



# **EDGAR<sup>®</sup> Submission Type SH-ER Information Table XML Technical Specification**

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## 1.0 INTRODUCTION

### 1.1 PURPOSE

This document details the valid structure and content of the Electronic Data Gathering, Analysis, and Retrieval (EDGAR) Submission Type SH-ER Information Table Extensible Markup Language (XML) document type for the following submission types.

Submission Type	Description
SH-ER	Weekly Form SH Entries Report Filed by Institutional Investment Managers
SH-ER/A	Amendment to a Weekly Form SH Entries Report Filed by Institutional Investment Managers

This specification provides a basis for creating the XML document without the use of the EDGAR SH-ER Information Table PDF.

The Submission Type SH-ER Information Table document file must conform to the EDGAR Submission Type SH-ER Information Table document taxonomy. The taxonomy is a collection of XML Schema Definition (.xsd) files that define the structure of an EDGAR Submission Type SH-ER Information Table document.

### 1.2 Summary of Changes:

The system will begin to validate the Submission Type SH-ER Information Table XML documents against the schema and will suspend the SH-ER submission if the XML document violates the schema. In addition, the schema has been modified to allow for short sale data to be provided for more than one CIK. The following specific changes have been implemented:

- The XML schema version has been updated to X0200.
- A new parent tag <informationTableData> has been added as a mandatory tag.
- All of the following elements become mandatory in the XML schema if the short sale data is provided.
  1. <nameOfIssure>
  2. <cusip>
  3. <shortStartPosition>
  4. <numberSecuritiesSoldShort>
  5. <shortEndPosition>

- The <shortStartPosition>, <numberSecuritiesSoldShort>, and <shortEndPosition> elements of the <SHORT\_SALE\_DATA\_TYPE> have been changed to accept only positive integer values, zero, NA (case insensitive) or N/A (case insensitive).
- The <cusip> element of the <SHORT\_SALE\_DATA\_TYPE> has been changed to only accept 9 alphanumeric characters.

## 2.0 EDGAR SCHEMA FILES

These are the Schema files that the EDGAR system uses to validate Submission Type SH-ER Information Table document. They are considered part of this specification and are distributed with this document.

XML Schema File	Scope of File
edgarSubmissionCommon.xsd.xml	Defines the submission “header” fields that can be included in the document file for Submission Type SH-ER Information Table documents.
subtypeSH-ER.xsd.xml	Defines elements that are common to all Submission Type SH-ER Information Table documents.
filedByCompany.xsd.xml	Defines elements that are common to all submission filings like CIK, CCC and Entity Type
stateCodes.xsd.xml	Defines states that are common to all the Submission Type SH-ER Information Table documents

These files define the valid data elements for an Submission Type SH-ER Information Table document, the hierarchy and sequencing of these elements, data types, valid values, maximum lengths, number of occurrences, etc.

It is recommended that you download these files and use them for your own validation prior to transmitting a submission. This will greatly reduce the likelihood of receiving an EDGAR Suspense error. These Schema files contain several annotations that describe the nature of the content of some of the elements.

EDGAR does perform several validation checks that are not related to the Schema files, so it is possible for a submission to meet all the Schema constraints and still be SUSPENDED or BLOCKED. For instance, EDGAR verifies that each Primary Issuer Central Index Key (CIK)/ CIK Confirmation Code (CCC ) pair is valid.

### 2.1 Key Schema Indicators

We assume the filer is familiar with the basics of the XML language, Namespaces, and the XML Schema Definition language. If not, you can find numerous references on the World Wide Web. One recommended website that provides several useful tutorials and examples is <http://www.w3schools.com/>.

We would, however, like to highlight the Schema language features used most heavily in the EDGAR Submission Type SH-ER Information Table Schema file. These are:

Indicator	Purpose
<sequence>	Specifies that child elements must appear in a specific order. This indicator is used with each element hierarchy. Elements must always appear in the order shown in Sections 3.4 and 3.5.
<minOccurs>	Specifies the minimum number of times that an element can occur
<maxOccurs>	Specifies the maximum number of times that an element can occur

The default value <maxOccurs> occurrence indicator is 1. An optional field will have a <minOccurs> value of zero. This excerpt from the subtypeSH-ER.xsd Schema file includes all three of these indicators.

```
<xs:complexType name="SHORT_SALE_DATA_INFO">
  <xs:sequence>
    <xs:element name="sundayData" type="SHORT_SALE_DATA_LIST" minOccurs="0" maxOccurs="1"/>
    <xs:element name="mondayData" type="SHORT_SALE_DATA_LIST" minOccurs="0" maxOccurs="1"/>
    <xs:element name="tuesdayData" type="SHORT_SALE_DATA_LIST" minOccurs="0" maxOccurs="1"/>
    <xs:element name="wednesdayData" type="SHORT_SALE_DATA_LIST" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="thursdayData" type="SHORT_SALE_DATA_LIST" minOccurs="0" maxOccurs="1"/>
    <xs:element name="fridayData" type="SHORT_SALE_DATA_LIST" minOccurs="0" maxOccurs="1"/>
    <xs:element name="saturdayData" type="SHORT_SALE_DATA_LIST" minOccurs="0" maxOccurs="1"/>
  </xs:sequence>
</xs:complexType>
```

This is a section of a sample XML document that conforms to the Schema definition given above.

```
<sundayData>
  <saleDate>2008-10-13</saleDate>
  <shortSaleDataList>
    <nameOfIssuer>company name</nameOfIssuer>
    <cusip>999999999</cusip>
    <shortStartPosition>1000</shortStartPosition>
    <numberSecuritiesSoldShort>5000</numberSecuritiesSoldShort>
    <shortEndPosition>5000</shortEndPosition>
  </shortSaleDataList>
</sundayData>
<mondayData>
  <saleDate>2008-10-14</saleDate>
  <shortSaleDataList>
    <nameOfIssuer>company name</nameOfIssuer>
    <cusip>999999998</cusip>
    <shortStartPosition>1000</shortStartPosition>
    <numberSecuritiesSoldShort>5000</numberSecuritiesSoldShort>
    <shortEndPosition>5000</shortEndPosition>
  </shortSaleDataList>
</mondayData>
```

### 3.0 XML SCHEMAS

This section summarizes the restrictions and constraints imposed on the content of the Submission Type SH-ER Information Table documents. These rules are enforced by the Schema files.

#### 3.1 Schema Table Column Definitions

The following defines the columns in the two Schema Summation tables provided in Sections 3.4 and 3.5.

Column Name	Description
Level	Depth of element in the XML node hierarchy
Order	Order in which elements must appear
Data Type	See the Data Type Constraints table for a detailed description
Element Name	Name of the XML element. This is case-sensitive
Max Length	Maximum length for String fields. EDGAR database stores up to this number of characters
Max Occur	Maximum times a set of elements may be repeated
Submission Type – SH-ER	Identifies if the particular element is optional (o), mandatory (m), conditionally mandatory (cm).
Submission Type – SH-ER/A	Identifies if the particular element is optional (o), mandatory (m), conditionally mandatory (cm).

#### 3.2 Data Type Constraints

Each entry in the “Data Type” column of these tables will be one of these values.

Data Type	Constraints		
boolean	Indicate a “true” value with either a “1” or the word “true.” Indicate a “false” value with either a “0” or the word “false.” A boolean element may not have a null or blank value. This is a Schema violation and will cause a SUSPENSE error.		
date	Must be of the format YYYY-MM-DD. A date element may not have a null or blank value. This is a Schema violation and will cause a SUSPENSE error. Do not include a date element at all if your goal is to not provide an optional date.		
string	Should not be longer than the length shown in the tables in Sections 3.4 and 3.5. <signatureName>, and <contactEmailAddress> elements exactly as provided. All other values are stored in the database as uppercase.  You must use special escape sequences to represent these four characters: <table><tr><td></td><td>Escape</td></tr></table>		Escape
	Escape		

Data Type		Constraints	
		Character	Sequence
		<	&lt; or &#60;
		>	&gt; or &#62;
		&	&amp; or &#38;
		“	&quot; or &#34;
NV	These fields cannot have a value. They only contain other XML elements; however, they do need to be present for proper validation		

### 3.3 Applicability of Schema Elements

Each entry in the Submission Type SH-ER Information Table document columns in the tables in Sections 3.4 and 3.5 will have one of these values.

Value	Description
m	Mandatory
cm	Conditional Mandatory. The element is mandatory if its parent element is included. The element cannot be included if its parent is not included.
o	Optional
NA	Does not apply to submission type. EDGAR uses this field for server-side processing. Do not provide a value for this element.
blank	Does not apply to submission type

### 3.4 Mapping of Submission Type SH-ER Information Table Schema to Submission Types

Level	Order	Data Type	Element Name	Max Length	Max Occur	Submission Type SH-ER	Submission Type SH-ER/A
1	1	NV	edgarDocument			m	m
2	1	NV	informationTableData		unbounded	m	m
3	1	string	cik	10	1	m	m
3	2	NV	shortSaleDataInfo		1	m	m
4	1	NV	sundayData			o	o
5	1	Date	saleDate	Date	1	cm	cm
5	2	NV	shortSaleDataList		unbounded	o	o
6	1	String	nameOfIssuer	150	1	cm	cm
6	2	String	cusip	9	1	cm	cm
6	3	String	shortStartPosition	12	1	cm	cm
6	4	String	numberSecuritiesSoldShort	12	1	cm	cm
6	5	String	shortEndPosition	12	1	cm	cm
4	2	NV	mondayData			o	o
5	1	Date	saleDate	Date	1	cm	cm
5	2	NV	shortSaleDataList		unbounded	o	o
6	1	String	nameOfIssuer	150	1	cm	cm
6	2	String	cusip	9	1	cm	cm
6	3	String	shortStartPosition	12	1	cm	cm
6	4	String	numberSecuritiesSoldShort	12	1	cm	cm

Level	Order	Data Type	Element Name	Max Length	Max Occur	Submission Type	
						SH-ER	SH-ER/A
6	5	String	shortEndPosition	12	1	cm	cm
4	3	NV	tuesdayData			o	o
5	1	Date	saleDate	Date	1	cm	cm
5	2	NV	shortSaleDataList		unbounded	o	o
6	1	String	nameOfIssuer	150	1	cm	cm
6	2	String	cusip	9	1	cm	cm
6	3	String	shortStartPosition	12	1	cm	cm
6	4	String	numberSecuritiesSoldShort	12	1	cm	cm
6	5	String	shortEndPosition	12	1	cm	cm
4	4	NV	wednesdayData			o	o
5	1	Date	saleDate	Date	1	cm	cm
5	2	NV	shortSaleDataList		unbounded	o	o
6	1	String	nameOfIssuer	150	1	cm	cm
6	2	String	cusip	9	1	cm	cm
6	3	String	shortStartPosition	12	1	cm	cm
6	4	String	numberSecuritiesSoldShort	12	1	cm	cm
6	5	String	shortEndPosition	12	1	cm	cm
4	5	NV	thursdayData			o	o
5	1	Date	saleDate	Date	1	cm	cm
5	2	NV	shortSaleDataList		unbounded	o	o
6	1	String	nameOfIssuer	150	1	cm	cm
6	2	String	cusip	9	1	cm	cm

Level	Order	Data Type	Element Name	Max Length	Max Occur	Submission Type	
						SH-ER	SH-ER/A
6	3	String	shortStartPosition	12	1	cm	cm
6	4	String	numberSecuritiesSoldShort	12	1	cm	cm
6	5	String	shortEndPosition	12	1	cm	cm
4	6	NV	fridayData			o	o
5	1	Date	saleDate	Date	1	cm	cm
5	2	NV	shortSaleDataList		unbounded	o	o
6	1	String	nameOfIssuer	150	1	cm	cm
6	2	String	cusip	9	1	cm	cm
6	3	String	shortStartPosition	12	1	cm	cm
6	4	String	numberSecuritiesSoldShort	12	1	cm	cm
6	5	String	shortEndPosition	12	1	cm	cm
4	7	NV	saturdayData			o	o
5	1	Date	saleDate	Date	1	cm	cm
5	2	NV	shortSaleDataList		unbounded	o	o
6	1	String	nameOfIssuer	150	1	cm	cm
6	2	String	cusip	9	1	cm	cm
6	3	String	shortStartPosition	12	1	cm	cm
6	4	String	numberSecuritiesSoldShort	12	1	cm	cm
6	5	String	shortEndPosition	12	1	cm	cm

## 4.0 BASIC SUBMISSION CONSTRUCTION

### 4.1 General Submission and Formatting of XML Files

These rules apply to the document file of an XML-format SH-ER Information Table attachment for Submission Type SH-ER and SH-ER/A submissions:

1. The filename must end with an “.xml” extension.
2. The file cannot be compressed in any fashion.
3. We strongly recommend you format the document file as shown in the provided sample files. This makes the raw XML files easier to view in a text editor. The submission of ASCII XML files with no line breaks, while legal XML, is strongly discouraged. XML filings are required to be posted on public websites. While usually formatted via style sheets, the raw XML is frequently available for inspection and should be readable by the user. The SEC will not be reformatting XML files for readability. A single line XML file is not viewer-friendly and should be avoided.
4. The `<?xml version="1.0" encoding="UTF-8"?>` declaration line is optional; however if it is included it must be the first line in the file. Any text before this line, even white space, will cause a SUSPENSE error. The version value must be “1.0.” Any other value for version will cause a SUSPENSE error.
5. For an XML element with a data value, keep the begin tag, data value, and end tag on the same line of text. Otherwise, you could get a Schema violation error. As an example, for a Issuer CIK value which cannot be longer than 10 characters, this specification is correct:

```
<cik>1212121212</cik>
```

6. This specification will result in a parsing error because the extraneous white space and line feeds will be counted as part of the length of the data value. In other words, the CIK value will be regarded as longer than 10 characters.

```
<cik>
1212121212
</cik>
```

7. The document file must conform to the `edgarSubmissionCommon.xsd.xml` XML Schema file.

## **4.2 XML Document Rules**

The document must conform to the subtypeSH-ER.xsd.xml XML Schema file. The table in Section 3.4 provides a detailed summary of the XML elements that apply to each submission type. The following sections reinforce and supplement the contents of this table.

## 5.0 SUBMISSION TYPE SH-ER INFORMATION TABLE

The document files listed below provide examples of the Submission Type SH-ER and SH-ER/A information table attachment document file name.

Document Type	Document File
SH-ER	informationtablesh-er.xml
SH-ER/A	informationtablesh-er.xml

## **APPENDIX A - ACRONYMS**

ASCII	American Standard Code for Information Interchange
CCC	CIK Confirmation Code
CIK	Central Index Key
EDGAR	Electronic Data Gathering, Analysis, and Retrieval
PDF	Portable Document Format
SEC	Securities and Exchange Commission
XML	Extensible Markup Language