



ICEDIS Claim, Claim Response and Claim Cancellation Messages

DRAFT - Version 0.1
January 2011

EDITEUR invites comments on this specification and the associated XML schema. Please send comments and suggestions for improvement to info@editeur.org

1. Introduction

This document describes the ICEDIS Claim, Claim Response and Claim Cancellation messages, developed by EDItEUR in conjunction with ICEDIS, the International Committee on EDI for Serials. The messages provide a structured means of communicating claims for missing, damaged or otherwise incorrectly fulfilled journal issues, responses to such claims and cancellations of claims. Structurally, the messages are expressed in XML and have been developed within the evolving framework of the EDItX family of transactional standards.

The messages have been created to help automate the large volumes of claims exchanges commonly encountered in the serials industry. Although earlier relevant standards exist (notably X12 and the EDIFACT OSTENQ and ORDRSP formats), uptake between agents and publishers has been relatively limited. Alongside this particular initiative, renewed efforts are being made to improve information flows about despatch schedules and dates, since it is recognized that many claims are generated “prematurely” by library systems that lack up-to-date information on publication schedules.

2. Scope and future plans

The parties exchanging the messages will initially be subscription agents and the publishers of the journals concerned. In future phases, the same message structures may also be used further upstream in the supply chain, with claims being sent by customers (presumably using library management systems) to agents and/or publishers.

The scope of the messages has been deliberately restricted, initially, to claims for printed resources – usually printed journal issues. A follow-up investigation by ICEDIS is evaluating the business case for extending the message structure to claims for online resources.

The terminology and constructs described below are designed to be easily adaptable to claimable items other than printed journal issues, such as online journals, e-books, e-book series and print series. Hence, for example, the following terms are used:

- Customer (rather than Subscriber)
- Order (rather than Subscription)
- Release (rather than Issue).

3. Related documents and resources

Further information on related standards or formats can be found on the EDItEUR website:

- The ONIX for Serials family of standards: <http://www.editeur.org/84/Overview/>
- The Serials Release Notification, used to convey details of release dates and schedules: <http://www.editeur.org/18/Current-Releases/#SRN>
- The ONIX for Serials Coverage Statement, providing a comprehensive framework for describing coverage, enumeration and chronology: <http://www.editeur.org/18/Current-Releases/#Coverage%20statement>
- The ONIX for Serials Code Lists: <http://www.editeur.org/19/Code-Lists/>

More information on ICEDIS and the standards it has implemented can be found at <http://www.icedis.org/index.html> and <http://www.icedis.org/standards/html>

ICEDIS and EDItEUR also maintain a dedicated group list ICEDIS_IMPLEMENT, which is intended to provide support and a forum where parties implementing, or seeking to implement, one of the ICEDIS standards can share problems and solutions. For more information on this list or to raise any other queries or suggestions related to the Claim messages, please contact info@editeur.org

4. Structure of the Messages

The Claim, Claim Response and Claim Cancellation messages share a considerable number of structural elements, but with some differentiation for the particular requirements of each message. Later in this document (see Section 9 and subsequent pages), a color-coded table presents the detailed structure of the messages.

In outline, all three messages contain the following high-level units:

- A message **<Header>**, containing details of sender and receiver, as well as other administrative information
- One or more instances of a **<ClaimTransaction>**, containing information on the resource claimed, the customer and order to which the claim relates, and coded values and other detail to explain the circumstances of each transaction
- A message **<Summary>**, containing control totals to help check the integrity of message construction and transmission.

It is very important to note that each <ClaimTransaction> represents only *one* claimed release. Even if the agent or customer wishes to claim a range of releases, the underlying reason for the claim or claim response could be quite different for each claimed release. Hence the decision to use one <ClaimTransaction> for each claimed release. If the sender wishes to claim for a range of issues, then the correct approach is to split these into multiple claim transactions.

Each instance of the <ClaimTransaction> is identified by a unique and persistent <TransactionID>. This is assigned by the original sender (here, the agent) and it remains with this particular claimed release throughout its history.

To avoid separate and different constructions when referring to key transactional documents related to the claim, a standardized means of reference coding is used for both order- and payment-related documents. This takes the form of composite elements (see below) like this:

```
<OrderReferenceCoded>
  <ReferenceTypeCode> a value from a controlled code list, representing e.g.
                        the customer's purchase order number or the
                        agent's order ID
  <ReferenceNumber>   the number or ID of the document referenced
  <ReferenceDate>     the date of the document referenced
```

Each of the high-level units is made up of a series of elements. Some of these are simple elements like this one, contained between opening and closing tags:

```
<SenderEmail>mark@editeur.org</SenderEmail>
```

Others are composites, which in turn may contain a number of simple elements or composites, as in this example:

```
<SenderIdentifier>
  <SenderIDType>06</SenderIDType>
  <IDValue>5050085059306</IDValue>
</SenderIdentifier>
```

Wherever simple elements have a defined value list, they are populated using controlled values from the ONIX code lists published by EDItEUR, found at <http://www.editeur.org/19/Code-Lists/>. In the example above, the '06' in the <SenderIDType> signals that the information provided is a Global Location Number or GLN: the GLN value itself is then presented in the <IDValue> element. In other circumstances, simple elements may take free-text values, as here:

```
<SupplierName>EDItEUR</SupplierName>
```

A complete description of the Claim, Claim Response and Claim Cancellation Messages is given at the end of this document: see Section 9 and subsequent pages of this document.

5. Business scenarios and reason/response codes

The business scenarios covered by the messages involve three types of exchange between various senders and recipients:

- Placing the original claim: the Claim

- Responding to the claim: the Claim Response
- Cancelling an existing Claim: the Claim Cancellation.

The most likely parties to claim exchanges are agents and publishers, but the message structure can accommodate a wider list of potential partners:

- Agent and Publisher
- Agent and (in future) Online Content Provider
- Agent and Distributor
- Library Customer (using a library management system) and Agent
- Library Customer and Publisher
- Library Customer and (in future) Online Content Provider
- Library Customer and Distributor.

The business claiming scenarios likely to be encountered were developed in close consultation with an ICEDIS Claims Project Team: the team was based upon several partnerships, each involving one publisher and one or more agents.

The Project Team examined a number of existing practices and produced candidate lists of data elements likely to be needed to support these exchanges. These lists were then debated and validated against earlier EDIFACT cases and code values: emphasis was placed upon achieving a comprehensive and shared understanding of the various terms proposed.

Two main deliverables emerged from this investigation and validation. One was the structure of the three messages, described extensively elsewhere in this document.

The other deliverable comprised agreed and standardized code values for “claim reasons” and “claim responses”. These have been incorporated into EDItEUR’s ONIX for Serials Code Lists, Version 3: Code list 180S covers claim reasons and Code list 181S claim response types. In many circumstances, these code values can be used without any further explanation. In other situations, it is possible to qualify or amplify the reason or response by using free-text <ReleaseNote>, <ClaimReasonNote> and <ClaimResponseNote> elements.

To date, six types of claim reasons and 39 types of claim responses have been defined and codified. For example, the claim reason code ‘01’ from Code list 180S denotes “no copies received”, while the claim response code ‘12’ from Code list 181S signifies “out of print, will reprint and supply”. The full code lists are supplied along with the XML schemas for the messages and can be obtained in eye-readable form by downloading the ONIX for Serials Code List from the EDItEUR website.

6. Identifying the release claimed

The Claim messages express the enumeration and chronology of a single release in a form that enables the release to be identified fully and unambiguously by a computer system. Four principal cases are covered in the enumeration and chronology scheme used for claiming scenarios.

6.1 Simple or complex hierarchical enumeration, “normal” release.

For “normal” releases (that is, not supplements or indexes), an <Enumeration> composite is used, allowing up to six levels of hierarchy.

6.2 Releases of supplementary material (supplements and indexes)

If a release is a supplement or an index, the enumeration is carried in a <SupplementEnumeration> composite.

If a release is part of a series of periodic supplements to a serial or monograph, the <SupplementSeriesIdentifier> and/or <SupplementSeriesTitle> are included as applicable. If the supplement enumeration is dependent on the enumeration of a part of the main run of the serial version, both <MainRunEnumeration> and <DependentEnumeration> are used. <MainRunNominalDate> and <MainRunReleaseTitle> may also be included if necessary to

define a main run release, as could happen in the case of a supplement to a release that carries no enumeration.

If the supplement enumeration is associated with a part of the main run of the serial, but not dependent on it, both <MainRunEnumeration> and <IndependentEnumeration> are used. <MainRunNominalDate> and <MainRunReleaseTitle> may also be included if necessary to define a main run release, as could happen in the case of a supplement to a release that carries no enumeration.

If the supplement enumeration is completely independent of the main run enumeration, only <IndependentEnumeration> will be used.

6.3 Indexes

Where indexes are delivered as part of a normal issue of a serial, these are not listed in the Claim messages. Where they are delivered separately, they are treated as supplements, and a <SupplementEnumeration> composite is defined, including, if known, the <IndexedSequence> and <IndexedPeriod> composites to describe the enumeration and date range, respectively, of the main run that are indexed by the release.

6.4 Combined releases

Combined releases are handled by carrying the full enumeration and/or chronology for each item that was merged into the combined release, using repetitions of the <IncludedRelease> composite, and also for the combined release itself, if it has its own enumeration and/or chronology, in the <Enumeration> composite. If the combined release is not assigned any enumeration or chronology in its own right, it is described solely by the <IncludedRelease> composites. Note that a combined release is not the same as a range of releases; it is the release of multiple issues under one cover.

7. Enumeration

The <Enumeration> and <SupplementEnumeration> composites are based on the following underlying principles:

- (a) An “*enumeration unit*” is defined as any one of a hierarchy of subdivisions of a serial publication that forms part of the enumeration of a serial release. Up to six levels of hierarchy may be expressed.
- (b) Where the enumeration hierarchy is a mixture of numbers and date fragments (eg a combination of year and issue number), the date fragments should appear in *both* the <Enumeration> *and* the <NominalDate> composites. Where the release is identified by date only, with no enumeration, only the <NominalDate> composite is sent.
- (c) At any level, an enumeration unit is defined by (i) the type of unit (which may be explicit on the piece, or may be implied), in a <Unit> or <ImpliedUnit> element or a <UnitAbbr> composite, followed by a sequence number, or (ii) (less often) in cases where the level is identified by a name (e.g. "New Series") rather than a sequence number, by text identifying the serial part without any sequence numbering, in a <NamedUnit> element. The <Level*n*> composite must carry either a <Number> element or a <NamedUnit> element (but not both). If the item has a <Number>, it is strongly recommended, but not mandatory, that it should be accompanied by an appropriate “caption”, in the form of a <Unit> or <ImpliedUnit> name, and/or a <UnitAbbr> element if an abbreviated caption is required. Thus, for example, “level 1” in an enumeration hierarchy might be represented by:

```
<Level1>
  <Unit>Volume</Unit>
  <Number>2</Number>
</Level1>
```

or by:

```
<Level1>
  <NamedUnit>New Series</NamedUnit>
</Level1>
```

or by (where there is no unit name or implied unit name):

```
<Level1>
```

<Number>432</Number>

</Level1>

- (d) Sequence numbering need not be numeric, but may be alphabetic or mixed.
- (e) An enumeration unit may be a date, eg when there is no volume numbering but issues are numbered within each publication year. In this case, the relevant date element appears both in the enumeration hierarchy and as part of the nominal date (“cover date”) of the release.
- (f) Additional or alternative enumeration may be specified for a release in an AdditionalEnumeration composite, if appropriate. Note that this composite should be used only when there is additional enumeration within the serial version or supplement series of which the release is a part. There are occasions where an item actually belongs simultaneously to two distinct serial versions, each having its own title. In such cases, enumeration under Title A should not be treated as alternative enumeration under Title B.
- (g) Relationship between enumeration and chronology:
In the Claim Message, a <Release> must contain one or more of <Enumeration>, <NominalDate>, <SupplementEnumeration>, or <IncludedRelease>. However, <Enumeration> and <SupplementEnumeration> may not both be present. In a Claim Response either <ExpectedReleaseDate> or <ReleaseDate> (but not both) may also be present.

8. Chronology

Chronology is handled differently in three different situations:

8.1 Nominal chronology of a release

The cover date or nominal chronology of a release is represented by a composite

<NominalDate>, for example:

```
<NominalDate>
  <Calendar>01</Calendar>      01 = "Hebrew"
  <DateFormat>00</DateFormat>  01 = "YYYYMMDD"
  <Date>57641109</Date>
</NominalDate>
```

The <Calendar> element has a default value of “Gregorian”. The date formats currently supported are found in the [ONIX Serials Code Lists](#), table 55.

The <NominalDate> should be expressed using the calendar found on the release itself.

8.2 Actual date of release and expected date of release.

The actual date of release (for releases that have already been made available) or the expected date of release (for releases not yet made available), if known, may be included in a Claim Response message. These are represented by <ReleaseDate> and <ExpectedReleaseDate>, respectively. These dates are always stated precisely in format YYYYMMDD, using the Gregorian calendar.

8.3 Period covered by an index

If the item claimed is an index, the period covered by the index, if known, is represented by a composite <IndexedPeriod> within <SupplementEnumeration>, with the same structure as <NominalDate>, for example:

```
<IndexedPeriod>
  <Calendar>00</Calendar>      00 = "Gregorian"
  <DateFormat>11</DateFormat>  11 = "YYYYYYYY"
  <Date>20022004</Date>
</IndexedPeriod>
```

Treatment of Indexes is discussed in Section 6.3 of this document.

It is not necessary to include the <IndexedPeriod> if the index has its own enumeration or chronology. It is only necessary when required to uniquely identify the release.

9. The detailed structure of the messages

The following pages present, in tabular form, the detailed structure of the Claim, Claim Response and Claim Cancellation Messages. As mentioned earlier, much of the message structure is shared between all three messages, but color-coding as in these examples is used to illustrate those elements that uniquely appear within each type of message:

<ClaimReason>	Darker blue background shows an element that only appears in a Claims Message
<ClaimResponseCode>	Olive green background shows an element that only appears in a Claims Response Message
<TotalClaimCancellations>	Brick background shows an element that only appears in a Claims Cancellation Message

A nested and indented depiction has been used, in order to make clearer the context and form of each message element. (Although please note that in real practice, XML files contain information in one continuous string, with no carriage returns or indentations! Sample files are available that illustrate how real message files should appear.)

Line numbers are shown in the left-hand column, purely for ease of reference. These are followed by the relevant element names and structures; every effort has been made to choose self-explanatory element names, but a full description or explanation is presented for each one. Standardized and controlled code lists are used extensively to ensure shared understanding of the terms or options involved. The final, right-hand column specifies the cardinality of each element, with the following meanings:

- 1 Mandatory within its parent, not repeatable within its parent
- 0-1 Optional, not repeatable within its parent
- 1-n Mandatory within its parent, repeatable within its parent
- 0-n Optional, repeatable within its parent

	<ICEDISClaimMessage version="0.01">	Used to transmit a group of claims from a single sender to a single recipient
	<ICEDISClaimResponseMessage version="0.01">	Used to transmit a group of claim responses from a single sender to a single recipient
	<ICEDISClaimCancellationMessage version="0.01">	Used to transmit a group of claim cancellations from a single sender to a single recipient

1	<Header>		Message header	1	
2	<Sender>		The sender of the message (coded identifier or name or both)	1	
3		<SenderIdentifier>		Composite: a coded identifier of the message sender, eg a SAN or GLN. Repeatable if multiple identifiers are sent.	0-n
4			<SenderIDType>	A code indicating the scheme from which the identifier is taken (see code list 44A for permissible values)	1
5			<IDTypeName>	The name of a proprietary scheme, if applicable	0-1
6			<IDValue>	The identifier value, from the specified scheme	1
7		<SenderName>		The name of the sender organization	0-1
8		<SenderContact>		The name of a contact person in the sender organization	0-1
9		<SenderEmail>		An email address for the sender	0-1
10		<Addressee>		The addressee of the message	1
11	<AddresseeIdentifier>			Composite: a coded identifier of the message addressee. Repeatable if multiple identifiers are sent.	0-n
12			<AddresseeIDType>	A code indicating the scheme from which the identifier is taken (see code list 44A for permissible values)	1
13			<IDTypeName>	The name of a proprietary scheme, if applicable	0-1
14			<IDValue>	The identifier value, from the specified scheme	1
15	<AddresseeName>			The name of the addressee organization	0-1
16	<AddresseeContact>			The name of a contact person in the addressee organization	0-1
17	<AddresseeEmail>		An email address for the addressee	0-1	

18	<MessageNumber>			Message sequence number	0-1
19	<MessageRepeat>			A number which distinguishes any repeat transmissions of a message	0-1
20	<SentDateTime>			The date, and optionally the time, when a message was sent	1
21	<MessageNote>			A free-text note about the contents of the message..	0-1

1	<ClaimTransaction>			A single claim or claim response or claim cancellation transaction: one claim or claim response for one release of one resource for one customer. Repeatable for multiple transactions.	1-n
2	<TransactionID>			Unique claim identifier, assigned by sender of the initial claim. This identifier is kept for all transactions involving the same claim.	1
3	<Resource>			Identification and description of a resource of which a release is claimed	1
4		<ResourceIdentifier>		A coded identifier of a resource. Repeatable to allow multiple identifiers such as ISSN, publisher's identifier, agent's identifier, etc.	1-n
5		<ResourceIDType>		A code specifying a resource identifier scheme (see code list 103S for permissible values).	1
6		<IDTypeName>		Name of a proprietary scheme, used only when <ResourceIDType> is "proprietary"	0-1
7		<IDValue>		The identifier value, from the specified scheme	1
8		<ResourceTitle>		Title of the resource.	0-1
9		<ResourceForm>		A code indicating the form of the resource (e.g. print journal, online book), (see code list 7S for permissible values)	1
10	<Component/>		An "empty element" indicating that the resource was ordered as part of a larger product such as a package, a collection, or a print + online combination.	0-1	
11	<Release>			Enumeration, chronology and other details of the claimed release. If a single release that is not a supplement, must contain at least one of: <ul style="list-style-type: none"> • Enumeration • NominalDate • ReleaseIdentifier. If a combined release, containing two or more releases from the normal numbering run, must contain at least one of: <ul style="list-style-type: none"> • IncludedRelease AND CombinedRelease • NominalDate • ReleaseIdentifier. If a supplement, index, etc., must contain at least one of: <ul style="list-style-type: none"> • SupplementEnumeration • NominalDate • ReleaseIdentifier. 	1
12		<ReleaseType>			A code specifying the type of a release; e.g. normal release,

			supplement, index (see code list 115A for permissible values).	
13		<CombinedRelease/>	An “empty element” signifying that this release is a combined release, combining two or more expected releases in normal enumeration sequence.	0-1
14		<ReleaseIdentifier>	A unique coded identifier for a release. Repeatable if there is a need to send two or more identifiers of different types, eg a SICI and an ISBN for a serial part that is also traded as a monograph.	0-n
15		<ReleaseIDType>	A code specifying a release identifier scheme (see code list 5S for permissible values).	1
16		<IDTypeName>	Name of a proprietary scheme, used only when <ReleaseIDType> is “proprietary”	0-1
17		<IDValue>	The identifier value, from the specified scheme	1
18		<Enumeration>	Composite: the enumeration of a release that is neither a supplement nor an index. See expansion below.	0-1
19		<SupplementEnumeration>	Composite: the enumeration of a release that is either a supplement or an index. See expansion below.	0-1
20		<NominalDate>	The “cover” date of a release: repeatable if the date is given under more than one calendar, eg Hebrew and Gregorian.	0-1
21		<Calendar>	A code specifying the calendar (see code list 110S for permissible values). If omitted, defaults to Gregorian.	0-1
22		<DateFormat>	A code indicating a date format (see code list 55S for permissible values)	1
23		<Date>	A date, or spread of dates, in the specified format.	1
24		<IncludedRelease>	The enumeration, chronology and/or title of a component of a combined release. If present, there will be two or more occurrences. If present, then <CombinedRelease/> must also be present.	0-n
25		<Enumeration>	Enumeration of one of the included releases. See expansion below.	0-1
26		<SupplementEnumeration>	Enumeration of one of the included releases, if a supplement. See expansion below	0-1
27		<NominalDate>	The “cover” date of one of the included releases. See expansion above.	0-1
28		<ReleaseNote>	Free text note describing claimed release	0-1
29		<ReleaseDate>	Date when the claimed release was made available. YYYYMMDD. Used only in Claims Response messages. Either <ReleaseDate> or <ExpectedReleaseDate>, but not both, may be present.	0-1
30		<ExpectedReleaseDate>	Date when the claimed release is expected to be made available. YYYYMMDD. Used only in Claims Response messages. Either <ReleaseDate> or <ExpectedReleaseDate>, but not both, may be present.	0-1
31	<Customer>		The party that initiated the claim	1
32		<CustomerIdentifier>	A coded identifier of the customer. Repeatable to allow for agent’s	1-n

			identifier, publisher's identifier, etc.	
33		<CustomerIDType>	A code indicating the scheme from which the identifier is taken (see code list 44A for permissible values)	1
34		<IDTypeName>	The name of a proprietary scheme, if applicable	0-1
35		<IDValue>	The identifier value, from the specified scheme	1
36		<CustomerName>	The name of the customer	0-1
37		<CustomerContact>	The name of a contact person in the customer organization	0-1
38		<CustomerEmail>	An email address for the customer	0-1
39	<OrderReferenceCoded>		Order references, repeatable for different reference types.	0-n
40		<ReferenceTypeCode>	Reference type: [this will be a modified code list 111] <i>Customer's PO#</i> <i>Supplier's order ID</i> <i>Agent's order ID</i> <i>Customer's order line item ID (must be accompanied by a Customer's PO#)</i>	1
41		<ReferenceNumber>		1
42		<ReferenceDateTime>	Format: YYYYMMDDTHHMMSS, where the "T" is a literal character indicating the beginning of the time substring. HH values assume a 24-hour clock.	0-1
43	<QuantityOrdered>		The number of copies of any physical items included in the order. Defaults to "1"	0-1
44	<PaymentReferenceCoded>		Payment references, for payment to supplier	0-n
45		<ReferenceTypeCode>	Reference type: (this will be code list 182S) <i>00 = Unspecified</i> <i>01 = Invoice number of supplier's invoice</i> <i>02 = Check number of claiming party's payment to supplier</i> <i>03 = Electronic payment reference of payment to supplier</i> <i>04 = Credit card transaction ID</i> <i>05 = PayPal transaction ID</i> <i>06 = Money order transaction ID</i>	1
46		<ReferenceNumber>		1
47		<ReferenceDateTime>	Format: YYYYMMDDTHHMMSS, where the "T" is a literal character indicating the beginning of the time substring. HH values assume a 24-hour clock.	0-1
48	<Location>		A unit within the subscribing organisation that the parties mutually wish to recognise as a unit: in the case of printed journals, may or may not identify the location to which physical supplies are sent.	0-1
49		<LocationIdentifier>	A coded identifier for the location. Repeatable to allow for alternate identifier schemes, e.g. GLN or SAN.	0-n

50			<LocationIDType>	A code indicating the scheme from which the identifier is taken (see code list xx for permissible values)	1
51			<IDTypeName>	The name of a proprietary scheme, if applicable	0-1
52			<IDValue>	The identifier value, from the specified scheme	1
53		<LocationName>		A free-text string	0-1
54	<ClaimDetails>			Description of a claim. Found only in Claim message. Required in Claim message.	1
55		<ClaimSequenceNumber>		Number of times claimed by sender; that is, the number of claim messages with this ClaimIdentifier that has been sent by this sender to this addressee.	0-1
56		<QuantityClaimed>		Number of copies claimed	1
57		<ClaimReason>		Coded value for reason for claim (see code list 180S for permissible values)	1
58		<ClaimReasonNote>		Free text note explaining reason	0-1
59	<ClaimResponseDetails>			Description of a claim response. Found only in Claim Response message. Required in Claim Response message.	1
60		<ClaimSequenceNumber>		Number of times responded to by sender; that is, the number of claim response message with this ClaimIdentifier that has been sent by this sender to this addressee.	0-1
61		<QuantityClaimed>		Number of copies claimed	1
62		<ClaimActionDate>		Date action taken on claim by supplier, if any, always YYYYMMDD	0-1
63		<ClaimResponseCode>		Coded value for claim response (see code list 181S for permissible values)	1
64		<ClaimResponseNote>		Free text note explaining claim response	0-1
65		<QuantityDispatched>		Number of copies sent in response to the claim (only included if an item is sent).	0-1
66	<Summary>			Summary of transactions in this message	1
67		<TotalClaims>		Total number of claim transactions found in this message. Found only in Claim message. Required in Claim message.	1
68		<TotalClaimResponses>		Total number of claim response transactions found in this message. Found only in Claim Response message. Required in Claim Response message.	1
69		<TotalClaimCancellations>		Total number of claim cancellation transactions found in this message. Found only in Claim Cancellation message. Required in Claim Cancellation message.	1

1	<Enumeration>			The enumeration of a release that is neither a supplement nor an index	
		<Level n >		Where $n = 1$ to 6. This set of composites carries the primary enumeration of a release, in descending hierarchical order, always starting with Level 1. See Introduction, Section 7 for requirements and explanation.	1 (for $n=1$) 0-1 (for $n=2-6$)
			<Unit>	Enumeration unit stated on the piece: name in full. Optional, but inclusion is strongly recommended whenever applicable; must be accompanied by <Number>.	0-n
			<ImpliedUnit>	Enumeration unit not named on the piece, eg <i>Year</i> when the year is used as the volume number: see section 7(c). Optional, but inclusion is strongly recommended whenever applicable; must be accompanied by <Number>. <Unit> and <ImpliedUnit> are mutually exclusive elements.	0-n
			<UnitAbbr>	Composite: An abbreviated form of the name of the enumeration unit. May be used in addition to <Unit> or <ImpliedUnit>, or in place of either of them; must be accompanied by <Number>. Contains the following elements: <ul style="list-style-type: none"> <UnitAbbrType> - a code for the source of the abbreviation; e.g. AACR2, ISO, proprietary (see code list 116S for permissible values) <AbbrTypeName> - if <AbbrType> is "proprietary," the name of the source of the abbreviation. <Abbreviation> - the abbreviation itself; e.g. "Vol." 	0-1 1 0-1 1
			<Number>	A numeric or alphanumeric string that identifies an enumeration unit within a sequence of enumeration units. If <Number> is present, then <NamedUnit> cannot be present.	0-1
			<NamedUnit>	Text naming a level in the enumeration hierarchy that has no associated sequence numbering. If <NamedUnit> is present, then <Number> cannot be present.	0-1
			<EnumerationNote>	A free text note clarifying the enumeration.	0-1
			<AdditionalEnumeration>	Additional or alternative enumeration applied to the release, if any. See Introduction, Section 7 for requirements and explanation. Repeatable for multiple additional enumerations.	0-n
			<Level n >	Composites <Level1> to <Level6>, for any additional enumeration.	1 (for $n=1$) 0-1 (for $n=2-6$)
			<EnumerationNote>	A free text note clarifying the enumeration.	0-1

12	<Supplement Enumeration>			Enumeration of a supplement or index release	
		<SeriesIdentifier>		Identifier of a supplement or index series. Used only if the supplement or index is part of a series that carries an identifying number, usually an ISSN.	0-n
			<SeriesIDType>	A code identifying the scheme from which a series identifier is taken (see code list 13S for permissible values)	1
			<IDTypeName>	The name of a proprietary scheme, used only when <SeriesIDType> is "proprietary"	0-1
			<IDValue>	A code value from the specified scheme	1
		<SeriesTitle>		Title of a supplement or index series. Used only if the supplement or index is part of a named series. Repeatable for multiple Title Types.	0-n
			<TitleType>	A code identifying a type of title (see code list 15A for permissible values)	0-1
			<TitleText>	The text of the title.	1
			<Subtitle>	The text of a subtitle, if any.	0-1
		<MainRunEnumeration>		Enumeration of a main run volume, issue or part. Used when the supplement or index is explicitly associated with a part of the main run of the serial version.	0-1
			<Leveln>	Composite: Same expansion as Leveln within <Enumeration> described above.	1 (for n=1) 0-1 (for n=2-6)
			<EnumerationNote>	A free text note clarifying the enumeration.	0-1
			<AdditionalMainRun Enumeration>	Composite: Additional or alternate enumeration applied to the main run volume, issue or part. Repeatable for multiple main run alternate enumerations. Expansion is same as <Enumeration> on previous page, excluding <AdditionalEnumeration>.	0-n
		<MainRunNominalDate>		Composite: May be included if necessary to identify a main run release. Same expansion as <NominalDate> previously.	0-1
		<MainRunReleaseTitle>		Composite: Title of the main run release; optional, for Main Run releases with a specific title; may be used when announcing a supplement or index to a single Main Run release. See previous expansion of release title.	0-n
		<DependentEnumeration>		Enumeration of a supplement or index when the enumeration of the main run is required to definitively identify it, eg, if supplement enumeration begins anew with each new volume of the main run. Must be preceded by one or more of <MainRunEnumeration>, <MainRunNominalDate> or <MainRunReleaseTitle>. Not repeatable.	0-1

		<Level <i>n</i> >	Composite: Same expansion as Level <i>n</i> within <Enumeration> described above.	1 (for n=1) 0-1 (for n=2-6)
		<EnumerationNote>	A free text note clarifying the enumeration.	0-1
		<AdditionalDependent Enumeration>	Composite: Additional or alternate dependent enumeration applied to the supplement or index. Repeatable for multiple alternate dependent supplement enumerations. Same expansion as <Enumeration> earlier in this document (excluding <AdditionalEnumeration>).	0-n
	<Independent Enumeration>		Enumeration of a supplement or index when it carries enumeration of its own, not requiring MainRunEnumeration for unique identification. If the supplement or index is also identified as being issued in conjunction with a particular main run volume or issue, then <MainRunEnumeration> should identify that volume or issue. Not repeatable.	0-1
		<Level <i>n</i> >	Composite: Same expansion as Level <i>n</i> within <Enumeration> described above.	1 (for n=1) 0-1 (for n=2-6)
		<EnumerationNote>	A free text note clarifying the enumeration.	0-1
		<AdditionalIndependent Enumeration>	Composite: Additional or alternate independent enumeration applied to the supplement or index. Repeatable for multiple alternate independent supplement enumerations. Same expansion as <Enumeration> earlier in this document (excluding <AdditionalEnumeration>).	0-n
	<IndexedSequence>		Range of volumes or issues covered by an index. Used only when <ReleaseType> specifies that the release is an index.	0-1
		<StartEnumeration>	Composite: Enumeration of the first of a sequence of consecutive issues or volumes. Same expansion as <Enumeration> earlier in this document.	1
		<EndEnumeration>	Composite: Enumeration of the last of a sequence of consecutive issues or volumes. Same expansion as <Enumeration> earlier in this document.	0-1
	<IndexedPeriod>		Range of dates covered by an index. Used only when <ReleaseType> specifies that the release is an index.	0-1
		<Calendar>	These elements are structured the same as those found in <NominalDate> above.	0-1
40		<DateFormat>		1
41		<Date>		1