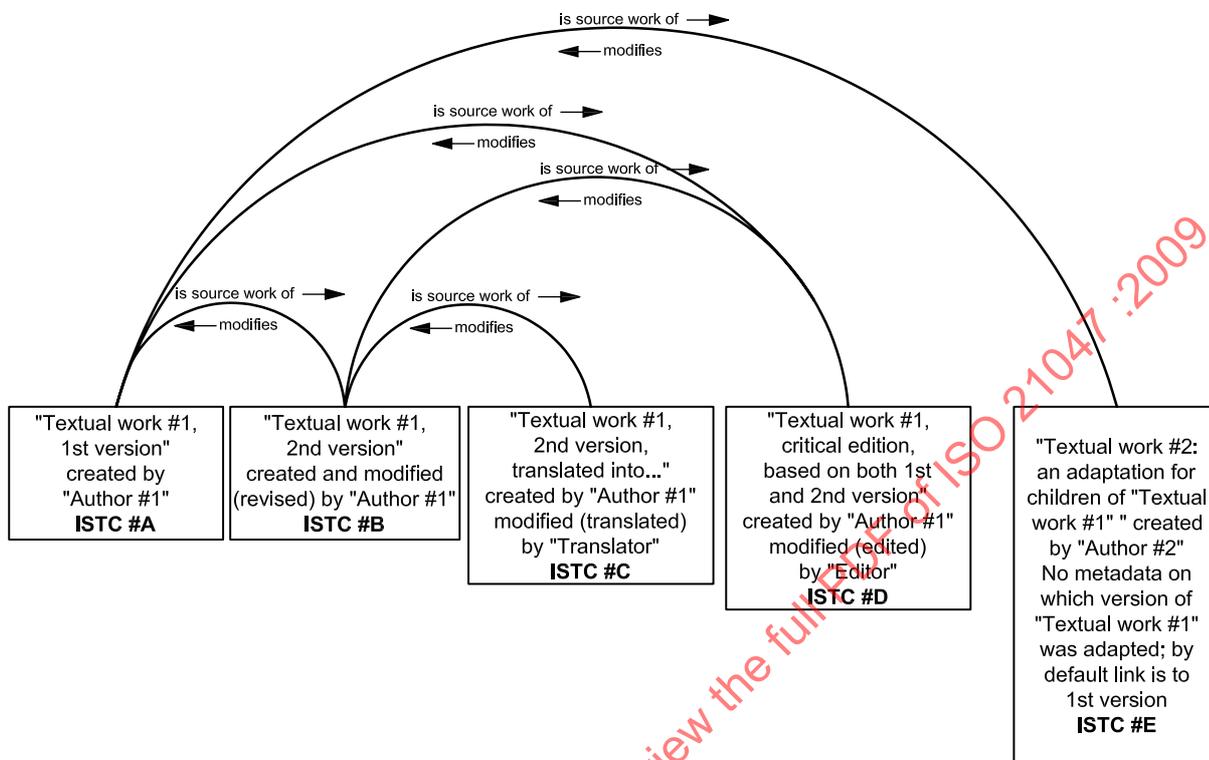

Figure E.8 — A textual work and several textual works derived from it

E.5 Relationships between ISTC and other types of identifiers

E.5.1 Sound recordings, musical works and associated manifestations

Figure E.9 illustrates the relationships between an ISTC and the identifiers for a sound recording and associated manifestations in the case of a textual work that is orally delivered and recorded, of which the sound recording is released as an audiocassette, a compact disc, and an MP3 file.

NOTE 1   An ISRC (International Standard Recording Code) is a unique, international identifier for a specific sound recording, in accordance with ISO 3901.