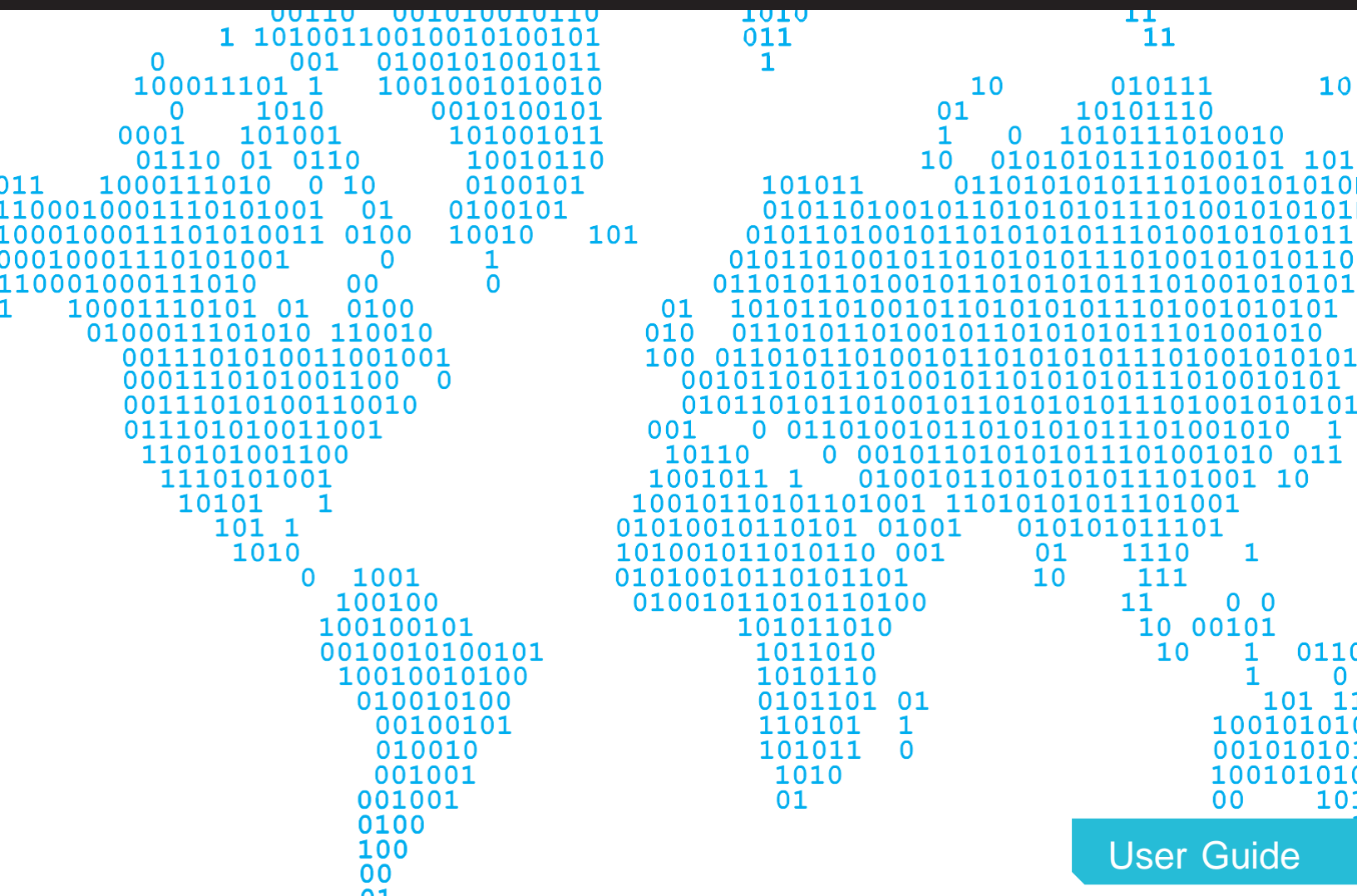Foreign Account Tax Compliance Act

FATCA

Metadata XML Schema v1.2

User Guide

Table of Contents

What's New

This section summarizes updates since the last publication of the FATCA XML Metadata User Guide (August 2019):

Section	Description
2.3 FATCAEntCommunicationTypeCd	Added three (3) new communication types – International Compliance Assurance Program (ICAP), Joint Audit (JA), and Exchange of Information Request (EOIR)

1 Introduction

1.1 | About FATCA

The Foreign Account Tax Compliance Act (FATCA) was enacted as part of the Hiring Incentives to Restore Employment (HIRE) Act in March 2010. FATCA was created to improve transparency and address tax non-compliance by US taxpayers.

FATCA requires certain foreign financial institutions (FFIs) to report certain information about its U.S. accounts (including U.S. owned foreign entities), accounts held by owner-documented FFIs (ODFFI), and certain aggregate information concerning account holders that are recalcitrant account holders and, for a transitional period, accounts held by nonparticipating FFIs. Generally, FFIs will commit to these reporting requirements by registering with the IRS and signing an agreement with the IRS; however, the FFI agreement does not apply to FFIs under a Model 1 IGA. In most cases, FFIs that do not register with the IRS will be subject to 30% withholding on certain U.S. source payments (unless an exception applies). Chapter 4 also generally requires a withholding agent to deduct and withhold tax equal to 30 percent of a withholdable payment made to a passive non-financial foreign entity (NFFE) unless the passive NFFE certifies to the withholding agent that it does not have any substantial U.S. owners or provides certain identifying information with respect to its substantial U.S. owners that the withholding agent reports to the IRS. Payments to NFFEs that report their substantial U.S. owners directly to the IRS (direct reporting NFFEs) are accepted from withholding and reporting by the withholding agent.

An approved financial institution (FI) (other than a limited FFI or a limited branch), direct reporting NFFE, or sponsoring entity that registers with the IRS under FATCA will receive a global intermediary identification number (GIIN) and appear on the published FFI list. The FFI List Search and Download tool allows users to search entities by GIIN, financial institution name, or country.

There are certain entities, such as U.S. withholding agents (USWA), territory financial institutions (TFI), third party preparers, and independent software vendors that do not need to have a GIIN (non-GIIN filers) but need to file FATCA reports through the International Data Exchange Service (IDES). A non-GIIN filer has to get a FATCA identification number (FIN) in order to enroll in and report through IDES. Publication of a FIN on the FFI list does not change the filer's status for FATCA purposes, as it does not subject the filer to the requirements applicable to an FFI and does not serve any function related to withholding tax on payments under FATCA or reporting such tax. A FIN will be accompanied by a generic name (e.g., "U.S. Withholding Agent 1") on the FFI List. For more information on FINs, visit the **FATCA Identification Number (FIN) Enrollment Process page**.

Host Country Tax Authorities (HCTAs) receive a pre-assigned username and HCTA FATCA Entity ID and will be required to change their username and password upon the first login to IDES. For additional information on the HCTA FATCA Entity ID, contact the **IDES help desk.**

1.2 | Purpose

This guide is intended to serve as a tool for FIs, direct reporting NFFEs, sponsoring entities, non-GIIN filers, and Host Country Tax Authorities (HCTAs) who transmit data through the International Data Exchange Service (IDES). It explains how to prepare and validate the IDES metadata file used in FATCA reporting. The reader should be familiar with the FATCA regulations and experienced with extensible markup language (XML) and schema technology.

Document	Description
FATCA XML Schema v1.1 User Guide (Publication 5124)	Explains the schema and elements of the electronic version of Form 8966
International Compliance Management Model Notification XML Schema User Guide (Pub 5216)	Explains the schema and elements of FATCA notifications
FATCA IDES User Guide (Publication 5190)	Provides instructions on how to use the International Data Exchange Service to transmit FATCA reporting data
FATCA Online Registration User Guide (Publication 5118)	Provides instructions for the online system to complete an electronic Form 8957, FATCA Registration
FFI List Search and Download Tool User Guide (Publication 5147)	Provides instructions on how to use the FFI List Search and Download Tool to search for an approved GIIN

Table 1 - FATCA related documents list provides a list of related FATCA publications.

1.3 | IDES Enrollment Process Overview

The IDES web application is a secure managed file transfer service that is available to FIs, direct reporting NFFEs, sponsoring entities, non-GIIN filers, and HCTAs to facilitate FATCA reporting. IDES is accessible to enrolled users over the Internet via Hypertext Transfer Protocol Secure (HTTPS) or Secure File Transfer Protocol (SFTP). The system only accepts encrypted electronic submissions and will allow for the transmission of FATCA reporting in the approved Intergovernmental FATCA XML Schema v1.1 (FATCA XML). IDES provides for an end-to-end controlled file transfer with enhanced monitoring and security features. For more information on FATCA regulations, Form 8966 and instructions, FATCA XML, and other related topics, visit the **FATCA IDES** home page.

Steps	Description
1	Obtain a digital certificate
2-4	Create and validate IDES account
5	Prepare & Upload FATCA XML file: ■ Prepare, validate and digitally sign FATCA XML file ■ Compress FATCA XML file with zip utility ■ Encrypt FATCA XML file with AES-256 Key ■ Encrypt AES Key with public key of each recipient ■ Create sender metadata file ■ Create the data packet (transmission archive)
6	Access IDES though web browser or SFTP client ■ Transmit the data packet to IDES ■ Receive transmission alerts and notifications

Figure 1: IDES Process Overview

1.4 | Sender Metadata File

Metadata is a collection of data about the content and characteristics contained in the FATCA reporting files. It is used to ensure the data packets are correctly processed. IDES metadata files should never be encrypted. An authorized user should create and validate a metadata file using the **FATCA Metadata XML Schema v1.2**.

An unencrypted metadata file must be included in the data packet (.ZIP). A metadata file can also be generated using a sender metadata template on the IDES Enrollment Site. For more information on FATCA XML and data file preparation, refer to the FATCA IDES User Guide.

File Format	Naming Convention	Description
XML File	FATCAEntitySenderId_Metadata.xml	The sender GIIN is an IRS-approved GIIN, FIN or HCTA FATCA Entity ID. Each HCTA will be assigned an entity ID in GIIN format: 000000.00000.TA. <ISO>. The country identifier is the ISO 3166-1 standard numeric country code. The constant two-character code 'TA' identifies the entity type as the Tax Authority.

Table 2 - Sender Metadata Files

1.5 | Comments

We appreciate your feedback on the quality and usefulness of this publication. Please send comments, with a reference to chapter, section, and page number(s) to: lbi.fatca.ides@irs.gov.

1.6 | General Principles

The elements in the metadata schema are described by the definition, attribute, and constraints in **Table 3**.

Items	Description
Element	■ Elements not described in the guide are not supported in the schema.
Attribute(s)	■ The name(s) of the attribute(s). If blank, then there are no associated attributes.
Size/Pattern	■ The minimum and/or maximum character size of the element value. ■ If size is not defined, assume a limitation default of 200 characters.
Cardinality	■ The number of times an element occurs in an XML file. ■ If cardinality is not defined, then one and only one instance should be included. ■ minOccurs=1 and maxOccurs=1 ■ Where a data element is not used, then the associated attribute(s) are not used.
Namespace/Prefix	■ A collection of elements and attribute names identified by a Uniform Resource Identifier (URI) reference in an XML file. ■ Namespace differentiates between different sources and identifiers with the same name.
Datatype	■ The datatype or classification of a data element value, such as numeric, string, Boolean, or time. ■ XML supports custom datatypes and inheritance.
Encoding	■ The UTF-8 encoding standard must be used in all XML reports.
Requirement(s):	■ The requirement field for each data element and its attribute indicates whether the element must be included in the XML file.
Validation	■ The data element is required for schema validation and must be included.
Mandatory	■ The data element is not used for schema validation but is required.
Optional	■ The data element is not required but may be provided if available. ■ The use of optional field may be subject to an intergovernmental agreement, consult your applicable tax authority.
Description	■ The definitions for the message set or element.

Table 3: Element Description

1.6.1 | Character Restrictions

All FATCA XML documents (Form 8966 data, metadata, etc.), should conform to recommended XML schema best practices. Certain characters are prohibited and if included will cause an error notification.

Non-Optional Entity Reference

If an XML document contains one of these characters in the XML text content, the data packet will be rejected and an error notification (XML not well-formed) will be generated. These characters are not allowed by XML syntax rules and must be replaced with the following predefined entity references. To prevent error notifications, do not include any of these characters in XML documents.

Characters	Character Description	Entity Reference
&	Ampersand	&
<	Less than	<

Optional Entity Reference

If an XML document contains one of these characters in the XML text content, it is not restricted and will not cause an error notification. The characters should be replaced by the following predefined entity references to conform to XML schema best practices.

Characters	Character Description	Entity Reference
>	Greater than	>
'	Apostrophe	'
"	Quotation mark	"

SQL Injection Validation

If an XML document contains one of these combinations of characters in the XML text content, the data packet will be rejected and a failed threat detection (error) notification will be generated. These characters are not allowed. To prevent error notifications, do not include any of these combinations of characters.

Characters	Character Description	Entity Reference
--	Double dash	None
/*	Slash Asterisk	None
&#	Ampersand Hash	None

1.7 | How to Use Guide

The FATCA Metadata XML Schema v1.2. supports FATCA reporting and expands each data element to describe business rules. The schema definition files take precedence over any information presented within the guide. The FATCA XML schema definition files or .xsd files may be downloaded from the **FATCA XML Schema for Form 8966 page.**

The schema was tested using XMLSpy and the diagrams shown illustrate the message structure and hierarchy relationship of elements. The schema and sample files can be viewed with an XML tool, such as XML Notepad. The table below describes the XMLSpy legend to interpret the diagrams. If you are using a different XML tool, the icons and images may vary.

Schema Icon	Description
MsgId	Box with full-line is a required report element
InitgPty	Box with dotted line is an optional report element
	The child elements must appear in the sequence mentioned
	Only one of the possible child elements may be present

Figure 2: Schema Legend

2 FATCAIDESSenderFileMetadata

The file name for the FATCA XML metadata file is FATCAEntitySenderId_Metadata.xml. See **Section 1.4 Sender Metadata File** for more information. The elements and values are summarized in Table 4.

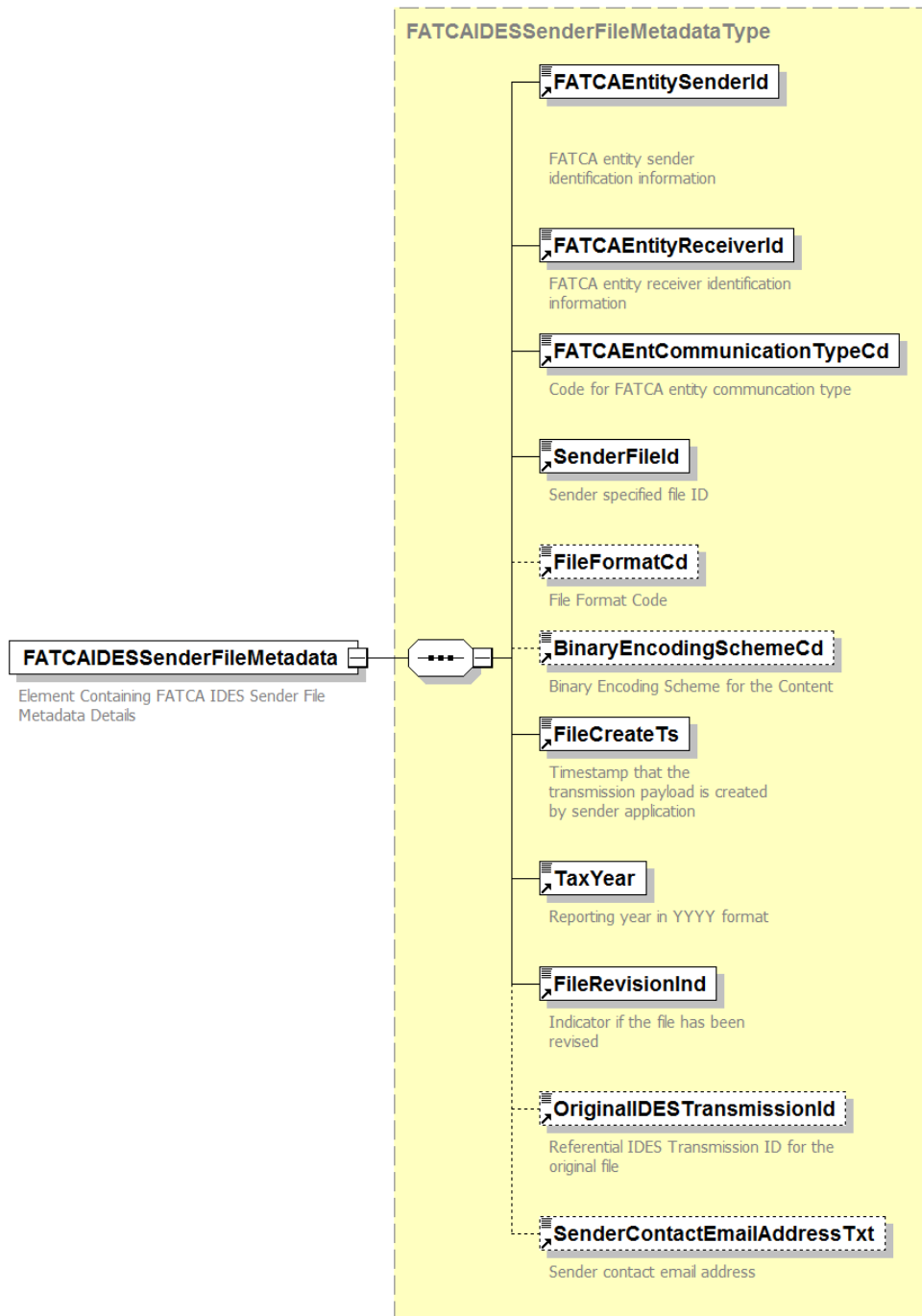| Ref	Elements	Datatype	Cardinality	Requirement	Description
2.0	FATCAIDESSender FileMetadata	N/A	1	Mandatory	
2.1	FATCAEntitySenderId	String	1	Mandatory	Identifies GIIN or FIN of sender submitting data
2.2	FATCAEntityReceiverId	String	1	Mandatory	Identifies GIIN of recipient receiving data
2.3	FATCAEntCommunication TypeCd	String	1	Mandatory	Indicates the type of transmission
2.4	SenderFileId	String	1	Mandatory	References file name created by sender
2.5	FileFormatCd	String	0..1	Optional	Indicates file format type
2.6	BinaryEncodingSchemeCd	String	0..1	Optional	Indicates binary encoding scheme information
2.7	FileCreateTs	Timestamp With Milliseconds Type	1	Mandatory	References timestamp for the transmission payload
2.8	TaxYear	gYear	1	Mandatory	Indicates the tax year for FATCA reporting
2.9	FileRevisionInd	Boolean	1	Mandatory	Indicates if the FATCA report is a revised transmission
2.10	OriginalIDES TransmissionId	String	0..1	Optional	References for the original IDES transmission ID
2.11	SenderContactEmail AddressTxt	String	0..1	Optional	Sender email address

Table 4: IDES Metadata Schema Overview provides a summary for each element

2.1 | FATCAEntitySenderId

Element	FATCAEntitySenderId
Attribute(s)	N/A
Size/Pattern	19-character GIIN format
Namespace/ Prefix	N/A
Datatype	String
Requirement	Mandatory
Description:	■ Element contains the sender FATCA GIIN or FIN. The GIIN or FIN is a 19-character alphanumeric identifier entered with appropriate punctuation (period or decimal). ■ If the sender is a reporting FI, direct reporting NFFE, or sponsoring entity, use the approved GIIN. Example: 98Q96B.00000.LE.840 ■ If the sender is an HCTA, use the predefined HCTA FATCA Entity ID format. Example: 000000.00000.TA.840. ■ If the sender is a USWA, TFI, third party preparer or independent software vendor, use the approved FIN. Example: G5ME2G.12100.ME.840

2.2 | FATCAEntityReceiverId

Element	FATCAEntityReceiverId
Attribute(s)	N/A
Size/Pattern	19-character GIIN format
Namespace/ Prefix	N/A
Datatype	String
Requirement	Mandatory
Description	■ Element contains the recipient entity ID in GIIN format with punctuation (period or decimal). ■ If the direct recipient is a tax authority (TA) or HCTA, use the HCTA FATCA Entity ID. Example: 000000.00000.TA.ISO ■ If the direct recipient is the U.S. tax authority, use HCTA FATCA Entity ID for the United States (US). Example: 000000.00000.TA.840

2.3 | FATCAEntCommunicationTypeCd

Element	FATCAEntCommunicationTypeCd
Attribute(s)	N/A
Size/Pattern	RPT, NTF, CAR, REG, ICAP, JA, EOIR
Namespace/Prefix	N/A
Datatype	FATCAEntCommunicationTypeCdType
Requirement	Mandatory
Description:	■ Element specifies the type of message transmitted. The only allowable entries are the entity communication type codes. ■ Enumeration values: ■ RPT - FATCA Report ■ NTF - FATCA Notification ■ CAR – FATCA Competent Authority Request (IRS use only) ■ REG – FATCA Registration Data (Reserved. Do not use) ■ ICAP – International Compliance Assurance Program ■ JA – Joint Audit ■ EOIR – Exchange of Information Request

__Note__ - All other enumerations for FATCAEntCommunicationTypeCd element included in the FATCA Metadata XML schema should not be used unless pre-coordinated/instructed by the recipient country's tax authority.

2.4 | SenderFileId

Element	SenderFileId
Attribute(s)	N/A
Size	Maximum length 200 characters
Namespace/Prefix	N/A
Datatype	String
Requirement	Mandatory
Description:	■ Element is a free text field to capture the file name or ID created by the sender. The element helps both the sender and receiver to track and monitor a specific message. ■ This element cannot be blank.

2.5 | FileFormatCd

Element	FileFormatCd
Attribute(s)	N/A
Size/Pattern	XML, PDF, TXT, RTF, JPG
Namespace/ Prefix	N/A
Datatype	FileFormatCdType
Requirement	Optional
Description	- Element specifies the file format of message transmitted. The only allowable values are the file format codes. - If sending a FATCA Report (RPT), the only allowable value is XML. - If sending a file using PDF, TXT, RTF or JPG file type, the non-XML file must be converted to XML by using the **FATCA Wrapper for Non-XML v1.1.** TXT files can be converted using the <Wrapper> element tag directly around the text.. - Enumeration values: - XML – Extensible markup language - PDF – Portable document format - TXT – Plain text - RTF – Rich text format - JPG/JFIF – Joint photographic group. (EXIF is not supported)

2.6 | BinaryEncodingSchemeCd

Element	BinaryEncodingSchemeCd
Attribute(s)	N/A
Size/Pattern	NONE or BASE64
Namespace/ Prefix	N/A
Datatype	BinaryEncodingSchemeCdType
Requirement	Optional

Description:	■ Element identifies the type of encoding scheme for the transmission payload.
	
	■ If sending an XML file, the value should be 'NONE'.
	
	■ If receiving a CAR from IRS, the value will be 'BASE64'. The element value indicates the payload has BASE64 encoding.
	
	■ If sending or receiving a notification, the value will be associated with the file type and format.
	
	■ Enumeration values:
	   ■ NONE – No special encoding
	   ■ BASE64 – BASE64 encoding
	   ■ Examples

File Type	Binary Encoding Type
XML	NONE BASE64
PDF	NONE
TXT	or BASE64
RTF	BASE64 BASE64
JPG	

2.7 | FileCreateTs

Element	FileCreateTs
Attribute(s)	N/A
Size/Pattern	YYYY-MM-DDTHH:MM:SS.msTZD
Namespace/ Prefix	N/A
Datatype	TimestampWithMillisecondsType
Requirement	Mandatory
Description:	■ Element identifies the timestamp for the transmission payload created by the sender application. ■ TZD represents the time zone. If Coordinated Universal Time (UTC), Z should be used. Recommend UTC. ■ If local time, then the correct time zone should be included, such as -05:00. Do not enter 00 as the month.
Example:	2014-11-30T00:00:00Z 2014-11-30T00:00:00.123Z 2014-11-30T00:00:00.1234-05:00

2.8 | TaxYear

Element	TaxYear
Attribute(s)	N/A
Size/Pattern	YYYY
Namespace/ Prefix	N/A
Datatype	gYear
Requirement	Mandatory
Description:	■ Element identifies the FATCA report tax year of the message YYYY format. ■ Reporting information for the accounts or payments made in the tax year 2014, enter "2014." Do not enter a future year.

2.9 | FileRevisionInd

Element	FileRevisionInd
Attribute(s)	N/A
Size/Pattern	true or false
Namespace/ Prefix	N/A
Datatype	Boolean
Requirement	Mandatory
Description:	Element is a Boolean fi to indicate if the fi is a revised message. The only allowable values are "true" or "false."

2.10 | OriginalIDESTransmissionId

Element	OriginalIDESTransmissionId
Attribute(s)	N/A
Size/Pattern	32 character unique ID
Namespace/ Prefix	N/A
Datatype	String
Requirement	Optional
Description:	■ Element is a free text field to reference the unique original IDES transmission ID. ■ The identifier helps both the sender and receiver to track and monitor messages. ■ If sending an amended, corrected or voided report, leave blank. ■ If sending a report, this field references the OriginalIDESTransmissionID associated with the previously failed transmission. ■ If sending a Notification or CAR, this field references the OriginalIDESTransmissionID associated with the original report.

Element	SenderContactEmailAddressTxt
Attribute(s)	N/A
Size/Pattern	Maximum length 200 characters
Namespace/ Prefix	N/A
Datatype	String
Requirement	Optional
Description:	Element is a free text field to identify the sender email address.

3 Appendix

Samples are for illustrative purposes only. Do not use during testing. For more information on schema files, visit **FATCA XML Schemas for Form 8966** page.

3.1 | Appendix A: FATCA XML Metadata Sample - FATCA Report (RPT)

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!--Sample XML file generated by XMLSpy v2014 rel. 2 (http://www.altova.com)-->
<FATCAIDESSenderFileMetadata xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="urn:fatca:idessenderfilemetadata">
    <FATCAEntitySenderId>000000.00000.TA.124</FATCAEntitySenderId>
    <FATCAEntityReceiverId>000000.00000.TA.840</FATCAEntityReceiverId>
    <FATCAEntCommunicationTypeCd>RPT</FATCAEntCommunicationTypeCd>
    <SenderFileId>000000.00000.TA.124_Payload.xml</SenderFileId>
    <FileFormatCd>XML</FileFormatCd>
    <BinaryEncodingSchemeCd>NONE</BinaryEncodingSchemeCd>
    <FileCreateTs>2015-06-30T00:00:00Z</FileCreateTs>
    <TaxYear>2014</TaxYear>
    <FileRevisionInd>true</FileRevisionInd>
    <OriginalIDESTransmissionId>c19d4f557daf461fbb6d601b74c821a2</OriginalIDESTransmissionId>
</FATCAIDESSenderFileMetadata>
```

Figure 4: IDES Metadata Sample

Figure 4 Sample Details:

- HCTA sends a revised FATCA Report to the US and includes the original transmission ID.

- HCTA Sender: Canada

- HCTA Receiver: U.S.

- Tax reporting year: 2014

- Report: FATCA Report (RPT)

3.2 | Appendix B: FATCA XML Metadata Sample - Notifications

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!--Sample XML file generated by XMLSpy v2014 rel. 2 (http://www.altova.com)-->
<FATCAIDESSenderFileMetadata    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="urn:fatca:idessenderfilemetadata">
        <FATCAEntitySenderId>000000.00000.TA.840</FATCAEntitySenderId>
        <FATCAEntityReceiverId>000000.00000.TA.124</FATCAEntityReceiverId>
        <FATCAEntCommunicationTypeCd>NTF</FATCAEntCommunicationTypeCd>
        <SenderFileId>000000.00000.TA.840_Payload.xml</SenderFileId>
        <FileFormatCd>XML</FileFormatCd>
        <BinaryEncodingSchemeCd>NONE</BinaryEncodingSchemeCd>
        <FileCreateTs>2015-06-30T00:00:00Z</FileCreateTs>
        <TaxYear>2014</TaxYear>
        <FileRevisionInd>false</FileRevisionInd>
        <OriginalIDESTransmissionId>a7c6363de36f4c2192856b4d3283747c</OriginalIDESTransmissionId>
</FATCAIDESSenderFileMetadata>
```

Figure 5: IDES Metadata Sample - NTF

Figure 5 Sample Details:

- HCTA receives a FATCA Report notification from the U.S. The file format is XML.

- HCTA Sender: U.S

- HCTA Receiver: Canada

- Tax reporting year: 2014

- Report: FATCA Report Notification (NTF)

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!--Sample XML file generated by XMLSpy v2014 rel. 2 (http://www.altova.com)-->
<FATCAIDESSenderFileMetadata    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="urn:fatca:idessenderfilemetadata">
    <FATCAEntitySenderId>000000.00000.TA.124</FATCAEntitySenderId>
    <FATCAEntityReceiverId>000000.00000.TA.840</FATCAEntityReceiverId>
    <FATCAEntCommunicationTypeCd>NTF</FATCAEntCommunicationTypeCd>
    <SenderFileId>000000.00000.TA.124_Payload.xml</SenderFileId>
    <FileFormatCd>PDF</FileFormatCd>
    <BinaryEncodingSchemeCd>BASE64</BinaryEncodingSchemeCd>
    <FileCreateTs>2015-09-30T00:00:00Z</FileCreateTs>
    <TaxYear>2014</TaxYear>
    <FileRevisionInd>false</FileRevisionInd>
    <OriginalIDESTransmissionId>c646151fe7ed4bd696efc8efe49226ac</OriginalIDESTransmissionId>
</FATCAIDESSenderFileMetadata>
```

Figure 6: IDES Metadata Sample – NTF to IRS

Figure 6 Sample Details:

■ IRS receives PDF file notification from the U.S. The file format is PDF format and the encoding value is 'BASE64'.

■ HCTA Sender: Canada

■ HCTA Receiver: U.S.

■ Tax reporting year: 2014

■ Report: FATCA Report Notification (NTF)

3.4 | Appendix D: FATCA XML Metadata Sample – Competent Authority Request (CAR)

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!--Sample XML file generated by XMLSpy v2014 rel. 2 (http://www.altova.com)-->
<FATCAIDESSenderFileMetadata    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="urn:fatca:idessenderfilemetadata">
    <FATCAEntitySenderId>000000.00000.TA.840</FATCAEntitySenderId>
    <FATCAEntityReceiverId>000000.00000.TA.060</FATCAEntityReceiverId>
    <FATCAEntCommunicationTypeCd>CAR</FATCAEntCommunicationTypeCd>
    <SenderFileId>000000.00000.TA.840_Payload.xml</SenderFileId>
    <FileFormatCd>PDF</FileFormatCd>
    <BinaryEncodingSchemeCd>BASE64</BinaryEncodingSchemeCd>
    <FileCreateTs>2015-06-30T00:00:00Z</FileCreateTs>
    <TaxYear>2014</TaxYear>
    <FileRevisionInd>false</FileRevisionInd>
    <OriginalIDESTransmissionId>a7c6363de36f4c2192856b4d3283747c</OriginalIDESTransmissionId>
</FATCAIDESSenderFileMetadata>
```

Figure 7: IDES Metadata Sample – CAR

Figure 7 Sample Details:

- HCTA receives a CAR from the U.S. The file format is PDF format and the encoding value is 'Base64'.

- HCTA Sender: U.S

- HCTA Receiver: Bermuda

- Tax reporting year: 2014

- Report: Competent Authority Request (CAR)