Implementation Guide

to the

Postsecondary Electronic Standards Council

XML Standard Format

for the

Academic Record Batch Schema

Version 2.0.0

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PESC Batch Submittal Schema Implementation Guide
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Introduction

In the late 1980's, The American Association of Collegiate Registrars and Admissions Officers (AACRAO) created the committee on the Standardization of Postsecondary Education Electronic Data Exchange (SPEEDE) to explore the possibility of exchanging student records electronically. In the early 1990's, the American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 approved a suite of national standard transaction sets to allow these exchanges to take place in the education community using the ANSI ASC X12 Electronic Data Interchange (EDI) standards. These standards included an envelope which allowed for multiple types of EDI standard documents to be bundled together, and then sent to another school in a batch.

When the Postsecondary Electronic Standards Council (PESC) approved the newer XML standard for the Student Transcript in 2004, these standards did not include a means for bundling multiple XML instance documents.

For the secondary and higher education communities to achieve the timely, uniform, accurate, and secure exchange of academic records for current or previous secondary and postsecondary students, PESC developed and approved a standard format in eXtensible Markup Language (XML) for an Academic Record Batch Transmission Envelope. This Implementation Guide proposes a format for a Batch Envelope that can contain an unlimited number of Academic Record documents. These documents may derive from several different XML Schemas and do not necessarily reference each other. The documents may typically include secondary and postsecondary transcripts, applications for admission, transcript requests, transcript responses and transcript acknowledgments.

Besides its obvious use for secondary and postsecondary education institutions, this Guide should also be useful for software vendors and state and federal education agencies.

Educational institutions send academic record documents such as high school and postsecondary transcripts to other educational institutions. Although these documents can be sent as single transmissions through various transport protocols, a common method is to utilize a central server set up in a "hub-and-spoke" architecture to act as a clearinghouse for those institutions that are joined together as a unified federation. Several such federations have already been formed at the state, province and national level.

In a federated central server model, it is typical for institutions to send and receive transactions that consist of several different documents in a single batch transmission. However because of the syntax of XML, multiple documents cannot be appended in a single file because the resulting document will not be "well-formed" XML and will be rejected by most parsers. This Academic Record Batch XML Schema provides one solution to that issue.

This Implementation Guide is based on the PESC XML Academic Record Batch Schema version 2.0.0, which in turn, in based on the PESC Core Main schema version 1.4.0 and the Academic Record Sector Library version 1.3.0. The electronic exchange of PESC XML student documents does not require the use of this Batch Schema but it may be specified by certain automated exchange processes. It is recommended that practitioners understand and comply with the requirements outlined in this Guide where its use is specified.

Purpose of the Academic Record Batch Schema

The Academic Record Batch Envelope serves the following functions:

a. It allows for the Agency to Agency Feeds on behalf of institution(s) that they are representing. Prior to this version, only first party feeds were negotiated. The implementation of the Batch Envelope allows for 3rd party to 3rd party feeds which allows an Agency representing an Institution to send to another Agency representing another Institution.

b. The envelope also defines directions on how the content payload should be handled. Should it be parsed out to individual institutions or sent as one content payload to a receiving Agency/Institution.

c. The current Record Batch Envelope is optional and not required.

The Academic Record Batch Content serves the following functions:

a. It allows the concatenation of multiple distinct XML documents into a single document that is itself a valid, well formed, schema validated XML document.

b. The child documents may each have their separate namespaces which can be validated against their respective schemas. Documents can be a mixture of different academic record types and may be bundled in any order.

c. No modification to the original child documents is necessary. When extracted from the Batch Content, the documents can stand alone as well-formed, validated XML.

d. The Batch content is lightweight. It requires a single tag pair around the concatenated documents. There is no requirement for document indexes or addressing information except as originally specified in the child documents.

Techniques for Use of the Academic Record Batch Schema

Overview: This schema was developed for use with a document exchange service, such as the University of Texas at Austin SPEEDE Server. It may be used in other similar services or in other applications that require the use of batch processing of multiple logical XML documents. The following is a description of a typical store-and-forward documents exchange process that illustrates how the batch envelope may be used.

By the Sender of Original Student Documents: The sender generates or assembles all XML documents that are intended to be transmitted in a single batch. These documents are concatenated into a single file, without other modification. The entire resulting document is placed within the AcademicRecordBatch XML tag pair and the complete resulting file is stored with the extension .xml. This document is then transmitted to the recipient using a protocol such as sftp, https, etc. The recipient may be the final logical destination of the documents such as another institution or agency, or it may be sent to a document server for additional routing.

By a Document Exchange Service: (If used) The XML batch file is received and parsed into individual logical documents. These now multiple XML documents can be further processed according to the specifications of the individual service. For example, these documents may be examined for header information such as destination address and sorted by destination. They may be grouped together with other documents addressed to the same destination that may have come from multiple sources. When the batch of documents is assembled for transmission, they are concatenated into a single file as in the previous step and the resulting document is placed within the AcademicRecordBatch XML tag pair. This single document may then be transmitted.

> **Special note:** The exchange service or any other recipient must be aware and be familiar with the type of content being delivered. Generally this means that the exchange service or other recipient has installed all XML schemas that describe any of the received document types. Unfamiliar documents may be rejected as unsupported or impossible to interpret. The list of acceptable document types, schemas and versions may vary by service or recipient. The Academic Record Batch Schema does not specify or restrict the associated schema types that may be transmitted. In theory, any well-formed XML documents may be transmitted in this manner. This Implementation Guide recommends that only PESC-approved XML standard documents be included in the Academic Record Batch document but this is not enforced at the schema level. Users and exchange federations may determine the acceptable use of their service and by extension which documents may be transmitted in this format.

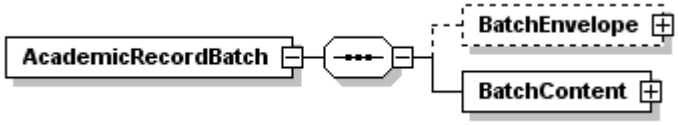
By Final Receiver of the Original Student Documents: The XML batch file is received and parsed into individual logical documents. These now multiple XML documents can be further processed according to the specifications of the individual institution or agency.

Acknowledgments and Development History

This schema was developed by the AACRAO SPEEDE Committee in response to a request by the Association of American Medical Colleges (AAMC). AAMC has been receiving the EDI transaction sets for many years and had been used to receiving batches of transcripts enclosed in the EDI Batch Envelope. They insisted on some method of batching XML instance documents in a similar fashion.

The primary leads in the development were Bruce Marton from the University of Texas at Austin and Tuan Anh Do from San Francisco State University.

AcademicRecordBatch



Tag Name	Schema Use	Description	Recommended Use	Format
BatchEnvelope	Optional	The container that holds all of the identifying information about the parties involved in this exchange of data	Optional	minOcc 0 maxOcc 1
Comment: *For the transmission of XML instance documents from one school to another, the batch envelope is not required. However, it must be used if there are third party participants in the exchange of the XML instance documents. EDI documents are sent in electronic envelopes (ISA), and it is possible to mail many documents in a single envelope. It is no different with XML. XML incorporates several levels of envelopes in order to insure that each document is correctly identified, and that only like documents are grouped together.* *This complex data element will be expanded on Page 2.*				
BatchContent	Required	Used to create a place holder and root element to contain multiple logical XML documents that are bundled for a single batch transmission	Required	minOcc 1 maxOcc 1
Comment: *This complex data element will be expanded on Page 31.*				

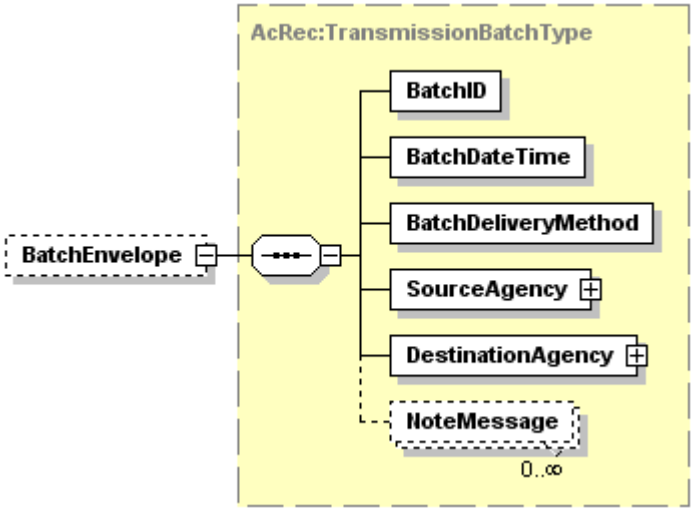
Code illustration:

<AcademicRecordBatch>
<BatchEnvelope>

</BatchEnvelope>
<BatchContent>

<BatchContent>
<AcademicRecordBatch>

AcademicRecordBatch.BatchEnvelope



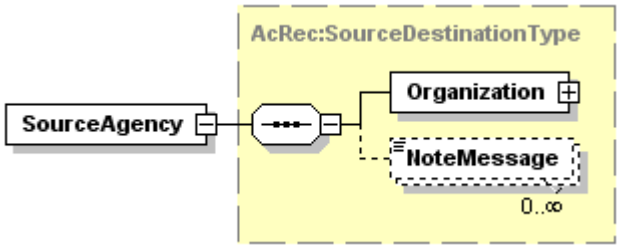
Tag Name	Schema Use	Description	Recommended Use	Format
BatchID	Required	This number uniquely identifies the interchange data to the sender	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 35
Comment: The Batch ID is assigned by the sender. Together with the sender ID, it uniquely identifies the interchange data to the receiver. It is suggested that the sender, receiver, and all third parties be able to maintain an audit trail of interchanges using this number.				
BatchDateTime	Required	The Date and Time stamp when the document was created	Required	minOcc 1 maxOcc 1 xs:datetime ccyy-mm-ddThh:ii:ss{+-GMT]
BatchDeliveryMethod	Required	Instructions on how the Batch should be processed	Required	minOcc 1 maxOcc 1 **Enumerations:** DeliverWhole ParseBatch
SourceAgency	Required	This field is required and essential to indicate the source of the batch of documents being sent. It is normally the sending institution where the student applied or enrolled for courses, or an agency that initiated the record, or the agency that is transmitting on behalf of an institution.	Required	minOcc 1 maxOcc 1
Comment: *This complex data element will be expanded on Page 4.*				
DestinationAgency	Required	This field is mandatory and essential to indicate the destination or recipient of the batch of instance documents being sent or the agency that receiving the batch on behalf of an institution.	Required	minOcc 1 maxOcc 1
Comment: *This complex data element will be expanded on Page 17.*				
NoteMessage	Optional Repeatable	Additional information about the Batch Envelope	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

AcademicRecordBatch.BatchEnvelope (Continued)

Code illustration:

```
<BatchEnvelope>
        <BatchID>2005-02-02T10:04:29-05:0000000001</BatchID>
        <BatchDateTime>2005-02-02T10:04:29-05:00</BatchDateTime>
        <BatchDeliveryMethod>DeliverWhole</BatchDeliveryMethod>
        <SourceAgency>


        </SourceAgency>
        <DestinationAgency>


        </DestinationAgency>
        <NoteMessage/>
</BatchEnvelope>
```

BatchEnvelope.SourceAgency

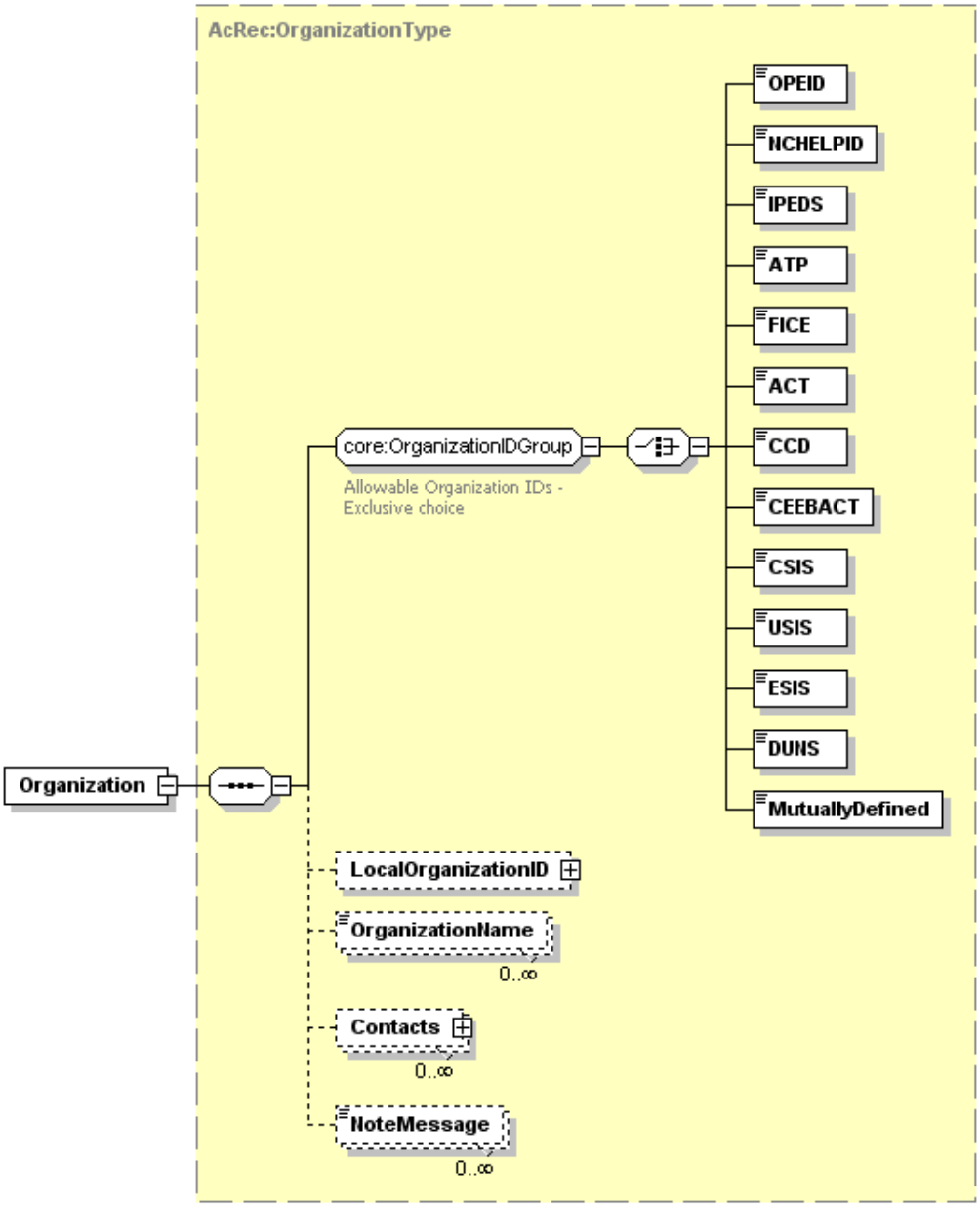


Tag Name	Schema Use	Description	Recommended Use	Format
Organization	Required	Non-person entity such as Organization, Institution, Agency or Business.	Required	minOcc 1 maxOcc 1
Comment: *This complex data element will be expanded on Page 5.*				
NoteMessage	Optional	Additional information about the Source Agency	Not Recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

Code illustration:

```
<SourceAgency>
        <Organization>

        </Organization>
        <NoteMessage/>
<SourceAgency>
```

BatchEnvelope.SourceAgency.Organization



Tag Name	Schema Use	Description	Recommended Use	Format
[OrganizationIDGroup]	Required	Allowable Organization IDs - Exclusive choice	Required	minOcc 1 maxOcc 1
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.	Optional	minOcc 0 maxOcc 1 minLength 3 maxLength 8
Comment: *The OPEID would be an appropriate choice if the source institution is a high school.*				

Tag Name	Schema Use	Description	Recommended Use	Format
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 normally be an appropriate choice in this case.*				
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.	Optional	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: *The IPEDS would be an appropriate choice if the source institution is a postsecondary school.*				
ATP	Required choice	The unique identifier for the Admissions Testing Program assigned by the College Board for each data exchange partner.	Optional	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: *The ATP would be an appropriate choice if the source institution is a postsecondary school.*				
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.	Optional	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. The FICE would be an appropriate choice if the source institution is a postsecondary school.*				
ACT	Required choice	The unique identifier for postsecondary educational institutions assigned by American College Testing available at www.act.org	Optional	minOcc 0 maxOcc 1 minLength 4 maxLength 4
Comment: *The ACT would be an appropriate choice if the source institution is a postsecondary school.*				
CCD	Required choice	The unique identifier assigned by National Center for Education Statistics as the Common Core of Data for each data exchange partner.	Optional	minOcc 0 maxOcc 1 minLength 12 maxLength 12
Comment: *The CDD would be an appropriate choice if the source institution is a high school.*				
CEEBACT	Required choice	The unique identifier assigned by the College Entrance Examining Board and ACT for each K-12 data exchange partner.	Optional	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: *The CEEBACT would be an appropriate choice if the source institution is a high school.*				
CSIS	Required choice	The unique identifier assigned by the Statistics Canada Canadian College Student Information System for each postsecondary data exchange partner.	Not Recommended	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: *This code set was created by Statistics Canada to identify Canadian colleges, but is no longer being used.*				
USIS	Required choice	The unique identifier assigned by the Statistics Canada University Student Information System for each data postsecondary exchange partner.	Not Recommended	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: *This code set was created by Statistics Canada to identify Canadian universities, but is no longer being used.*				

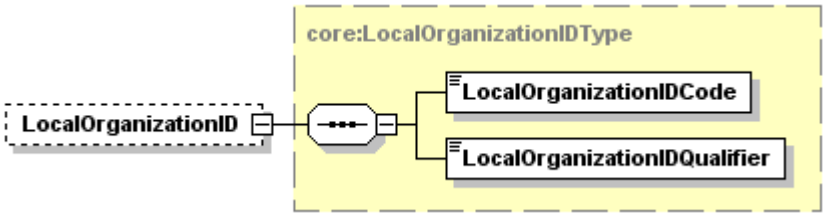
Tag Name	Schema Use	Description	Recommended Use	Format
ESIS	Required choice	The unique identifier assigned by the Statistics Canada Enhanced Student Information System for each data postsecondary exchange partner.	Optional	minOcc 0 maxOcc 1 minLength 8 maxLength 8
Comment: *This code set was created by Statistics Canada to identify Canadian postsecondary schools. It is now being phased out and it is being replaced by a new code set called the Postsecondary Student Information System (PSIS).*				
DUNS	Required choice	Data Universal Numbering System (DUNS), unique nine character company identification number issued by Dun and Bradstreet Corporation.	Optional	minOcc 0 maxOcc 1 minLength 9 maxLength 9
Comment: *The DUNS would be an appropriate choice if the source is an agency that uses a DUNS number.*				
MutuallyDefined	Required choice	A code set that has been mutually defined among two or more trading partners in this exchange of student records	Optional	minOcc 0 maxOcc 1 minLength 1 maxLength 60
Comment: *This mutually defined code set could be used by an agency or other group that has no code in any of the other above code sets, and is agreed upon by all the participants in the exchange.*				
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 page 8 which follows.*				
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 school or of the agency acting on behalf of one or more of the sending schools.*				
Contacts	Optional Repeatable	To identify a person or an office at the sending school or agency to which administrative communications should be directed	Recommended	minOcc 0 maxOcc ∞
Comment: *This complex data element will be expanded on page 9 which follows.*				
NoteMessage	Optional Repeatable	Additional information about the organization	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

Code illustration:

```
<Organization>
        <CEEBACT>440320</CEEBACT>
        <LocalOrganizationID>

        </LocalOrganizationID>
        <OrganizationName>Austin High School</OrganizationName>
        <OrganizationName>Austin Independent School District</OrganizationName>
        <Contacts>

        </Contacts>
        <NoteMessage />
</Organization>
```

BatchEnvelope.SourceAgency.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.

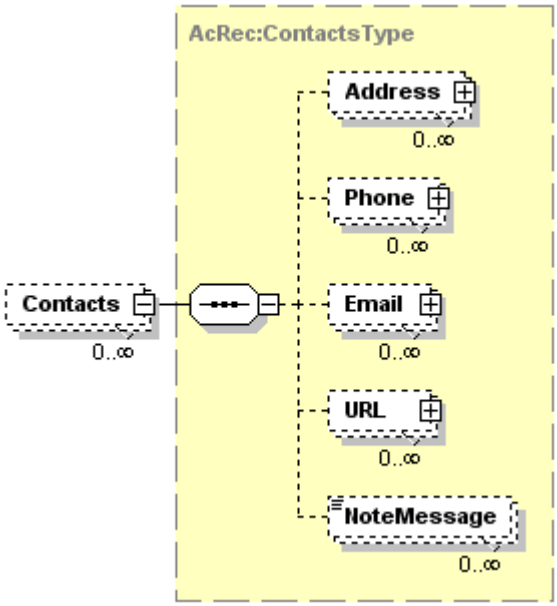


Tag Name	Schema Use	Description	Recommended Use	Format
LocalOrganizationIDCode	Required	The code assigned for the sending school or agency by the state, province or other mutually defined agency specified in the LocalIDQualifier that follows.	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 35
Comment: *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 a school in that state. If it is not assigned by a state or province, then code ZZ should be used in the Local ID Qualifier that follows.*				
LocalOrganizationIDQualifier	Required	This is the state, province or other mutually definded agency that assigned the Local ID Code above.	Required	minOcc 1 maxOcc 1 **Enumerations:** See Code Set in Appendix A
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. If it is not assigned by a state or province, then code ZZ should be used in this data element.*				

Code illustration:

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

BatchEnvelope.SourceAgency.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	Recommended	minOcc o maxOcc ∞
Comment: *This complex data element will be expanded on page 11 which follows.*				
Phone	Optional Repeatable	Phone number of source institution or agency contact	Recommended	minOcc o maxOcc ∞
Comment: *This complex data element will be expanded on page 14 which follows.*				
Email	Optional Repeatable	Email address of source institution or agency contact	Recommended	minOcc o maxOcc ∞
Comment: *This complex data element will be expanded on page 15 which follows.*				
URL	Optional Repeatable	The Uniform Resource Locator of source institution	Optional	minOcc o maxOcc ∞
Comment: *This complex data element will be expanded on page 16 which follows.*				
NoteMessage	Optional Repeatable	Additional information about the contacts at the source institution or agency	Not recommended	minOcc o maxOcc ∞ minLength 1 maxLength 80
Comment: *This is contact information included by the sending agency or school to indicate the preferred means for the receiving school or agency to contact the sending school or agency in case there is a need for further communication.*				

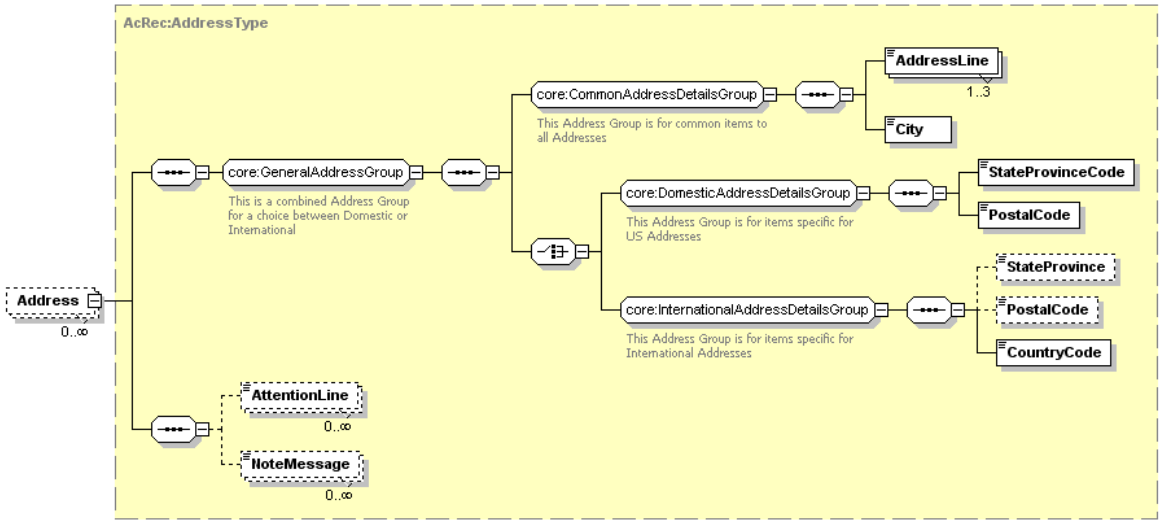
BatchEnvelope.SourceAgency.Organization.Contacts (Continued)

Code illustration:

```
<Contacts>
        <Address>

        </Address>
        <Phone>

        </Phone>
        <Email>

        </Email>
        <URL>

        </URL>
        <NoteMessage />
</Contacts>
```

BatchEnvelope.SourceAgency.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 or Agency, 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 or Agency.	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 or Agency.	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 United States or Canadian Postal Code and a US State or Canadian Province Code, then this should be the required choice.*				

Tag Name	Schema Use	Description	Recommended Use	Format
StateProvinceCode	Required	Code for US states, etc., and Canadian provinces.	Required	minOcc 1 maxOcc 1 **Enumerations:** See Appendix A
PostalCode	Required	The postal code portion of the Address.	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 17
InternationalAddressDetailsGroup	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
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 web site 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 source 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 web site 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 Appendix B
AttentionLine	Optional	The individual or office name within the postal address where inquiries should be directed.	Optional	minOcc 1 maxOcc ∞ minLength 1 maxLength 45
Comment: *This might be used to indicate where questions about the record should be sent. For example, Principal, Guidance Counselor, Headmaster, Information Technology contact, etc.*				
NoteMessage	Optional Repeatable	Additional information about the addresses of the contacts at the source school	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

BatchEnvelope.SourceAgency.Organization.Contacts.Address (Continued)

Code illustration 1 (Domestic Address):

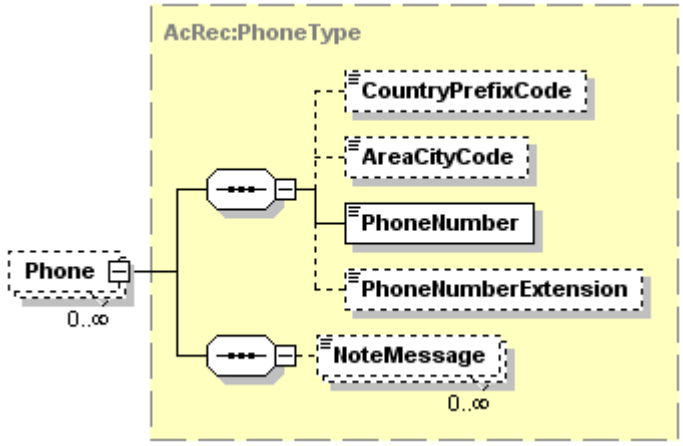
```
<Address>
        <AddressLine>1715 W Cesar Chavez</AddressLine>
        <City>Austin</City>
        <StateProvinceCode>TX</StateProvinceCode>
        <PostalCode>78703</PostalCode>
        <AttentionLine>Jane Doe</AttentionLine>
          <AttentionLine>GuidanceCounselor</AttentionLine>
       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

BatchEnvelope.SourceAgency.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 Agency, then you must send a phone number.



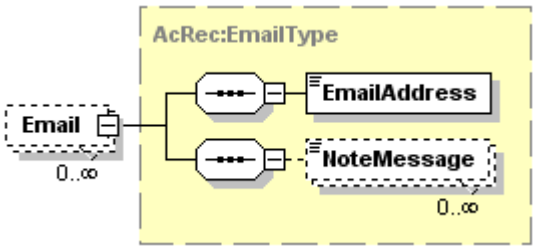
Tag Name	Schema Use	Description	Recommended Use	Format
CountryPrefixCode	Optional	International dialing code	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 3
AreaCityCode	Optional	Regional dialing code	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 5
PhoneNumber	Required	Telephone number	Required	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
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

Code illustration:

```
<Phone>
        <CountryPrefixCode/>
        <AreaCityCode>512</AreaCityCode>
        <PhoneNumber>4142505</PhoneNumber>
        <PhoneNumberExtension />
</Phone>
 <Phone>
        <CountryPrefixCode/>
        <AreaCityCode>512</AreaCityCode>
        <PhoneNumber>4747935</PhoneNumber>
        <PhoneNumberExtension/>
          <NoteMessage>Fax</NoteMessage>
</Phone>
```

BatchEnvelope.SourceAgency.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 or Agency, then you must send the data element EmailAddress.



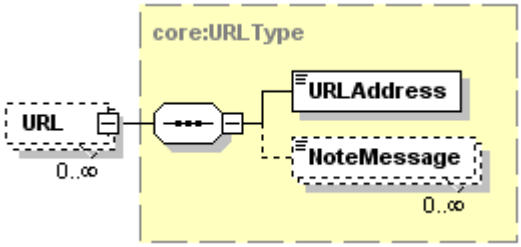
Tag Name	Schema Use	Description	Recommended Use	Format
EmailAddress	Required	The numbers, letters, and symbols used to identify an electronic mail (Email) user within a network.	Required	minOcc 1 maxOc 1 minLength 1 maxLength 128
NoteMessage	Optional Repeatable	Additional information about the email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

Code illustration:

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

BatchEnvelope.SourceAgency.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 or Agency, then you must send the URLAddress.

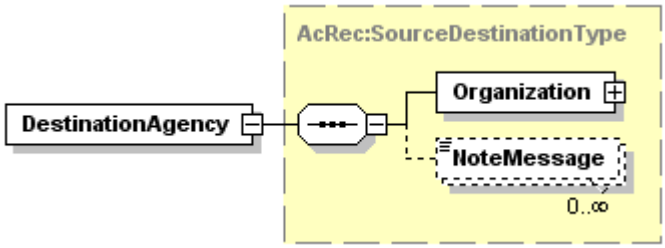


Tag Name	Schema Use	Description	Recommended Use	Format
URLAddress	Required	The Uniform Resource Locator (URL) address of the sending high school or of a contact at the sending school or agency	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 512
NoteMessage	Optional Repeatable	Additional information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

Code illustration:

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

BatchEnvelope.DestinationAgency

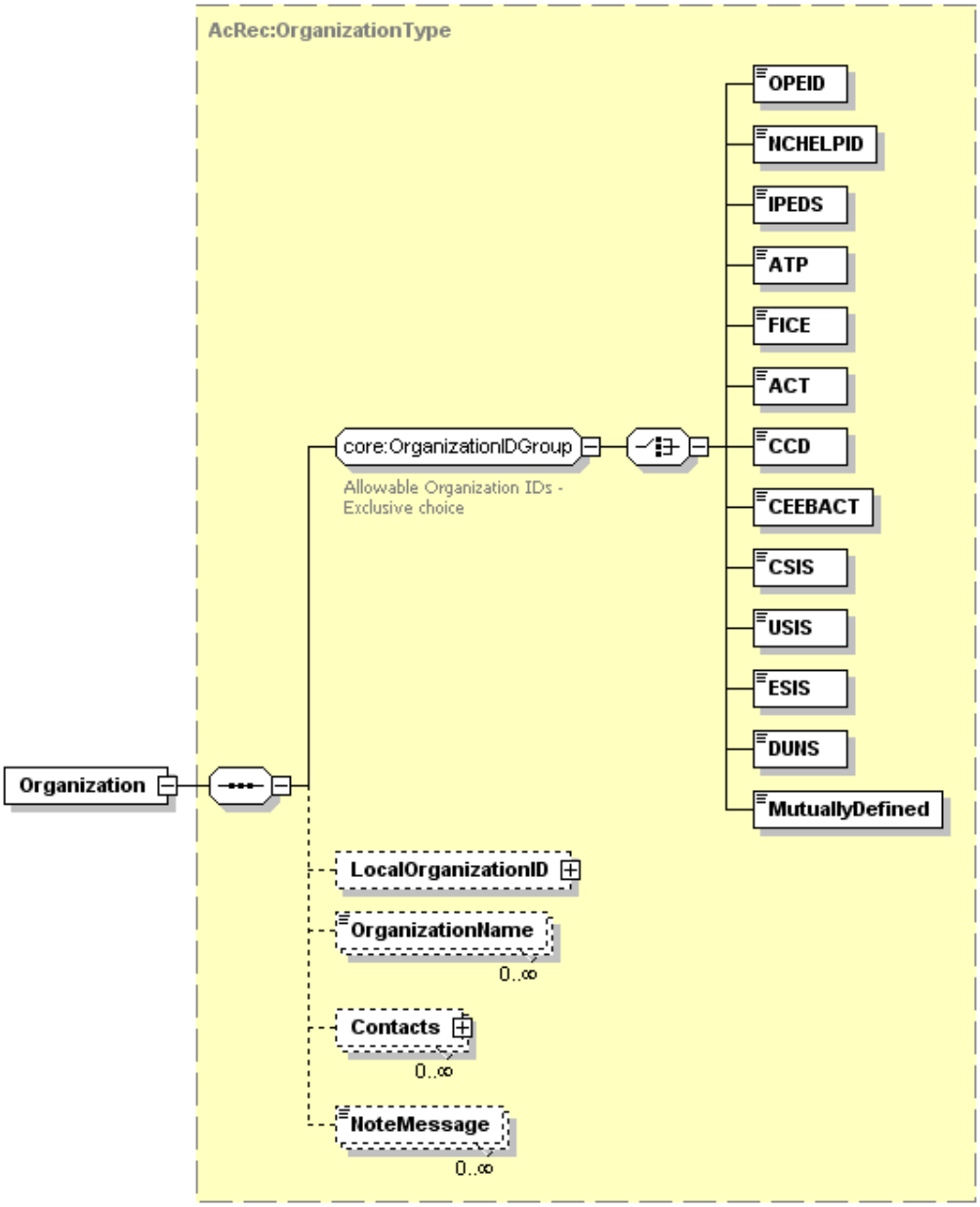


Tag Name	Schema Use	Description	Recommended Use	Format
Organization	Required	Non-person entity such as Organization, Institution, Agency or Business.	Required	minOcc 1 maxOcc 1
Comment: *This complex data element will be expanded on page 18 which follows.*				
NoteMessage	Optional Repeatable	Additional information about destination organization or school.	Not Recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80
Comment: *This is the school or other agency to which this batch of instance documents is being sent.*				

Code illustration:

```
<DestinationAgency>
        <Organization>

        </Organization>
        <NoteMessage />
</DestinationAgency>
```

BatchEnvelope.DestinationAgency.Organization



Tag Name	Schema Use	Description	Recommended Use	Format
[OrganizationIDGroup]	Required	Allowable Organization IDs - Exclusive choice	Required	minOcc 1 maxOcc 1
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 or agency.*				
OPEID	Required choice	The unique identifier assigned by the Office of Postsecondary Education for each data exchange partner.	Required choice Optional	minOcc 0 maxOcc 1 minLength 3 maxLength 8
Comment: *The OPEID would be an appropriate choice if this batch of instance documents is being sent to a postsecondary institution and the OPEID is known.*				

Tag Name	Schema Use	Description	Recommended Use	Format
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.*				
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	Required choice Optional	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: *The IPEDS would be an appropriate choice if this batch of instance documents 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.	Required choice Optional	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: *The ATP would be an appropriate choice if this batch of documents 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.	Required choice Optional	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 batch of instance documents is being sent, this is an appropriate choice.*				
ACT	Required choice	The unique identifier for postsecondary educational institutions assigned by American College Testing available at www.act.org	Required choice Optional	minOcc 0 maxOcc 1 minLength 4 maxLength 4
Comment: *The ACT would be an appropriate choice if this batch of instance docunments 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.	Required Choice Optional	minOcc 0 maxOcc 1 minLength 12 maxLength 12
Comment: *The CCD was primarily a code set used by K12 and would be an option for this choice as a destination high school.*				
CEEBACT	Required choice	The unique identifier assigned by the College Entrance Examining Board and ACT for each K-12 data exchange partner.	Required Choice Optional	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: *The CEEBACT code set primarily includes K12 institutions and would be an option for this choice as a destination high school.*				

Tag Name	Schema Use	Description	Recommended Use	Format
CSIS	Required choice	The unique identifier assigned by the Statistics Canada Canadian College Student Information System for each postsecondary data exchange partner.	Required choice Not Recommended	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: *The CSIS was a code set of Canadian colleges that was created and maintained by Statistics Canada. It is no longer being used.*				
USIS	Required choice	The unique identifier assigned by the Statistics Canada University Student Information System for each data postsecondary exchange partner.	Required choice Not Recommended	minOcc 0 maxOcc 1 minLength 6 maxLength 6
Comment: *The USIS was a code set of Canadian universities that was created and maintained by Statistics Canada. It is no longer being used.*				
ESIS	Required choice	The unique identifier assigned by the Statistics Canada Enhanced Student Information System for each data postsecondary exchange partner.	Required choice Recommended	minOcc 0 maxOcc 1 minLength 8 maxLength 8
Comment: *The ESIS would be an appropriate choice if this batch of instance documents is being sent to a postsecondary institution in Canada. However, this code set is now being phased out and will be replaced by PSIS (Postsecondary Student Information System).*				
DUNS	Required choice	Data Universal Numbering System (DUNS), unique nine character company identification number issued by Dun and Bradstreet Corporation.	Required Choice Optional	minOcc 0 maxOcc 1 minLength 9 maxLength 9
Comment: *The DUNS number would be an appropriate choice to identify the agency that is receiving this batch of instance documents on behalf of the intended final recipients.*				
MutuallyDefined	Required choice	A code set that has been mutually defined among two or more trading partners in this exchange of student records	Required choice Optional	minOcc 0 maxOcc 1 minLength 8 maxLength 8
Comment: *If the school or agency that is receiving this batch of instance documents has no code assigned by any of the above code sets, then this would be an appropriate code set to use.*				
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 page 22 which follows.*				
OrganizationName	Optional Repeatable	Name of Non-person entity such as Organization, Institution, Agency or Business.	Recommended	minOcc o 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 o maxOcc ∞
Comment: *Use Contacts for additional routing instructions and information for the receiving school or agency. This complex data element will be expanded on page XXX which follows.*				
NoteMessage	Optional Repeatable	Additional information about the organization	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

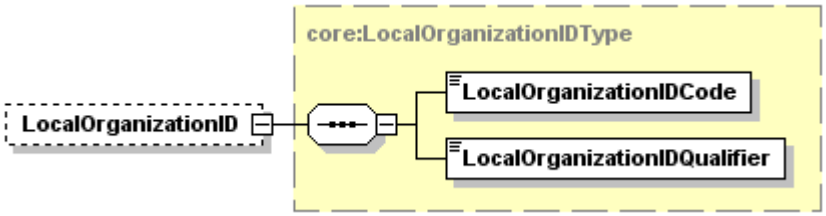
BatchEnvelope.DestinationAgency.Organization (Continued)

Code illustration:

```
<Organization>
        <ATP>006882</ATP>
        <LocalOrganizationID>

        </LocalOrganizationID>
        <OrganizationName>THE UNIVERSITY OF TEXAS AT AUSTIN</OrganizationName>
        <Contacts>

        </Contacts>
        <NoteMessage />
</Organization>
```

BatchEnvelope.DestinationAgency.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.

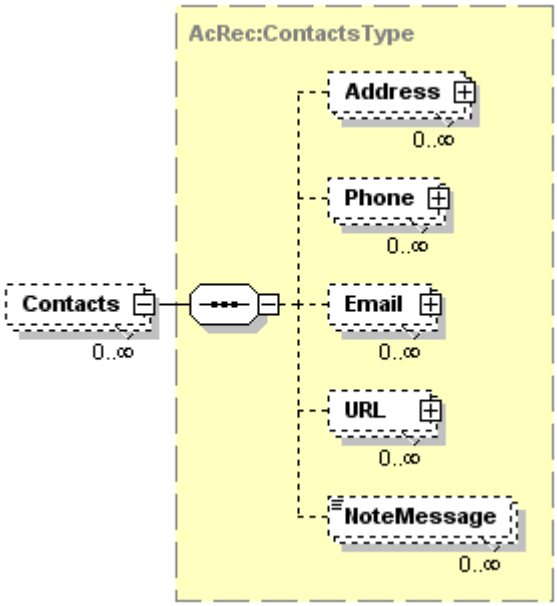


Tag Name	Schema Use	Description	Recommended Use	Format
LocalOrganizationIDCode	Required	The code assigned for the receiving school by the state, province or other mutually defined agency specified in the LocalIDQualifier that follows.	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 35
Comment: *This 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 receiving school in that state. If it is not assigned by a state or province, then code ZZ should be used in the Local ID Qualifier that follows.*				
LocalIDQualifier	Required	This is the state, province or other mutually defined agency that assigned the Local ID Code above.	Required	minOcc 1 maxOcc 1 **Enumerations:** Sec Appendix A
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 identify the receiving school or agency in that state. If it is not assigned by a state or province, then code ZZ should be used in this data element*				

Code illustration:

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

BatchEnvelope.DestinationAgency.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 o maxOcc ∞
Comment: *This address of the recipient 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 page 25 which follows.*				
Phone	Optional Repeatable	This is the phone number of the contact at the destination school or agency.	Optional	minOcc o maxOcc ∞
Comment: *The phone number at the recipient 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 page 28 which follows.*				
Email	Optional Repeatable	This is the email address of the contact at the destination school or agency.	Optional	minOcc o maxOcc ∞
Comment: *The email address at the recipient 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 page 29 which follows.*				
URL	Optional Repeatable	This is the Uniform Resource Locator of the destination school or agency.	Not Recommended	minOcc o maxOcc ∞
Comment: *The URL at the recipient school or agency is not often used. This complex data element will be expanded on page 30 which follows.*				
NoteMessage	Optional Repeatable	Additional information about the contact at the destination school or agency	Not Recommended	minOcc o maxOcc ∞ minLength 1 maxLength 80

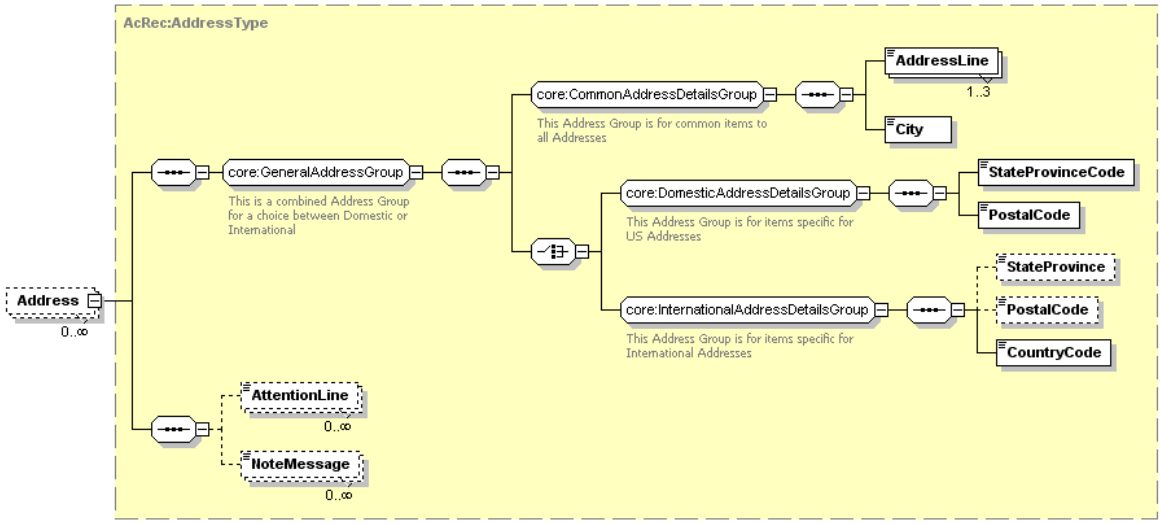
BatchEnvelope.DestinationAgency.Organization.Contacts (Continued)

Code illustration:

```
<Contacts>
        <Address>

        </Address>
        <Phone>

        </Phone>
        <Email>

        </Email>
        <URL>

        </URL>
        <NoteMessage />
</Contacts>
```

BatchEnvelope.DestinationAgency.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
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 or school.*				
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 batch of instance documents, 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 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
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] and does not appear in the instance document. If the complex data element address has a United States or Canadian Postal Code and a US State or Canadian Province Code, then this should be the required choice.*				

Tag Name	Schema Use	Description	Recommended Use	Format
StateProvinceCode	Required	Code for US states, etc. and Canadian provinces.	Required	minOcc 1 maxOcc 1 **Enumerations:** See Appendix A
PostalCode	Required	The postal code portion of the Address.	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 17
InternationalAddressDetailsGroup	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 Appendix B
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	Not recommended	minOcc 0 maxOcc ∞ minLength 1 maxLength 80

BatchEnvelope.DestinationAgency.Organization.Contacts.Address (Continued)

Code illustration 1 (Domestic Address):

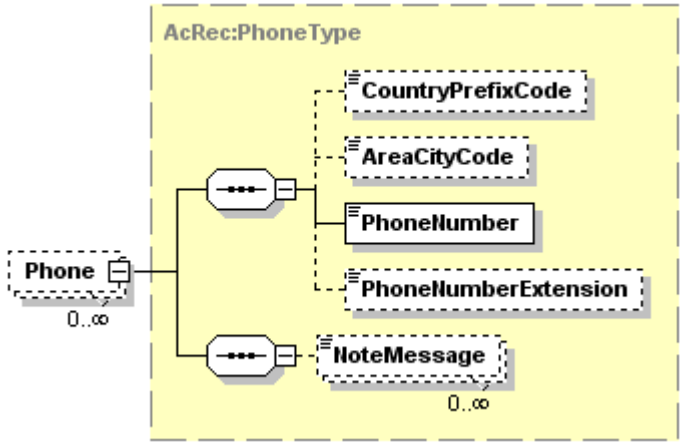
```
<Address>
        <AddressLine>1715 W Cesar Chavez</AddressLine>
        <City>Austin</City>
        <StateProvinceCode>TX</StateProvinceCode>
        <PostalCode>78703</PostalCode>
        <AttentionLine>Jane Doe</AttentionLine>
        <AttentionLine>Guidance Counselor</AttentionLine>
        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

BatchEnvelope.DestinationAgency.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, then you must send a phone number.



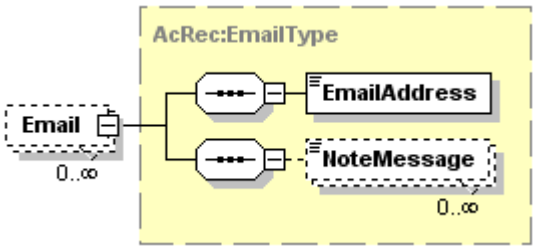
Tag Name	Schema Use	Description	Recommended Use	Format
CountryPrefixCode	Optional	International dialing code	Optional	minOcc 0 maxOcc 1 minLength 1 maxLength 3
AreaCityCode	Optional	Regional dialing code	Recommended	minOcc 0 maxOcc 1 minLength 1 maxLength 5
PhoneNumber	Required	Telephone number	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 11
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
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

Code illustration:

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

BatchEnvelope.DestinationAgency.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.



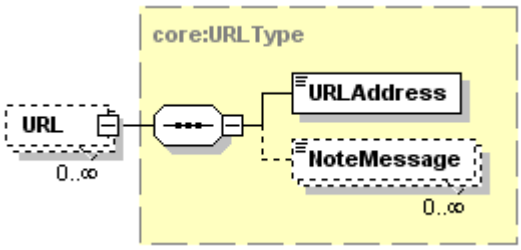
Tag Name	Schema Use	Description	Recommended Use	Format
EmailAddress	Required	The numbers, letters, and symbols used to identify an electronic mail (Email) user within a network.	Required	minOcc 1 maxOcc 1 minLength 1 maxLength 128
NoteMessage	Optional Repeatable	Additional information about the email 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>
```

BatchEnvelope.DestinationAgency.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.

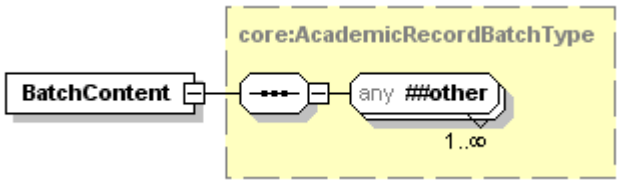


Tag Name	Schema Use	Description	Recommended Use	Format
URLAddress	Required	The Uniform Resource Locator (URL) address associated with a product, deliverable or contact.	Required	minOcc 1 maxOcc 1 minLength 0 maxLength 512
NoteMessage	Optional Repeatable	Additional information about the URL of the contact 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>
```

BatchContent



Tag Name	Schema Use	Description	Recommended Use	Format
BatchContent	Required	Used to create a place holder and root element to contain multiple logical XML documents that are bundled for a single batch transmission	Required	minOcc 1 maxOcc ∞ processContents Strict Namespace ##other
Comment: *One or multiple XML documents may be sent within the Batch Content. Please note the "BatchEnvelope.BatchDeliveryMethod" will dictate how these documents will be processed.*				

Appendix A State and Province Codes Sorted by State and Province Codes	
State and Province Code	**State and Province Name**
AA	Military – Americas
AB	Alberta
AE	Military – Europe
AK	Alaska
AL	Alabama
AP	Military – Pacific
AR	Arkansas
AS	American Samoa
AZ	Arizona
BC	British Columbia
CA	California
CO	Colorado
CT	Connecticut
CZ	Canal Zone
DC	District of Columbia
DE	Delaware
FL	Florida
FM	Federated States of Micronesia
GA	Georgia
GU	Guam
HI	Hawaii
IA	Iowa
ID	Idaho
IL	Illinois
IN	Indiana
KS	Kansas
KY	Kentucky
LA	Louisiana
MA	Massachusetts
MB	Manitoba
MD	Maryland
ME	Maine
MH	Marshall Islands
MI	Michigan
MN	Minnesota
MO	Missouri
MP	Northern Mariana Islands
MS	Mississippi

Appendix A State and Province Codes Sorted by State and Province Codes	
State and Province Code	**State and Province Name**
MT	Montana
NB	New Brunswick
NC	North Carolina
ND	North Dakota
NE	Nebraska
NF	Newfoundland
NH	New Hampshire
NJ	New Jersey
NL	Newfoundland and Labrador
NM	New Mexico
NS	Nova Scotia
NT	Northwest Territories
NU	Nunavut
NV	Nevada
NY	New York
OH	Ohio
OK	Oklahoma
ON	Ontario
OR	Oregon
PA	Pennsylvania
PE	Prince Edward Island
PR	Puerto Rico
PW	Republic of Palau
QC	Quebec
RI	Rhode Island
SC	South Carolina
SD	South Dakota
SK	Saskatchewan
TN	Tennessee
TX	Texas
UT	Utah
VA	Virginia
VI	Virgin Islands
VT	Vermont
WA	Washington
WI	Wisconsin
WV	West Virginia
WY	Wyoming
YT	Yukon

Appendix B
Country Codes
ISO 3166-1 Alpha-2 Standard (as of March 2008)
Sorted by Code

CountryCode	Description
AD	Andorra
AE	United Arab Emirates
AF	Afghanistan
AG	Antigua And Barbuda
AI	Anguilla
AL	Albania
AM	Armenia
AN	Netherlands Antilles
AO	Angola
AQ	Antarctica
AR	Argentina
AS	American Samoa
AT	Austria
AU	Australia
AW	Aruba
AX	Åland Islands
AZ	Azerbaijan
BA	Bosnia And Herzegovina
BB	Barbados
BD	Bangladesh
BE	Belgium
BF	Burkina Faso
BG	Bulgaria
BH	Bahrain
BI	Burundi
BJ	Benin
BL	Saint Barthélemy*
BM	Bermuda
BN	Brunei Darussalam
BO	Bolivia
BR	Brazil
BS	Bahamas
BT	Bhutan
BV	Bouvet Island
BW	Botswana
BY	Belarus
BZ	Belize
CA	Canada
CC	Cocos (Keeling) Islands
CD	Congo, The Democratic Republic Of The

Appendix B
Country Codes
ISO 3166-1 Alpha-2 Standard (as of March 2008)
Sorted by Code

CountryCode	Description
CF	Central African Republic
CG	Congo
CH	Switzerland
CI	Cote D'ivoire
CK	Cook Islands
CL	Chile
CM	Cameroon
CN	China
CO	Colombia
CR	Costa Rica
CS	Serbia And Montenegro (Deleted as of April 2007 – see ME and RS) *
CU	Cuba
CV	Cape Verde
CX	Christmas Island
CY	Cyprus
CZ	Czech Republic
DE	Germany
DJ	Djibouti
DK	Denmark
DM	Dominica
DO	Dominican Republic
DZ	Algeria
EC	Ecuador
EE	Estonia
EG	Egypt
EH	Western Sahara
ER	Eritrea
ES	Spain
ET	Ethiopia
FI	Finland
FJ	Fiji
FK	Falkland Islands (Malvinas)
FM	Micronesia, Federated States Of
FO	Faroe Islands
FR	France
GA	Gabon
GB	United Kingdom
GD	Grenada
GE	Georgia
GF	French Guiana

Appendix B
Country Codes
ISO 3166-1 Alpha-2 Standard (as of March 2008)
Sorted by Code

CountryCode	Description
GG	Guernsey *
GH	Ghana
GI	Gibraltar
GL	Greenland
GM	Gambia
GN	Guinea
GP	Guadeloupe
GQ	Equatorial Guinea
GR	Greece
GS	South Georgia And The South Sandwich Islands
GT	Guatemala
GU	Guam
GW	Guinea Bissau
GY	Guyana
HK	Hong Kong
HM	Heard Island And Mcdonald Islands
HN	Honduras
HR	Croatia
HT	Haiti
HU	Hungary
ID	Indonesia
IE	Ireland
IL	Israel
IM	Isle of Man *
IN	India
IO	British Indian Ocean Territory
IQ	Iraq
IR	Iran, Islamic Republic Of
IS	Iceland
IT	Italy
JE	Jersey *
JM	Jamaica
JO	Jordan
JP	Japan
KE	Kenya
KG	Kyrgyzstan
KH	Cambodia
KI	Kiribati
KM	Comoros
KN	Saint Kitts And Nevis

Appendix B
Country Codes
ISO 3166-1 Alpha-2 Standard (as of March 2008)
Sorted by Code

CountryCode	Description
KP	Korea, Democratic People's Republic Of
KR	Korea, Republic Of
KW	Kuwait
KY	Cayman Islands
KZ	Kazakhstan
LA	Lao People's Democratic Republic
LB	Lebanon
LC	Saint Lucia
LI	Liechtenstein
LK	Sri Lanka
LR	Liberia
LS	Lesotho
LT	Lithuania
LU	Luxembourg
LV	Latvia
LY	Libyan Arab Jamahiriya
MA	Morocco
MC	Monaco
MD	Moldova, Republic Of
ME	Montenegro *
MF	Saint Martin *
MG	Madagascar
MH	Marshall Islands
MK	Macedonia, The Former Yugoslav Republic Of
ML	Mali
MM	Myanmar
MN	Mongolia
MO	Macao
MP	Northern Mariana Islands
MQ	Martinique
MR	Mauritania
MS	Montserrat
MT	Malta
MU	Mauritius
MV	Maldives
MW	Malawi
MX	Mexico
MY	Malaysia
MZ	Mozambique
NA	Namibia

Appendix B
Country Codes
ISO 3166-1 Alpha-2 Standard (as of March 2008)
Sorted by Code

CountryCode	Description
NC	New Caledonia
NE	Niger
NF	Norfolk Island
NG	Nigeria
NI	Nicaragua
NL	Netherlands
NO	Norway
NP	Nepal
NR	Nauru
NU	Niue
NZ	New Zealand
OM	Oman
PA	Panama
PE	Peru
PF	French Polynesia
PG	Papua New Guinea
PH	Philippines
PK	Pakistan
PL	Poland
PM	Saint Pierre And Miquelon
PN	Pitcairn
PR	Puerto Rico
PS	Palestinian Territory, Occupied
PT	Portugal
PW	Palau
PY	Paraguay
QA	Qatar
RE	Reunion
RO	Romania
RS	Serbia *
RU	Russian Federation
RW	Rwanda
SA	Saudi Arabia
SB	Solomon Islands
SC	Seychelles
SD	Sudan
SE	Sweden
SG	Singapore
SH	Saint Helena
SI	Slovenia

Appendix B
Country Codes
ISO 3166-1 Alpha-2 Standard (as of March 2008)
Sorted by Code

CountryCode	Description
SJ	Svalbard And Jan Mayen
SK	Slovakia
SL	Sierra Leone
SM	San Marino
SN	Senegal
SO	Somalia
SR	Suriname
ST	Sao Tome And Principe
SV	El Salvador
SY	Syrian Arab Republic
SZ	Swaziland
TC	Turks And Caicos Islands
TD	Chad
TF	French Southern Territories
TG	Togo
TH	Thailand
TJ	Tajikistan
TK	Tokelau
TL	Timor Leste
TM	Turkmenistan
TN	Tunisia
TO	Tonga
TR	Turkey
TT	Trinidad And Tobago
TV	Tuvalu
TW	Taiwan, Province Of China
TZ	Tanzania, United Republic Of
UA	Ukraine
UG	Uganda
UM	United States Minor Outlying Islands
US	United States
UY	Uruguay
UZ	Uzbekistan
VA	Holy See (Vatican City State)
VC	Saint Vincent And The Grenadines
VE	Venezuela
VG	Virgin Islands, British
VI	Virgin Islands, U.S.
VN	Viet Nam
VU	Vanuatu

Appendix B
Country Codes
ISO 3166-1 Alpha-2 Standard (as of March 2008)
Sorted by Code

CountryCode	Description
WF	Wallis And Futuna
WS	Samoa
YE	Yemen
YT	Mayotte
ZA	South Africa
ZM	Zambia
ZW	Zimbabwe

- **Updated as of March 2008**

Appendix B
Country Codes
ISO 3166-1 Alpha-2 Standard (as of March 2008)
Sorted by Country Name

CountryCode	Description
AD	Andorra
AF	Afghanistan
AX	Åland Islands
AL	Albania
DZ	Algeria
AS	American Samoa
AO	Angola
AI	Anguilla
AQ	Antarctica
AG	Antigua And Barbuda
AR	Argentina
AM	Armenia
AW	Aruba
AU	Australia
AT	Austria
AZ	Azerbaijan
BS	Bahamas
BH	Bahrain
BD	Bangladesh
BB	Barbados
BY	Belarus
BE	Belgium
BZ	Belize
BJ	Benin
BM	Bermuda
BT	Bhutan
BO	Bolivia
BA	Bosnia And Herzegovina
BW	Botswana
BV	Bouvet Island
BR	Brazil
IO	British Indian Ocean Territory
BN	Brunei Darussalam
BG	Bulgaria
BF	Burkina Faso
BI	Burundi
KH	Cambodia
CM	Cameroon
CA	Canada

Appendix B
Country Codes
ISO 3166-1 Alpha-2 Standard (as of March 2008)
Sorted by Country Name

CountryCode	Description
CV	Cape Verde
KY	Cayman Islands
CF	Central African Republic
TD	Chad
CL	Chile
CN	China
CX	Christmas Island
CC	Cocos (Keeling) Islands
CO	Colombia
KM	Comoros
CG	Congo
CD	Congo, The Democratic Republic Of The
CK	Cook Islands
CR	Costa Rica
CI	Cote D'ivoire
HR	Croatia
CU	Cuba
CY	Cyprus
CZ	Czech Republic
DK	Denmark
DJ	Djibouti
DM	Dominica
DO	Dominican Republic
EC	Ecuador
EG	Egypt
SV	El Salvador
GQ	Equatorial Guinea
ER	Eritrea
EE	Estonia
ET	Ethiopia
FK	Falkland Islands (Malvinas)
FO	Faroe Islands
FJ	Fiji
FI	Finland
FR	France
GF	French Guiana
PF	French Polynesia
TF	French Southern Territories
GA	Gabon
GM	Gambia

Appendix B
Country Codes
ISO 3166-1 Alpha-2 Standard (as of March 2008)
Sorted by Country Name

CountryCode	Description
GE	Georgia
DE	Germany
GH	Ghana
GI	Gibraltar
GR	Greece
GL	Greenland
GD	Grenada
GP	Guadeloupe
GU	Guam
GT	Guatemala
GG	Guernsey *
GN	Guinea
GW	Guinea Bissau
GY	Guyana
HT	Haiti
HM	Heard Island And Mcdonald Islands
VA	Holy See (Vatican City State)
HN	Honduras
HK	Hong Kong
HU	Hungary
IS	Iceland
IN	India
ID	Indonesia
IR	Iran, Islamic Republic Of
IQ	Iraq
IE	Ireland
IM	Isle of Man *
IL	Israel
IT	Italy
JM	Jamaica
JP	Japan
JE	Jersey *
JO	Jordan
KZ	Kazakhstan
KE	Kenya
KI	Kiribati
KP	Korea, Democratic People's Republic Of
KR	Korea, Republic Of
KW	Kuwait
KG	Kyrgyzstan

Appendix B
Country Codes
ISO 3166-1 Alpha-2 Standard (as of March 2008)
Sorted by Country Name

CountryCode	Description
LA	Lao People's Democratic Republic
LV	Latvia
LB	Lebanon
LS	Lesotho
LR	Liberia
LY	Libyan Arab Jamahiriya
LI	Liechtenstein
LT	Lithuania
LU	Luxembourg
MO	Macao
MK	Macedonia, The Former Yugoslav Republic Of
MG	Madagascar
MW	Malawi
MY	Malaysia
MV	Maldives
ML	Mali
MT	Malta
MH	Marshall Islands
MQ	Martinique
MR	Mauritania
MU	Mauritius
YT	Mayotte
MX	Mexico
FM	Micronesia, Federated States Of
MD	Moldova, Republic Of
MC	Monaco
MN	Mongolia
ME	Montenegro *
MS	Montserrat
MA	Morocco
MZ	Mozambique
MM	Myanmar
NA	Namibia
NR	Nauru
NP	Nepal
NL	Netherlands
AN	Netherlands Antilles
NC	New Caledonia
NZ	New Zealand
NI	Nicaragua

Appendix B
Country Codes
ISO 3166-1 Alpha-2 Standard (as of March 2008)
Sorted by Country Name

CountryCode	Description
NE	Niger
NG	Nigeria
NU	Niue
NF	Norfolk Island
MP	Northern Mariana Islands
NO	Norway
OM	Oman
PK	Pakistan
PW	Palau
PS	Palestinian Territory, Occupied
PA	Panama
PG	Papua New Guinea
PY	Paraguay
PE	Peru
PH	Philippines
PN	Pitcairn
PL	Poland
PT	Portugal
PR	Puerto Rico
QA	Qatar
RE	Reunion
RO	Romania
RU	Russian Federation
RW	Rwanda
BL	Saint Barthélemy *
SH	Saint Helena
KN	Saint Kitts And Nevis
LC	Saint Lucia
MF	Saint Martin *
PM	Saint Pierre And Miquelon
VC	Saint Vincent And The Grenadines
WS	Samoa
SM	San Marino
ST	Sao Tome And Principe
SA	Saudi Arabia
SN	Senegal
RS	Serbia *
CS	Serbia And Montenegro (Deleted as of April 2007 – see ME and RS) *
SC	Seychelles
SL	Sierra Leone

Appendix B
Country Codes
ISO 3166-1 Alpha-2 Standard (as of March 2008)
Sorted by Country Name

CountryCode	Description
SG	Singapore
SK	Slovakia
SI	Slovenia
SB	Solomon Islands
SO	Somalia
ZA	South Africa
GS	South Georgia And The South Sandwich Islands
ES	Spain
LK	Sri Lanka
SD	Sudan
SR	Suriname
SJ	Svalbard And Jan Mayen
SZ	Swaziland
SE	Sweden
CH	Switzerland
SY	Syrian Arab Republic
TW	Taiwan, Province Of China
TJ	Tajikistan
TZ	Tanzania, United Republic Of
TH	Thailand
TL	Timor Leste
TG	Togo
TK	Tokelau
TO	Tonga
TT	Trinidad And Tobago
TN	Tunisia
TR	Turkey
TM	Turkmenistan
TC	Turks And Caicos Islands
TV	Tuvalu
UG	Uganda
UA	Ukraine
AE	United Arab Emirates
GB	United Kingdom
US	United States
UM	United States Minor Outlying Islands
UY	Uruguay
UZ	Uzbekistan
VU	Vanuatu
VE	Venezuela

Appendix B
Country Codes
ISO 3166-1 Alpha-2 Standard (as of March 2008)
Sorted by Country Name

CountryCode	Description
VN	Viet Nam
VG	Virgin Islands, British
VI	Virgin Islands, U.S.
WF	Wallis And Futuna
EH	Western Sahara
YE	Yemen
ZM	Zambia
ZW	Zimbabwe

*** Updated as of April 2007**

Appendix C – Sample XML Academic Record Batch Document

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                            <PostalCode>60637</PostalCode>
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Appendix D – History of Changes Made Since Version 1.0.0 of XML Academic Record Batch Schema

Version 2.0.0

This version makes it possible for a batch of instance documents to be sent to an intermediary agency acting on behalf of one or more schools or agencies. That agency, in turn, may forward the appropriate instance documents to the intended recipient school or agency.

Version 1.0.0 only contained one data element as child to the root schema. Version 2.0.0 adds two child data elements, one of which is required.

This version is not backwardly compatible with the previous version (1.0.0) and is considered to be a major change to the schema.