

Implementation Guide
to the
Postsecondary Electronic Standards Council



XML Standard Format

for the

PDF Attachment

Version 1.0.0

August 10, 2010

Send corrections and comments to:

Jim Bouse, University of Oregon
jbouse@uoregon.edu

Table of Contents	
Page	
v	Introduction
v	Organization and Format
x	Development History and Acknowledgments
1	PDFAttachment
3	TransmissionData
5	..... Source
6	..... --- Organization
10	..... --- ..... LocalOrganizationID
11	..... --- ..... Contacts
13	..... --- ..... --- Address
16	..... --- ..... --- Email
17	..... --- ..... --- Phone
19	..... --- ..... --- URL
20	..... Destination
21	..... --- Organization
25	..... --- ..... LocalOrganizationID
26	..... --- ..... Contacts
28	..... --- ..... --- Address
31	..... --- ..... --- Email
32	..... --- ..... --- Phone
34	..... --- ..... --- URL
35	Person
38	..... --- AgencyIdentifier
40	..... --- Birth
42	..... --- Name
44	..... --- AlternateName
46	..... --- Contacts
48	..... --- ..... Address
51	..... --- ..... Email
52	..... --- ..... Phone
54	..... --- ..... URL
55	ParentDocument
56	Attachments
57	..... Attachment
	NoteMessage
	UserDefinedExtension
58	Appendix A – Example XML PDF Attachment

Introduction

Formatting data in the ISO standard format of PDF (Portable Document Format) is an excellent way to display and view information; however the format was neither designed for nor natively enables the exchange of data between systems. The PDF Working Group of PESC was challenged to find a means to leverage the near ubiquitous use and acceptance of PDF documents that would allow such documents to enable data exchange. By capitalizing on one of the PDF's capabilities to serve as a container or conveyance, the Working Group has devised a standard for embedding files within the PDF that can make the PDFs machine-readable. Also, if embedded files are themselves machine-readable (e.g., another standard XML file), the PDF joins with the other data PESC formats as a very effective data exchange medium.

This implementation guide specifies a standard for embedding (often referred to as "creating an attachment") a properly formed XML header file that both describes the contents of the host PDF and signals the placement of other attached files and file types. Attached files may or may not be machine-readable, and that fact is also specified. The content of this implementation guide should be familiar to and compatible with other PESC guides as many elements of the header file standard are borrowed or based on standards already promulgated by PESC.

A properly formed PDF will contain a PESC-approved standard header file. The header file describes the contents and purpose of the host PDF file, the identity and related information of the person about whom the PDF document was created, the destination or recipient information for the document and attached file(s), and specifies the presence of and description of other attached files within the document. Ostensibly, this allows system programs to understand, classify, and route PDF documents and accompanying files received. In addition, depending on the types of other attached files, programs may harvest and process additional data as intended. For example, a transcript formatted as a PDF document may contain a properly formatted ANSIX12 or PESC-approved XML transcript file reflecting the exact same data contained in the easily read or viewable PDF document. This makes it possible to route the PDF document to personnel for action while the data can be uploaded to systems for analysis or archiving. Or alternatively, the PDF document could be routed to an image system for archiving while the data could be further processed by central information systems.

One of the values of using the PDF document to format data is that it reflects the manner in which the originating source organizes and understands its own data; as information, data formats are devoid of format and organizational information that communicates the intentionality and purposes of the institution from which the data originates. Also, vendors may find that providing data in multiple standard formats expands their ability to serve their many constituents across diverse platforms and systems. Finally, enabling the integration of data or information formats makes it easier for individuals to verify data received.

Organization and Format

The schema for the PDF Attachment is made up of two main parts:

1. Transmission Data
2. Student

These main parts branch to form other parts, which in turn branch out further. This Guide is organized so that each level of branching is documented in the order as follows:

```

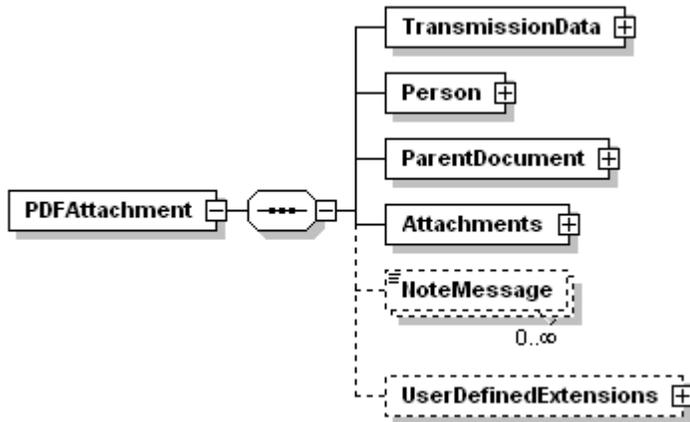
Transmission Data Level I
  Sub-level IA
    Sub-level IA1
      Sub-level IA1a
      Sub-level IA1b
    Sub-level IA2
      Sub-level IA2a
      Sub-level IA2b
  Sub-level IB
  
```

Sub-level IB1
 Sub-level IB1a
 Student Data Level I
 (Etc.)

The heading for each level and sub-level indicates the position of the subsequent diagram in the larger Schema.

Following the heading, the diagram serves to illustrate its relationship with the preceding branch. All diagrams in this Guide were copied from a graphical representation of the PDF Attachment Schema using a software package from Altova Corporation called XMLSpy.

Example:



The boxes in the diagrams can illustrate two separate components of the Schema. First, certain boxes show data element groupings, which branch out to form lower-level data element groupings. Other boxes show the Schema's other primary component, the fields that contain actual data. A box with a solid border indicates that that particular data element or field is required. A box with a dotted line indicates an optional data element or field. Likewise, a solid line connecting two or more boxes indicates that the boxes to the right in the diagram are required fields and a dotted line indicates the fields in the boxes to the right are optional. A plus (+) sign at the right of a box indicates that the element grouping or field branches beyond the scope of a given diagram. The Schema displays such branching in subsequent diagrams.

Each diagram includes a representation of a field or data element's repeatability. Under a given box, for example, "0...∞" would indicate an optional data element or field (with a minimum number of occurrences of zero) that can be repeated an infinite number of times. On the other hand, "1...3" would indicate a mandatory field (with at least one required instance) that can be repeated up to 3 times.

Although most data elements that could theoretically be included an infinite number of times in the schema, would typically only be included once or perhaps a few times. Including a high number of occurrences of a field would present problems for the receiving agency or institution.

Under each diagram, a table will appear with five columns:

Tag Name: This is the name of the data element grouping or field that will appear in the Schema and in the instance document. ("Instance document" refers to a transcript with real data for an actual student that institutions would exchange.) The format for the tag name is Upper Camel Case which takes a name such as "Transmission Data" and eliminates the

space between the two words, retaining the capital letters of each word making up the tag name.

Schema Use: This column indicates whether the data element or field is required or optional in the instance document. If a required field is not included in the instance document, the transcript will normally be rejected by the receiving institution or agency's computer program (XML Parser). This column will also include a notation (Repeatable) if a data element (field) can be sent multiple times.

Description: This is a brief description of the data included with a particular XML tag name. The description normally comes from the description in the PDF Attachment Schema for data elements.

Recommended Use: This column reflects recommendations from the developers of the PDF Attachment Schema, standards of good practice as defined by the AACRAO PDF Attachment Guide, and generally recommended practices for exchanging electronic documents. Reaching consensus on the recommended use of data elements and fields has grown into an additional task for the PESC Workgroup.

Recommendations in this column generally match the standards in Schema Use, especially if Schema Use shows an element or field as "Required." However, a component listed as "Optional" under Schema Use may be listed as "Recommended" in Recommended Use if the Workgroup regards the element or field as essential and in keeping with good practices in the AACRAO community.

Required: Indicates that a sending institution must include the data element or field in its transmission since it is required by most schema parsers.

Recommended: If the information for a field is readily available at the sending school, then 'Recommended' indicates that the field should be sent.

Conditional: This recommended use does not occur often in this Guide, but it may occur when the recommendation (recommended, optional or not recommended) is dependent on another data element being sent, or even on the value of another data element that is sent.

Optional: Indicates that it is generally up to the sender to include the data or not. If a document normally includes the element or field, then the sender will probably choose to include it. In addition, within certain states, items marked as "Optional" may be essential for intrastate exchanges. Finally, it may be the case that a destination school receives all data at a single location; in such a case, the sender may need to provide optional elements to identify the specific intended recipient.

Not Recommended: Indicates that, in the view of the Workgroup, such a data element or field should not form part of a transmission. In general, the Workgroup recommends that institutions not send notes or comments, since most Student Information System programs cannot automatically process them. Sending these elements could thereby slow or impede automatic processing by the receiving school. However, exceptions to this rule-of-thumb may lie in the needs of individual states, as certain intrastate transmissions may require information that only a note or comment field can accommodate. In such cases, the Workgroup recommends that institutions in the state develop a protocol for maintaining and transmitting the element or field. In other cases, common practice may be to include data that is not recommended by the Workgroup.

In many cases, because of the reusability of complex data elements in XML, there are data elements included in this schema that may not be appropriate for use in the PDF Attachment. In these cases, the recommended use may be designated as “Not Recommended.”

Format: This column shows the minimum and maximum number of occurrences of the data element. It also shows the minimum and maximum length allowable for a field, if that field does not have enumerated values and is not a special type of field, such a date field.

“**minOcc** 1” indicates a required field, since it must have at least one occurrence in the instance document. “minOcc 0” indicates an optional field.

“**maxOcc**” followed by a number or symbol specifies the maximum number of times that an element can recur in an instance document at a particular position. For example, “maxOcc 5” would indicate that the field may occur no more than 5 times in a given position of the instance document. “maxOcc ∞” indicates that a field may recur an unlimited number of times in the instance document. However, the use of an excessive number of occurrences puts a burden on the receiving agency or institution, so they should always be limited to the fewest number possible.

“**minLength**” indicates the minimum number of characters that a field must contain, while “**maxLength**” indicates the maximum number of characters that a field may contain.

“**Enumerations**” is used to list the allowable values that may be used in the instance document. They must be used exactly as shown in this column. When the values are enumerated in this column, “minLength” and “maxLength” will not be indicated and are not appropriate.

“**DateTime**” always uses the same format: ccyy-mm-ddThh:ii:ss(+GMT). An example would be “2005-11-20T08:15:36(+7)”. Likewise, “Date” always uses the format “ccyy-mm-dd”. An example would be “2005-11-20”. If either DateTime or Date is used, then “minLength” and “maxLength” will not be indicated.

“**xs:decimal**” indicates a numeric field. It has a maximum length of 18 characters including a decimal if the decimal point is explicitly included. Typical values would be (1) a grade point average of “3.250”; (2) credits earned of “24”; or (3) credits included in GPA of “16”.

“**minInclusive**” indicates the lowest value of a decimal type field that can be included, while “**maxInclusive**” indicates the maximum value that can be included in a decimal type field. “**totalDigits**” indicates the maximum number of digits that can be used in the specified field.

Comments: The Guide may include comments beneath the rows of a given table and/or at the end of the table. The Workgroup intends for these comments to provide further explanation for the items displayed above the comment.

Code Illustration: Below each table, the Guide includes a snippet of what that portion of an instance document might look like in XML format. If the data element is a required data element for the schema, then that data element will be in bold type.

If the code is illustrating a complex data element that will be further explained on a subsequent page, then only the opening and closing tags will be included. For example:

<Course>

</Course>

If the code is illustrating a simple data element that is not recommended for inclusion, then an empty tag may be included for this particular Code Illustration. For example:

<NoteMessage/>

Appendix A shows an example of an XML Schema for the PDF Attachment. This example is not intended to match the Code Illustrations throughout the Guide, since a typical PDF Attachment would not include many of the optional sections of the Schema.

Order of Including Data Elements: Although the Schema includes many optional data elements and you may choose not to include them in an instance document, if you do include data elements, they must appear in the same order they appear in the Schema.

NoteMessage: You will find “NoteMessage” appearing throughout the Schema. This Guide almost always recommends against the routine use of note messages. Unless there is an agreed upon format for a note message between the sender and the receiver, notes cannot be interpreted and automatically processed by the receiver’s computer.

UserDefinedExtensions: The user-defined extension (UDE) design pattern is intended to address situations in which the current Schema does not accommodate sender-specific data. The Schema has to allow for additional elements that may be defined and used at a later date. The user-defined extensions pattern serves as a placeholder for these to-be-defined fields and elements. However, it can require that these fields be defined in a Schema by the organization that wants to use the extensions area. Senders should take care not to use the user-defined extensions as a fall-back for doing appropriate research and design. They should only use the extension when in actuality, the organization defining the base Schema cannot define the additional elements that other organizations may need. Furthermore, other recipients not interested in the data these specific organizations want to exchange in the user-defined area, may then just ignore the UDE.

In general, the use of NoteMessage is recommended to exchange smaller, uncomplicated data pertaining to a state or province, while UserDefinedExtensions should be reserved for much more complicated amounts of structured data.

User-defined extensions are beneficial when both the sending and receiving institutions agree on their use. For best work practice, the Workgroup recommends the use of user-defined extensions in the following scope:

- Mutually defined sub-schemas: For the transmittal and receipt of data agreed upon by both sending and receiving institutions;
- Regional requirements

The benefit of using the user-defined extensions stems primarily from the open nature of the XML design. Institutions may take advantage of XML’s openness, use the user-defined extensions to accommodate data for which the original Schema has not accounted, and standardize the use of the extensions among themselves. Such institution-to-institution agreements allow for the following:

- Strict standardization among institutions through design and implementation agreements,
- Ability of users outside of the agreement to ignore the data contained in the user-defined extensions.

Because the Schema recommends that institutions develop their own agreements for the use of user-defined extensions, the Workgroup also recommends against the development of national standards.

Example Code:

```
<UserDefinedExtensions>  
  <YearTerm>20042</YearTerm>  
  <CourseAbbrev>ENG</CourseAbbrev>  
  <CourseNumb>0114</CourseNumb>  
  <SectNumb>02</SectNumb>  
</UserDefinedExtensions>
```

Please reference Excerpt from PESC Guidelines for XML Architecture and Data Modeling Version 3.0 on the PESC web site at www.pesc.org for a full explanation on the usage of user-defined extensions.

Development History and Acknowledgments

With the introduction of the XML Postsecondary Transcript and High School Transcript, momentum had increased towards the sending and receiving of the Education Record (Transcript) for both High School and College purposes. The higher education community pursued data standardization of the Education Record in ANSI X12 EDI then XML.

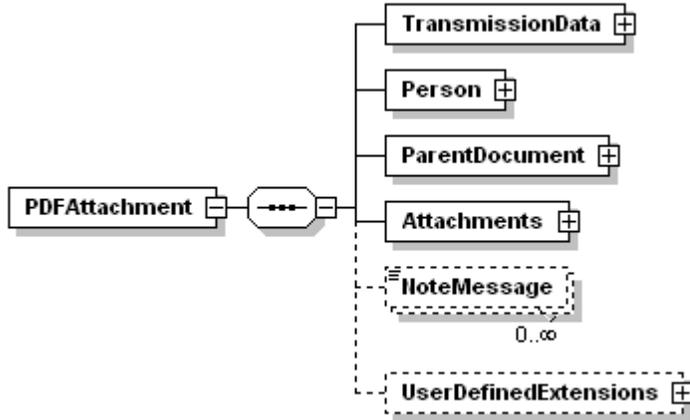
With PDF becoming the next stage in evolution of the Education Record, for the higher education institution seeking an alternative to EDI or XML, several different PDF transcript formats become prevalent in the industry. For the higher education institution as a user, this caused more confusion amongst the installed user base than desired. Accessing, parsing and sorting PDF Education Records that may arrive via email, downloaded from various sites and other future avenues proved cumbersome and inefficient.

While the transcript information is the fundamental building block of an education record, the format is not always the same. A PESC standard can help to preserve the structure of the information while allowing the content itself to be fluid. Most importantly, PESC PDF Standards will aid in the transmission of XML encoded data between institutions to support integration between Student Information Systems (SIS) and external data systems.

The PDF Workgroup developed and submitted for approval a standard for exchanging Education Record (Transcript) PDFs amongst the various electronic transcript vendors. The standard focuses on creating a standard format for the XML content embedded within an Educational Record (Transcript) PDF. We are striving for a standard that will allow for increased efficiency and automation of electronic (PDF) document processing and routing. This standard also has future scalable potential for a myriad of other education documents aside from transcripts.

To assist in the review for approval by the PESC Change Control Board, the Workgroup has prepared this draft of an Implementation Guide.

PDF Attachment



Tag Name	Schema Use	Description	Recommended Use	Format
TransmissionData	Required	Routing and header information	Required	minOcc 1 maxOcc 1
Comment: This complex data element will be further expanded and explained on a following page..				
Person	Required	Additional information about the subject of the document	Required	minOcc 1 maxOcc 1
Comment: This complex data element will be further expanded and explained on a following page..				
ParentDocument	Required	Additional information about the PDF document that contains this attachment	Required	minOcc 1 maxOcc 1
Comment: This complex data element will be further expanded and explained on a following page.				
Attachments	Required	Additional information about the attachments embedded in the parent PDF	Required	minOcc 1 maxOcc 1
Comment: This complex data element contains information about the attachments that are embedded in the parent PDF.				
NoteMessage	Optional Repeatable	Additional information about transcript	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80
Comment: Although NoteMessage occurs frequently throughout this schema and Implementation Guide, it is almost always Not Recommended for inclusion. Of course, this is because it cannot normally be automatically processed by the receiving school's or agency's computer system. It may be recommended in some cases where a state or agency has established structured formats so that the receiving school or agency computer can process it automatically.				
UserDefinedExtensions	Optional	Additional structured information. Requires mutually defined XML schema.	Optional	minOcc 0 maxOcc 1
Comment: The PDF Attachment Schema can only contain information about the attachments embedded in one PDF document..				

PDFAttachment (Continued)

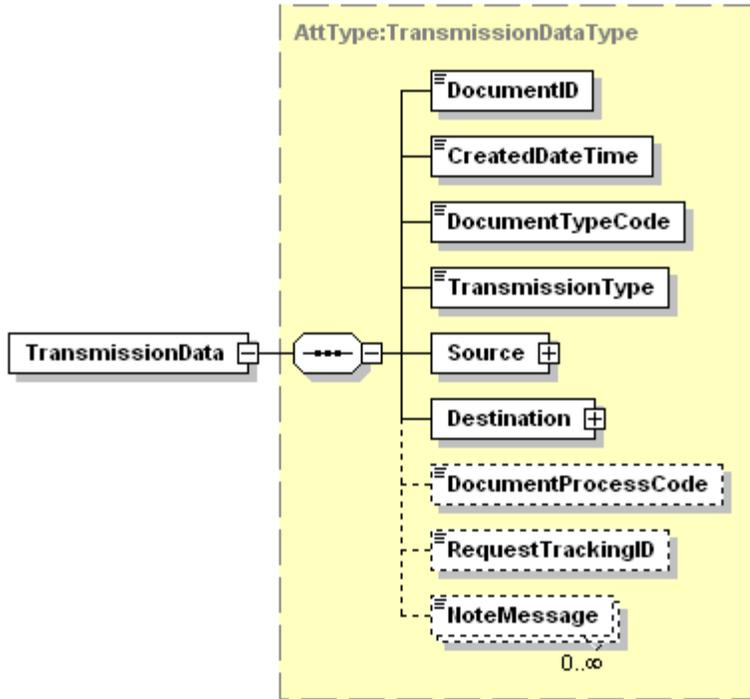
Code illustration:

```
<PDFAtt:PDFTranscript
  XMLNs:PDFAtt="urn:org:pecs:message:PDFAttachment:v1.0.0"
  XMLNs:AttType="urn:org:pecs:sector:AttachmentTypes:v1.0.0"
  XMLNs:core="urn:org:pecs:core:CoreMain:v1.9.0"
  XMLNs:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="urn:org:pecs:message:PDFAttachment:v1.0.0
/Attachment_v1.0.0.xsd">
  <TransmissionData>

    </TransmissionData>
  <Person>

    </Person>
  <ParentDocument />
  <Attachment />
  <NoteMessage />
  <UserDefinedExtensions />
</PDFAtt:PDFTranscript>
```

TransmissionData



Tag Name	Schema Use	Description	Recommended Use	Format
DocumentID	Required	The File Transmission Date and Time stamp with additional unique qualifying characters	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 35
CreatedDateTime	Required	The Date and Time stamp when the document was created	Required	minOcc 1 maxOcc 1 xs:datetime ccy-mm-ddThh:ii:ss{+-GMT}
DocumentTypeCode	Required	Type and purpose of document being transmitted	Required	minOcc 1 maxOcc 1 Enumerations: RequestedRecord
Comment: This element is required by the Academic Main Schema, which is included in the PDF Attachment Schema for convenience. Refer to the Academic Main Schema for other enumerations				
TransmissionType	Required	The nature of the Transmission	Required	minOcc 1 maxOcc 1 Enumerations: Original Replace Duplicate Resubmission Reissue MutuallyDefined
Comment: This element is required by the Academic Main Schema, which is included in the PDF Attachment Schema for convenience. Refer to the Academic Main Schema for other enumerations				

Source	Required	This field is required and essential to indicate the source of the Document being sent. It is normally the sending school which generated the document.	Required	minOcc 1 maxOcc 1
Comment: This complex data element will be expanded on a following page.				
Destination	Required	This field is mandatory and essential to indicate the destination or recipient of the document being sent.	Required	minOcc 1 maxOcc 1
Comment: This complex data element will be expanded on a following page.				
DocumentProcessCode	Optional	This element indicates a TEST or PRODUCTION document	Required if "TEST"; "PRODUCTION" implied, not recommended	minOcc 0 maxOcc 1 Enumerations: TEST PRODUCTION
Comment: If a test transcript is being sent as part of the implementation testing process, or to identify a problem, then this data element would be included with the value "TEST". If this is not the case and this is a normal official transcript being sent, then this data element would not be included in the instance document.				
RequestTrackingID	Optional	The unique ID associated with a request action that is returned to the requestor for document matching and tracking.	Optional	minOcc 0 maxOcc 1 minLength 1 maxLength 35
NoteMessage	Optional Repeatable	Additional information about transmission	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

TransmissionData (Continued)

Code illustration:

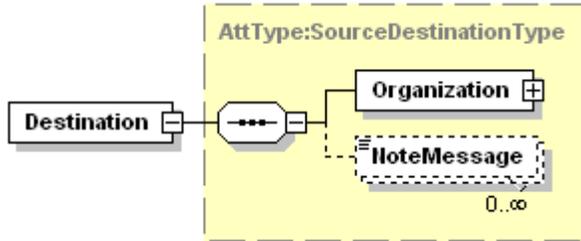
```

<TransmissionData>
  <DocumentID>2316139</DocumentID>
  <CreatedDateTime>2004-04-04T09:30:47-05:00</CreatedDateTime>
  <TransmissionType>Original</TransmissionType>
  <DocumentTypeCode>Request</DocumentTypeCode>
  <Source>

  </Source>
  <Destination>

  </Destination>
  <DocumentProcessCode />
  <RequestTrackingID />
  <NoteMessage />
</TransmissionData>
    
```

TransmissionData.Source



Tag Name	Schema Use	Description	Recommended Use	Format
Organization	Required	Non-person entity such as Organization, Institution, Agency or Business.	Required	minOcc 1 maxOcc 1
Comment: This complex data element will be expanded on a following page.				
NoteMessage	Optional Repeatabe	Additional information about Organization	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80
Comment: This gives additional information about the sending or source vendor or agency. Since it cannot be easily and automatically processed by the receiving school, note messages are not recommended for inclusion in the instance document.				

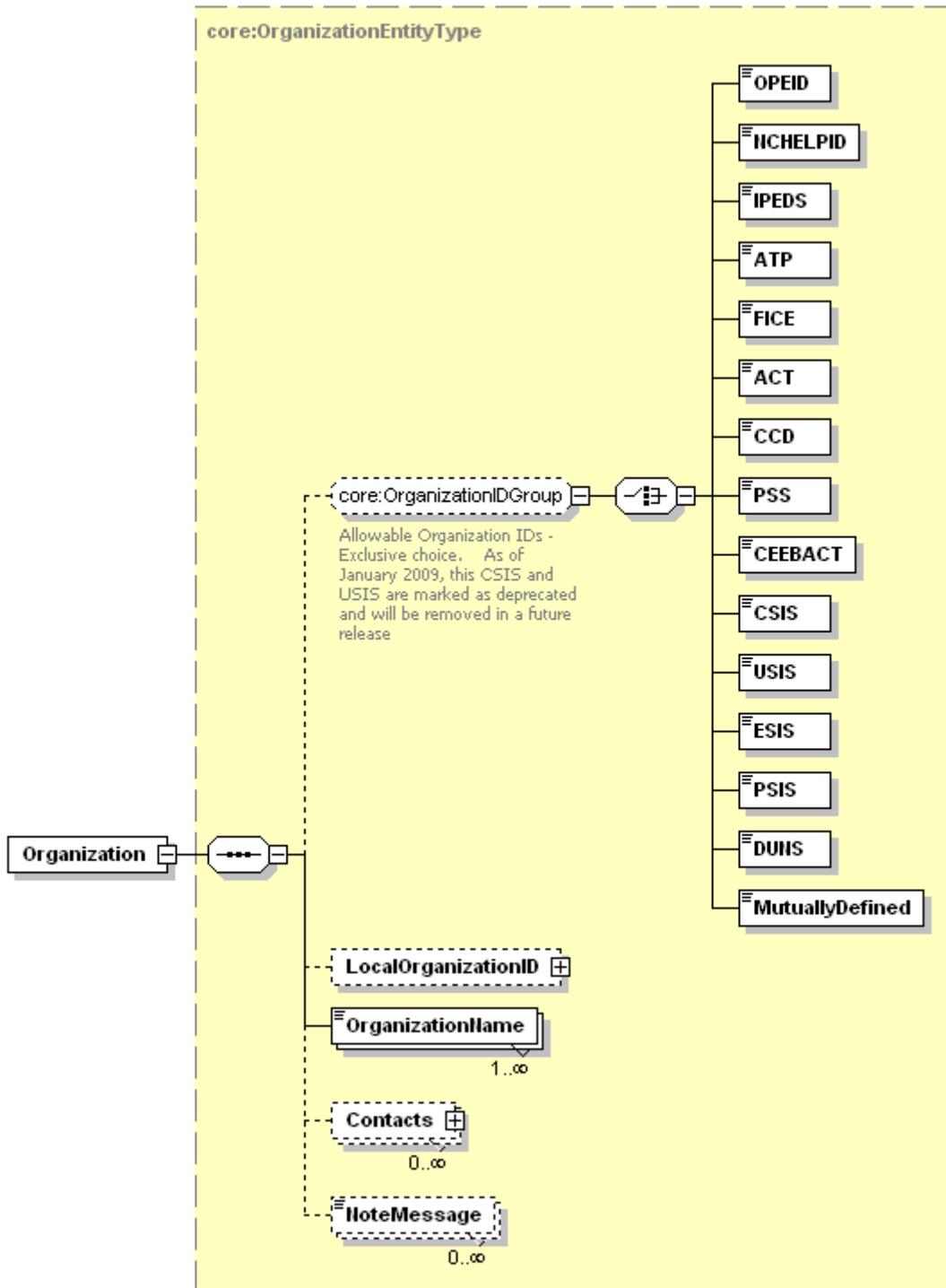
Code illustration:

```

<Source>
  <Organization>

  </Organization>
  <NoteMessage />
</Source>
    
```

TransmissionData.Source.Organization



Tag Name	Schema Use	Description	Recommended Use	Format
[OrganizationIDGroup]	Required	Allowable Organization IDs - Exclusive choice	Required	minOcc 1 maxOcc 1

Tag Name	Schema Use	Description	Recommended Use	Format
Comment: [OrganizationIDGroup] is not an XML tag and does not appear in an instance document. It requires the choice of one and only one of the following code set tags to identify the institution/organization.				
OPEID	Required choice	The unique identifier assigned by the Office of Postsecondary Education for each data exchange partner.	Recommended choice	minOcc 0 maxOcc 1 minLength 3 maxLength 8
NHELPID	Required choice	The unique identifier assigned by National Council on Higher Education Loan Programs for each data exchange partner.	Not Recommended	minOcc 0 maxOcc 1 minLength 3 maxLength 8
Comment: The NHELPID would not normally be an appropriate choice in this case since transcripts are not normally generated by the financial aid world.				
IPEDS	Required choice	The unique identifier for Integrated Postsecondary Education Data System assigned by the National Center for Education Statistics for each postsecondary data exchange partner.	Recommended choice	minOcc 0 maxOcc 1 minLength 6 maxLength 6
ATP	Required choice	The unique identifier for the Admissions Testing Program assigned by the College Board for each data exchange partner.	Recommended choice	minOcc 0 maxOcc 1 minLength 6 maxLength 6
FICE	Required choice	The unique identifier once maintained for the Federal Interagency Committee on Education by the National Center for Education Statistics for each postsecondary data exchange partner.	Recommended choice	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: Although the FICE code set is still widely used by many postsecondary institutions, it has not been maintained by NCES or anyone else since late in the last century. Therefore, codes for new institutions created since then have been locally assigned and cannot be relied upon.				
ACT	Required choice	The unique identifier for postsecondary educational institutions assigned by American College Testing available at www.act.org	Recommended choice	minOcc 0 maxOcc 1 minLength 4 maxLength 4
CCD	Required choice	The unique identifier assigned by National Center for Education Statistics as the Common Core of Data for each data exchange partner.	Not Recommended	minOcc 0 maxOcc 1 minLength 12 maxLength 12
Comment: The CCD is not a recommended choice to identify postsecondary school senders.				
CEEBACT	Required choice	The unique identifier assigned by the College Entrance Examining Board and ACT for each K-12 data exchange partner.	Not Recommended	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: The CEEBACT code set is not a recommended choice to identify postsecondary school senders.				
CSIS	Required choice	The unique identifier assigned by the Statistics Canada Canadian College Student Information System for each postsecondary data exchange partner.	Optional choice	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: Since this code set has been used to identify colleges in Canada, it is not a recommended choice for postsecondary schools in the United States. It would be an appropriate choice for colleges in Canada. This code set is scheduled to be replaced by a new code set PSIS in the future.				

Tag Name	Schema Use	Description	Recommended Use	Format
USIS	Required choice	The unique identifier assigned by the Statistics Canada University Student Information System for each data postsecondary exchange partner.	Optional choice	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: Since this code set has been used to identify universities in Canada, it is not a recommended choice for postsecondary schools in the United States. It would, however, be an appropriate choice for universities in Canada. This code set is scheduled to be replaced by a new code set PSIS in the future.				
ESIS	Required choice	The unique identifier assigned by the Statistics Canada Enhanced Student Information System for each data postsecondary exchange partner.	Optional choice	minOcc 0 maxOcc 1 minLength 8 maxLength 8
Comment: The ESIS number would not be a normal choice to identify the sending postsecondary school that created a Transcript in the United States. However, it could be used to identify a postsecondary school in Canada. This code set is scheduled to be replaced by a new code set PSIS in the future.				
DUNS	Required choice	Data Universal Numbering System (DUNS), unique nine character company identification number issued by Dun and Bradstreet Corporation.	Not Recommended	minOcc 0 maxOcc 1 minLength 9 maxLength 9
Comment: The DUNS number would not be a normal choice to identify the sending school that created a Postsecondary Transcript.				
MutuallyDefined	Required choice	This code set could be used by a selected set of trading partners if none of the other above code sets is appropriate.	Optional choice	minOcc 0 maxOcc 1 minLength 1 maxLength 60
Comment: If a PDF Document is being sent by a school or agency that does not have a valid code in one of the other above code sets, and if that code and code set are recognized by the recipient, then this code set might be used for a set of limited exchange partners.				
Comment: End of OrganizationIDGroup choice set tags				
LocalOrganizationID	Optional	A code set typically used by a state, province or region to further identify the sending school.	Optional	minOcc 0 maxOcc 1
Comment: This complex data element will be expanded on a following page.				
OrganizationName	Optional Repeatable	Name of Non-person entity such as Organization, Institution, Agency or Business.	Recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 60
Comment: This is the name of the sending postsecondary school.				
Contacts	Optional Repeatable	To identify a person or an office at the sending school to which administrative communications should be directed	Recommended	minOcc 0 maxOcc ∞
Comment: This complex data element will be further explained and expanded on a following page.				
NoteMessage	Optional Repeatable	Additional information about the organization	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

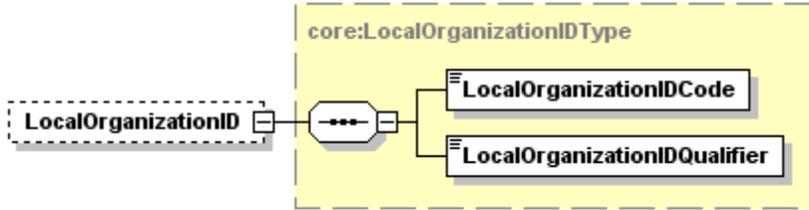
TransmissionData.Source.Organization (Continued)

Code illustration:

```
<Organization>  
  <FICE>123456</FICE>  
  <LocalOrganizationID>  
  
    </LocalOrganizationID>  
  <OrganizationName>Southwestern University</OrganizationName>  
  <Contacts>  
  
    </Contacts>  
  <NoteMessage />  
</Organization>
```

TransmissionData.Source.Organization.LocalOrganizationID

Note: Although the complex data element LocalOrganizationID is an optional data element, if you choose to send LocalOrganizationID, then you must send both LocalOrganizationIDCode and also LocalOrganizationIDQualifier.

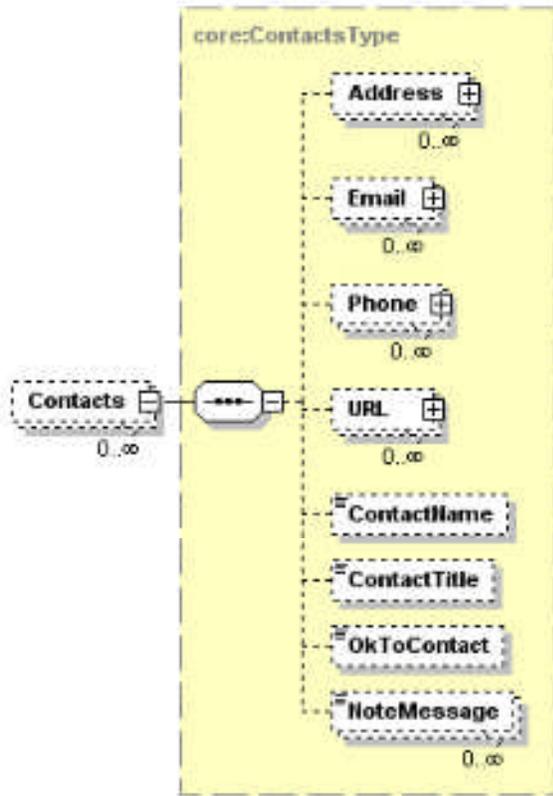


Tag Name	Schema Use	Description	Recommended Use	Format
LocalOrganizationIDCode	Required	The code assigned for the sending school by the state, province or other mutually defined agency specified in the LocalIDQualifier that follows.	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 35
Comment: This is a required data element only if the Local Organization ID complex data element is sent. This is typically the administrative school code assigned by a state or province to specifically identify the sending school in that state				
LocalOrganizationIDQualifier	Required	This is the state, province or other mutually defined agency that assigned the Local D Code above.	Required	minOcc 1 maxOcc 1 Enumerations: See Code Set in CoreMain
Comment: This is a required data element only if the Local Organization ID data element is sent. This is typically the state or province that assigned the code to specifically identify the sending school in that state				

Code illustration:

```
<LocalOrganizationID>
  <LocalOrganizationIDCode>2237901002</LocalOrganizationIDCode>
  <LocalOrganizationIDQualifier>TX</LocalOrganizationIDQualifier>
</LocalOrganizationID>
```

TransmissionData.Source.Organization.Contacts



Tag Name	Schema Use	Description	Recommended Use	Format
Address	Optional Repeatabe	This is a combined Address Group for a choice between Domestic or International	Recommended	minOcc 0 maxOcc ∞
<i>Comment: This complex data element will be expanded on a following page. This is the address of the source (company, agency or institution) of this document.</i>				
Email	Optional Repeatabe	Email address of source institution contact	Recommended	minOcc 0 maxOcc ∞
<i>Comment: This complex data element will be expanded on a following page.</i>				
Phone	Optional Repeatabe	Phone number of source institution contact	Recommended	minOcc 0 maxOcc ∞
<i>Comment: This complex data element will be expanded on a following page.</i>				
URL	Optional Repeatabe	The Uniform Resource Locator of source institution	Optional	minOcc 0 maxOcc ∞
<i>Comment: This complex data element will be expanded on a following page.</i>				
ContactName	Optional	This is the name of the contact at the source for this transmission.	Optional	minOcc 0 maxOcc 1 minLength 0 maxLength 60
ContactTitle	Optional	This is the job or position title of the	Optional	minOcc 0 maxOcc 1

		contact at the source for this transmission		minLength 0 maxLength 60
OkToContact	Optional	This is information provided by the applicant that indicates if it is OK to contact this individual at the source institution, company or agency.	Optional	minOcc 0 maxOcc 1 Enumerations: No Yes
NoteMessage	Optional Repeatable	Additional information about the contacts at the source institution	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

Comment: This is contact information included by the sending company, agency or institution to indicate the preferred means for the receiving school to contact it in case there is a need for further communication.

TransmissionData.Source.Organization.Contacts (Continued)

Code illustration:

```

<Contacts>
  <Address>

    </Address>
  <Email>

    </Email>
  <Phone>

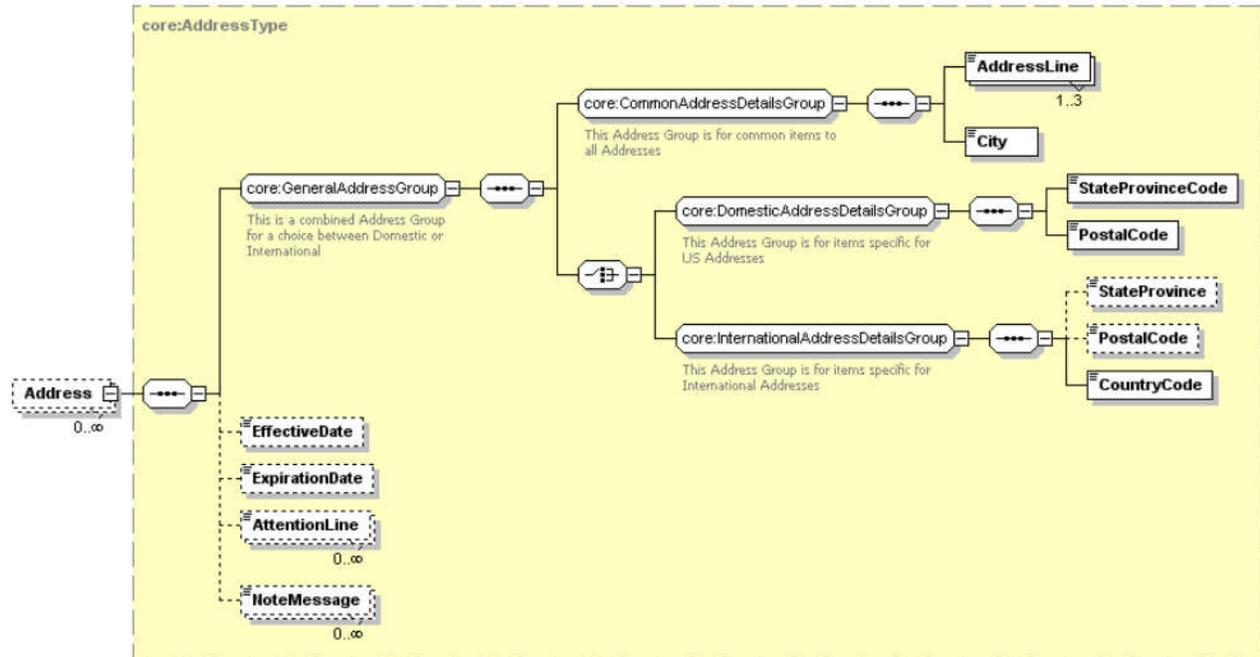
    </Phone>
  <URL>

    </URL>
  <ContactName>John Doe</ContactName>
  <ContactTitle>Manager</ContactTitle>
  <OkToContact>Yes</OkToContact>
  <NoteMessage />
</Contacts>

```

TransmissionData.Source.Organization.Contacts.Address

Note: Although the complex data element Address is an optional data element, if you choose to send the Address of Contacts at the Source Institution, then you must send AddressLine and City and also StateProvinceCode, and PostalCode OR CountryCode.



Tag Name	Schema Use	Description	Recommended Use	Format
GeneralAddressGroup	Required	This Address Group is for items common to all Addresses	Required	minOcc 1 maxOcc 1
Comment: [GeneralAddressGroup] does not appear in the instance document. It requires the use of CommonAddressDetailsGroup and the choice of one of either DomesticAddressDetailsGroup or InternationalAddressDetailsGroup. This group is required in the schema only if you choose to send the address of the contact.				
CommonAddressDetailsGroup	Required	This Address Group is for items common to all Addresses	Required	minOcc 1 maxOcc 1
Comment: [CommonAddressDetailsGroup] does not appear in the instance document. If the address of a contact is included in the transcript, then this must be sent. It is required and must be paired with one of either DomesticAddressDetailsGroup or InternationalAddressDetailsGroup.				
AddressLine	Required Repeatable	Local delivery information such as street, building number, PO box, or apartment portion of a postal address of a Contact at the Sending (Source) School.	Required	minOcc 1 maxOcc 3 minLength 1 maxLength 40
City	Required	The city portion of the Address of a Contact at the Sending (Source) School.	Required	minOcc 1 maxOcc 1 minLength 2 maxLength 30
DomesticAddressDetailsGroup	Required choice	This Address Group is for items specific for US and Canadian Addresses	Required for domestic addresses	minOcc 1 maxOcc 1
Comment: [DomesticAddressDetailsGroup] does not appear in the instance document. If the complex data element address has a				

Tag Name	Schema Use	Description	Recommended Use	Format
<i>United States or Canadian Postal Code and a US State or Canadian Province Code, then this should be the required choice.</i>				
StateProvinceCode	Required	Code for US states, etc., and Canadian provinces.	Required	minOcc 1 maxOcc 1 Enumerations: See CoreMain
PostalCode	Required	The postal code portion of the Address.	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 17
<i>InternationalAddressDetailsGroup</i>	Required choice	This Address Group is for items specific for International Addresses	Required for international addresses	minOcc 1 maxOcc 1
Comment: [InternationalAddressDetailsGroup] does not appear in the instance document. This choice is for addresses that do not have a US or Canadian postal code.				
StateProvince	Optional	The literal name of the state, province or territory of a postal address of the source of this document. Use for addresses outside US or Canada.	Recommended Refer to common postal practices of the source country	minOcc 0 maxOcc 1 minLength 2 maxLength 30
<i>Comment: For an internet resource of states or other geographical subdivisions in countries other than the US and Canada, you might choose to refer to the website of the Universal Postal Union at http://www.upu.int</i>				
PostalCode	Optional	The postal code portion of the Address.	Recommended Refer to common postal practices of the source country	minOcc 0 maxOcc 1 minLength 1 maxLength 17
<i>Comment: For an internet resource of states or other geographical subdivisions in countries other than the US and Canada, you might choose to refer to the website of the Universal Postal Union at http://www.upu.int</i>				
CountryCode	Required	Code indicating Country. Use ISO 3166-1 alpha-2 standard.	Required	minOcc 1 maxOcc 1 Enumerations: See CoreMain
EffectiveDate	Optional	The date on which the address became (or will become) effective.	Optional	minOcc 0 maxOcc 1 Date format: CCYY-MM-DD
ExpirationDate	Optional	The date on which the address will (or did) expire.	Optional	minOcc 0 maxOcc 1 Date format: CCYY-MM-DD
AttentionLine	Optional	The individual or office name within the postal address where inquiries should be directed.	Optional	minOcc 1 maxOcc ∞ minLength 1 maxLength 45
<i>Comment: This might be used to indicate where questions about the record should be sent. For example, Registrar, Guidance Office, Information Technology Department.</i>				
NoteMessage	Optional Repeatable	Additional information about the addresses of the contacts at the source school	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

TransmissionData.Source.Organization.Contacts.Address (Continued)

Code illustration 1 (Domestic Address):

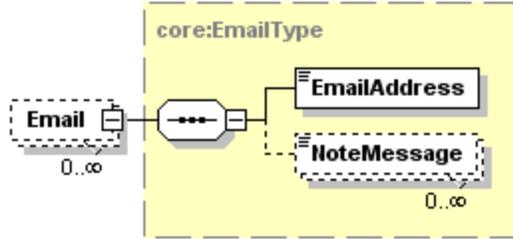
```
<Address>
  <AddressLine>1715 W Cesar Chavez</AddressLine>
  <City>Austin</City>
  <StateProvinceCode>TX</StateProvinceCode>
  <PostalCode>78703</PostalCode>
  <EffectiveDate/>
  <ExpirationDate/>
  <AttentionLine>Jane Doe</AttentionLine>
  <NoteMessage />
</Address>
```

Code illustration 2 (International Address):

```
<Address>
  <AddressLine>Altova Corporation</AddressLine>
  <AddressLine>Rudolfsplatz 13a/9</AddressLine>
  <City>Wien</City>
  <StateProvince/>
  <PostalCode>A-1010</PostalCode>
  <CountryCode>AT</CountryCode>
  <EffectiveDate/>
  <ExpirationDate/>
  <AttentionLine/>
  <NoteMessage />
</Address>
```

TransmissionData.Source.Organization.Contacts.Email

Note: Although the complex data element Email is an optional data element, if you choose to send the Email of a Contact at the Sending Institution, then you must send the data element EmailAddress.



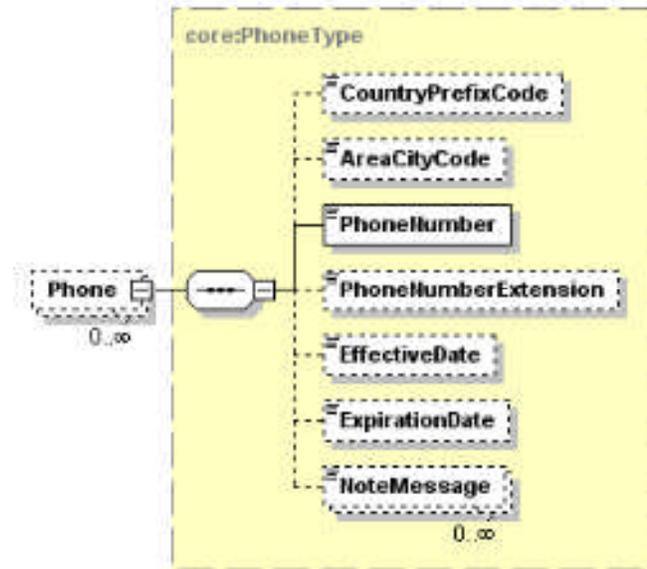
Tag Name	Schema Use	Description	Recommended Use	Format
EmailAddress	Required	The numbers, letters, and symbols used to identify an electronic mail (Email) user within a network.	Required	minOcc 1 maxOc 1 minLength 1 maxLength 128
NoteMessage	Optional Repeatable	Additional information about the email address of the contact at the sending school	Not recommended	minOcc 0 maxOc ∞ minLength 1 maxLength 80

Code illustration:

```
<Email>
  <EmailAddress>registrar@anyuniversity.edu</EmailAddress>
  <NoteMessage />
</Email>
```

TransmissionData.Source.Organization.Contacts.Phone

Note: Although the complex data element Phone is an optional data element, if you choose to send the Phone of a Contact at the Sending Institution, then you must send a phone number.



Tag Name	Schema Use	Description	Recommended Use	Format
CountryPrefixCode	Optional	International dialing code	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 3
AreaCityCode	Optional	Regional dialing code	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 5
PhoneNumber	Required	Telephone number	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 11
Comment: The phone number will typically be sent as a string of numbers with no spaces, periods or dashes.				
PhoneNumberExtension	Optional	The extended telephone addressing information used in addition to phone number such as a PBX extension, a pager PIN, or FAX sub-address	Optional	minOcc 0 maxOcc 1 minLength 1 maxLength 5
EffectiveDate	Optional	The date on which the phone number became (or will become) effective.	Optional	minOcc 0 maxOcc 1 Date format: CCYY-MM-DD
ExpirationDate	Optional	The date on which the phone number will (or did) expire.	Optional	minOcc 0 maxOcc 1 Date format: CCYY-MM-DD
NoteMessage	Optional Repeatable	Additional information about the phone number of the contact at the source institution	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

TransmissionData.Source.Organization.Contacts.Phone (Continued)

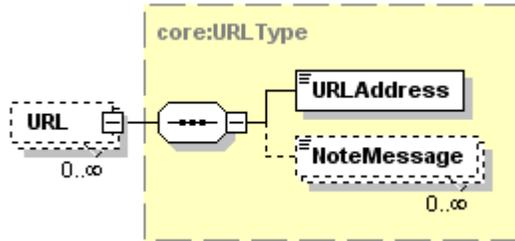
Code illustration:

```
<Phone>
  <CountryPrefixCode/>
  <AreaCityCode>512</AreaCityCode>
  <PhoneNumber>4142505</PhoneNumber>
  <PhoneNumberExtension />
  <EffectiveDate/>
  <ExpirationDate/>
  <NoteMessage>Phone</NoteMessage>
</Phone>
```

```
<Phone>
  <CountryPrefixCode/>
  <AreaCityCode>512</AreaCityCode>
  <PhoneNumber>4747935</PhoneNumber>
  <PhoneNumberExtension/>
  <EffectiveDate/>
  <ExpirationDate/>
  <NoteMessage>Fax</NoteMessage>
</Phone>
```

TransmissionData.Source.Organization.Contacts.URL

Note: Although the complex data element URL is an optional data element, if you choose to send the URL of the Sending Institution, then you must send the URLAddress.



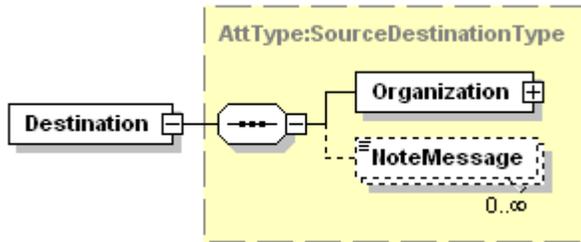
Tag Name	Schema Use	Description	Recommended Use	Format
URLAddress	Required	The Uniform Resource Locator (URL) address of the sending school or of a contact at the sending school	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 512
NoteMessage	Optional Repeatable	Additional information about the URL address of the source institution	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

Code illustration:

```

<URL>
  <URLAddress>www.anyuniversity.edu</URLAddress>
  <NoteMessage />
</URL>
    
```

TransmissionData.Destination



Tag Name	Schema Use	Description	Recommended Use	Format
Organization	Required	Non-person entity such as Organization, Institution, Agency or Business.	Required	minOcc 1 maxOcc 1
Comment: This complex data element will be expanded on a following page.				
NoteMessage	Optional Repeatable	Additional information about destination organization or school.	Not Recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80
Comment: This is the postsecondary school or other agency to which this student's transcript is being sent.				

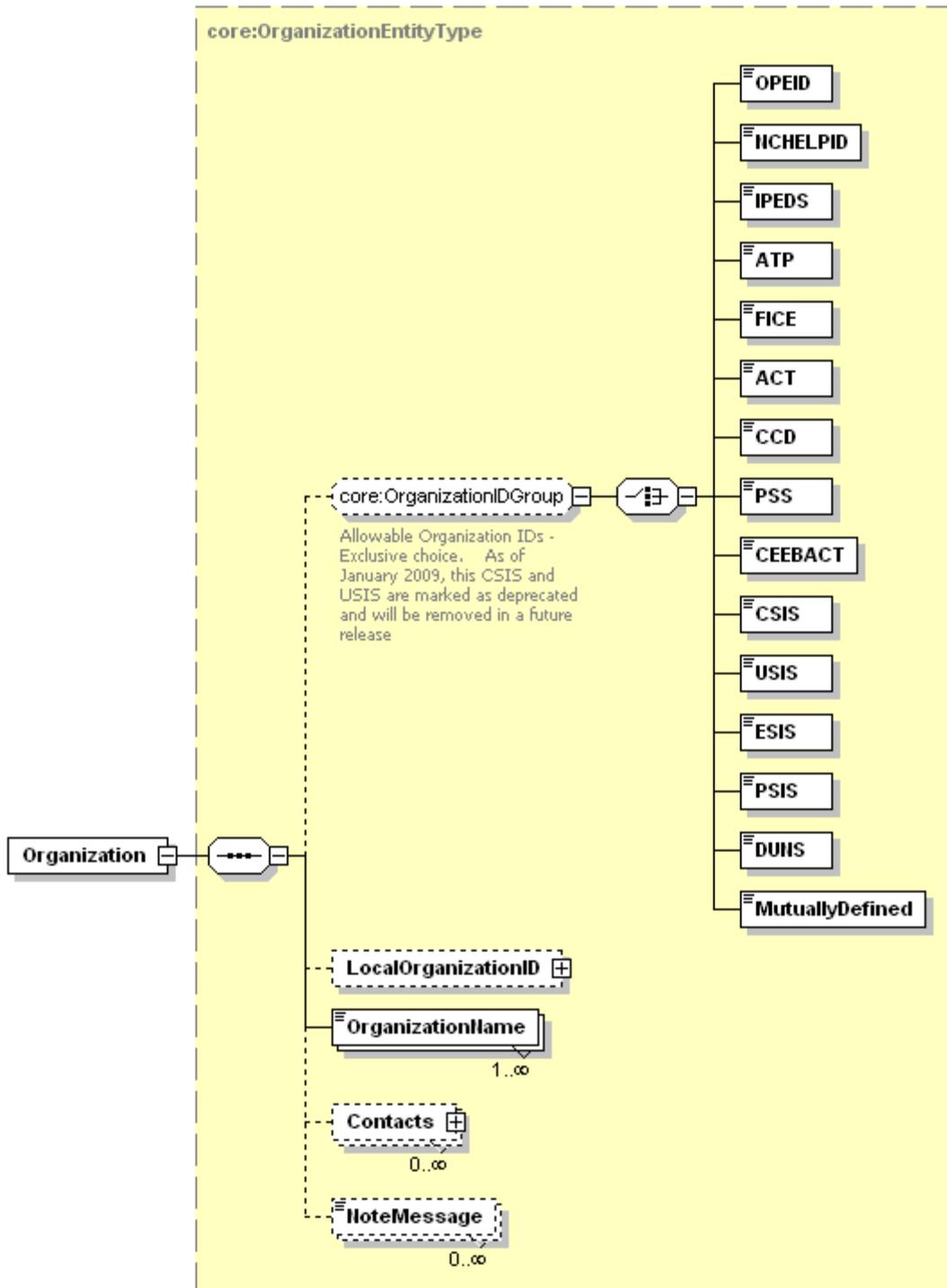
Code illustration:

```

<Destination>
  <Organization>

  </Organization>
  <NoteMessage />
</Destination>
    
```

TransmissionData.Destination.Organization



Tag Name	Schema Use	Description	Recommended Use	Format
[OrganizationIDGroup]	Required	Allowable Organization IDs - Exclusive choice	Required	minOcc 1 maxOcc 1

Tag Name	Schema Use	Description	Recommended Use	Format
Comment: [OrganizationIDGroup] is not a tag and does not appear in the instance document. It requires the choice of one and only one of the following code set tags to identify the institution/organization.				
OPEID	Required choice	The unique identifier assigned by the Office of Postsecondary Education for each data exchange partner.	Recommended choice	minOcc 0 maxOcc 1 minLength 3 maxLength 8
Comment: The OPEID would be an appropriate choice if this transcript is being sent to a postsecondary institution and the OPEID is known.				
NCHelpID	Required choice	The unique identifier assigned by National Council on Higher Education Loan Programs for each data exchange partner.	Not Recommended	minOcc 0 maxOcc 1 minLength 3 maxLength 8
Comment: The NCHelpID would not be an appropriate choice in this case since transcripts are not normally sent to the financial aid world.				
IPEDS	Required choice	The unique identifier for Integrated Postsecondary Education Data System assigned by the National Center for Education Statistics for postsecondary data exchange partners	Recommended choice	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: The IPEDS would be an appropriate choice if this transcript is being sent to a postsecondary institution and the IPEDS number for that institution is known.				
ATP	Required choice	The unique identifier for the Admissions Testing Program assigned by the College Board for each data exchange partner.	Recommended choice	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: The ATP would be an appropriate choice if this transcript is being sent to a postsecondary institution and the ATP number for that institution is known.				
FICE	Required choice	The unique identifier once maintained for the Federal Interagency Committee on Education by the National Center for Education Statistics for each postsecondary data exchange partner.	Recommended choice	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: Although the FICE code set is still widely used by many postsecondary institutions, it has not been maintained by NCES or anyone else since late in the last century. Therefore, codes for new institutions created since then, have been locally assigned and cannot be relied upon. However, if you do know the actual FICE code for the postsecondary institution to which this transcript is being sent, this is a recommended choice.				
ACT	Required choice	The unique identifier for postsecondary educational institutions assigned by American College Testing available at www.act.org	Recommended choice	minOcc 0 maxOcc 1 minLength 4 maxLength 4
Comment: The ACT would be an appropriate choice if this transcript is being sent to a postsecondary institution and the ACT number for that institution is known.				
CCD	Required choice	The unique identifier assigned by the United States Department of Education's National Center for Education Statistics as the Common Core of Data for each data exchange partner.	Not Recommended	minOcc 0 maxOcc 1 minLength 12 maxLength 12
Comment: The CCD is primarily a code set used by K12 and would not be a option for this choice as a destination postsecondary school or agency.				
CEEBACT	Required choice	The unique identifier assigned by the College Entrance Examining Board and ACT for each K-12 data exchange partner.	Not Recommended	minOcc 0 maxOcc 1 minLength 6 maxLength 6

Tag Name	Schema Use	Description	Recommended Use	Format
Comment: The CEEBACT code set primarily includes K12 institutions and would not be an option for this choice as a destination postsecondary school or agency.				
CSIS	Required choice	The unique identifier assigned by the Statistics Canada Canadian College Student Information System for each postsecondary data exchange partner.	Optional choice	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: The CSIS would be an appropriate choice if this transcript is being sent to a college in Canada and the CSIS number for that school is known.				
USIS	Required choice	The unique identifier assigned by the Statistics Canada University Student Information System for each data postsecondary exchange partner.	Optional choice	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: The USIS would be an appropriate choice if this transcript is being sent to a university in Canada.				
ESIS	Required choice	The unique identifier assigned by the Statistics Canada Enhanced Student Information System for each data postsecondary exchange partner.	Optional choice	minOcc 0 maxOcc 1 minLength 8 maxLength 8
Comment: The ESIS would be an appropriate choice if this transcript is being sent to a postsecondary institution in Canada.				
DUNS	Required choice	Data Universal Numbering System (DUNS), unique nine character company identification number issued by Dun and Bradstreet Corporation.	Not Recommended	minOcc 0 maxOcc 1 minLength 9 maxLength 9
Comment: The DUNS number would not be a normal choice to identify the recipient postsecondary institution for a transcript. However, it could be used if this electronic transcript is being sent to a company or agency that can receive XML transcripts and that company or agency has a DUNS number that is known to the sending school.				
MutuallyDefined	Required choice	A code set that can be used by a set of trading partners when none of the other codes sets is appropriate	Not Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 60
Comment: This choice would only be appropriate when all the trading partners are aware of the code set and none of the other code sets is appropriate.				
Comment: End of OrganizationIDGroup choice set tags				
LocalOrganizationID	Optional	An identification number typically used by a state, province or region to further identify the receiving school or agency	Optional	minOcc 0 maxOcc 1
Comment: This complex data element will be expanded on a following page.				
OrganizationName	Optional Repeatable	Name of Non-person entity such as Organization, Institution, Agency or Business.	Recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 60
Comment: You may use repeated OrganizationName to include alternate routing destination (e.g.Human Resources, Graduate School) or you may include this information the Contacts data element which follows.				
Contacts	Optional Repeatable	To identify a person or an office at the receiving school or agency to which administrative communications should be directed	Optional	minOcc 0 maxOcc ∞
Comment: Use Contacts for additional routing instructions and information for the receiving school or agency. This complex data element will be expanded on a following page.				
NoteMessage	Optional Repeatable	Additional information about the organization	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

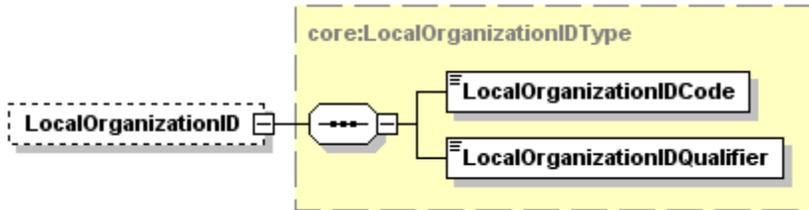
TransmissionData.Destination.Organization (Continued)

Code illustration:

```
<Organization>  
  <ATP>006882</ATP>  
  <LocalOrganizationID>  
  
    </LocalOrganizationID>  
    <OrganizationName>THE UNIVERSITY OF TEXAS AT AUSTIN</OrganizationName>  
    <Contacts>  
  
      </Contacts>  
    <NoteMessage />  
</Organization>
```

TransmissionData.Destination.Organization.LocalOrganizationID

Note: Although the complex data element LocalOrganizationID is an optional data element, if you choose to send LocalOrganizationID, then you must also send both LocalOrganizationIDCode and also LocalOrganizationIDQualifier.

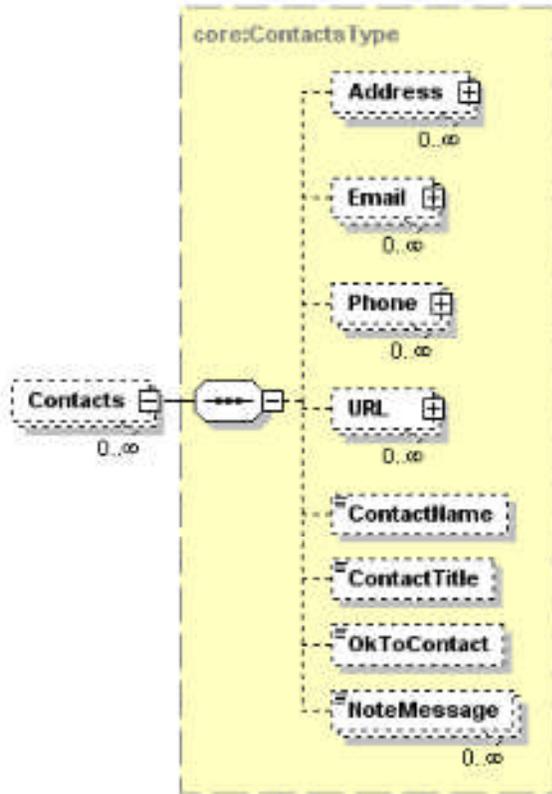


Tag Name	Schema Use	Description	Recommended Use	Format
LocalOrganizationIDCode	Required	The code assigned for the receiving school by the state, province or other mutually defined agency specified in the LocalOrganizationIDQualifier that follows.	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 35
Comment: This is a required data element only if the Local Organization ID complex data element is sent. This is typically the administrative school code assigned by a state or province to specifically identify the receiving school in that state				
LocalOrganizationIDQualifier	Required	This is the state, province or other mutually defined agency that assigned the LocalOrganizationIDCode above.	Required	minOcc 1 maxOcc 1 Enumerations: See CoreMain
Comment: This is a required data element only if the Local Organization ID complex data element is sent. This is typically the state or province that assigned the code to specifically identify the receiving school in that state				

Code illustration:

```
<LocalOrganizationID>
  <LocalOrganizationIDCode>012587</LocalOrganizationIDCode>
  <LocalOrganizationIDQualifier>TX</LocalOrganizationIDQualifier>
</LocalOrganizationID>
```

TransmissionData.Destination.Organization.Contacts



Tag Name	Schema Use	Description	Recommended Use	Format
Address	Optional Repeatable	This is a combined Address Group for a choice between Domestic or International	Optional	minOcc 0 maxOcc ∞
Comment: This address of the recipient postsecondary school or agency is not often used, but it may be helpful to identify the specific recipient of the document. This complex data element will be expanded on a following page.				
Email	Optional Repeatable	This is the email address of the contact at the destination school or agency.	Optional	minOcc 0 maxOcc ∞
Comment: The email address at the recipient postsecondary school or agency is not often used, but it may be helpful to identify the specific recipient of the document. This complex data element will be expanded on a following page.				
Phone	Optional Repeatable	This is the phone number of the contact at the destination school or agency.	Optional	minOcc 0 maxOcc ∞
Comment: The phone number at the recipient postsecondary school or agency is not often used, but it may be helpful to identify the specific recipient of the document. This complex data element will be expanded on a following page.				
URL	Optional Repeatable	This is the Uniform Resource Locator of the destination school or agency.	Not Recommended	minOcc 0 maxOcc ∞
Comment: The URL at the recipient postsecondary school or agency is not often used. This complex data element will be expanded on a following page.				
ContactName	Optional	This is the name of the contact at the destination for this transmission.	Optional	minOcc 0 maxOcc 1 minLength 0 maxLength 60

ContactTitle	Optional	This is the job or position title of the contact at the destination for this transmission	Optional	minOcc 0 maxOcc 1 minLength 0 maxLength 60
OkToContact	Optional	This is information provided by the applicant that indicates if it is OK to contact this individual at the destination institution, company or agency.	Optional	minOcc 0 maxOcc 1 Enumerations: No Yes
NoteMessage	Optional Repeatable	Additional information about the contact at the destination school or agency	Not Recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

TransmissionData.Destination.Organization.Contacts (Continued)

Code illustration:

```

<Contacts>
  <Address>

  </Address>
  <Phone>

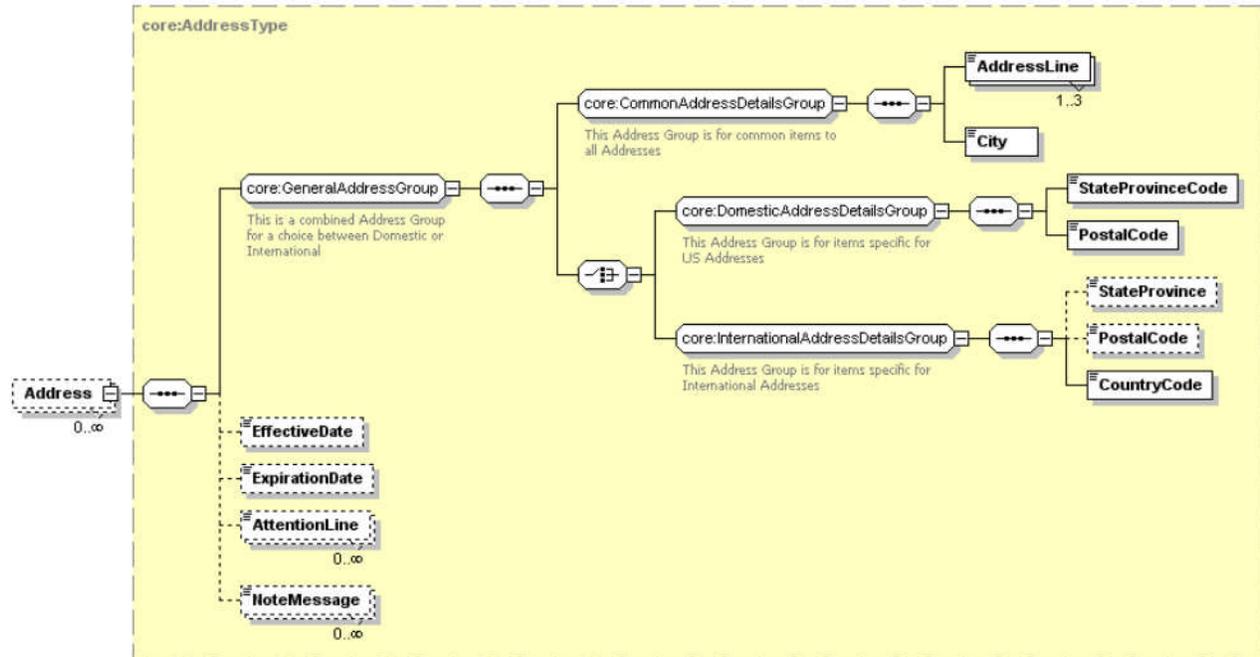
  </Phone>
  <Email>

  </Email>
  <URL>

  </URL>
  <ContactName>John Doe</ContactName>
  <ContactTitle>Manager</ContactTitle>
  <OkToContact>Yes</OkToContact>
  <NoteMessage />
</Contacts>
    
```

TransmissionData.Destination.Organization.Contacts.Address

Note: Although the complex data element Address is an optional data element, if you choose to send the Address of Contacts at the Destination Institution or Agency, then you must send AddressLine and City and also StateProvinceCode, and PostalCode OR CountryCode.



Tag Name	Schema Use	Description	Recommended Use	Format
<i>GeneralAddressGroup</i>	Required	This Address Group is for items common to all Addresses	Required	minOcc 1 maxOcc 1
Comment: [<i>GeneralAddressGroup</i>] does not appear in the instance document. It requires the use of <i>CommonAddressDetailsGroup</i> and the choice of one of either <i>DomesticAddressDetailsGroup</i> or <i>InternationalAddressDetailsGroup</i> . This group is required in the schema only if you choose to send the address of the contact or school.				
<i>CommonAddressDetailsGroup</i>	Required	This Address Group is for items common to all Addresses	Required	minOcc 1 maxOcc 1
Comment: [<i>CommonAddressDetailsGroup</i>] does not appear in the instance document. If the address of a contact is included in the transcript, then this must be sent. It is required and must be paired with one of either <i>DomesticAddressDetailsGroup</i> or <i>InternationalAddressDetailsGroup</i> .				
AddressLine	Required Repeatable	Local delivery information such as street, building number, PO box, or apartment portion of a postal address of a Contact at the Receiving (Destination) School or Agency.	Required	minOcc 1 maxOcc 3 minLength 1 maxLength 40
City	Required	The city portion of the Address of a Contact at the Receiving (Destination) School or Agency.	Required	minOcc 1 maxOcc 1 minLength 2 maxLength 30
<i>DomesticAddressDetailsGroup</i>	Required choice	This Address Group is for items specific for US and Canadian Addresses	Required for domestic addresses	minOcc 1 maxOcc 1
Comment: [<i>DomesticAddressDetailsGroup</i>] and does not appear in the instance document. If the complex data element address has a				

Tag Name	Schema Use	Description	Recommended Use	Format
<i>United States or Canadian Postal Code and a US State or Canadian Province Code, then this should be the required choice.</i>				
StateProvinceCode	Required	Code for US states, etc. and Canadian provinces.	Required	minOcc 1 maxOcc 1 Enumerations: See CoreMain
PostalCode	Required	The postal code portion of the Address.	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 17
<i>InternationalAddressDetailsGroup</i>	Required choice	This Address Group is for items specific for International Addresses	Required for international addresses	minOcc 1 maxOcc 1
Comment: [InternationalAddressDetailsGroup] does not appear in the instance document. This choice is for addresses that do not have a US or Canadian postal code.				
StateProvince	Optional	The literal name of the state, province or territory of a postal address of the source of this document. Use for addresses outside US or Canada.	Recommended Refer to common postal practices of the destination country	minOcc 0 maxOcc 1 minLength 2 maxLength 30
Comment: For an internet resource of states or other geographical subdivisions in countries other than the US and Canada, you might choose to refer to the website of the Universal Postal Union at http://www.upu.int				
PostalCode	Optional	The postal code portion of the Address.	Recommended Refer to common postal practices of the destination country	minOcc 0 maxOcc 1 minLength 1 maxLength 17
Comment: For an internet resource of states or other geographical subdivisions in countries other than the US and Canada, you might choose to refer to the website of the Universal Postal Union at http://www.upu.int				
CountryCode	Required	Code indicating Country. Use ISO 3166-1 alpha-2 standard.	Required	minOcc 1 maxOcc 1 Enumerations: See CoreMain
EffectiveDate	Optional	The date on which the address became (or will become) effective.	Optional	minOcc 0 maxOcc 1 Date format: CCYY-MM-DD
ExpirationDate	Optional	The date on which the address will (or did) expire.	Optional	minOcc 0 maxOcc 1 Date format: CCYY-MM-DD
AttentionLine	Optional Repeatable	The individual or office name within the postal address where inquiries should be directed.	Optional	minOcc 0 maxOcc ∞ minLength 1 maxLength 45
NoteMessage	Optional Repeatable	Additional information about the addresses of the contacts at the destination school or agency	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

TransmissionData.Destination.Organization.Contacts.Address (Continued)

Code illustration 1 (Domestic Address):

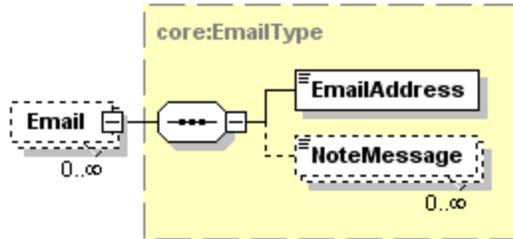
```
<Address>
  <AddressLine>1715 W Cesar Chavez</AddressLine>
  <City>Austin</City>
  <StateProvinceCode>TX</StateProvinceCode>
  <PostalCode>78703</PostalCode>
  <AttentionLine>Jane Doe</AttentionLine>
  <AttentionLine>Guidance Counselor</AttentionLine>
  <EffectiveDate/>
  <ExpirationDate/>
  <NoteMessage />
</Address>
```

Code illustration 2 (International Address):

```
<Address>
  <AddressLine>Altova Corporation</AddressLine>
  <AddressLine>Rudolfsplatz 13a/9</AddressLine>
  <City>Wien</City>
  <StateProvince/>
  <PostalCode>A-1010</PostalCode>
  <CountryCode>AT</CountryCode>
  <EffectiveDate/>
  <ExpirationDate/>
</Address>
```

TransmissionData.Destination.Organization.Contacts.Email

Note: Although the complex data element Email is an optional data element, if you choose to send the Email of a Contact at the Receiving Institution or Agency, then you must send the data element EmailAddress.



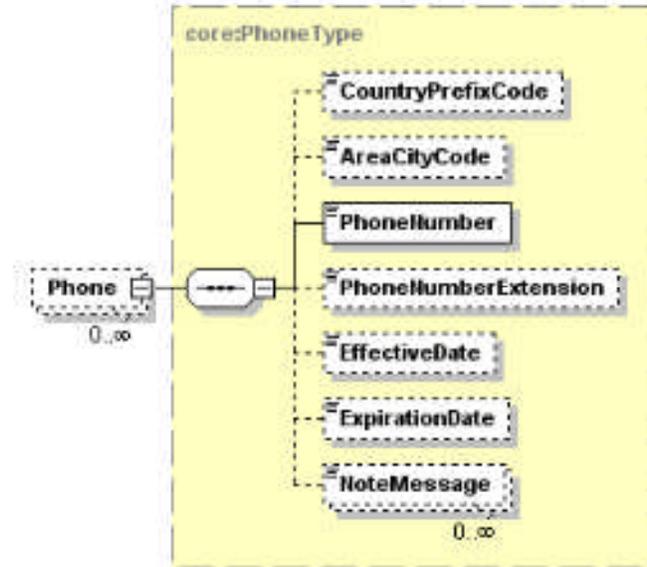
Tag Name	Schema Use	Description	Recommended Use	Format
EmailAddress	Required	The numbers, letters, and symbols used to identify an electronic mail (Email) user within a network.	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 128
NoteMessage	Optional Repeatable	Additional information about the email address of the contact at the destination school or agency	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

Code illustration:

```
<Email>
  <EmailAddress>AdmissionsDirector@UTAustin.edu</EmailAddress>
  <NoteMessage />
</Email>
```

TransmissionData.Destination.Organization.Contacts.Phone

Note: Although the complex data element Phone is an optional data element, if you choose to send the Phone of a Contact at the Receiving Institution or Agency, then you must send a phone number.



Tag Name	Schema Use	Description	Recommended Use	Format
CountryPrefixCode	Optional	International dialing code	Optional	minOcc 0 maxOcc 1 minLength 1 maxLength 3
AreaCityCode	Optional	Regional dialing code	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 5
PhoneNumber	Required	Telephone number	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 11
Comment: The phone number will typically be sent as a string of numbers with no spaces, periods or dashes.				
PhoneNumberExtension	Optional	The extended telephone addressing information used in addition to phone number such as a PBX extension, a pager PIN, or FAX sub-address.	Optional	minOcc 0 maxOcc 1 minLength 1 maxLength 5
EffectiveDate	Optional	The date on which the phone number became (or will become) effective.	Optional	minOcc 0 maxOcc 1 Date format: CCYY-MM-DD
ExpirationDate	Optional	The date on which the phone number will (or did) expire.	Optional	minOcc 0 maxOcc 1 Date format: CCYY-MM-DD
NoteMessage	Optional Repeatable	Additional information about the phone number of the contact at the destination school or agency	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

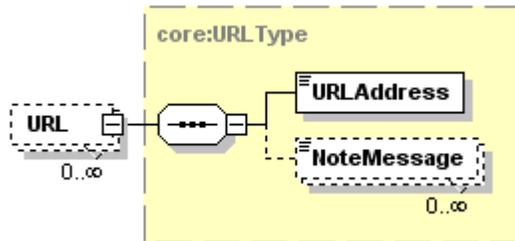
TransmissionData.Destination.Organization.Contacts.Phone (Continued)

Code illustration:

```
<Phone>  
  <CountryPrefixCode />  
  <AreaCityCode>512</AreaCityCode>  
  <PhoneNumber>4757638</PhoneNumber>  
  <PhoneNumberExtension>4589</PhoneNumberExtension>  
</Phone>
```

TransmissionData.Destination.Organization.Contacts.URL

Note: Although the complex data element URL is an optional data element, if you choose to send the URL of a Contact at the Receiving Institution or Agency, then you must send the URLAddress.



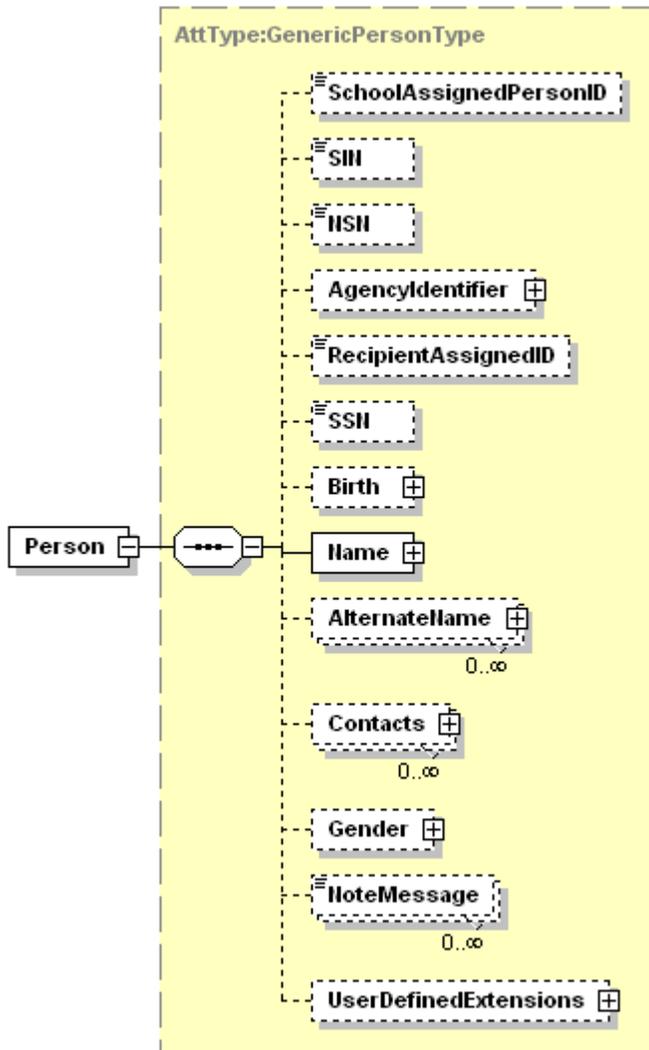
Tag Name	Schema Use	Description	Recommended Use	Format
URLAddress	Required	The Uniform Resource Locator (URL) address associated with a product, deliverable or contact.	Required	minOcc 1 maxOcc 1 minLength 0 maxLength 512
NoteMessage	Optional Repeatable	Additional information about the URL of the contact at the destination school or agency	Not Recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

Code illustration:

```

<URL>
  <URLAddress>www.anyuniversity.edu</URLAddress>
  <NoteMessage />
</URL>
    
```

Person



Tag Name	Schema Use	Description	Recommended Use	Format
SchoolAssignedPersonID	Optional	School Assigned Identifier Type	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 20
Comment: This is the student's ID at the source or sending school. It is recommended that this ID number be included, even if the student ID number used is an Agency Assigned ID.				
SIN	Optional	The person's Canadian Social Insurance Number	Not Recommended	minOcc 0 maxOcc 1 minLength 9 maxLength 9
Comment: This is a Canadian student's Social Insurance Number assigned by the Canadian government. It is not appropriate for the Transcript sent by a US school. Neither is it recommended in Canada for use to identify students on education records.				
NSN	Optional	Canadian National Student Number Identifier	Optional	minOcc 0 maxOcc 1 minLength 1 maxLength 30

Tag Name	Schema Use	Description	Recommended Use	Format
Comment: This is a postsecondary Canadian student's National Student Number assigned by postsecondary schools using the format used by Statistics Canada. It is not appropriate for the transcript to identify a US student.				
AgencyIdentifier	Optional	The identification assigned by the state or province or an agency, to the person (student).	Recommended	minOcc 0 maxOcc 1
Comment: If this data element is included, it is helpful if the state or agency identify is placed in the first several positions of this field. For example, if this is a state of Florida assigned ID, then the value might be "FL12345678902334".				
RecipientAssignedID	Optional	Recipient Assigned Identifier Type	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 20
Comment: If this transcript is being sent in response to a request for the transcript from another institution, then this is the student's ID number at the school that requested the record.				
SSN	Optional	The person's U.S. Social Security Number	Recommended	pattern \d{9} minOcc 0 maxOcc 1
Comment: If included, this number must be sent as a string of nine numbers with no dashes. While the SSN is no longer appropriate for use as a student identifier in a school's data base, it is extremely helpful for the receiving school or agency to match the student's record there.				
Birth	Optional	Identifying information related to a person's birth	Recommended	minOcc 0 maxOcc 1
Comment: This complex data element will be expanded on page 38 which follows. This information is very helpful in matching the transcript with the student's record at the receiving institution. It is almost essential if the SSN is not included.				
Name	Required	The name of record at the sending institution	Required	minOcc 1 maxOcc 1
Comment: This should be the full legal name of the student as recorded at the sending institution. This complex data element will be expanded on a following page.				
AlternateName	Optional Repeatabe	Any other names by which the person may be known	Optional	minOcc 0 maxOcc ∞
Comment: Includes former name(s), nicknames, or other names by which the student may be known. This complex data element will be expanded on a following page.				
Contacts	Optional Repeatabe	Contact information for the student as recorded by the sending institution	Recommended	minOcc 0 maxOcc ∞
Comment: This is helpful for creating a record when the receiving institution has not previously been contacted by the student. It may also help to match this transcript with the student's record at the receiving school, especially if the SSN is not included. This complex data element will be expanded on a following page.				
Gender	Optional	Gender of the student	Recommended	minOcc 0 maxOcc 1
Comment: Useful for matching. Although AACRAO does not recommend including this information on the paper transcript, it is recommended to be included on the XML electronic transcript if the destination is to a postsecondary institution or other governmental agency. This complex data element will be expanded on a following page.				
NoteMessage	Optional Repeatabe	Additional information about the person	Not Recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

Student (Continued)

Code illustration:

```

<Person>
  <SchoolAssignedPersonID>5555555</SchoolAssignedPersonID>
  <SIN/>
  <NSN/>
  <AgencyIdentifier>

  </AgencyIdentifier>
  <RecipientAssignedID/>
  <SSN>555555555</SSN>
  <Birth>

  </Birth>
  <Name>

  </Name>
  <AlternateName>

  </AlternateName>
  <HighSchool>

  </HighSchool>
  <Contacts>

  </Contacts>
  <Gender>

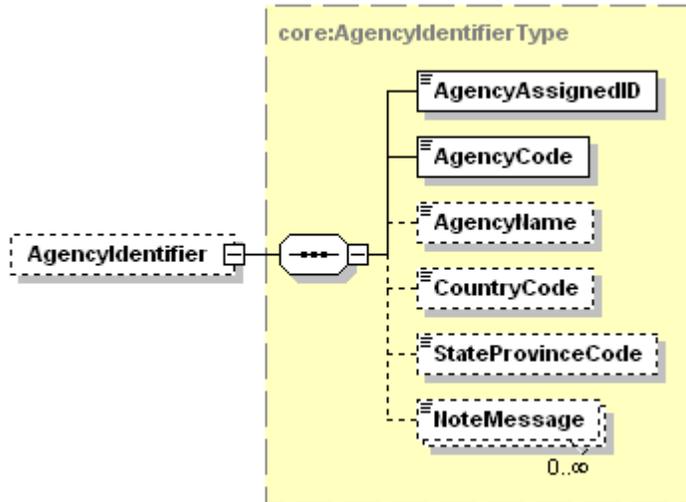
  </Gender>
  <Residency>

  </Residency>
  <Deceased>

  </Deceased>
  <NoteMessage />
</Person>

```

Person.AgencyIdentifier



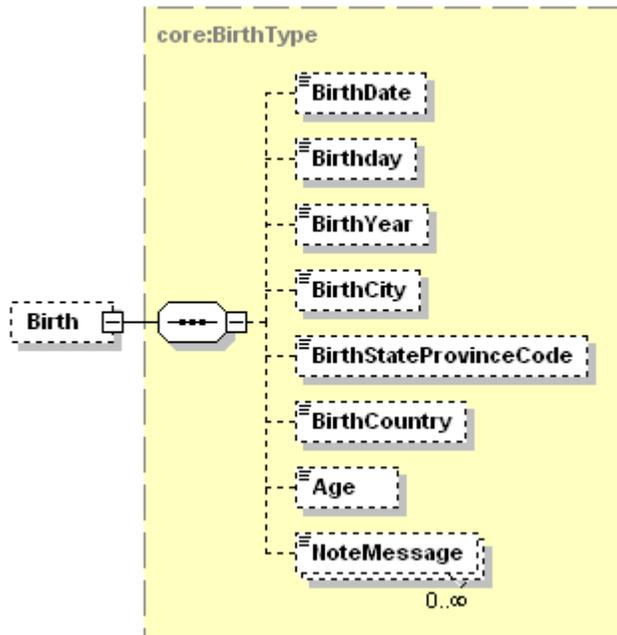
Tag Name	Schema Use	Description	Recommended Use	Format
AgencyAssignedID	Optional	The ID assigned by the state or province or an agency, to the person (student).	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 30
<p>Comment: If this data element is included, it is helpful if the state or agency identify is placed in the first several positions of this field. For example, if this is a state of Florida assigned ID, then the value might be "FL12345678902334".</p>				
AgencyCode	Required	The agency code	Recommended	minOcc 0 maxOcc 1 Enumerations: District Migrant MutuallyDefined National Regional State
AgencyName	Optional	The agency name	Optional	minOcc 0 maxOcc 1 minLength 1 maxLength 60
CountryCode	Optional	The name of the country in which the agency is located. Use ISO 3 155-1 alpha-2 standard.	Optional	minOcc 0 maxOcc 1 Enumerations: See CoreMain
StateProvinceCode	Optional	The state, province, or extra-state jurisdiction in which the agency is located	Optional	minOcc 0 maxOcc 1 Enumerations: See CoreMain
NoteMessage	Optional Repeatable	Additional information about the agency.	Not Recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

Person.AgencyIdentifier (Continued)

Code illustration:

```
<AgencyIdentifier>  
  <AgencyAssignedID>FL130123456789</AgencyAssignedID>  
  <AgencyCode>MutuallyDefined</ AgencyCode >  
  <AgencyName> </ AgencyName >  
  <StateProvinceCode>CO</ StateProvinceCode >  
  < CountryCode >US</ CountryCode >  
  <NoteMessage />  
</ AgencyIdentifier >
```

Person.Birth



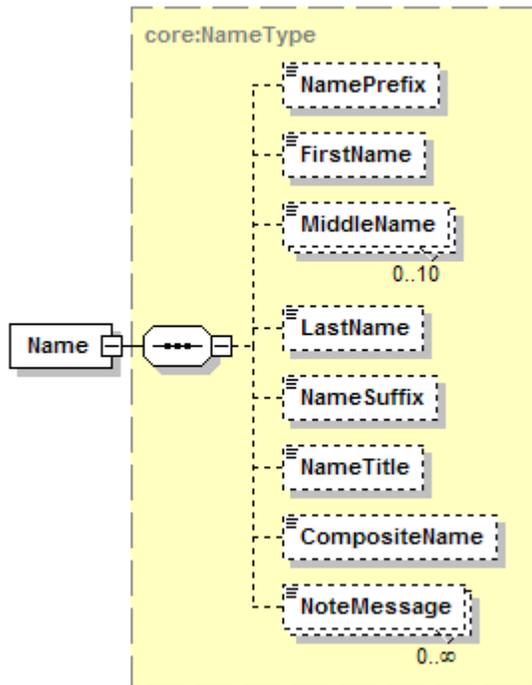
Tag Name	Schema Use	Description	Recommended Use	Format
BirthDate	Optional	Date of Birth	Recommended	minOcc 0 maxOcc 1 Format: CCYY-MM-DD
BirthDay	Optional	Month and Day of Birth	Not Recommended	minOcc 0 maxOcc 1 Format: MM-DD
Comment: Use instead of BirthDate when it is desirable to withhold the student's age.				
BirthYear	Optional	Year of Birth	Not Recommended	minOcc 0 maxOcc 1 Format: CCYY-DD
Comment: Use instead of BirthDate when the complete date of birth is not known.				
BirthCity	Optional	The city which the person was born.	Optional	minOcc 0 maxOcc 1 minLength 1 maxLength 25
BirthStateProvinceCode	Optional	The state, province, or extra-state jurisdiction in which the person was born	Optional	minOcc 0 maxOcc 1 Enumerations: See CoreMain
BirthCountry	Optional	The name of the country in which the person was born. Use ISO 3 155-1 alpha-2 standard.	Optional	minOcc 0 maxOcc 1 Enumerations: See CoreMain
Age	Optional	An integer that specifies how old a person is	Not Recommended	minOcc 0 maxOcc 1 Format is an integer
Comment: We don't recommend the use of this data element since it can always be derived from the birthday at any time in the future.				
NoteMessage	Optional Repeatable	Additional information about the birth.	Not Recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

Person.Birth (Continued)

Code illustration:

```
<Birth>
  <BirthDate>1970-01-01</BirthDate>
  <BirthDay />
  <BirthYear />
  <BirthCity>Denver</ BirthCity >
  <BirthStateProvinceCode>CO</ BirthStateProvinceCode >
  <BirthCountry>US</ BirthCountry >
  <Age />
  <NoteMessage />
</ Birth >
```

Person.Name



Tag Name	Schema Use	Description	Recommended Use	Format
NamePrefix	Optional	An honorific, title or form of address that precedes the name.	Not Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 30
FirstName	Optional	The first name of the person, usually given at birth, baptism, or during, another ceremony, or through legal change	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 35
MiddleName	Optional Repeatable	A secondary name of the person, usually given at birth, baptism, or during another naming ceremony or through legal change	Recommended	minOcc 0 maxOcc 10 minLength 1 maxLength 35
LastName	Optional	The last name or surname by which a person is legally known	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 35
NameSuffix	Optional	The expression of an individual's generation within a family.	Recommended	minOcc 0 maxOcc 1 Enumerations: JR SR I II III IV
NameTitle	Optional	An honorific, title or credential that follows the name.	Not Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 30

Tag Name	Schema Use	Description	Recommended Use	Format
CompositeName	Optional	The full name of the person in Last NameSuffix, First Middle order; comma after last name or NameSuffix	Not Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 45
Comment: <i>The use of the Composite Name, while it is allowed, is not recommended. It is felt that the storing of a person's name in schools' student information systems as individual components is becoming more common. And it should be easier for the sending school to break up a composite name into its individual components, than for the receiving school to do so.</i>				
NoteMessage	Optional Repeatable	Additional information about the student name	Not Recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

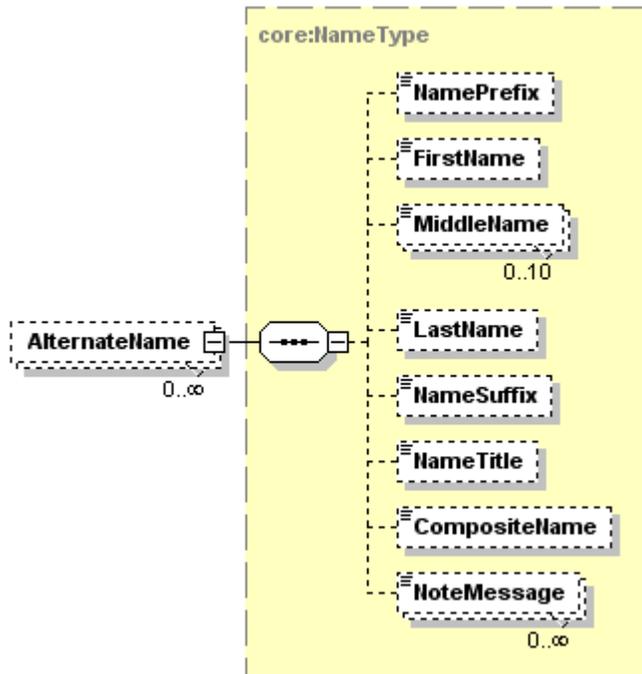
Person.Name (Continued)

Code illustration:

```

<Name>
  <NamePrefix />
  <FirstName>John</FirstName>
  <MiddleName>Billy</MiddleName>
  <MiddleName>Bob</MiddleName>
  <LastName>Thornton</LastName>
  <NameSuffix>JR</NameSuffix>
  <NameTitle />
  <CompositeName />
  <NoteMessage />
</Name>
    
```

Person.AlternateName



Tag Name	Schema Use	Description	Recommended Use	Format
NamePrefix	Optional	An honorific, title or form of address that precedes the name.	Not Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 30
FirstName	Optional	The first name of the person, usually given at birth, baptism, or during another ceremony, or through legal change	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 35
MiddleName	Optional Repeatable	A secondary name of the person, usually given at birth, baptism, or during another naming ceremony or through legal change	Recommended	minOcc 0 maxOcc 10 minLength 1 maxLength 35
LastName	Optional	The last name or surname by which a person is legally known	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 35
NameSuffix	Optional	The expression of an individual's generation within a family.	Recommended	minOcc 0 maxOcc 1 Enumerations: JR SR I II III IV
NameTitle	Optional	An honorific, title or credential that follows the name.	Not Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 30

Tag Name	Schema Use	Description	Recommended Use	Format
CompositeName	Optional	The full name of the person in Last, First Middle order, comma after last name	Not Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 45
<p>Comment: The use of the Composite Name, while it is allowed, is not recommended. It is felt that the storing of a person's name in schools' student information systems as individual components is becoming more common. And it should be easier for the sending school to break up a composite name into its individual components, than for the receiving school to do so.</p>				
NoteMessage	Optional Repeatable	Additional information about the alternate name	Not Recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80
<p>Comment: Sending of alternate names may sometimes help in the matching of this transcript with the student's record at the receiving institution.</p>				

Person.AlternateName (Continued)

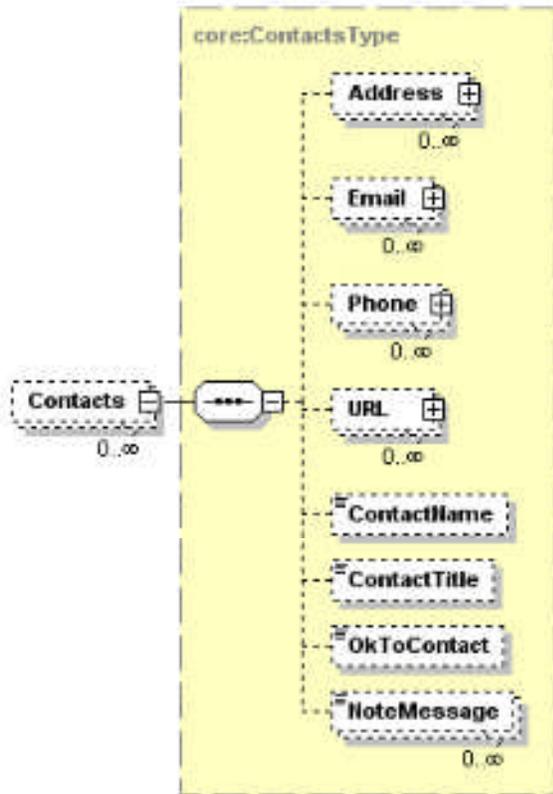
Code illustration:

```

<AlternateName>
  <NamePrefix />
  <FirstName> Test</FirstName>
  <MiddleName> Record</MiddleName>
  <MiddleName> Test</MiddleName>
  <LastName> Speede</LastName>
  <NameSuffix />
  <NameTitle />
  <CompositeName />
  <NoteMessage />
</AlternateName>

```

Person.Contacts



Tag Name	Schema Use	Description	Recommended Use	Format
Address	Optional Repeatable	This is a combined Address Group for a choice between Domestic or International	Recommended	minOcc 0 maxOcc ∞
<i>Comment: This complex data element will be expanded on a following page..</i>				
Email	Optional Repeatable	Email address(es) for the student	Recommended	minOcc 0 maxOcc ∞
<i>Comment: This complex data element will be expanded on a following page.</i>				
Phone	Optional Repeatable	Phone number(s) for the student	Recommended	minOcc 0 maxOcc ∞
<i>Comment: This complex data element will be expanded on a following page.</i>				
URL	Optional Repeatable	Personal URL(s) on record for the student	Optional	minOcc 0 maxOcc ∞
<i>Comment: This complex data element will be expanded on a following page.</i>				
ContactName	Optional	This is the name of the student.	Optional	minOcc 0 maxOcc 1 minLength 0 maxLength 60
ContactTitle	Optional	This is the job or position title of the student	Optional	minOcc 0 maxOcc 1 minLength 0

OkToContact	Optional	This is information provided by the applicant that indicates if it is OK to contact this student.	Optional	maxLength 60 minOcc 0 maxOcc 1 Enumerations: No Yes
NoteMessage	Optional Repeatable	Additional information about the student	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

Comment: This is contact information included by the sending company, agency or institution to indicate the preferred means for the receiving school to contact it in case there is a need for further communication.

Person.Contacts (Continued)

Code illustration:

```

<Contacts>
  <Address>

  </Address>
  <Email>

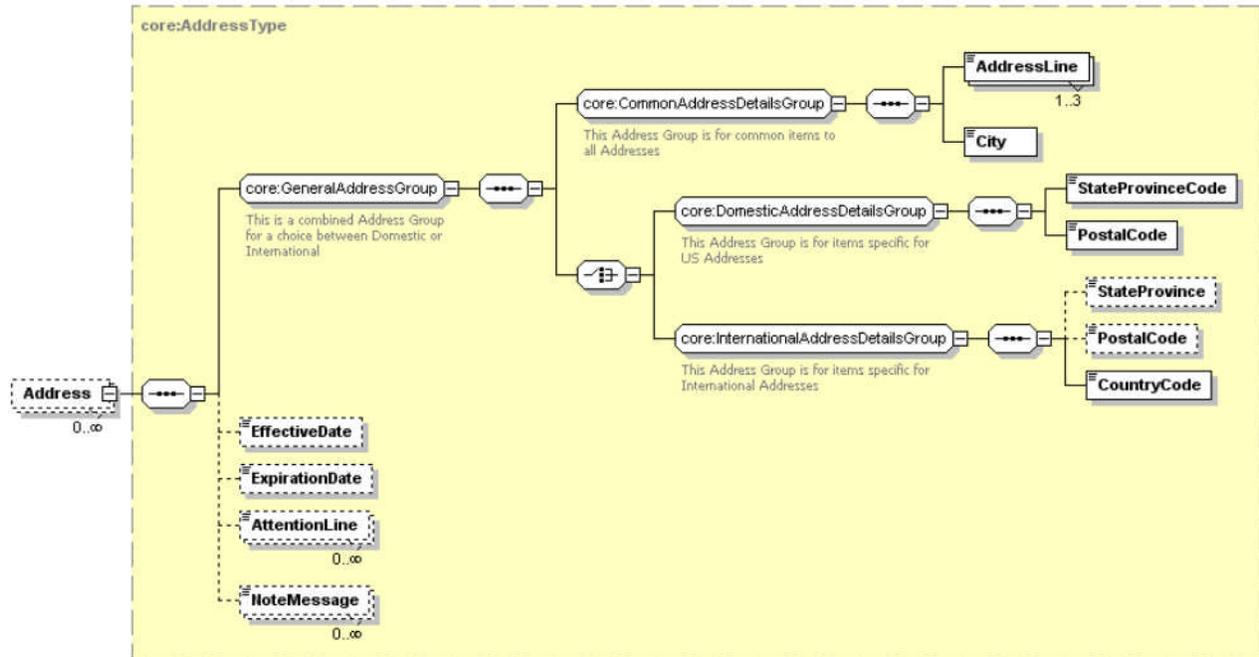
  </Email>
  <Phone>

  </Phone>
  <URL>

  </URL>
  <ContactName>John Doe</ContactName>
  <ContactTitle>Manager</ContactTitle>
  <OkToContact>Yes</OkToContact>
  <NoteMessage />
</Contacts>
    
```

Person.Contacts.Address

Note: Although the complex data element Address is an optional data element, if you choose to send the Address of the Student, then you must send AddressLine and City and also StateProvinceCode, and PostalCode OR CountryCode.



Tag Name	Schema Use	Description	Recommended Use	Format
<i>GeneralAddressGroup</i>	Required	This Address Group is for items common to all Addresses	Required	minOcc 1 maxOcc 1
Comment: [<i>GeneralAddressGroup</i>] does not appear in the instance document. It requires the use of <i>CommonAddressDetailsGroup</i> and the choice of one of either <i>DomesticAddressDetailsGroup</i> or <i>InternationalAddressDetailsGroup</i> . This group is required in the schema only if you choose to send the address of the contact.				
<i>CommonAddressDetailsGroup</i>	Required	This Address Group is for items common to all Addresses	Required	minOcc 1 maxOcc 1
Comment: [<i>CommonAddressDetailsGroup</i>] does not appear in the instance document. If the address of a contact is included in the transcript, then this must be sent. It is required and must be paired with one of either <i>DomesticAddressDetailsGroup</i> or <i>InternationalAddressDetailsGroup</i> .				
<i>AddressLine</i>	Required Repeatable	Local delivery information such as street, building number, PO box, or apartment portion of a postal address of a Contact at the Sending (Source) School.	Required	minOcc 1 maxOcc 3 minLength 1 maxLength 40
<i>City</i>	Required	The city portion of the Address of a Contact at the Sending (Source) School.	Required	minOcc 1 maxOcc 1 minLength 2 maxLength 30
<i>DomesticAddressDetailsGroup</i>	Required choice	This Address Group is for items specific for US and Canadian Addresses	Required for domestic addresses	minOcc 1 maxOcc 1
Comment: [<i>DomesticAddressDetailsGroup</i>] does not appear in the instance document. If the complex data element address has a				

Tag Name	Schema Use	Description	Recommended Use	Format
<i>United States or Canadian Postal Code and a US State or Canadian Province Code, then this should be the required choice.</i>				
StateProvinceCode	Required	Code for US states, etc., and Canadian provinces.	Required	minOcc 1 maxOcc 1 Enumerations: See CoreMain
PostalCode	Required	The postal code portion of the Address.	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 17
<i>InternationalAddressDetailsGroup</i>	Required choice	This Address Group is for items specific for International Addresses	Required for international addresses	minOcc 1 maxOcc 1
Comment: [InternationalAddressDetailsGroup] does not appear in the instance document. This choice is for addresses that do not have a US or Canadian postal code.				
StateProvince	Optional	The literal name of the state, province or territory of a postal address of the source of this document. Use for addresses outside US or Canada.	Recommended Refer to common postal practices of the source country	minOcc 0 maxOcc 1 minLength 2 maxLength 30
<i>Comment: For an internet resource of states or other geographical subdivisions in countries other than the US and Canada, you might choose to refer to the website of the Universal Postal Union at http://www.upu.int</i>				
PostalCode	Optional	The postal code portion of the Address.	Recommended Refer to common postal practices of the source country	minOcc 0 maxOcc 1 minLength 1 maxLength 17
<i>Comment: For an internet resource of states or other geographical subdivisions in countries other than the US and Canada, you might choose to refer to the website of the Universal Postal Union at http://www.upu.int</i>				
CountryCode	Required	Code indicating Country. Use ISO 3166-1 alpha-2 standard.	Required	minOcc 1 maxOcc 1 Enumerations: See CoreMain
EffectiveDate	Optional	The date on which the address became (or will become) effective.	Optional	minOcc 0 maxOcc 1 Date format: CCYY-MM-DD
ExpirationDate	Optional	The date on which the address will (or did) expire.	Optional	minOcc 0 maxOcc 1 Date format: CCYY-MM-DD
AttentionLine	Optional	The individual or office name within the postal address where inquiries should be directed.	Optional	minOcc 1 maxOcc ∞ minLength 1 maxLength 45
<i>Comment: This might be used to indicate where questions about the record should be sent. For example, Registrar, Guidance Office, Information Technology Department.</i>				
NoteMessage	Optional Repeatable	Additional information about the addresses of the contacts at the source school	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

Person.Contacts.Address (Continued)

Code illustration 1 (Domestic Address):

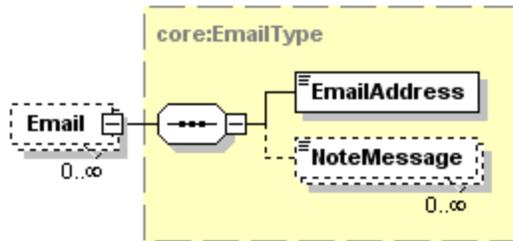
```
<Address>
  <AddressLine>1715 W Cesar Chavez</AddressLine>
  <City>Austin</City>
  <StateProvinceCode>TX</StateProvinceCode>
  <PostalCode>78703</PostalCode>
  <AttentionLine>Jane Doe</AttentionLine>
  <AttentionLine>GuidanceCounselor</AttentionLine>
  <NoteMessage />
</Address>
```

Code illustration 2 (International Address):

```
<Address>
  <AddressLine>Altova Corporation</AddressLine>
  <AddressLine>Rudolfsplatz 13a/9</AddressLine>
  <City>Wien</City>
  <StateProvince />
  <PostalCode>A-1010</PostalCode>
  <CountryCode>AT</CountryCode>
</Address>
```

Person.Contacts.Email

Note: Although the complex data element Email is an optional data element, if you choose to send the Email of the Student, then you must send the data element EmailAddress.



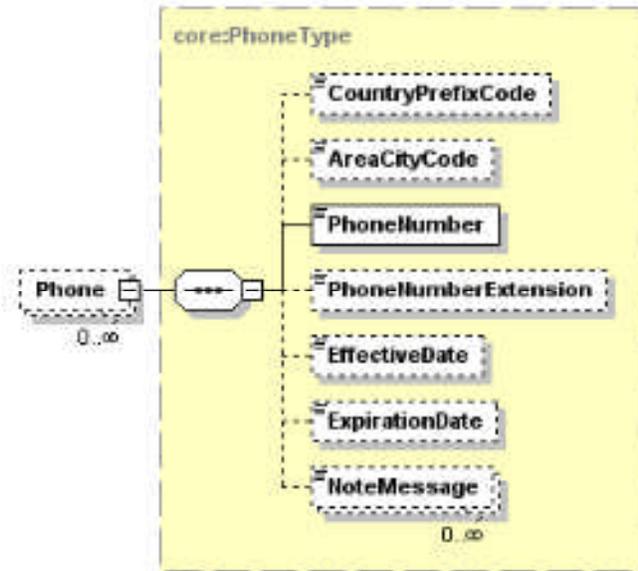
Tag Name	Schema Use	Description	Recommended Use	Format
EmailAddress	Required	The numbers, letters, and symbols used to identify an electronic mail (Email) user within a network.	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 128
NoteMessage	Optional Repeatable	Additional information about the email address	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

Code illustration:

```
<Email>
  <EmailAddress>stewartj@aol.com</EmailAddress>
  <NoteMessage />
</Email>
```

Person.Contacts.Phone

Note: Although the complex data element Phone is an optional data element, if you choose to send the Phone of the Student, then you must send the data element PhoneNumber.



Tag Name	Schema Use	Description	Recommended Use	Format
CountryPrefixCode	Optional	International dialing code	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 3
AreaCityCode	Optional	Regional dialing code	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 5
PhoneNumber	Required	Telephone number	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 11
Comment: The phone number will typically be sent as a string of numbers with no spaces, periods or dashes.				
PhoneNumberExtension	Optional	The extended telephone addressing information used in addition to phone number such as a PBX extension, a pager PIN, or FAX sub-address	Optional	minOcc 0 maxOcc 1 minLength 1 maxLength 5
EffectiveDate	Optional	The date on which the phone number became (or will become) effective.	Optional	minOcc 0 maxOcc 1 Date format: CCYY-MM-DD
ExpirationDate	Optional	The date on which the phone number will (or did) expire.	Optional	minOcc 0 maxOcc 1 Date format: CCYY-MM-DD
NoteMessage	Optional Repeatable	Additional information about the phone number of the contact at the source institution	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

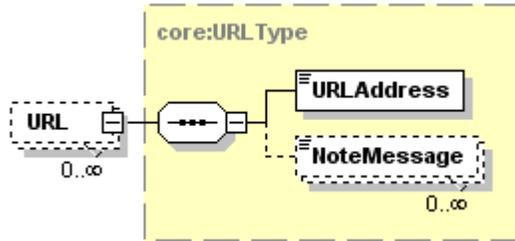
Person.Contacts.Phone (Continued)

Code illustration:

```
<Phone>  
  <CountryPrefixCode />  
  <AreaCityCode>512</AreaCityCode>  
  <PhoneNumber>8888888</PhoneNumber>  
  <PhoneNumberExtension />  
  <NoteMessage />  
</Phone>
```

Person.Contacts.URL

Note: Although the complex data element URL is an optional data element, if you choose to send the URL of the Student, then you must send the data element URLAddress.

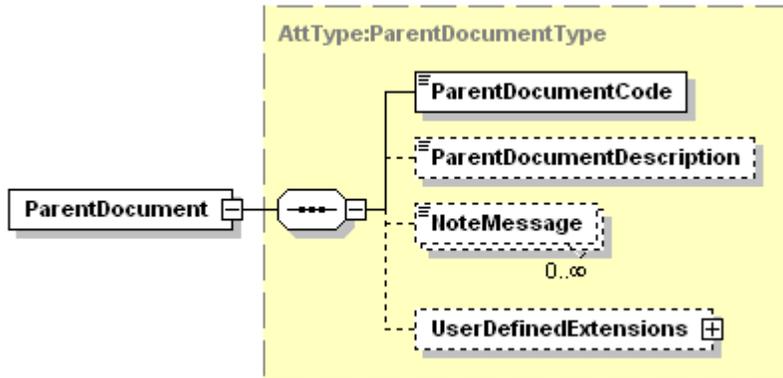


Tag Name	Schema Use	Description	Recommended Use	Format
URLAddress	Required	The Uniform Resource Locator (URL) address associated with a student	Required	minOcc 1 maxOcc 1 minLength 0 maxLength 512
NoteMessage	Optional Repeatable	Additional information about the URL	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

Code illustration:

```
<URL>
  <URLAddress>John.Appleseed.com</URLAddress>
  <NoteMessage />
</URL>
```

ParentDocument



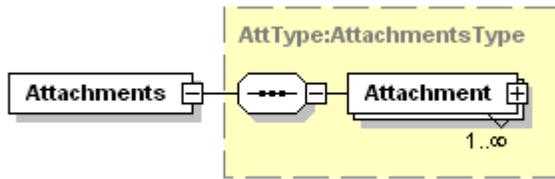
Tag Name	Schema Use	Description	Recommended Use	Format
ParentDocumentCode	Required	Described the parent PDF document.	Required	minOcc 1 maxOcc 1 Enumerations: Transcript MutuallyDefined
Comment: The parent document code will describe the top-level PDF, which could be a Transcript, or other document such as a cover letter.				
ParentDocumentDescription	Optional	A short description used to help identify the contents of the parent document.	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 100
NoteMessage	Optional Repeatable	Additional information about transmission	Not Recommended	minOcc 1 maxOcc ∞ minLength 1 maxLength 80

Code illustration:

```

<ParentDocument>
  <ParentDocumentCode>Transcript</ ParentDocumentCode >
  <ParentDocumentDescription>College Transcript:v1.0.0</ParentDocumentDescription>
  <NoteMessage />
</ ParentDocument >
    
```

Attachments



Tag Name	Schema Use	Description	Recommended Use	Format
Attachments	Required	Additional information about the attachments embedded in the parent PDF	Required	minOcc 1 maxOcc ∞

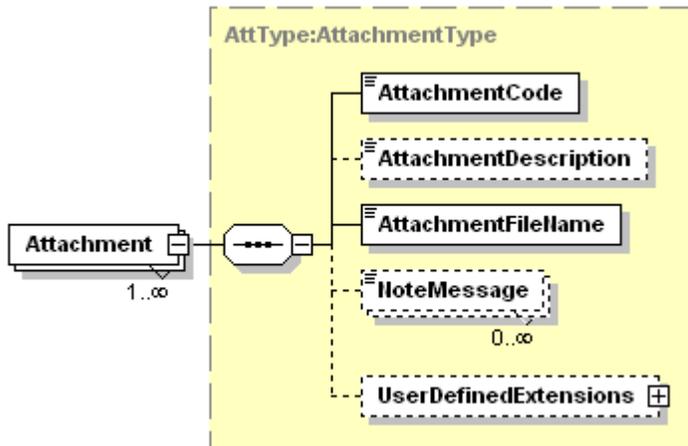
Comment: This complex data element contains information about the attachments that are embedded in the parent PDF. This schema, contained in the header.xml attachment, should be included in the attachment list.

Code illustration:

```

<Attachments>
  <Attachment>
    <AttachmentCode>Header</ AttachmentCode >
    <AttachmentFileName>header.xml</ AttachmentFileName >
    <AttachmentDescription/>
    <NoteMessage />
  </Attachment>
</Attachments>
    
```

Attachment



Tag Name	Schema Use	Description	Recommended Use	Format
AttachmentCode	Required	Described the contents of the attachment.	Required	minOcc 1 maxOcc 1 Enumerations: Header PESCXML ASCX12 XML Text PDF MutuallyDefined
Comment: The attachment code identifies the structure and content of the attachment. An example would be attaching the PESC XML version of the student's transcript. The "Header" code is used to identify the header.xml attachment itself.				
AttachmentDescription	Optional	A short description used to help identify the contents of the attachment	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 100
AttachmentFilename	Required	The filename of this attachment.	Recommended	minOcc 1 maxOcc 1 minLength 1
Comment: The attachment filename is used to identify this attachment in the list of attached files in the PDF.				
NoteMessage	Optional Repeatable	Additional information about transmission	Not Recommended	minOcc 1 maxOcc ∞ minLength 1 maxLength 80

Code illustration:

```

<Attachment>
  <AttachmentCode>Header</ AttachmentCode >
  <AttachmentFileName>header.xml</ AttachmentFileName >
  <AttachmentDescription/>
  <NoteMessage />
</Attachment>
<Attachment>
  <AttachmentCode>PESCXML</ AttachmentCode >
  <AttachmentFileName>transcript.xml</ AttachmentFileName >
  <AttachmentDescription>The PESC XML Representation of the transcript</AttachmentDescription>
  <NoteMessage />
</Attachment>
    
```

Appendix A – Sample XML PDF Attachment

```

<?xml version="1.0" encoding="UTF-8"?>
<PDFAttachment xmlns:xsi="http://www.w3.org/2000/10/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="PDFAttachment_v1.0.0.xsd">
  <TransmissionData>
    <DocumentID>1276875358412465128649</DocumentID>
    <CreatedDateTime>2010-07-12T09:35:58.865-06:00</CreatedDateTime>
    <DocumentTypeCode>RequestedRecord</DocumentTypeCode>
    <TransmissionType>Original</TransmissionType>
    <DocumentProcessCode>TEST</DocumentProcessCode>
    <Source>
      <Organization>
        <FICE>001000</FICE>
        <OrganizationName>Source University</OrganizationName>
        <Contacts>
          <Address>
            <AddressLine>123 Campus Ave</AddressLine>
            <City>College</City>
            <StateProvinceCode>NY</StateProvinceCode>
            <PostalCode>12345</PostalCode>
          </Address>
        </Contacts>
      </Organization>
    </Source>
    <Destination>
      <Organization>
        <FICE>002000</FICE>
        <OrganizationName>Med School Admissions</OrganizationName>
        <Contacts>
          <Address>
            <AddressLine>345 Alumni Rd</AddressLine>
            <City>Anytown</City>
            <StateProvinceCode>NY</StateProvinceCode>
            <PostalCode>10000</PostalCode>
          </Address>
        </Contacts>
      </Organization>
    </Destination>
    <RequestTrackingID>13330</RequestTrackingID>
  </TransmissionData>
  <Person>
    <Name>
      <CompositeName>Joe Student</CompositeName>
    </Name>
  </Person>
  <ParentDocument>
    <ParentDocumentCode>Transcript</ParentDocumentCode>
  </ParentDocument>
  <Attachments>
    <Attachment>
      <AttachmentCode>Header</AttachmentCode>
      <AttachmentDescription>Header</AttachmentDescription>
      <AttachmentFileName>header.xml</AttachmentFileName>
    </Attachment>
    <Attachment>
      <AttachmentCode>ASCX12</AttachmentCode>
      <AttachmentDescription>TS130: v004010</AttachmentDescription>
      <AttachmentFileName>TS130_X12.txt</AttachmentFileName>
    </Attachment>
    <Attachment>
      <AttachmentCode>PESCXML</AttachmentCode>
      <AttachmentDescription>College Transcript: v1.1.0</AttachmentDescription>
      <AttachmentFileName>PESC_XML.xml</AttachmentFileName>
    </Attachment>
  </Attachments>
</PDFAttachment>

```