



Version 2.6

# **EDGAR® Form N-CEN XML Technical Specification**

February 2021

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# 1 INTRODUCTION

## 1.1 Purpose

This document details the valid structure and content of the Form N-CEN Electronic Data Gathering, Analysis, and Retrieval (EDGAR) Extensible Markup Language (XML) submission types. The following table lists the submission types for Form N-CEN.

**Table 1-1: N-CEN Submission Types**

| SUBMISSION TYPE | DESCRIPTION                                                    |
|-----------------|----------------------------------------------------------------|
| N-CEN           | Annual Report for Registered Investment Companies              |
| N-CEN/A         | Amendment to Annual Report for Registered Investment Companies |

This specification provides the basis for creating the aforementioned submission types for N-CEN XML submissions. Filers must use this technical specification to generate a N-CEN XML submission that can be successfully parsed by the EDGAR system.

The N-CEN submission file must conform to the EDGAR N-CEN Submission Taxonomy. This taxonomy is comprised of a collection of XML Schema Definition (.xsd) files that define the structures of EDGAR N-CEN submissions.

The N-CEN XML submissions can be transmitted to the SEC via the EDGAR FilerWeb (<https://www.edgarfiling.sec.gov/>) or the “Transmit XML Submission” option from the EDGAR OnlineForms Website (<https://www.onlineforms.edgarfiling.sec.gov/>).

In order to use the EDGAR FilerWeb or OnlineForms Website, you must have a Central Index Key (CIK) and EDGAR access codes (password, CIK confirmation code (CCC)). If you currently have a CIK and access codes, you can proceed to the EDGAR FilerWeb or OnlineForms Website to submit your submission. If you do not have access codes, you will need to obtain access codes through the EDGAR Filer Management website (<https://www.filermanagement.edgarfiling.sec.gov/>). For further information regarding how to obtain access codes, refer to the “Becoming an EDGAR Filer” section of the EDGAR Filer Manual, Volume I (General Information).

For further information regarding the EDGAR FilerWeb or OnlineForms Website, specifically in regards to the transmission of filer-constructed submissions, refer to the Filer Constructed XML Submissions section of the EDGAR Filer Manual, Volume II (EDGAR Filing).

## 1.2 Summary of Changes

On February 25, 2021, EDGAR Urgent Release 21.0.2.u1 introduced the following changes:

- Text for Country GEORGIA is changed to GEORGIA (COUNTRY) in eis\_Common.xsd file.
- Text for Country GEORGIA is changed to GEORGIA (COUNTRY) in eis\_stateCodes.xsd file.

## 2 EDGAR SCHEMA FILES

**Table 2 1: N-CEN Schema Files** describes the schema files that the EDGAR system uses to validate N-CEN submissions. These schemas are considered part of this specification and are distributed with this document.

**Table 2-1: N-CEN Schema Files**

| XML Schema File          | Scope of File                                               |
|--------------------------|-------------------------------------------------------------|
| eis_NCEN_Filer.xsd       | Defines the elements for a N-CEN submission                 |
| eis_NCEN_Common.xsd      | Defines common elements for N-CEN submission                |
| eis_Common_SC.xsd        | Defines series and class elements for all EDGAR submissions |
| eis_Common.xsd           | Defines the common elements for all EDGAR submissions       |
| eis_ISO_ExchangeList.xsd | Defines ISO Exchange codes for all N-CEN submissions        |
| eis_ISO_StateCodes.xsd   | Defines ISO State Country codes for all N-CEN submissions   |
| eis_stateCodes.xsd       | Defines State Country codes referred in eis_Common.xsd.     |

The schema files define the valid data elements for a Form N-CEN submission, the hierarchy and sequencing of these elements, data types, valid values, maximum lengths, and number of occurrences, etc.

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

EDGAR performs 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 CIK/CCC pair is valid.

### 2.1 Schema Table Column Definitions

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/>.

The table below highlights the schema language features used most heavily in the EDGAR N-CEN submission schema files. These are:

**Table 2-2: Schema Language**

| 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 Section 3.4. |
| <choice>    | Specifies that only one of the child elements can be present within the containing element.                                                                                       |
| <minOccurs> | Specifies the minimum number of times that an element can occur.                                                                                                                  |
| <maxOccurs> | Specifies the maximum number of times that an element can occur.                                                                                                                  |

### 3 XML SCHEMAS

This section summarizes the restrictions and constraints imposed on the content of the N-CEN submission types. These rules are enforced by the schema files and by EDGAR submission processing applications.

The schema files cannot enforce all the rules concerning data content, so it is possible for a submission to satisfy all the schema constraints and still be **SUSPENDED** or **BLOCKED** by EDGAR.

#### 3.1 Schema Table Column Definitions

The following table defines the columns in the two schema summation tables provided in Sections 3.4:

**Table 3-1: Column Definitions for the Tables in Section 3-4**

| Column Name              | Description                                                                                                                                                                            |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Level                    | Depth of element in the XML node hierarchy.                                                                                                                                            |
| Order                    | Order in which elements must appear.                                                                                                                                                   |
| Data Type                | See Table in Section 3.2 for a detailed description.                                                                                                                                   |
| Element Name             | Name of the XML element. This is case-sensitive.                                                                                                                                       |
| Data Value Constraint    | The paragraph that describes the data value constraint for the element. The values specified are case sensitive.                                                                       |
| Max Occur                | Maximum times a set of elements may be repeated. The maximum occurrence is 1, if not specified.                                                                                        |
| Applicability of Element | Indicates applicability of the element. m = Mandatory, o = Optional, NA = Does Not Apply. EDGAR uses this element for server-side processing. Do not provide a value for this element. |
| Max Length               | Maximum length for elements. EDGAR database stores up to this number of characters. "Unlimited" means no maximum length constraint for the element value.                              |

#### 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".<br>Indicate a "false" value with either a "0" or the word "false".<br>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.                |
| integer   | Only valid characters are 0-9. Cannot contain commas, a minus sign, a dollar sign, or parentheses.<br>An integer element may not have a null or blank value. This is a schema violation and will cause a SUSPENSE error.                              |

| Data Type | Constraints                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |                 |   |               |   |               |   |                |   |                 |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------------|---|---------------|---|---------------|---|----------------|---|-----------------|
| Decimal   | Only valid characters are 0-9 and a period. Cannot contain commas, dollar sign, or parentheses. EDGAR is equipped with storing a maximum of 24 digits (with no restriction on the number of digits after a floating point; if floating point is provided). A decimal element may not have a null or blank value. This is a schema violation and will cause a SUSPENSE error. Do not include a decimal element at all if your goal is to not provide an optional number.                                                                                                                                                                         |           |                 |   |               |   |               |   |                |   |                 |
| String    | <p>Should be no longer than the length shown in the tables in Section 3.4.</p> <p>EDGAR stores values in the &lt;signatureName&gt;, and &lt;contactEmailAddress&gt; elements exactly as provided. All other values are stored in the database as uppercase.</p> <p>You must use special escape sequences to represent these four characters:</p> <table> <tr> <th>Character</th><th>Escape Sequence</th></tr> <tr> <td>&lt;</td><td>&amp;lt; or &amp;#60;</td></tr> <tr> <td>&gt;</td><td>&amp;gt; or &amp;#62;</td></tr> <tr> <td>&amp;</td><td>&amp;amp; or &amp;#38;</td></tr> <tr> <td>"</td><td>&amp;quot; or &amp;#34;</td></tr> </table> | Character | Escape Sequence | < | &lt; or &#60; | > | &gt; or &#62; | & | &amp; or &#38; | " | &quot; or &#34; |
| Character | Escape Sequence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |           |                 |   |               |   |               |   |                |   |                 |
| <         | &lt; or &#60;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |           |                 |   |               |   |               |   |                |   |                 |
| >         | &gt; or &#62;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |           |                 |   |               |   |               |   |                |   |                 |
| &         | &amp; or &#38;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           |                 |   |               |   |               |   |                |   |                 |
| "         | &quot; or &#34;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |           |                 |   |               |   |               |   |                |   |                 |
| NV        | These fields cannot have a value. They are parent element nodes that contain other XML elements. These elements need to be present for proper validation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           |                 |   |               |   |               |   |                |   |                 |
| attr      | Attribute property for an XML element.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           |                 |   |               |   |               |   |                |   |                 |

### 3.3 Applicability of Schema Elements

Each entry in the submission/document type column in Section 3.4 will have one of these values:

| Value | Description                                                                                  |
|-------|----------------------------------------------------------------------------------------------|
| M     | Mandatory.                                                                                   |
| m#    | Conditional Mandatory. The element is mandatory if its parent element is included.           |
| m#1   | If <confirmingCopyFlag> is "true", then the element becomes mandatory.                       |
| m#2   | If <investmentCompanyType> is N-1A or N-3 or N-4 or N-6, then the element becomes mandatory. |
| m#3   | If <registrantCountry> is US, then the element becomes mandatory.                            |
| m#4   | Mandatory, Should provide the same value as <investmentCompanyType>                          |
| m#5   | If <investmentCompanyType> is N-1A, then the element becomes mandatory.                      |
| m#6   | If <investmentCompanyType> is N-1A or N-2 or N-3 or N-5, then the element becomes mandatory. |
| m#7   | If <investmentCompanyType> is N-1A or N-3 then the element becomes mandatory.                |
| m#8   | If <paymentToAgentManagerType> is "Other" then the element becomes mandatory.                |
| m#9   | If <custodyType> is "Other" then the element becomes mandatory.                              |

| Value | Description                                                                                                                                                                                                                                                                                                                                                                                         |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| m#10  | If "Money Market Fund" was provided as one of the <fundType> then the element becomes mandatory.                                                                                                                                                                                                                                                                                                    |
| m#11  | If <description> is "Other" then this element becomes mandatory.                                                                                                                                                                                                                                                                                                                                    |
| m#12  | If <rightsOfferingType> is "Other" then this element becomes mandatory.                                                                                                                                                                                                                                                                                                                             |
| m#13  | If <secondaryOfferingType> is "Other" then this element becomes mandatory.                                                                                                                                                                                                                                                                                                                          |
| m#14  | If <repurchaseSecurityType> is "Other" then this element becomes mandatory.                                                                                                                                                                                                                                                                                                                         |
| m#15  | If <investmentCompanyType> is N-2 then the element becomes mandatory.                                                                                                                                                                                                                                                                                                                               |
| m#16  | If "Common Stock" was provided as one of the <repurchaseSecurityType> then the element becomes mandatory.                                                                                                                                                                                                                                                                                           |
| m#17  | If <custodyType> is "Other" then the element becomes mandatory.                                                                                                                                                                                                                                                                                                                                     |
| m#18  | If <investmentCompanyType> is N-1A or N-2 or N-3 then the element becomes mandatory and should match with one of the <mgmtInvFundName> in <managementInvestmentQuestion>                                                                                                                                                                                                                            |
| m#19  | If <investmentCompanyType> is S-6 then this element becomes mandatory.                                                                                                                                                                                                                                                                                                                              |
| m#20  | If <numOfExistingSeries> is greater than zero then the element becomes mandatory.                                                                                                                                                                                                                                                                                                                   |
| m#21  | If <isRegistrantSeparateInsuranceAccount> is "Y" or <investmentCompanyType> is N-3 then this element becomes mandatory.                                                                                                                                                                                                                                                                             |
| m#22  | If <investmentCompanyType> is N-1A or N-2 or N-3, <managementInvestmentQuestion> is provided, <indexFundInfo> and <masterFeederFundInfo> are not provided then the element becomes mandatory. Note : In one <managementInvestmentQuestion> either "Exchange-Traded Fund" or "Exchange-Traded Managed Fund" is allowed.                                                                              |
| m#23  | If <investmentCompanyType> is N-1A or N-2 or N-3, <managementInvestmentQuestion> is provided <fundType> and <masterFeederFundInfo> are not provided then the element becomes mandatory.                                                                                                                                                                                                             |
| m#24  | If <investmentCompanyType> is N-1A or N-2 or N-3, <managementInvestmentQuestion> is provided, <fundType> and <indexFundInfo> are not provided then the element becomes mandatory.                                                                                                                                                                                                                   |
| m#25  | If <hasLineOfCredit> or <lineOfCredit> is provided then this element becomes mandatory.                                                                                                                                                                                                                                                                                                             |
| m#26  | If <principalName> is provided then this element becomes mandatory.                                                                                                                                                                                                                                                                                                                                 |
| c#1   | <p>If &lt;investmentCompanyType&gt; is N-1A or N-2 or N-3 then the element becomes mandatory.</p> <p>If &lt;investmentCompanyType&gt; is N-5 then the element becomes optional.</p> <p>If &lt;investmentCompanyType&gt; is N-4 or N-6 or S-6 then the element becomes not applicable.</p>                                                                                                           |
| c#2   | <p>If &lt;investmentCompanyType&gt; is N-1A or N-3 and &lt;managementInvestmentQuestion&gt; is provided then the element becomes mandatory.</p> <p>If &lt;investmentCompanyType&gt; is N-2 and &lt;managementInvestmentQuestion&gt; is provided then the element becomes optional.</p> <p>If &lt;investmentCompanyType&gt; is N-4 or N-5 or N-6 or S-6 then the element becomes not applicable.</p> |

| Value | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| c#3   | <p>If &lt;investmentCompanyType&gt; is N-1A or N-3, &lt;managementInvestmentQuestion&gt; is provided and &lt;numAuthorizedClass&gt; is greater than or equal to 1 then the element becomes mandatory.</p> <p>If &lt;investmentCompanyType&gt; is N-2 and &lt;managementInvestmentQuestion&gt; is provided then the element becomes optional.</p> <p>If &lt;investmentCompanyType&gt; is N-4 or N-5 or N-6 or S-6 then the element becomes not applicable.</p>                                                                                                                                                                                                                                                                |
| c#4   | <p>If &lt;investmentCompanyType&gt; is N-1A or N-2 or N-3 and "Exchange-Traded Fund" or "Exchange-Traded Managed Fund" was provided as one of the &lt;fundType&gt; in any of the &lt;managementInvestmentQuestion&gt; then the element becomes mandatory.</p> <p>If &lt;investmentCompanyType&gt; is N-1A or N-2 or N-3 and "Exchange-Traded Fund" or "Exchange-Traded Managed Fund" was not provided as one of the &lt;fundType&gt; in all of the &lt;managementInvestmentQuestion&gt; then the element becomes not applicable.</p> <p>If &lt;investmentCompanyType&gt; is S-6 then the element becomes optional.</p> <p>If &lt;investmentCompanyType&gt; is N-4 or N-5 or N-6 then the element becomes not applicable.</p> |
| c#5   | <p>If &lt;investmentCompanyType&gt; is N-5 then the element becomes mandatory.</p> <p>If &lt;investmentCompanyType&gt; is N-2 then the element becomes optional.</p> <p>If &lt;investmentCompanyType&gt; is N-1A or N-3 or N-4 or N-6 or S-6 then the element becomes not applicable.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| c#6   | <p>If &lt;investmentCompanyType&gt; is N-5 then the element becomes mandatory.</p> <p>If &lt;investmentCompanyType&gt; is N-1A or N-2 or N-3 or N-4 or N-6 or S-6 then the element becomes not applicable.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| c#7   | <p>If "Exchange-Traded Fund" or "Exchange-Traded Managed Fund" was provided as one of the &lt;fundType&gt; in the &lt;managementInvestmentQuestion&gt; then in the associated &lt;exchangeTradedFund&gt; element becomes mandatory.</p> <p>If "Exchange-Traded Fund" or "Exchange-Traded Managed Fund" was not provided as one of the &lt;fundType&gt; in any of the &lt;managementInvestmentQuestion&gt; then the element becomes not applicable.</p>                                                                                                                                                                                                                                                                       |

| Value | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| c#8   | <p>If &lt;investmentCompanyType&gt; is N-1A or N-3, and “Exchange-Traded Fund” or “Exchange-Traded Managed Fund” was provided as one of the &lt;fundType&gt; in the &lt;managementInvestmentQuestion&gt; then in the associated &lt;exchangeTradedFund&gt; the element becomes mandatory.</p> <p>If &lt;investmentCompanyType&gt; is N-2, and “Exchange-Traded Fund” or “Exchange-Traded Managed Fund” was provided as one of the &lt;fundType&gt; in any of the &lt;managementInvestmentQuestion&gt; then in the associated &lt;exchangeTradedFund&gt; the element becomes optional.</p> <p>If &lt;investmentCompanyType&gt; is N-4, N-5, N-6 or S-6 or &lt;investmentCompanyType&gt; is N-1A, N-2 or N-3 and “Exchange-Traded Fund” or “Exchange-Traded Managed Fund” was not provided as one of the &lt;fundType&gt; in any of the &lt;managementInvestmentQuestion&gt; then the element becomes not applicable.</p> |
| O     | Optional.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| o#1   | <p>If &lt;investmentCompanyType&gt; is N-1A, then the element becomes optional.</p> <p>If &lt;investmentCompanyType&gt; is N-2 or N-3 or N-4 or N-5 or N-6 or S-6 then the element becomes not applicable.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| o#2   | <p>If &lt;investmentCompanyType&gt; is N-1A or N-3 then the element becomes optional.</p> <p>If &lt;investmentCompanyType&gt; is N-2 then the element becomes not applicable.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| o#3   | <p>If &lt;investmentCompanyType&gt; is N-1A or N-3 and “Exchange-Traded Fund”, “Exchange-Traded Managed Fund” and “Money Market Fund” were not provided as one of the &lt;fundType&gt; in all of the &lt;managementInvestmentQuestion&gt; then this element becomes optional.</p> <p>If &lt;investmentCompanyType&gt; is N-1A or N-3 and “Exchange-Traded Fund” or “Exchange-Traded Managed Fund” or “Money Market Fund” was provided as one of the &lt;fundType&gt; in any of the &lt;managementInvestmentQuestion&gt; then this element becomes not applicable.</p> <p>If &lt;investmentCompanyType&gt; is N-2 then this element becomes not applicable.</p>                                                                                                                                                                                                                                                          |
| o#4   | <p>If &lt;investmentCompanyType&gt; is N-5 then the element becomes optional.</p> <p>If &lt;investmentCompanyType&gt; is N-2 then the element becomes not applicable.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| o#5   | <p>If &lt;investmentCompanyType&gt; is N-1A or N-2 or N-3 and “Exchange-Traded Fund” or “Exchange-Traded Managed Fund” was provided as one of the &lt;fundType&gt; in any of the &lt;managementInvestmentQuestion&gt; then the element becomes optional.</p> <p>If &lt;investmentCompanyType&gt; is S-6 then the element becomes optional.</p> <p>If &lt;investmentCompanyType&gt; is N-1A or N-2 or N-3 and “Exchange-Traded Fund” and “Exchange-Traded Managed Fund” were not provided as one of the &lt;fundType&gt; in all of the &lt;managementInvestmentQuestion&gt; then the element becomes not applicable.</p> <p>If &lt;investmentCompanyType&gt; is N-4 or N-5 or N-6 then the element becomes not applicable.</p>                                                                                                                                                                                           |

| Value | Description                                                                                                                                                                                                       |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| o#6   | <p>If &lt;investmentCompanyType&gt; is N-4 or N-6 or S-6 then the element beomes optional.</p> <p>If &lt;investmentCompanyType&gt; is N-1A or N-2 or N-3 or N-5 then the element becomes not applicable.</p>      |
| o#7   | <p>If &lt;divestments&gt; exists then this element becomes optional.</p> <p>If &lt;divestments&gt; does not exists then this element becomes not applicable.</p>                                                  |
| o#8   | <p>If &lt;investmentCompanyType&gt; is N-2 or N-5 then the element beomes optional.</p> <p>If &lt;investmentCompanyType&gt; is N-1A or N-3 or N-4 or N-6 or S-6 then the element becomes not applicable.</p>      |
| o#9   | <p>If &lt;investmentCompanyType&gt; is N-1A or N-2 or N-3 then the element becomes optional.</p> <p>If &lt;investmentCompanyType&gt; is N-4 or or N-5 or N-6 or S-6 then the element becomes not applicable.</p>  |
| Na    | Does not apply to the submission type. EDGAR uses this field for server-side processing. Do not provide a value for this element.                                                                                 |
| na#1  | If <assetType> is Other then the element becomes required. Other wise it it not applicable.                                                                                                                       |
| na#2  | <p>If &lt;investmentCompanyType&gt; is N-1A or N-2 or N-3 then the element becomes mandatory.</p> <p>If &lt;investmentCompanyType&gt; is N-4 or or N-5 or N-6 or S-6 then the element becomes not applicable.</p> |
| na#3  | <p>If &lt;fundType&gt; is "Money Market Fund" then the element becomes not applicable.</p> <p>If &lt;fundType&gt; is not "Money Market Fund" then the element becomes mandatory.</p>                              |
| na#4  | <p>If &lt;investmentCompanyType&gt; is N-2 or N-5 then the element becomes mandatory.</p> <p>If &lt;investmentCompanyType&gt; is N-1A or N-3 or N-4 or N-6 or S-6 then the element becomes not applicable.</p>    |
| na#5  | <p>If &lt;investmentCompanyType&gt; is N-3 or N-4 or N-6 or S-6 then this element becomes mandatory.</p> <p>If &lt;investmentCompanyType&gt; is N-1A or N-2 or N-5 then the element becomes not applicable.</p>   |
| na#6  | <p>If &lt;investmentCompanyType&gt; is N-4 or N-6 or S-6 then this element becomes mandatory.</p> <p>If &lt;investmentCompanyType&gt; is N-1A or N-2 or N-3 or N-5 then the element becomes not applicable.</p>   |

### 3.4 Mapping of Form N-CEN Submission Schemas to Submission Type

| Level | Order | Data Type | Element/Attribute Length | Max Length | Choice List                                       | N-CEN | N-CEN/A | Max Occur |
|-------|-------|-----------|--------------------------|------------|---------------------------------------------------|-------|---------|-----------|
| 1     | 1     | NV        | edgarSubmission          |            |                                                   | m     | m       | 1         |
| 2     | 1     | String    | schemaVersion            | 5          |                                                   | na    | na      | 1         |
| 2     | 2     | NV        | headerData               |            |                                                   | m     | m       | 1         |
| 3     | 1     | NV        | submissionType           |            | <a href="#">SUBMISSION TYPE</a>                   | m     | m       | 1         |
| 3     | 2     | String    | accessionNumber          |            |                                                   | na    | m       | 1         |
| 3     | 3     | NV        | filerInfo                |            |                                                   | m     | m       | 1         |
| 4     | 1     | Boolean   | liveTestFlag             |            | "LIVE" or "TEST"                                  | m     | m       | 1         |
| 4     | 2     | NV        | filer                    |            |                                                   | m     | m       | 1         |
| 5     | 1     | NV        | issuerCredentials        |            |                                                   | m     | m       | 1         |
| 6     | 1     | String    | cik                      | 10         |                                                   | m     | m       | 1         |
| 6     | 2     | String    | ccc                      | 8          |                                                   | m     | m       | 1         |
| 5     | 2     | String    | fileNumber               | 17         |                                                   | m#1   | m#1     | 1         |
| 4     | 3     | NV        | contact                  |            |                                                   | m     | m       | 1         |
| 5     | 1     | String    | contactName              | 30         |                                                   | m     | m       | 1         |
| 5     | 2     | String    | contactPhoneNumber       | 30         |                                                   | m     | m       | 1         |
| 5     | 3     | String    | contactEmailAddress      | 30         |                                                   | m     | m       | 1         |
| 4     | 4     | NV        | notifications            |            |                                                   | o     | o       | 1         |
| 5     | 1     | String    | notificationEmailAddress | 80         |                                                   | o     | o       | 3         |
| 4     | 5     | NV        | flags                    |            |                                                   | o     | o       | 1         |
| 5     | 1     | Boolean   | returnCopyFlag           |            | "true" or "false"                                 | o     | o       | 1         |
| 5     | 2     | Boolean   | overrideInternetFlag     |            | "true" or "false"                                 | o     | o       | 1         |
| 5     | 3     | Boolean   | confirmingCopyFlag       |            | "true" or "false"                                 | o     | o       | 1         |
| 4     | 6     | String    | investmentCompanyType    |            | <a href="#">COMPANY CLASSIFICATION TYPE</a>       | m     | m       | 1         |
| 3     | 4     | NV        | seriesClass              |            |                                                   | m#2   | m#2     | 1         |
| 4     | 1     | NV        | reportSeriesClass        |            | CHOICE                                            | m#    | m#      | 1         |
| 5     | 1     | Boolean   | rptIncludeAllSeriesFlag  |            | CHOICE<br>"true"                                  | m#    | m#      | 1         |
| 5     | 1     | NV        | rptSeriesClassInfo       |            | CHOICE                                            | m#    | m#      | 1000      |
| 6     | 1     | String    | seriesId                 |            | SERIES_ID_TYPE<br>defined in<br>eis_Common_SC.xsd | m     | m       | 1         |
| 6     | 2     | Boolean   | includeAllClassesFlag    |            | CHOICE<br>"true"                                  | m#    | m#      | 1         |
| 6     | 2     | NV        | classInfo                |            | CHOICE                                            | m#    | m#      | 1000      |
| 7     | 1     | String    | classId                  |            | CLASS_ID_TYPE<br>defined in<br>eis_Common_SC.xsd  | m     | m       | 1         |

| Level | Order | Data Type      | Element/Attribute Length | Max Length | Choice List                                                  | N-CEN | N-CEN/A | Max Occur |
|-------|-------|----------------|--------------------------|------------|--------------------------------------------------------------|-------|---------|-----------|
| 4     | 1     | NV             | reportClass              |            | CHOICE                                                       | m#    | m#      | 1         |
| 5     | 1     | Boolean        | rptIncludeAllClassesFlag |            | CHOICE<br>"true"                                             | m#    | m#      | 1         |
| 5     | 1     | NV             | classInfo                |            | CHOICE                                                       | m#    | m#      | 1000      |
| 6     | 1     | String         | classId                  |            | CLASS_ID_TYPE<br>defined in<br>eis_Common_SC.x<br>sd         | m     | m       | 1         |
| 2     | 3     | NV             | formData                 |            |                                                              | m     | m       | 1         |
| 3     | 1     | NV             | generalInfo              |            |                                                              | m     | m       | 1         |
| 3     | 1     | attr<br>date   | reportEndingPeriod       |            | YYYY-MM-DD                                                   | m     | m       | 1         |
| 3     | 1     | attr<br>String | isReportPeriodLt12       |            | <a href="#">YES_NO_TYPE</a>                                  | m     | m       | 1         |
| 3     | 2     | NV             | registrantInfo           |            |                                                              | m     | m       | 1         |
| 4     | 1     | String         | registrantFullName       | 150        |                                                              | m     | m       | 1         |
| 4     | 2     | String         | investmentCompFileNo     | 17         |                                                              | m     | m       | 1         |
| 4     | 3     | String         | registrantCik            | 10         |                                                              | m     | m       | 1         |
| 4     | 4     | String         | registrantLei            | 20         |                                                              | m     | m       | 1         |
| 4     | 5     | String         | registrantsstreet1       | 40         |                                                              | m     | m       | 1         |
| 4     | 6     | String         | registrantsstreet2       | 40         |                                                              | o     | o       | 1         |
| 4     | 7     | String         | registrantcity           | 30         |                                                              | m     | m       | 1         |
| 4     | 8     | String         | registrantzipCode        | 10         |                                                              | m     | m       | 1         |
| 4     | 9     | String         | registrantstate          |            | <a href="#">ISO<br/>AND OUTLYING<br/>AREA CODE US<br/>A</a>  | m#3   | m#3     | 1         |
| 4     | 10    | String         | registrantcountry        |            | <a href="#">ISO COUNTRY C<br/>ODE</a>                        | m     | m       | 1         |
| 4     | 11    | String         | registrantphoneNumber    | 20         |                                                              | m     | m       | 1         |
| 4     | 12    | NV             | websites                 |            |                                                              | m     | m       | 1         |
| 5     | 1     | NV             | website                  |            |                                                              | m     | m       | 1000      |
| 5     | 1     | attr<br>String | webpage                  | 150        |                                                              | m     | m       | 1         |
| 4     | 13    | NV             | locationBooksRecords     |            |                                                              | m     | m       | 1         |
| 5     | 1     | NV             | locationBooksRecord      |            |                                                              | m     | m       | 1000      |
| 6     | 1     | String         | officeName               | 150        |                                                              | m     | m       | 1         |
| 6     | 2     | String         | officeAddress1           | 40         |                                                              | m     | m       | 1         |
| 6     | 3     | String         | officeAddress2           | 40         |                                                              | o     | o       | 1         |
| 6     | 4     | String         | officeCity               | 30         |                                                              | m     | m       | 1         |
| 6     | 5     | NV             | officeStateCountry       |            | CHOICE                                                       | m     | m       | 1         |
| 6     | 5     | attr<br>String | officeState              |            | <a href="#">ISO STATE AND<br/>OUTLYING AREA<br/>CODE USA</a> | m     | m       | 1         |
| 6     | 5     | attr<br>String | officeCountry            |            | "US"                                                         | m     | m       | 1         |

| Level | Order | Data Type      | Element/Attribute Length     | Max Length | Choice List                                                  | N-CEN | N-CEN/A | Max Occur |
|-------|-------|----------------|------------------------------|------------|--------------------------------------------------------------|-------|---------|-----------|
| 6     | 5     | String         | officeCountry                |            | CHOICE<br><a href="#">ISO_FOREIGN_C<br/>OUNTRY_CODE</a>      | m     | m       | 1         |
| 6     | 6     | String         | officeRecordsZipCode         | 10         |                                                              | m     | m       | 1         |
| 6     | 7     | String         | officePhone                  | 20         |                                                              | m     | m       | 1         |
| 6     | 8     | String         | booksRecordsDesc             | 5000       |                                                              | m     | m       | 1         |
| 4     | 14    | String         | isRegistrantFirstFiling      |            | <a href="#">YES_NO_TYPE</a>                                  | m     | m       | 1         |
| 4     | 15    | String         | isRegistrantLastFiling       |            | <a href="#">YES_NO_TYPE</a>                                  | m     | m       | 1         |
| 4     | 16    | NV             | registrantFamilyInvComp      |            | CHOICE                                                       | m     | m       | 1         |
| 4     | 16    | attr<br>String | isRegistrantFamilyInvComp    |            | "Y"                                                          | m     | m       | 1         |
| 4     | 16    | attr<br>String | familyInvCompFullName        | 150        |                                                              | m     | m       | 1         |
| 4     | 16    | String         | isRegistrantFamilyInvComp    |            | CHOICE "N"                                                   | m     | m       | 1         |
| 4     | 17    | String         | registrantClassificationType |            | <a href="#">COMPANY_CLAS<br/>SIFICATION_TYP<br/>E</a>        | m#4   | m#4     | 1         |
| 4     | 18    | integer        | totalSeries                  | 8          |                                                              | m#5   | m#5     | 1         |
| 4     | 19    | NV             | terminatedSeries             |            |                                                              | o#1   | o#1     | 1         |
| 5     | 1     | NV             | terminatedSeriesInfo         |            |                                                              | m#    | m#      | 1000      |
| 5     | 1     | attr<br>String | seriesName                   | 150        |                                                              | m     | m       | 1         |
| 5     | 2     | attr<br>String | seriesId                     | 10         | SERIES_ID_NA_T<br>YPE<br>defined in<br>eis_Common_SC.x<br>sd | m     | m       | 1         |
| 5     | 3     | attr<br>String | terminationDate              | 10         |                                                              | m     | m       | 1         |
| 4     | 20    | String         | isSecuritiesActRegistration  |            | <a href="#">YES_NO_TYPE</a>                                  | m     | m       | 1         |
| 4     | 21    | NV             | directors                    |            |                                                              | m#6   | m#6     | 1         |
| 5     | 1     | NV             | director                     |            |                                                              | m#    | m#      | 1000      |
| 6     | 1     | String         | directorName                 | 150        |                                                              | m     | m       | 1         |
| 6     | 2     | String         | crdNumber                    | 9          |                                                              | m     | m       | 1         |
| 6     | 3     | String         | isDirectorInterestedPerson   |            | <a href="#">YES_NO_TYPE</a>                                  | m     | m       | 1         |
| 6     | 4     | NV             | fileNumbers                  |            |                                                              | m     | m       | 1         |
| 7     | 1     | NV             | fileNumberInfo               |            |                                                              | m     | m       | 1000      |
| 7     | 1     | attr<br>String | fileNumber                   | 17         |                                                              | m     | m       | 1         |
| 4     | 22    | NV             | chiefComplianceOfficers      |            |                                                              | m     | m       | 1         |
| 5     | 1     | NV             | chiefComplianceOfficer       |            |                                                              | m     | m       | 1000      |
| 6     | 1     | String         | ccoName                      | 150        |                                                              | m     | m       | 1         |
| 6     | 2     | String         | crdNumber                    | 9          |                                                              | m     | m       | 1         |
| 6     | 3     | String         | ccoStreet1                   | 40         |                                                              | m     | m       | 1         |
| 6     | 4     | String         | ccoStreet2                   | 40         |                                                              | o     | o       | 1         |

| Level | Order | Data Type      | Element/Attribute Length       | Max Length | Choice List                                                  | N-CEN | N-CEN/A | Max Occur |
|-------|-------|----------------|--------------------------------|------------|--------------------------------------------------------------|-------|---------|-----------|
| 6     | 5     | String         | ccoCity                        | 30         |                                                              | m     | m       | 1         |
| 6     | 6     | NV             | ccoStateCountry                |            | CHOICE                                                       | m     | m       | 1         |
| 6     | 6     | attr<br>String | ccoState                       |            | <a href="#">ISO STATE AND<br/>OUTLYING AREA<br/>CODE USA</a> | m     | m       | 1         |
| 6     | 6     | attr<br>String | ccoCountry                     |            | "US"                                                         | m     | m       | 1         |
| 6     | 6     | String         | ccoCountry                     |            | CHOICE<br><a href="#">ISO FOREIGN C<br/>OUNTRY CODE</a>      | m     | m       | 1         |
| 6     | 7     | String         | ccoZipCode                     | 10         |                                                              | m     | m       | 1         |
| 6     | 8     | String         | ccoPhone                       | 20         |                                                              | m     | m       | 1         |
| 6     | 9     | String         | isCcoChangedSinceLastFiling    |            | <a href="#">YES_NO_TYPE</a>                                  | m     | m       | 1         |
| 6     | 10    | NV             | ccoEmployers                   |            |                                                              | m     | m       | 1         |
| 7     | 1     | NV             | ccoEmployer                    |            |                                                              | m     | m       | 1000      |
| 7     | 1     | String         | ccoEmployerName                | 150        |                                                              | m     | m       | 1         |
| 7     | 1     | String         | ccoEmployerId                  | 10         |                                                              | m     | m       | 1         |
| 4     | 23    | String         | isRegistrantSubmittedMatter    |            | CHOICE "N"                                                   | m     | m       | 1         |
| 4     | 23    | NV             | securityMatterSeriesInfo       |            | CHOICE                                                       | m     | m       | 1         |
| 4     | 23    | attr<br>String | isRegistrantSubmittedMatter    |            | "Y"                                                          | m     | m       | 1         |
| 5     | 1     | NV             | seriesInfo                     |            |                                                              | o     | o       | 1000      |
| 5     | 1     | attr<br>String | seriesName                     | 150        |                                                              | m     | m       | 1         |
| 5     | 1     | attr<br>String | seriesId                       | 10         | SERIES_ID_NA_T<br>YPE<br>defined in<br>eis_Common_SC.x<br>sd | m     | m       | 1         |
| 4     | 24    | String         | isPreviousLegalProceeding      |            | CHOICE "N"                                                   | m     | m       | 1         |
| 4     | 24    | NV             | legalProceedingSeriesInfo      |            | CHOICE                                                       | m     | m       | 1         |
| 4     | 24    | attr<br>String | isPreviousLegalProceeding      |            | "Y"                                                          | m     | m       | 1         |
| 5     | 1     | NV             | seriesInfo                     |            |                                                              | o     | o       | 1000      |
| 5     | 1     | String         | seriesName                     | 150        |                                                              | m     | m       | 1         |
| 5     | 1     | String         | seriesId                       | 10         | SERIES_ID_NA_T<br>YPE<br>defined in<br>eis_Common_SC.x<br>sd | m     | m       | 1         |
| 4     | 25    | String         | isPreviousProceedingTerminated |            | CHOICE "N"                                                   | m     | m       | 1         |
| 4     | 25    | NV             | previousProceedingTerminated   |            | CHOICE                                                       | m     | m       | 1         |
| 4     | 25    | attr<br>String | isPreviousProceedingTerminated |            | "Y"                                                          | m     | m       | 1         |
| 5     | 1     | NV             | seriesInfo                     |            |                                                              | o     | o       | 1000      |
| 5     | 1     | attr<br>String | seriesName                     | 150        |                                                              | m     | m       | 1         |

| Level | Order | Data Type    | Element/Attribute Length         | Max Length | Choice List                                          | N-CEN | N-CEN/A | Max Occur |
|-------|-------|--------------|----------------------------------|------------|------------------------------------------------------|-------|---------|-----------|
| 5     | 1     | attr String  | seriesId                         | 10         | SERIES_ID_NA_TYPE<br>defined in<br>eis_Common_SC.xsd | m     | m       | 1         |
| 4     | 26    | String       | isClaimFiled                     |            | CHOICE "N"                                           | m#6   | m#6     | 1         |
| 4     | 26    | NV           | claimFiled                       |            | CHOICE                                               | m#6   | m#6     | 1         |
| 4     | 26    | attr String  | isClaimFiled                     |            | "Y"                                                  | m     | m       | 1         |
| 4     | 26    | attr Decimal | totalClaimAmount                 | 24         |                                                      | m     | m       | 1         |
| 4     | 27    | String       | isCoveredByInsurancePolicy       |            | CHOICE "N"                                           | m#6   | m#6     | 1         |
| 4     | 27    | NV           | coveredByInsurancePolicy         |            | CHOICE                                               | m#6   | m#6     | 1         |
| 4     | 27    | attr String  | isCoveredByInsurancePolicy       |            | "Y"                                                  | m     | m       | 1         |
| 4     | 27    | attr String  | isClaimFiledDuringPeriod         |            | <a href="#">YES_NO_TYPE</a>                          | m     | m       | 1         |
| 4     | 28    | String       | isFinancialSupportDuringPeriod   |            | CHOICE "N"                                           | m     | m       | 1         |
| 4     | 28    | NV           | financialSupportSeriesInfo       |            | CHOICE                                               | m     | m       | 1         |
| 4     | 28    | attr String  | isFinancialSupportDuringPeriod   |            | "Y"                                                  | m     | m       | 1         |
| 5     | 1     | NV           | seriesInfo                       |            |                                                      | o     | o       | 1000      |
| 5     | 1     | attr String  | seriesName                       | 150        |                                                      | m     | m       | 1         |
| 5     | 1     | attr String  | seriesId                         | 10         | SERIES_ID_NA_TYPE<br>defined in<br>eis_Common_SC.xsd | m     | m       | 1         |
| 4     | 29    | String       | isExemptionFromAct               |            | CHOICE "N"                                           | m     | m       | 1         |
| 4     | 29    | NV           | releaseNumbers                   |            | CHOICE                                               | m     | m       | 1         |
| 4     | 29    | attr String  | isExemptionFromAct               |            | "Y"                                                  | m     | m       | 1         |
| 5     | 1     | NV           | releaseNumberInfo                |            |                                                      | m     | m       | 1000      |
| 5     | 1     | attr String  | releaseNumber                    | 20         |                                                      | m     | m       | 1         |
| 4     | 30    | NV           | principalUnderwriters            |            |                                                      | o     | o       | 1         |
| 5     | 1     | NV           | principalUnderwriter             |            |                                                      | m#    | m#      | 1000      |
| 6     | 1     | String       | principalUnderwriterName         | 150        |                                                      | m     | m       | 1         |
| 6     | 2     | String       | principalUnderwriterFileNumber   | 17         |                                                      | m     | m       | 1         |
| 6     | 3     | String       | principalUnderwriterCrdNumber    | 9          |                                                      | m     | m       | 1         |
| 6     | 4     | String       | principalUnderwriterLei          | 20         | LEI_TYPE_RSS_NA<br>defined in<br>eis_NCEN_Common.xsd | m     | m       | 1         |
| 6     | 5     | NV           | principalUnderWriterStateCountry |            | CHOICE                                               | m     | m       | 1         |
| 6     | 5     | attr String  | principalUnderWriterState        |            | <a href="#">ISO STATE AND OUTLYING AREA</a>          | m     | m       | 1         |

| Level | Order | Data Type   | Element/Attribute Length                           | Max Length | Choice List                                                   | N-CEN | N-CEN/A | Max Occur |
|-------|-------|-------------|----------------------------------------------------|------------|---------------------------------------------------------------|-------|---------|-----------|
|       |       |             |                                                    |            | <a href="#">CODE USA</a>                                      |       |         |           |
| 6     | 5     | attr String | principalUnderWriterCountry                        |            | "US"                                                          | m     | m       | 1         |
| 6     | 5     | String      | principalUnderWriterCountry                        |            | CHOICE<br><a href="#">ISO_FOREIGN_C<br/>OUNTRY_CODE</a>       | m     | m       | 1         |
| 6     | 6     | String      | isPrincipalUnderwriterAffiliatedWithRegi<br>strant |            | <a href="#">YES_NO_TYPE</a>                                   | m     | m       | 1         |
| 4     | 31    | String      | isUnderwriterHiredOrTerminated                     |            | <a href="#">YES_NO_TYPE</a>                                   | m     | m       | 1         |
| 4     | 32    | NV          | publicAccountants                                  |            |                                                               | m     | m       | 1         |
| 5     | 1     | NV          | publicAccountant                                   |            |                                                               | m     | m       | 1000      |
| 6     | 1     | String      | publicAccountantName                               | 150        |                                                               | m     | m       | 1         |
| 6     | 2     | String      | pcaobNumber                                        | 20         |                                                               | m     | m       | 1         |
| 6     | 3     | String      | publicAccountantLei                                | 20         | LEI_TYPE_RSS_N<br>A defined in<br>eis_NCEN_Commo<br>n.xsd     | m     | m       | 1         |
| 6     | 4     | NV          | publicAccountantStateCountry                       |            | CHOICE                                                        | m     | m       | 1         |
| 6     | 4     | Attr String | publicAccountantState                              |            | <a href="#">ISO_STATE_AND<br/>OUTLYING_AREA<br/>_CODE_USA</a> | m     | m       | 1         |
| 6     | 4     | attr String | publicAccountantCountry                            |            | "US"                                                          | m     | m       | 1         |
| 6     | 4     | String      | publicAccountantCountry                            |            | CHOICE<br><a href="#">ISO_FOREIGN_C<br/>OUNTRY_CODE</a>       | m     | m       | 1         |
| 4     | 33    | String      | isPublicAccountantChanged                          |            | <a href="#">YES_NO_TYPE</a>                                   | m     | m       | 1         |
| 4     | 34    | String      | isMaterialWeakness                                 |            | <a href="#">YES_NO_TYPE</a>                                   | c#1   | c#1     | 1         |
| 4     | 35    | String      | isOpinionOffered                                   |            | CHOICE "N"                                                    | m     | m       | 1         |
| 4     | 35    | NV          | auditOpinionSeries                                 |            | CHOICE                                                        | m     | m       | 1         |
| 4     | 35    | attr String | isOpinionOffered                                   |            | "Y"                                                           | m     | m       | 1         |
| 5     | 1     | NV          | seriesInfo                                         |            |                                                               | o     | o       | 1000      |
| 5     | 1     | attr String | seriesName                                         | 150        |                                                               | m     | m       | 1         |
| 5     | 1     | attr String | seriesId                                           | 10         | SERIES_ID_NA_T<br>YPE<br>defined in<br>eis_Common_SC.x<br>sd  | m     | m       | 1         |
| 4     | 36    | String      | isMaterialChange                                   |            | CHOICE "N"                                                    | m     | m       | 1         |
| 4     | 36    | NV          | valuationMethodsChanges                            |            | CHOICE                                                        | m     | m       | 1         |
| 4     | 36    | attr String | isMaterialChange                                   |            | "Y"                                                           | m     | m       | 1         |
| 5     | 1     | NV          | valuationMethodsChange                             |            |                                                               | m     | m       | 1000      |
| 6     | 1     | date        | dateOfChange                                       |            |                                                               | m     | m       | 1         |
| 6     | 2     | String      | changeExplanation                                  | 5000       |                                                               | m     | m       | 1         |
| 6     | 3     | String      | assetType                                          |            | <a href="#">ASSET_TYPE</a>                                    | m     | m       | 1         |

| Level | Order | Data Type   | Element/Attribute Length               | Max Length | Choice List                                          | N-CEN | N-CEN/A | Max Occur |
|-------|-------|-------------|----------------------------------------|------------|------------------------------------------------------|-------|---------|-----------|
| 6     | 4     | String      | assetTypeOtherDesc                     | 5000       |                                                      | na#1  | na#1    | 1         |
| 6     | 5     | String      | investmentType                         | 5000       |                                                      | m     | m       | 1         |
| 6     | 6     | String      | statutoryRegulatoryBasis               | 5000       |                                                      | m     | m       | 1         |
| 6     | 7     | NV          | valuationMethodsChangeSeries           |            |                                                      | m     | m       | 1         |
| 7     | 1     | NV          | seriesInfo                             |            |                                                      | o     | o       | 1000      |
| 7     | 1     | attr String | seriesName                             | 150        |                                                      | m     | m       | 1         |
| 7     | 1     | attr String | seriesId                               | 10         | SERIES_ID_NA_TYPE<br>defined in<br>eis_Common_SC.xsd | m     | m       | 1         |
| 4     | 37    | String      | isAccountingPrincipleChange            |            | <a href="#">YES_NO_TYPE</a>                          | m     | m       | 1         |
| 4     | 38    | String      | isPaymentErrorInNetAssetValue          |            | CHOICE "N"                                           | m#7   | m#7     | 1         |
| 4     | 38    | NV          | paymentErrorSeries                     |            | CHOICE                                               | m#7   | m#7     | 1         |
| 4     | 38    | attr String | isPaymentErrorInNetAssetValue          |            | "Y"                                                  | m     | m       | 1         |
| 5     | 1     | NV          | seriesInfo                             |            |                                                      | o     | o       | 1000      |
| 5     | 1     | attr String | seriesName                             | 150        |                                                      | m     | m       | 1         |
| 5     | 1     | attr String | seriesId                               | 10         | SERIES_ID_NA_TYPE<br>defined in<br>eis_Common_SC.xsd | m     | m       | 1         |
| 4     | 39    | String      | isPaymentDividend                      |            | CHOICE "N"                                           | m#6   | m#6     | 1         |
| 4     | 39    | NV          | paymentDividendSeries                  |            | CHOICE                                               | m#6   | m#6     | 1         |
| 4     | 39    | attr String | isPaymentDividend                      |            | "Y"                                                  | m     | m       | 1         |
| 5     | 1     | NV          | seriesInfo                             |            |                                                      | o     | o       | 1000      |
| 5     | 1     | attr String | seriesName                             | 150        |                                                      | m     | m       | 1         |
| 5     | 1     | attr String | seriesId                               | 10         | SERIES_ID_NA_TYPE<br>defined in<br>eis_Common_SC.xsd | m     | m       | 1         |
| 3     | 3     | NV          | managementInvestmentQuestionSeriesInfo |            |                                                      | o#9   | o#9     | 1         |
| 4     | 1     | NV          | managementInvestmentQuestion           |            |                                                      | m#    | m#      | 1000      |
| 5     | 1     | String      | mgmtInvFundName                        | 150        |                                                      | m     | m       | 1         |
| 5     | 2     | String      | mgmtInvSeriesId                        | 10         | SERIES_ID_TYPE<br>defined in<br>eis_Common_SC.xsd    | c#2   | c#2     | 1         |
| 5     | 3     | String      | mgmtInvLei                             | 20         |                                                      | m     | m       | 1         |
| 5     | 4     | String      | isFirstFilingByFund                    |            | <a href="#">YES_NO_TYPE</a>                          | m     | m       | 1         |
| 5     | 5     | integer     | numAuthorizedClass                     | 8          |                                                      | c#2   | c#2     | 1         |

| Level | Order | Data Type   | Element/Attribute Length               | Max Length | Choice List                                                     | N-CEN | N-CEN/A | Max Occur |
|-------|-------|-------------|----------------------------------------|------------|-----------------------------------------------------------------|-------|---------|-----------|
| 5     | 6     | integer     | numAddedClass                          | 8          |                                                                 | c#2   | c#2     | 1         |
| 5     | 7     | integer     | numTerminatedClass                     | 8          |                                                                 | c#2   | c#2     | 1         |
| 5     | 8     | NV          | sharesOutstandings                     |            |                                                                 | c#3   | c#3     | 1         |
| 6     | 1     | NV          | sharesOutstanding                      |            |                                                                 | m#    | m#      | 1000      |
| 6     | 1     | attr String | sharesOutstandingClassName             | 150        |                                                                 | m     | m       | 1         |
| 6     | 1     | attr String | sharesOutstandingClassId               | 10         | CLASS_ID_TYPE<br>defined in<br>eis_Common_SC.xsd                | m     | m       | 1         |
| 6     | 1     | attr String | sharesOutstandingTickerSymbol          | 12         |                                                                 | m     | m       | 1         |
| 5     | 9     | NV          | fundTypes                              |            | CHOICE                                                          | m#    | m#      | 1         |
| 6     | 1     | String      | fundType                               |            | <a href="#">FUND_TYPE</a>                                       | m#22  | m#22    | 7         |
| 6     | 2     | NV          | indexFundInfo                          |            |                                                                 | m#23  | m#23    | 1         |
| 6     | 2     | attr String | fundType                               |            | "Index Fund"                                                    | m#    | m#      | 1         |
| 7     | 1     | String      | isIndexFundAffiliated                  |            | <a href="#">YES_NO_TYPE</a>                                     | m     | m       | 1         |
| 7     | 2     | String      | isIndexFundExclusive                   |            | <a href="#">YES_NO_TYPE</a>                                     | m     | m       | 1         |
| 7     | 3     | Decimal     | indexFundReturnDiffBeforeExpense       | 24         |                                                                 | m     | m       | 1         |
| 7     | 4     | Decimal     | indexFundReturnDiffAfterExpense        | 24         |                                                                 | m     | m       | 1         |
| 7     | 5     | Decimal     | indexFundReturnDailyStdevBeforeExpense | 24         | NO NEG                                                          | m     | m       | 1         |
| 7     | 6     | Decimal     | indexFundReturnDailyStdevAfterExpense  | 24         | NO NEG                                                          | m     | m       | 1         |
| 6     | 3     | NV          | masterFeederFundInfo                   |            |                                                                 | m#24  | m#24    | 1         |
| 6     | 3     | attr String | fundType                               |            | "Master-Feeder Fund"                                            | m#    | m#      | 1         |
| 7     | 1     | NV          | feederFunds                            |            |                                                                 | o     | o       | 1000      |
| 7     | 1     | attr String | feederFundName                         | 150        |                                                                 | m     | m       | 1         |
| 7     | 1     | attr String | regFeederFundFileNo                    | 17         | FILE_NUMBER_TYPE<br>defined in<br>eis_Common.xsd                | m     | m       | 1         |
| 7     | 1     | attr String | regFeederFundSeriesIdNo                | 10         | SERIES_ID_NAME_TYPE<br>defined in<br>eis_Common_SC.xsd          | m     | m       | 1         |
| 7     | 1     | attr String | regFeederFundLei                       | 20         |                                                                 | m     | m       | 1         |
| 7     | 1     | attr String | unregFeederFileNo                      | 17         | FILE_NUMBER_TYPE_WITH_NAME<br>defined in<br>eis_NCEN_Common.xsd | m     | m       | 1         |
| 7     | 1     | attr String | unregFeederFundLei                     | 20         |                                                                 | m     | m       | 1         |

| Level | Order | Data Type   | Element/Attribute Length    | Max Length | Choice List                                                           | N-CEN | N-CEN/A | Max Occur |
|-------|-------|-------------|-----------------------------|------------|-----------------------------------------------------------------------|-------|---------|-----------|
| 7     | 2     | NV          | masterFunds                 |            |                                                                       | o     | o       | 1000      |
| 7     | 2     | attr String | masterFundName              | 150        |                                                                       | m     | m       | 1         |
| 7     | 2     | attr String | masterFundFileNo            | 17         |                                                                       | m     | m       | 1         |
| 7     | 2     | attr String | masterFundSECFileNo         | 17         | FILE_NUMBER_T<br>YPE_WITH_NA<br>defined in<br>eis_NCEN_Commo<br>n.xsd | m     | m       | 1         |
| 7     | 2     | attr String | masterFundLei               | 20         |                                                                       | m     | m       | 1         |
| 5     | 9     | String      | fundType                    |            | CHOICE "N/A"                                                          | m#    | m#      | 1         |
| 5     | 10    | String      | isNonDiversifiedCompany     |            | <a href="#">YES_NO_TYPE</a>                                           | m#    | m#      | 1         |
| 5     | 11    | String      | isForeignSubsidiary         |            | CHOICE "N"                                                            | m#    | m#      | 1         |
| 5     | 11    | NV          | foreignInvestments          |            | CHOICE                                                                | m#    | m#      | 1         |
| 5     | 11    | attr String | isForeignSubsidiary         |            | "Y"                                                                   | m     | m       | 1         |
| 6     | 1     | NV          | foreignInvestment           |            |                                                                       | m     | m       | 1000      |
| 6     | 1     | attr String | foreignSubsidiaryName       | 150        |                                                                       | m     | m       | 1         |
| 6     | 1     | attr String | foreignSubsidiaryLei        | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Commo<br>n.xsd          | m     | m       | 1         |
| 5     | 12    | String      | isFundSecuritiesLending     |            | <a href="#">YES_NO_TYPE</a>                                           | m#    | m#      | 1         |
| 5     | 13    | String      | didFundLendSecurities       |            | CHOICE "N"                                                            | m#    | m#      | 1         |
| 5     | 13    | NV          | fundLendSecurities          |            | CHOICE                                                                | m#    | m#      | 1         |
| 5     | 13    | attr String | didFundLendSecurities       |            | "Y"                                                                   | m     | m       | 1         |
| 6     | 1     | String      | isFundLiquidated            |            | <a href="#">YES_NO_TYPE</a>                                           | m     | m       | 1         |
| 6     | 2     | String      | isFundAdverselyImpacted     |            | <a href="#">YES_NO_TYPE</a>                                           | m     | m       | 1         |
| 5     | 14    | NV          | securityLendings            |            |                                                                       | o     | o       | 1         |
| 6     | 1     | NV          | securityLending             |            |                                                                       | m#    | m#      | 1000      |
| 7     | 1     | String      | securitiesAgentName         | 150        |                                                                       | m     | m       | 1         |
| 7     | 2     | String      | securitiesAgentLei          | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Commo<br>n.xsd          | m     | m       | 1         |
| 7     | 3     | String      | isSecuritiesAgentAffiliated |            | <a href="#">YES_NO_TYPE</a>                                           | m     | m       | 1         |
| 7     | 4     | NV          | securityAgentIdemnity       |            | CHOICE                                                                | m     | m       | 1         |
| 7     | 4     | attr String | isSecurityAgentIdemnity     |            | "Y"                                                                   | m     | m       | 1         |
| 8     | 1     | NV          | idemnityProviders           |            |                                                                       | m     | m       | 1         |
| 9     | 1     | NV          | idemnityProvider            |            |                                                                       | m     | m       | 1000      |

| Level | Order | Data Type   | Element/Attribute Length              | Max Length | Choice List                                              | N-CEN | N-CEN/A | Max Occur |
|-------|-------|-------------|---------------------------------------|------------|----------------------------------------------------------|-------|---------|-----------|
| 9     | 1     | attr String | idemnityProviderName                  | 150        |                                                          | m     | m       | 1         |
| 9     | 1     | attr String | idemnityProviderLei                   | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Common.xsd | m     | m       | 1         |
| 8     | 1     | String      | didIndemnificationRights              |            | <a href="#">YES_NO_TYPE</a>                              | m     | m       | 1         |
| 7     | 4     | String      | isSecurityAgentIdemnity               |            | CHOICE "N"                                               | m     | m       | 1         |
| 5     | 15    | NV          | collateralManagers                    |            |                                                          | o     | o       | 1         |
| 6     | 1     | NV          | collateralManager                     |            |                                                          | m#    | m#      | 1000      |
| 6     | 1     | attr String | collateralManagerName                 | 150        |                                                          | m     | m       | 1         |
| 6     | 1     | attr String | collateralManagerLei                  | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Common.xsd | m     | m       | 1         |
| 6     | 1     | attr String | isCollateralManagerAffiliated         |            | <a href="#">YES_NO_TYPE</a>                              | m     | m       | 1         |
| 6     | 1     | attr String | isCollateralManagerAffiliatedWithFund |            | <a href="#">YES_NO_TYPE</a>                              | m     | m       | 1         |
| 5     | 16    | NV          | paymentToAgentManagers                |            | CHOICE                                                   | m#    | m#      | 1         |
| 6     | 1     | String      | paymentToAgentManagerType             |            | <a href="#">PAYMENT_TO_A<br/>AGENT_MANAGER<br/>_TYPE</a> | m     | m       | 6         |
| 6     | 2     | String      | otherFeeDesc                          | 5000       |                                                          | m#8   | m#8     | 1         |
| 5     | 16    | String      | paymentToAgentManagerType             |            | CHOICE "N/A"                                             | m#    | m#      | 1         |
| 5     | 17    | Decimal     | avgPortfolioSecuritiesValue           | 24         |                                                          | m#    | m#      | 1         |
| 5     | 18    | Decimal     | netIncomeSecuritiesLending            | 24         |                                                          | m#    | m#      | 1         |
| 5     | 19    | NV          | relyOnRuleTypes                       |            | CHOICE                                                   | m#    | m#      | 1         |
| 6     | 1     | String      | relyOnRuleType                        |            | <a href="#">RELY_ON_RULE<br/>_TYPE</a>                   | m     | m       | 11        |
| 5     | 19    | String      | relyOnRuleType                        |            | CHOICE "N/A"                                             | m#    | m#      | 1         |
| 5     | 20    | String      | isExpenseLimitationInPlace            |            | <a href="#">YES_NO_TYPE</a>                              | m#    | m#      | 1         |
| 5     | 21    | String      | isExpenseReducedOrWaived              |            | <a href="#">YES_NO_TYPE</a>                              | m#    | m#      | 1         |
| 5     | 22    | String      | isFeesWaivedRecoupable                |            | <a href="#">YES_NO_TYPE</a>                              | m#    | m#      | 1         |
| 5     | 23    | String      | isExpenseWaivedRecoupable             |            | <a href="#">YES_NO_TYPE</a>                              | m#    | m#      | 1         |
| 5     | 24    | NV          | investmentAdvisers                    |            |                                                          | o     | o       | 1         |
| 6     | 1     | NV          | investmentAdviser                     |            |                                                          | m#    | m#      | 1000      |
| 7     | 1     | String      | investmentAdviserName                 | 150        |                                                          | m     | m       | 1         |
| 7     | 2     | String      | investmentAdviserFileNo               | 17         | FILE_NUMBER_T<br>YPE<br>defined in<br>eis_Common.xsd     | m     | m       | 1         |
| 7     | 3     | String      | investmentAdviserCrdNo                | 9          | CRD_NUMBER_T<br>YPE<br>defined in                        | m     | m       | 1         |

| Level | Order | Data Type   | Element/Attribute Length                | Max Length | Choice List                                          | N-CEN | N-CEN/A | Max Occur |
|-------|-------|-------------|-----------------------------------------|------------|------------------------------------------------------|-------|---------|-----------|
|       |       |             |                                         |            | eis_NCEN_Common.xsd                                  |       |         |           |
| 7     | 4     | String      | investmentAdviserLei                    | 20         | LEI_TYPE_RSS_NA<br>defined in<br>eis_NCEN_Common.xsd | m     | m       | 1         |
| 7     | 5     | NV          | investmentAdviserStateCountry           |            | CHOICE                                               | m     | m       | 1         |
| 7     | 5     | attr String | investmentAdviserState                  |            | <a href="#">ISO STATE AND OUTLYING AREA CODE USA</a> | m     | m       | 1         |
| 7     | 5     | attr String | investmentAdviserCountry                |            | "US"                                                 | m     | m       | 1         |
| 7     | 5     | String      | investmentAdviserCountry                |            | CHOICE<br><a href="#">ISO FOREIGN COUNTRY CODE</a>   | m     | m       | 1         |
| 7     | 6     | NV          | investmentAdviserHired                  |            | CHOICE                                               | m     | m       | 1         |
| 7     | 6     | attr String | isInvestmentAdviserHired                |            | "Y"                                                  | m     | m       | 1         |
| 8     | 1     | date        | investmentAdviserStartDate              |            | YYYY-MM-DD                                           | m     | m       | 1         |
| 7     | 6     | String      | isInvestmentAdviserHired                |            | CHOICE "N"                                           | m     | m       | 1         |
| 5     | 25    | NV          | investmentAdvisersTerminated            |            |                                                      | o     | o       | 1         |
| 6     | 1     | NV          | investmentAdviserTerminated             |            |                                                      | m#    | m#      | 1000      |
| 7     | 1     | String      | investmentAdviserTerminatedName         | 150        |                                                      | m     | m       | 1         |
| 7     | 2     | String      | investAdviserTerminatedFileNo           | 17         | FILE_NUMBER_TYPE<br>defined in<br>eis_Common.xsd     | m     | m       | 1         |
| 7     | 3     | String      | investAdviserTerminatedCrdNo            | 9          | CRD_NUMBER_TYPE<br>defined in<br>eis_NCEN_Common.xsd | m     | m       | 1         |
| 7     | 4     | String      | investAdviserTerminatedLei              | 20         | LEI_TYPE_RSS_NA<br>defined in<br>eis_NCEN_Common.xsd | m     | m       | 1         |
| 7     | 5     | NV          | investmentAdviserTerminatedStateCountry |            | CHOICE                                               | m     | m       | 1         |
| 7     | 5     | attr String | investmentAdviserTerminatedState        |            | <a href="#">ISO STATE AND OUTLYING AREA CODE USA</a> | m     | m       | 1         |
| 7     | 5     | attr String | investmentAdviserTerminatedCountry      |            | "US"                                                 | m     | m       | 1         |
| 7     | 5     | String      | investmentAdviserTerminatedCountry      |            | CHOICE<br><a href="#">ISO FOREIGN COUNTRY CODE</a>   | m     | m       | 1         |
| 7     | 6     | date        | investAdviserTerminationDate            |            | YYYY-MM-DD                                           | m     | m       | 1         |
| 5     | 26    | NV          | subAdvisers                             |            |                                                      | o     | o       | 1         |
| 6     | 1     | NV          | subAdviser                              |            |                                                      | m#    | m#      | 1000      |
| 7     | 1     | String      | subAdviserName                          | 150        |                                                      | m     | m       | 1         |

| Level | Order | Data Type      | Element/Attribute Length         | Max Length | Choice List                                                  | N-CEN | N-CEN/A | Max Occur |
|-------|-------|----------------|----------------------------------|------------|--------------------------------------------------------------|-------|---------|-----------|
| 7     | 2     | String         | subAdviserFileNo                 | 17         | FILE_NUMBER_T<br>YPE<br>defined in<br>eis_Common.xsd         | m     | m       | 1         |
| 7     | 3     | String         | subAdviserCrdNo                  | 9          | CRD_NUMBER_T<br>YPE<br>defined in<br>eis_NCEN_Commo<br>n.xsd | m     | m       | 1         |
| 7     | 4     | String         | subAdviserLei                    | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Commo<br>n.xsd | m     | m       | 1         |
| 7     | 5     | String         | isSubAdviserAffiliated           |            | <a href="#">YES_NO_TYPE</a>                                  | m     | m       | 1         |
| 7     | 6     | NV             | subAdviserStateCountry           |            | CHOICE                                                       | m     | m       | 1         |
| 7     | 6     | attr<br>String | subAdviserState                  |            | <a href="#">ISO STATE AND<br/>OUTLYING AREA<br/>CODE USA</a> | m     | m       | 1         |
| 7     | 6     | attr<br>String | subAdviserCountry                |            | "US"                                                         | m     | m       | 1         |
| 7     | 6     | String         | subAdviserCountry                |            | CHOICE<br><a href="#">ISO FOREIGN C<br/>OUNTRY CODE</a>      | m     | m       | 1         |
| 7     | 7     | NV             | subAdviserHired                  |            | CHOICE                                                       | m     | m       | 1         |
| 7     | 7     | attr<br>String | isSubAdviserHired                |            | "Y"                                                          | m     | m       | 1         |
| 7     | 7     | attr<br>date   | subAdviserStartDate              |            | YYYY-MM-DD                                                   | m     | m       | 1         |
| 7     | 7     | String         | isSubAdviserHired                |            | CHOICE "N"                                                   | m     | m       | 1         |
| 5     | 27    | NV             | subAdvisersTerminated            |            |                                                              | o     | o       | 1         |
| 6     | 1     | NV             | subAdviserTerminated             |            |                                                              | m#    | m#      | 1000      |
| 7     | 1     | String         | subAdviserTerminatedName         | 150        |                                                              | m     | m       | 1         |
| 7     | 2     | String         | subAdviserTerminatedFileNo       | 17         | FILE_NUMBER_T<br>YPE<br>defined in<br>eis_Common.xsd         | m     | m       | 1         |
| 7     | 3     | String         | subAdviserTerminatedCrdNo        | 9          | CRD_NUMBER_T<br>YPE<br>defined in<br>eis_NCEN_Commo<br>n.xsd | m     | m       | 1         |
| 7     | 4     | String         | subAdviserTerminatedLei          | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Commo<br>n.xsd | m     | m       | 1         |
| 7     | 5     | NV             | subAdviserTerminatedStateCountry |            | CHOICE                                                       | m     | m       | 1         |
| 7     | 5     | attr<br>String | subAdviserTerminatedState        |            | <a href="#">ISO STATE AND<br/>OUTLYING AREA<br/>CODE USA</a> | m     | m       | 1         |
| 7     | 5     | attr<br>String | subAdviserTerminatedCountry      |            | "US"                                                         | m     | m       | 1         |

| Level | Order | Data Type      | Element/Attribute Length          | Max Length | Choice List                                                  | N-CEN | N-CEN/A | Max Occur |
|-------|-------|----------------|-----------------------------------|------------|--------------------------------------------------------------|-------|---------|-----------|
| 7     | 5     | String         | subAdviserTerminatedCountry       |            | CHOICE                                                       | m     | m       | 1         |
| 7     | 6     | date           | subAdviserTerminationDate         |            |                                                              | m     | m       | 1         |
| 5     | 28    | NV             | transferAgents                    |            |                                                              | o     | o       | 1         |
| 6     | 1     | NV             | transferAgent                     |            |                                                              | m#    | m#      | 1000      |
| 7     | 1     | String         | transferAgentName                 | 150        |                                                              | m     | m       | 1         |
| 7     | 2     | String         | transferAgentFileNo               | 17         |                                                              | m     | m       | 1         |
| 7     | 3     | String         | transferAgentLei                  | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Common.xsd     | m     | m       | 1         |
| 7     | 4     | NV             | transferAgentStateCountry         |            | CHOICE                                                       | m     | m       | 1         |
| 7     | 4     | attr<br>String | transferAgentState                |            | <a href="#">ISO STATE AND<br/>OUTLYING AREA<br/>CODE USA</a> | m     | m       | 1         |
| 7     | 4     | attr<br>String | transferAgentCountry              |            | "US"                                                         | m     | m       | 1         |
| 7     | 4     | String         | transferAgentCountry              |            | CHOICE<br><a href="#">ISO FOREIGN C<br/>OUNTRY CODE</a>      | m     | m       | 1         |
| 7     | 5     | String         | isTransferAgentAffiliated         |            | <a href="#">YES_NO_TYPE</a>                                  | m     | m       | 1         |
| 7     | 6     | String         | isTransferAgentSubAgent           |            | <a href="#">YES_NO_TYPE</a>                                  | m     | m       | 1         |
| 5     | 29    | String         | isTransferAgentHiredOrTerminated  |            | <a href="#">YES_NO_TYPE</a>                                  | m#    | m#      | 1         |
| 5     | 30    | NV             | pricingServices                   |            |                                                              | o     | o       | 1         |
| 6     | 1     | NV             | pricingService                    |            |                                                              | m#    | m#      | 1000      |
| 7     | 1     | String         | pricingServiceName                | 150        |                                                              | m     | m       | 1         |
| 7     | 2     | String         | pricingServiceLei                 | 100        |                                                              | m     | m       | 1         |
| 7     | 3     | String         | pricingServiceIdNumberDesc        | 500        |                                                              | o     | o       | 1         |
| 7     | 4     | NV             | pricingServiceStateCountry        |            | CHOICE                                                       | m     | m       | 1         |
| 7     | 4     | String         | pricingServiceState               |            | <a href="#">ISO STATE AND<br/>OUTLYING AREA<br/>CODE USA</a> | m     | m       | 1         |
| 7     | 4     | String         | pricingServiceCountry             |            | "US"                                                         | m     | m       | 1         |
| 7     | 4     | String         | pricingServiceCountry             |            | CHOICE<br><a href="#">ISO FOREIGN C<br/>OUNTRY CODE</a>      | m     | m       | 1         |
| 7     | 5     | String         | isPricingServiceAffiliated        |            | <a href="#">YES_NO_TYPE</a>                                  | m     | m       | 1         |
| 5     | 31    | String         | isPricingServiceHiredOrTerminated |            | <a href="#">YES_NO_TYPE</a>                                  | m     | m       | 1         |
| 5     | 32    | NV             | custodians                        |            |                                                              | m#    | m#      | 1         |
| 6     | 1     | NV             | custodian                         |            |                                                              | m     | m       | 1000      |
| 7     | 1     | String         | custodianName                     | 150        |                                                              | m     | m       | 1         |
| 7     | 2     | String         | custodianLei                      | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Common.xsd     | m     | m       | 1         |

| Level | Order | Data Type   | Element/Attribute Length            | Max Length | Choice List                                          | N-CEN | N-CEN/A | Max Occur |
|-------|-------|-------------|-------------------------------------|------------|------------------------------------------------------|-------|---------|-----------|
| 7     | 3     | NV          | custodianStateCountry               |            | CHOICE                                               | m     | m       | 1         |
| 7     | 3     | attr String | custodianState                      |            | <a href="#">ISO STATE AND OUTLYING AREA CODE USA</a> | m     | m       | 1         |
| 7     | 3     | attr String | custodianCountry                    |            | "US"                                                 | m     | m       | 1         |
| 7     | 3     | String      | custodianCountry                    |            | CHOICE<br><a href="#">ISO FOREIGN COUNTRY CODE</a>   | m     | m       | 1         |
| 7     | 4     | String      | isCustodianAffiliated               |            | <a href="#">YES_NO_TYPE</a>                          | m     | m       | 1         |
| 7     | 5     | String      | isSubCustodian                      |            | <a href="#">YES_NO_TYPE</a>                          | m     | m       | 1         |
| 7     | 6     | String      | custodyType                         |            | <a href="#">CUSTODY_TYPE</a>                         | m     | m       | 1         |
| 7     | 7     | String      | otherCustodianDesc                  | 5000       |                                                      | m#9   | m#9     | 1         |
| 5     | 33    | String      | isCustodianHiredOrTerminated        |            | <a href="#">YES_NO_TYPE</a>                          | m#    | m#      | 1         |
| 5     | 34    | NV          | shareholderServicingAgents          |            |                                                      | o     | o       | 1         |
| 6     | 1     | NV          | shareholderServicingAgent           |            |                                                      | m#    | m#      | 1000      |
| 7     | 1     | String      | shareholderServiceAgentName         | 150        |                                                      | m     | m       | 1         |
| 7     | 2     | String      | shareholderServiceAgentLei          | 100        |                                                      | m     | m       | 1         |
| 7     | 3     | String      | shareholderServiceIdNumberDesc      | 500        |                                                      | o     | o       | 1         |
| 7     | 4     | NV          | shareholderServiceAgentStateCountry |            | CHOICE                                               | m     | m       | 1         |
| 7     | 4     | String      | shareholderServiceAgentState        |            | <a href="#">ISO STATE AND OUTLYING AREA CODE USA</a> | m     | m       | 1         |
| 7     | 4     | String      | shareholderServiceAgentCountry      |            | "US"                                                 | m     | m       | 1         |
| 7     | 4     | String      | shareholderServiceAgentCountry      |            | CHOICE<br><a href="#">ISO FOREIGN COUNTRY CODE</a>   | m     | m       | 1         |
| 7     | 5     | String      | isShareholderServiceAgentAffiliated |            | <a href="#">YES_NO_TYPE</a>                          | m     | m       | 1         |
| 7     | 6     | String      | isShareholderServiceAgentSubshare   |            | <a href="#">YES_NO_TYPE</a>                          | m     | m       | 1         |
| 5     | 35    | String      | isShareholderServiceHiredTerminated |            | <a href="#">YES_NO_TYPE</a>                          | m#    | m#      | 1         |
| 5     | 36    | NV          | admins                              |            |                                                      | o     | o       | 1         |
| 6     | 1     | NV          | admin                               |            |                                                      | m#    | m#      | 1000      |
| 7     | 1     | String      | adminName                           | 150        |                                                      | m     | m       | 1         |
| 7     | 2     | String      | adminLei                            | 100        |                                                      | m     | m       | 1         |
| 7     | 3     | String      | idNumberDesc                        | 500        |                                                      | o     | o       | 1         |
| 7     | 4     | NV          | adminStateCountry                   |            | CHOICE                                               | m     | m       | 1         |
| 7     | 4     | attr String | adminState                          |            | <a href="#">ISO STATE AND OUTLYING AREA CODE USA</a> | m     | m       | 1         |
| 7     | 4     | attr String | adminCountry                        |            | "US"                                                 | m     | m       | 1         |
| 7     | 4     | String      | adminCountry                        |            | CHOICE<br><a href="#">ISO FOREIGN COUNTRY CODE</a>   | m     | m       | 1         |
| 7     | 5     | String      | isAdminAffiliated                   |            | <a href="#">YES_NO_TYPE</a>                          | m     | m       | 1         |
| 7     | 6     | String      | isAdminSubAdmin                     |            | <a href="#">YES_NO_TYPE</a>                          | m     | m       | 1         |

| Level | Order | Data Type      | Element/Attribute Length | Max Length | Choice List                                                   | N-CEN | N-CEN/A | Max Occur |
|-------|-------|----------------|--------------------------|------------|---------------------------------------------------------------|-------|---------|-----------|
| 5     | 37    | String         | isAdminHiredOrTerminated |            | <a href="#">YES_NO_TYPE</a>                                   | m#    | m#      | 1         |
| 5     | 38    | NV             | brokerDealers            |            |                                                               | o     | o       | 1         |
| 6     | 1     | NV             | brokerDealer             |            |                                                               | m#    | m#      | 1000      |
| 7     | 1     | String         | brokerDealerName         | 150        |                                                               | m     | m       | 1         |
| 7     | 2     | String         | brokerDealerFileNo       | 17         | FILE_NUMBER_T<br>YPE<br>defined in<br>eis_Common.xsd          | m     | m       | 1         |
| 7     | 3     | String         | brokerDealerCrdNo        | 9          | CRD_NUMBER_T<br>YPE<br>defined in<br>eis_NCEN_Commo<br>n.xsd  | m     | m       | 1         |
| 7     | 4     | String         | brokerDealerLei          | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Commo<br>n.xsd  | m     | m       | 1         |
| 7     | 5     | NV             | brokerDealerStateCountry |            | CHOICE                                                        | m     | m       | 1         |
| 7     | 5     | attr<br>String | brokerDealerState        |            | <a href="#">ISO STATE AND<br/>OUTLYING AREA<br/>_CODE USA</a> | m     | m       | 1         |
| 7     | 5     | attr<br>String | brokerDealerCountry      |            | "US"                                                          | m     | m       | 1         |
| 7     | 5     | String         | brokerDealerCountry      |            | CHOICE<br><a href="#">ISO FOREIGN C<br/>OUNTRY CODE</a>       | m     | m       | 1         |
| 7     | 6     | Decimal        | brokerDealerCommission   | 24         |                                                               | m     | m       | 1         |
| 5     | 39    | NV             | brokers                  |            |                                                               | o     | o       | 1         |
| 6     | 1     | NV             | broker                   |            |                                                               | m#    | m#      | 10        |
| 7     | 1     | String         | brokerName               | 150        |                                                               | m     | m       | 1         |
| 7     | 2     | String         | brokerFileNo             | 17         | FILE_NUMBER_T<br>YPE<br>defined in<br>eis_Common.xsd          | m     | m       | 1         |
| 7     | 3     | String         | brokerCrdNo              | 9          | CRD_NUMBER_T<br>YPE<br>defined in<br>eis_NCEN_Commo<br>n.xsd  | m     | m       | 1         |
| 7     | 4     | String         | brokerLei                | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Commo<br>n.xsd  | m     | m       | 1         |
| 7     | 5     | NV             | brokerStateCountry       |            | CHOICE                                                        | m     | m       | 1         |
| 7     | 5     | attr<br>String | brokerState              |            | <a href="#">ISO STATE AND<br/>OUTLYING AREA<br/>_CODE USA</a> | m     | m       | 1         |
| 7     | 5     | attr<br>String | brokerCountry            |            | "US"                                                          | m     | m       | 1         |
| 7     | 5     | String         | brokerCountry            |            | CHOICE                                                        | m     | m       | 1         |

| Level | Order | Data Type   | Element/Attribute Length   | Max Length | Choice List                                          | N-CEN | N-CEN/A | Max Occur |
|-------|-------|-------------|----------------------------|------------|------------------------------------------------------|-------|---------|-----------|
|       |       |             |                            |            | <a href="#">ISO FOREIGN COUNTRY CODE</a>             |       |         |           |
| 7     | 6     | Decimal     | grossCommission            | 24         |                                                      | m     | m       | 1         |
| 5     | 40    | Decimal     | aggregateCommission        | 24         |                                                      | m#    | m#      | 1         |
| 5     | 41    | NV          | principalTransactions      |            |                                                      | o     | o       | 1         |
| 6     | 1     | NV          | principalTransaction       |            |                                                      | m#    | m#      | 10        |
| 7     | 1     | String      | principalName              | 150        |                                                      | m     | m       | 1         |
| 7     | 2     | String      | principalFileNo            | 17         | FILE_NUMBER_TYPE<br>defined in<br>eis_Common.xsd     | m     | m       | 1         |
| 7     | 3     | String      | principalCrdNo             | 9          | CRD_NUMBER_TYPE<br>defined in<br>eis_NCEN_Common.xsd | m     | m       | 1         |
| 7     | 4     | String      | principalLei               | 20         | LEI_TYPE_RSS_NA<br>defined in<br>eis_NCEN_Common.xsd | m#26  | m#26    | 1         |
| 7     | 5     | NV          | principalStateCountry      |            | CHOICE                                               | m     | m       | 1         |
| 7     | 5     | String      | principalState             |            | <a href="#">ISO STATE AND OUTLYING AREA CODE USA</a> | m     | m       | 1         |
| 7     | 5     | String      | principalCountry           |            | "US"                                                 | m     | m       | 1         |
| 7     | 5     | String      | principalCountry           |            | CHOICE<br><a href="#">ISO FOREIGN COUNTRY CODE</a>   | m     | m       | 1         |
| 7     | 6     | Decimal     | principalTotalPurchaseSale | 24         |                                                      | m     | m       | 1         |
| 5     | 42    | Decimal     | principalAggregatePurchase | 24         |                                                      | m#    | m#      | 1         |
| 5     | 43    | String      | isBrokerageResearchPayment |            | <a href="#">YES_NO_TYPE</a>                          | m#    | m#      | 1         |
| 5     | 44    | Decimal     | mnthlyAvgNetAssets         | 24         |                                                      | na#3  | na#3    | 1         |
| 5     | 45    | Decimal     | dailyAvgNetAssets          | 24         |                                                      | m#10  | m#10    | 1         |
| 5     | 46    | String      | hasLineOfCredit            |            | CHOICE "N"                                           | o#2   | o#2     | 1         |
| 5     | 46    | NV          | lineOfCredit               |            | CHOICE                                               | o#2   | o#2     | 1         |
| 5     | 46    | attr String | hasLineOfCredit            |            | "Y"                                                  | m     | m       | 1         |
| 6     | 1     | NV          | lineOfCreditDetails        |            |                                                      | m     | m       | 1         |
| 7     | 1     | NV          | lineOfCreditDetail         |            |                                                      | m     | m       | 1000      |
| 8     | 1     | String      | isCreditLineCommitted      |            | <a href="#">CREDIT LINE COMMITTED TYPE</a>           | m     | m       | 1         |
| 8     | 2     | Decimal     | lineOfCreditSize           | 24         |                                                      | m     | m       | 1         |
| 8     | 3     | NV          | lineOfCreditInstitutions   |            |                                                      | m     | m       | 1         |
| 9     | 1     | NV          | lineOfCreditInstitution    |            |                                                      | m     | m       | 1000      |
| 9     | 1     | attr String | creditInstitutionName      |            |                                                      | m     | m       | 1         |

| Level | Order | Data Type    | Element/Attribute Length          | Max Length | Choice List                   | N-CEN | N-CEN/A | Max Occur |
|-------|-------|--------------|-----------------------------------|------------|-------------------------------|-------|---------|-----------|
| 8     | 4     | NV           | soleCreditType                    |            | CHOICE                        | m     | m       | 1         |
| 8     | 4     | attr String  | creditType                        |            | "Sole"                        | m     | m       | 1         |
| 8     | 4     | NV           | sharedCreditType                  |            | CHOICE                        | m     | m       | 1         |
| 8     | 4     | attr String  | creditType                        |            | "Shared"                      | m     | m       | 1         |
| 9     | 1     | NV           | creditUser                        |            |                               | m     | m       | 1000      |
| 9     | 1     | attr String  | fundName                          | 150        |                               | m     | m       | 1         |
| 9     | 1     | attr String  | secFileNo                         | 17         |                               | m     | m       | 1         |
| 8     | 5     | String       | isCreditLineUsed                  |            | CHOICE "N"                    | m#25  | m#25    | 1         |
| 8     | 5     | NV           | creditLineUsed                    |            | CHOICE                        | m#25  | m#25    | 1         |
| 8     | 5     | attr String  | isCreditLineUsed                  |            | "Y"                           | m     | m       | 1         |
| 8     | 5     | attr Decimal | averageCreditLineUsed             | 24         |                               | m     | m       | 1         |
| 8     | 5     | attr integer | daysCreditUsed                    | 8          |                               | m     | m       | 1         |
| 5     | 47    | String       | isInterfundLending                |            | CHOICE "N"                    | m#25  | m#25    | 1         |
| 5     | 47    | NV           | interfundLendingDetails           |            | CHOICE                        | m#25  | m#25    | 1         |
| 5     | 47    | attr String  | isInterfundLending                |            | "Y"                           | m     | m       | 1         |
| 6     | 1     | NV           | interfundLending                  |            |                               | m     | m       | 1000      |
| 6     | 1     | attr Decimal | interfundLendingLoanAverage       | 24         |                               | m     | m       | 1         |
| 6     | 1     | attr integer | interfundLendingDaysOutstanding   | 8          |                               | m     | m       | 1         |
| 5     | 48    | String       | isInterfundBorrowing              |            | CHOICE "N"                    | m#25  | m#25    | 1         |
| 5     | 48    | NV           | interfundBorrowingDetails         |            | CHOICE                        | m#25  | m#25    | 1         |
| 5     | 48    | attr String  | isInterfundBorrowing              |            | "Y"                           | m     | m       | 1         |
| 6     | 1     | NV           | interfundBorrowing                |            |                               | m     | m       | 1000      |
| 6     | 1     | attr Decimal | interfundBorrowingLoanAverage     | 24         |                               | m     | m       | 1         |
| 6     | 1     | attr integer | interfundBorrowingDaysOutstanding | 8          |                               | m     | m       | 1         |
| 5     | 49    | String       | isSwingPricing                    |            | CHOICE "N"                    | o#3   | o#3     | 1         |
| 5     | 49    | NV           | swingPricingDetail                |            | CHOICE                        | o#3   | o#3     | 1         |
| 5     | 49    | attr String  | isSwingPricing                    |            | "Y"                           | m     | m       | 1         |
| 5     | 49    | attr Decimal | swingUpperLimit                   | 24         |                               | m     | m       | 1         |
| 3     | 4     | NV           | closedEndManagementInvestment     |            |                               | na#4  | na#4    | 1         |
| 4     | 1     | NV           | securityRelatedItems              |            |                               | m#    | m#      | 1         |
| 5     | 1     | NV           | securityRelatedItem               |            |                               | m#    | m#      | 1000      |
| 6     | 1     | String       | description                       |            | <a href="#">SECURITY_TYPE</a> | m     | m       | 1         |

| Level | Order | Data Type    | Element/Attribute Length           | Max Length | Choice List                       | N-CEN | N-CEN/A | Max Occur |
|-------|-------|--------------|------------------------------------|------------|-----------------------------------|-------|---------|-----------|
| 6     | 2     | String       | securityClassTitle                 |            |                                   | m     | m       | 1         |
| 6     | 3     | NV           | commonStocks                       |            |                                   | m     | m       | 1         |
| 7     | 1     | NV           | commonStock                        |            |                                   | m     | m       | 1000      |
| 7     | 1     | attr String  | commonStockExchange                |            | <a href="#">ISO EXCHANGE CODE</a> | m     | m       | 1         |
| 7     | 1     | attr String  | commonStockTickerSymbol            | 12         |                                   | m     | m       | 1         |
| 6     | 4     | String       | otherSecurityDescription           | 5000       |                                   | m#11  | m#11    | 1         |
| 4     | 2     | String       | isRightsOffering                   |            | CHOICE "N"                        | m#    | m#      | 1         |
| 4     | 2     | NV           | rightsOfferingFunds                |            | CHOICE                            | m#    | m#      | 1         |
| 4     | 2     | attr String  | isRightsOffering                   |            | "Y"                               | m     | m       | 1         |
| 5     | 1     | NV           | rightsOfferingFund                 |            |                                   | m     | m       | 1000      |
| 6     | 1     | NV           | rightsOfferingTypes                |            |                                   | m     | m       | 1         |
| 7     | 1     | String       | rightsOfferingType                 |            | <a href="#">SECURITY TYPE</a>     | m     | m       | 6         |
| 7     | 2     | String       | rightsOfferingDesc                 | 5000       |                                   | m#12  | m#12    | 1         |
| 6     | 2     | Decimal      | rightsOfferingParticipationPercent | 24         |                                   | m     | m       | 1         |
| 4     | 3     | String       | isSecondaryOffering                |            | CHOICE "N"                        | m#    | m#      | 1         |
| 4     | 3     | NV           | secondaryOfferings                 |            | CHOICE                            | m#    | m#      | 1         |
| 4     | 3     | attr String  | isSecondaryOffering                |            | "Y"                               | m     | m       | 1         |
| 5     | 1     | String       | secondaryOfferingType              |            | <a href="#">SECURITY TYPE</a>     | m     | m       | 6         |
| 5     | 2     | String       | otherSecondaryOfferingDesc         | 5000       |                                   | m#13  | m#13    | 1         |
| 4     | 4     | NV           | repurchaseSecurities               |            | CHOICE                            | m#    | m#      | 1         |
| 4     | 4     | attr String  | isRepurchaseSecurity               |            | "Y"                               | m     | m       | 1         |
| 5     | 1     | String       | repurchaseSecurityType             |            | <a href="#">SECURITY TYPE</a>     | m#    | m#      | 6         |
| 5     | 2     | String       | otherRepurchaseSecurityDesc        | 5000       |                                   | m#14  | m#14    | 1         |
| 4     | 4     | String       | isRepurchaseSecurity               |            | CHOICE "N"                        | m#    | m#      | 1         |
| 4     | 5     | NV           | longTermDebtDefault                |            | CHOICE                            | m#    | m#      | 1         |
| 4     | 5     | attr String  | isDefaultLongTermDebt              |            | "Y"                               | m     | m       | 1         |
| 5     | 1     | NV           | longTermDebtDefaults               |            |                                   | m     | m       | 1         |
| 6     | 1     | NV           | longTermDebtDefault                |            |                                   | m     | m       | 1000      |
| 6     | 1     | attr String  | defaultNature                      | 5000       |                                   | m     | m       | 1         |
| 6     | 1     | attr date    | defaultDate                        |            | YYYY-MM-DD                        | m     | m       | 1         |
| 6     | 1     | attr Decimal | defaultPerThousandAmount           | 24         |                                   | m     | m       | 1         |
| 6     | 1     | attr Decimal | defaultTotalAmount                 | 24         |                                   | m     | m       | 1         |
| 4     | 5     | String       | isDefaultLongTermDebt              |            | CHOICE "N"                        | m#    | m#      | 1         |
| 4     | 6     | NV           | divdlnArrears                      |            | CHOICE                            | m#    | m#      | 1         |

| Level | Order | Data Type    | Element/Attribute Length           | Max Length | Choice List                                                  | N-CEN | N-CEN/A | Max Occur |
|-------|-------|--------------|------------------------------------|------------|--------------------------------------------------------------|-------|---------|-----------|
| 4     | 6     | String attr  | isDividendsInArrears               |            | "Y"                                                          | m     | m       | 1         |
| 5     | 1     | NV           | dividendsInArrears                 |            |                                                              | m     | m       | 1         |
| 6     | 1     | NV           | dividendsInArrear                  |            |                                                              | m     | m       | 1000      |
| 6     | 1     | attr String  | dividendIssueTitle                 | 150        |                                                              | m     | m       | 1         |
| 6     | 1     | attr Decimal | dividendAmountPerShareInArrear     | 24         |                                                              | m     | m       | 1         |
| 4     | 6     | String       | isDividendsInArrears               |            | CHOICE "N"                                                   | m#    | m#      | 1         |
| 4     | 7     | String       | isSecuritiesModified               |            | <a href="#">YES_NO_TYPE</a>                                  | m#    | m#      | 1         |
| 4     | 8     | Decimal      | managementFee                      | 24         |                                                              | m#15  | m#15    | 1         |
| 4     | 9     | Decimal      | netOperatingExpenses               | 24         |                                                              | m#    | m#      | 1         |
| 4     | 10    | Decimal      | marketPricePerShare                | 24         | Decimal or N/A                                               | m#16  | m#16    | 1         |
| 4     | 11    | Decimal      | netAssetValuePerShare              | 24         |                                                              | m#    | m#      | 1         |
| 4     | 12    | NV           | smallInvestmentAdvisers            |            |                                                              | o#4   | o#4     | 1         |
| 5     | 1     | NV           | smallInvestmentAdviser             |            |                                                              | m#    | m#      | 1000      |
| 6     | 1     | String       | smallInvestmentAdviserName         | 150        |                                                              | m     | m       | 1         |
| 6     | 2     | Strng        | smallInvestmentAdviserFileNo       | 17         | FILE_NUMBER_T<br>YPE<br>defined in<br>eis_Common.xsd         | m     | m       | 1         |
| 6     | 3     | String       | smallInvestmentAdviserCrdNo        | 9          | CRD_NUMBER_T<br>YPE<br>defined in<br>eis_NCEN_Commo<br>n.xsd | m     | m       | 1         |
| 6     | 4     | String       | smallInvestmentAdviserLei          | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Commo<br>n.xsd | m     | m       | 1         |
| 6     | 5     | NV           | smallInvestmentAdviserStateCountry |            | CHOICE                                                       | m     | m       | 1         |
| 6     | 5     | attr String  | smallInvestmentAdviserState        |            | <a href="#">ISO STATE AND<br/>OUTLYING AREA<br/>CODE USA</a> | m     | m       | 1         |
| 6     | 5     | attr String  | smallInvestmentAdviserCountry      |            | "US"                                                         | m     | m       | 1         |
| 6     | 5     | String       | smallInvestmentAdviserCountry      |            | CHOICE<br><a href="#">ISO FOREIGN_C<br/>OUNTRY CODE</a>      | m     | m       | 1         |
| 6     | 6     | NV           | smallInvestmentAdviserHired        |            | CHOICE                                                       | m     | m       | 1         |
| 6     | 6     | attr String  | isSmallInvestmentAdviserHired      |            | "Y"                                                          | m     | m       | 1         |
| 6     | 6     | attr date    | smallInvestmentAdviserStartDate    |            | YYYY-MM-DD                                                   | m     | m       | 1         |
| 6     | 6     | String       | isSmallInvestmentAdviserHired      |            | CHOICE "N"                                                   | m     | m       | 1         |
| 4     | 13    | NV           | terminatedSmallInvAdvisers         |            |                                                              | o#4   | o#4     | 1         |
| 5     | 1     | NV           | terminatedSmallInvAdviser          |            |                                                              | m#    | m#      | 1000      |

| Level | Order | Data Type   | Element/Attribute Length                     | Max Length | Choice List                                          | N-CEN | N-CEN/A | Max Occur |
|-------|-------|-------------|----------------------------------------------|------------|------------------------------------------------------|-------|---------|-----------|
| 6     | 1     | String      | smallInvestmentAdviserTerminatedName         | 150        |                                                      | m     | m       | 1         |
| 6     | 2     | String      | smallInvestmentAdviserTerminatedFileNo       | 17         | FILE_NUMBER_TYPE<br>defined in<br>eis_Common.xsd     | m     | m       | 1         |
| 6     | 3     | String      | smallInvestmentAdviserTerminatedCrdNo        | 9          | CRD_NUMBER_TYPE<br>defined in<br>eis_NCEN_Common.xsd | m     | m       | 1         |
| 6     | 4     | String      | smallInvestmentAdviserTerminatedLei          | 20         | LEI_TYPE_RSS_NA<br>defined in<br>eis_NCEN_Common.xsd | m     | m       | 1         |
| 6     | 5     | NV          | smallInvestmentAdviserTerminatedStateCountry |            | CHOICE                                               | m     | m       | 1         |
| 6     | 5     | attr String | smallInvestmentAdviserTerminatedState        |            | <a href="#">ISO STATE AND OUTLYING AREA CODE USA</a> | m     | m       | 1         |
| 6     | 5     | attr String | smallInvestmentAdviserTerminatedCountry      |            | "US"                                                 | m     | m       | 1         |
| 6     | 5     | String      | smallInvestmentAdviserTerminatedCountry      |            | CHOICE<br><a href="#">ISO FOREIGN COUNTRY CODE</a>   | m     | m       | 1         |
| 6     | 6     | date        | smallInvestmentAdviserTerminatedDate         |            | YYYY-MM-DD                                           | m     | m       | 1         |
| 4     | 14    | NV          | smallSubAdvisers                             |            |                                                      | o#4   | o#4     | 1         |
| 5     | 1     | NV          | smallSubAdviser                              |            |                                                      | m#    | m#      | 1000      |
| 6     | 1     | String      | smallSubAdviserName                          | 150        |                                                      | m     | m       | 1         |
| 6     | 2     | String      | smallSubAdviserFileNo                        | 17         | FILE_NUMBER_TYPE<br>defined in<br>eis_Common.xsd     | m     | m       | 1         |
| 6     | 3     | String      | smallSubAdviserCrdNo                         | 9          | CRD_NUMBER_TYPE<br>defined in<br>eis_NCEN_Common.xsd | m     | m       | 1         |
| 6     | 4     | String      | smallSubAdviserLei                           | 20         | LEI_TYPE_RSS_NA<br>defined in<br>eis_NCEN_Common.xsd | m     | m       | 1         |
| 6     | 5     | NV          | smallSubAdviserStateCountry                  |            | CHOICE                                               | m     | m       | 1         |
| 6     | 5     | attr String | smallSubAdviserState                         |            | <a href="#">ISO STATE AND OUTLYING AREA CODE USA</a> | m     | m       | 1         |
| 6     | 5     | attr String | smallSubAdviserCountry                       |            | "US"                                                 | m     | m       | 1         |
| 6     | 5     | String      | smallSubAdviserCountry                       |            | CHOICE<br><a href="#">ISO FOREIGN COUNTRY CODE</a>   | m     | m       | 1         |
| 6     | 6     | String      | isSmallSubAdviserAffiliated                  |            | <a href="#">YES_NO_TYPE</a>                          | m     | m       | 1         |

| Level | Order | Data Type   | Element/Attribute Length              | Max Length | Choice List                                                  | N-CEN | N-CEN/A | Max Occur |
|-------|-------|-------------|---------------------------------------|------------|--------------------------------------------------------------|-------|---------|-----------|
| 6     | 7     | NV          | smallSubAdviserHired                  |            | CHOICE                                                       | m     | m       | 1         |
| 6     | 7     | attr String | isSmallSubAdviserHired                |            | "Y"                                                          | m     | m       | 1         |
| 6     | 7     | attr date   | smallSubAdviserStartDate              |            | YYYY-MM-DD                                                   | m     | m       | 1         |
| 6     | 7     | String      | isSmallSubAdviserHired                |            | CHOICE "N"                                                   | m     | m       | 1         |
| 4     | 15    | NV          | terminatedSmallSubAdvisers            |            |                                                              | o#4   | o#4     | 1         |
| 5     | 1     | NV          | terminatedSmallSubAdviser             |            |                                                              | m#    | m#      | 1000      |
| 6     | 1     | String      | smallSubAdviserTerminatedName         | 150        |                                                              | m     | m       | 1         |
| 6     | 2     | String      | smallSubAdviserTerminatedFileNo       | 17         | FILE_NUMBER_T<br>YPE<br>defined in<br>eis_Common.xsd         | m     | m       | 1         |
| 6     | 3     | String      | smallSubAdviserTerminatedCrdNo        | 9          | CRD_NUMBER_T<br>YPE<br>defined in<br>eis_NCEN_Commo<br>n.xsd | m     | m       | 1         |
| 6     | 4     | String      | smallSubAdviserTerminatedLei          | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Commo<br>n.xsd | m     | m       | 1         |
| 6     | 5     | NV          | smallSubAdviserTerminatedStateCountry |            | CHOICE                                                       | m     | m       | 1         |
| 6     | 5     | attr String | smallSubAdviserTerminatedState        |            | <a href="#">ISO STATE AND<br/>OUTLYING AREA<br/>CODE USA</a> | m     | m       | 1         |
| 6     | 5     | attr String | smallSubAdviserTerminatedCountry      |            | "US"                                                         | m     | m       | 1         |
| 6     | 5     | String      | smallSubAdviserTerminatedCountry      |            | CHOICE<br><a href="#">ISO FOREIGN C<br/>OUNTRY CODE</a>      | m     | m       | 1         |
| 6     | 6     | date        | smallSubAdviserTerminatedDate         |            | YYYY-MM-DD                                                   | m     | m       | 1         |
| 4     | 16    | NV          | smallTransferAgents                   |            |                                                              | o#4   | o#4     | 1         |
| 5     | 1     | NV          | smallTransferAgent                    |            |                                                              | m#    | m#      | 1000      |
| 6     | 1     | String      | smallTransferAgentName                | 150        |                                                              | m     | m       | 1         |
| 6     | 2     | String      | smallTransferAgentFileNo              | 17         | FILE_NUMBER_T<br>YPE<br>defined in<br>eis_Common.xsd         | m     | m       | 1         |
| 6     | 3     | String      | smallTransferAgentLei                 | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Commo<br>n.xsd | m     | m       | 1         |
| 6     | 4     | NV          | smallTransferAgentStateCountry        |            | CHOICE                                                       | m     | m       | 1         |
| 7     | 1     | String      | smallTransferAgentState               |            | <a href="#">ISO STATE AND<br/>OUTLYING AREA<br/>CODE USA</a> | m     | m       | 1         |
| 7     | 2     | String      | smallTransferAgentCountry             |            | "US"                                                         | m     | m       | 1         |

| Level | Order | Data Type   | Element/Attribute Length              | Max Length | Choice List                                          | N-CEN | N-CEN/A | Max Occur |
|-------|-------|-------------|---------------------------------------|------------|------------------------------------------------------|-------|---------|-----------|
| 6     | 4     | String      | smallTransferAgentCountry             |            | CHOICE<br><a href="#">ISO_FOREIGN_COUNTRY_CODE</a>   | m     | m       | 1         |
| 6     | 5     | String      | isSmallTransferAgentAffiliated        |            | <a href="#">YES_NO_TYPE</a>                          | m     | m       | 1         |
| 6     | 6     | String      | isSmallTransferAgentSubAdmin          |            | <a href="#">YES_NO_TYPE</a>                          | m     | m       | 1         |
| 4     | 17    | String      | isSmallTransferAgentHiredOrTerminated |            | <a href="#">YES_NO_TYPE</a>                          | c#5   | c#5     | 1         |
| 4     | 18    | NV          | smallCustodians                       |            |                                                      | c#5   | c#5     | 1         |
| 5     | 1     | NV          | smallCustodian                        |            |                                                      | m#    | m#      | 1000      |
| 6     | 1     | String      | smallCustodianName                    | 150        |                                                      | m     | m       | 1         |
| 6     | 2     | String      | smallCustodianLei                     | 20         | LEI_TYPE_RSS_NA<br>defined in<br>eis_NCEN_Common.xsd | m     | m       | 1         |
| 6     | 3     | NV          | smallCustodianStateCountry            |            | CHOICE                                               | m     | m       | 1         |
| 6     | 3     | attr String | smallCustodianState                   |            | <a href="#">ISO_STATE_AND_OUTLYING_AREA_CODE_USA</a> | m     | m       | 1         |
| 6     | 3     | attr String | smallCustodianCountry                 |            | "US"                                                 | m     | m       | 1         |
| 6     | 3     | String      | smallCustodianCountry                 |            | CHOICE<br><a href="#">ISO_FOREIGN_COUNTRY_CODE</a>   | m     | m       | 1         |
| 6     | 4     | String      | isSmallCustodianAffiliated            |            | <a href="#">YES_NO_TYPE</a>                          | m     | m       | 1         |
| 6     | 5     | String      | isSmallCustodianSub                   |            | <a href="#">YES_NO_TYPE</a>                          | m     | m       | 1         |
| 6     | 6     | NV          | custodyType                           |            | <a href="#">CUSTODY_TYPE</a>                         | m     | m       | 1         |
| 6     | 7     | String      | otherSmallCustodianDesc               | 5000       |                                                      | m#17  | m#17    | 1         |
| 4     | 19    | String      | isSmallCustodianHiredTerminated       |            | <a href="#">YES_NO_TYPE</a>                          | c#6   | c#6     | 1         |
| 3     | 5     | NV          | exchangeSeriesInfo                    |            |                                                      | c#4   | c#4     | 1         |
| 4     | 1     | NV          | exchangeTradedFund                    |            |                                                      | o     | o       | 1000      |
| 5     | 1     | String      | fundName                              | 150        |                                                      | c#7   | c#7     | 1         |
| 5     | 2     | String      | etfSeriesId                           |            | SERIES_ID_TYPE<br>defined in<br>eis_Common_SC.xsd    | c#8   | c#8     | 1         |
| 5     | 3     | NV          | securityExchanges                     |            |                                                      | m#    | m#      | 1         |
| 6     | 1     | NV          | securityExchange                      |            |                                                      | m#    | m#      | 1000      |
| 6     | 1     | attr String | fundExchange                          |            | <a href="#">ISO_EXCHANGE_CODE</a>                    | m     | m       | 1         |
| 6     | 1     | attr String | fundsTickerSymbol                     | 12         |                                                      | m     | m       | 1         |
| 5     | 4     | NV          | authorizedParticipants                |            |                                                      | m     | m       | 1         |
| 6     | 1     | NV          | authorizedParticipant                 |            |                                                      | m#    | m#      | 1000      |
| 6     | 1     | attr String | authorizedParticipantName             | 150        |                                                      | m     | m       | 1         |
| 6     | 1     | attr String | authorizedParticipantFileNo           | 17         | FILE_NUMBER_TYPE                                     | m     | m       | 1         |

| Level | Order | Data Type       | Element/Attribute Length                            | Max Length | Choice List                                                  | N-CEN | N-CEN/A | Max Occur |
|-------|-------|-----------------|-----------------------------------------------------|------------|--------------------------------------------------------------|-------|---------|-----------|
|       |       |                 |                                                     |            | defined in<br>eis_Common.xsd                                 |       |         |           |
| 6     | 1     | attr<br>String  | authorizedParticipantCrdNo                          | 9          | CRD_NUMBER_T<br>YPE<br>defined in<br>eis_NCEN_Commo<br>n.xsd | m     | m       | 1         |
| 6     | 1     | attr<br>String  | authorizedParticipantLei                            | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Commo<br>n.xsd | m     | m       | 1         |
|       |       |                 |                                                     |            |                                                              |       |         |           |
| 6     | 1     | attr<br>Decimal | authorizedParticipantPurchaseValue                  | 24         |                                                              | m     | m       | 1         |
| 6     | 1     | attr<br>Decimal | authorizedParticipantRedeemValue                    | 24         |                                                              | m     | m       | 1         |
| 5     | 5     | String          | isCollateralRequired                                |            | <a href="#">YES_NO_TYPE</a>                                  | m     | m       | 1         |
| 5     | 6     | Decimal         | creationUnitNumOfShares                             | 24         |                                                              | m     | m       | 1         |
| 5     | 7     | Decimal         | averagePercentagePurchased                          | 24         |                                                              | m     | m       | 1         |
| 5     | 8     | Decimal         | standardDeviationPurchased                          | 24         |                                                              | m     | m       | 1         |
| 5     | 9     | Decimal         | creationUnitPurchasedInKind                         | 24         |                                                              | m     | m       | 1         |
| 5     | 10    | Decimal         | creationUnitPurchasedSDInKind                       | 24         |                                                              | m     | m       | 1         |
| 5     | 11    | Decimal         | averagePercentageRedeemed                           | 24         |                                                              | m     | m       | 1         |
| 5     | 12    | Decimal         | percentSDRedeemed                                   | 24         |                                                              | m     | m       | 1         |
| 5     | 13    | Decimal         | creationUnitPercentageRedeemedInKin<br>d            | 24         |                                                              | m     | m       | 1         |
| 5     | 14    | Decimal         | creationUnitSDRedeemedInKind                        | 24         |                                                              | m     | m       | 1         |
| 5     | 15    | Decimal         | creationUnitTransactionFeePerUnit                   | 24         | Non Neg Decimal<br>or N/A                                    | m     | m       | 1         |
| 5     | 16    | Decimal         | creationUnitTransactionFeeManyUnits                 | 24         | Non Neg Decimal<br>or N/A                                    | m     | m       | 1         |
| 5     | 17    | Decimal         | creationUnitTransactionFeePercentageP<br>erUnit     | 24         | Non Neg Decimal<br>or N/A                                    | m     | m       | 1         |
| 5     | 18    | Decimal         | creationUnitTransactionFeeCashPerUnit               | 24         | Non Neg Decimal<br>or N/A                                    | m     | m       | 1         |
| 5     | 19    | Decimal         | creationUnitTransactionFeeCashManyU<br>nits         | 24         | Non Neg Decimal<br>or N/A                                    | m     | m       | 1         |
| 5     | 20    | Decimal         | creationUnitTransactionFeeCashPercent<br>agePerUnit | 24         | Non Neg Decimal<br>or N/A                                    | m     | m       | 1         |
| 5     | 21    | Decimal         | purchaseCreationUnitDollarPerUnit                   | 24         | Non Neg Decimal<br>or N/A                                    | m     | m       | 1         |
| 5     | 22    | Decimal         | purchaseCreationUnitDollarPerMoreUnit<br>s          | 24         | Non Neg Decimal<br>or N/A                                    | m     | m       | 1         |
| 5     | 23    | Decimal         | purchaseCreationUnitDollarPercentageP<br>erUnit     | 24         | Non Neg Decimal<br>or N/A                                    | m     | m       | 1         |
| 5     | 24    | Decimal         | purchaseCreationUnitCashPerUnit                     | 24         | Non Neg Decimal<br>or N/A                                    | m     | m       | 1         |
| 5     | 25    | Decimal         | purchaseCreationUnitCashPerMoreUnit<br>s            | 24         | Non Neg Decimal<br>or N/A                                    | m     | m       | 1         |
| 5     | 26    | Decimal         | purchaseCreationUnitCashPercentageP<br>erUnit       | 24         | Non Neg Decimal<br>or N/A                                    | m     | m       | 1         |

| Level | Order | Data Type      | Element/Attribute Length    | Max Length | Choice List                                                   | N-CEN | N-CEN/A | Max Occur |
|-------|-------|----------------|-----------------------------|------------|---------------------------------------------------------------|-------|---------|-----------|
| 5     | 27    | String         | isByAffiliatedPerson        |            | <a href="#">YES_NO_TYPE</a>                                   | m#19  | m#19    | 1         |
| 5     | 28    | String         | isExclusiveFund             |            | <a href="#">YES_NO_TYPE</a>                                   | m#19  | m#19    | 1         |
| 5     | 29    | Decimal        | beforeFundFeesExpensesDiff  | 24         |                                                               | m#19  | m#19    | 1         |
| 5     | 30    | Decimal        | afterFundFeesExpensesDiff   | 24         |                                                               | m#19  | m#19    | 1         |
| 5     | 31    | Decimal        | beforeFundFeesExpensesSd    | 24         |                                                               | m#19  | m#19    | 1         |
| 5     | 32    | Decimal        | afterFundFeesExpensesSd     | 24         |                                                               | m#19  | m#19    | 1         |
| 5     | 33    | String         | isInKindETF                 |            | <a href="#">YES_NO_TYPE</a>                                   | o#5   | o#5     | 1         |
| 3     | 6     | NV             | unitInvestmentTrust         |            |                                                               | na#5  | na#5    | 1         |
| 4     | 1     | NV             | depositors                  |            |                                                               | o#6   | o#6     | 1         |
| 5     | 1     | NV             | depositor                   |            |                                                               | m#    | m#      | 1000      |
| 6     | 1     | String         | depositorName               | 150        |                                                               | m     | m       | 1         |
| 6     | 2     | String         | depositorCrdNo              | 9          | CRD_NUMBER_T<br>YPE<br>defined in<br>eis_NCEN_Commo<br>n.xsd  | m     | m       | 1         |
| 6     | 3     | String         | depositorLei                | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Commo<br>n.xsd  | m     | m       | 1         |
| 6     | 4     | NV             | depositorStateCountry       |            | CHOICE                                                        | m     | m       | 1         |
| 6     | 4     | attr<br>String | depositorState              |            | <a href="#">ISO STATE AND<br/>OUTLYING AREA<br/>_CODE USA</a> | m     | m       | 1         |
| 6     | 4     | attr<br>String | depositorCountry            |            | "US"                                                          | m     | m       | 1         |
| 6     | 4     | String         | depositorCountry            |            | CHOICE<br><a href="#">ISO FOREIGN C<br/>OUNTRY CODE</a>       | m     | m       | 1         |
| 6     | 5     | String         | depositorUltimateParentname | 150        |                                                               | m     | m       | 1         |
| 4     | 2     | NV             | uitAdmins                   |            |                                                               | o#6   | o#6     | 1         |
| 5     | 1     | NV             | uitAdmin                    |            |                                                               | m#    | m#      | 1000      |
| 6     | 1     | String         | uitAdminName                | 150        |                                                               | m     | m       | 1         |
| 6     | 2     | String         | uitAdminLei                 | 100        |                                                               | m     | m       | 1         |
| 6     | 3     | String         | uitAdminDescOtherNumber     | 5000       |                                                               | o     | o       | 1         |
| 6     | 4     | NV             | uitAdminStateCountry        |            | CHOICE                                                        | m     | m       | 1         |
| 6     | 4     | attr<br>String | uitAdminState               |            | <a href="#">ISO STATE AND<br/>OUTLYING AREA<br/>_CODE USA</a> | m     | m       | 1         |
| 6     | 4     | attr<br>String | uitAdminCountry             |            | "US"                                                          | m     | m       | 1         |
| 6     | 4     | String         | uitAdminCountry             |            | CHOICE<br><a href="#">ISO FOREIGN C<br/>OUNTRY CODE</a>       | m     | m       | 1         |
| 6     | 5     | String         | isUitAdminAffiliated        |            | <a href="#">YES_NO_TYPE</a>                                   | m     | m       | 1         |

| Level | Order | Data Type   | Element/Attribute Length              | Max Length | Choice List                                                | N-CEN | N-CEN/A | Max Occur |
|-------|-------|-------------|---------------------------------------|------------|------------------------------------------------------------|-------|---------|-----------|
| 6     | 6     | String      | isUitAdminSubAdmin                    |            | <a href="#">YES_NO_TYPE</a>                                | m     | m       | 1         |
| 4     | 3     | String      | isUitAdminHiredTerminated             |            | <a href="#">YES_NO_TYPE</a>                                | na#6  | na#6    | 1         |
| 4     | 4     | NV          | registrantSeparateInsuranceAccount    |            | CHOICE                                                     | na#6  | na#6    | 1         |
| 4     | 4     | attr String | isRegistrantSeparateInsuranceAccount  |            | "Y"                                                        | m     | m       | 1         |
| 4     | 4     | attr Strng  | separateAccountSeriesId               | 10         | SERIES_ID_TYPE<br>defined in<br>eis_Common_SC.xsd          | m     | m       | 1         |
| 4     | 4     | NV          | notRegistrantSeparateInsuranceAccount |            | CHOICE                                                     | na#6  | na#6    | 1         |
| 4     | 4     | attr String | isRegistrantSeparateInsuranceAccount  |            | "N"                                                        | m     | m       | 1         |
| 5     | 1     | NV          | sponsors                              |            |                                                            | o     | o       | 1         |
| 6     | 1     | NV          | sponsor                               |            |                                                            | m#    | m#      | 1000      |
| 7     | 1     | String      | sponsorName                           | 150        |                                                            | m     | m       | 1         |
| 7     | 2     | String      | sponsorCrdNo                          | 9          | CRD_NUMBER_T<br>YPE<br>defined in<br>eis_NCEN_Common.xsd   | m     | m       | 1         |
| 7     | 2     | String      | sponsorLei                            | 20         | LEI_TYPE_RSS_N<br>A<br>defined in<br>eis_NCEN_Common.xsd   | m     | m       | 1         |
| 7     | 4     | NV          | sponsorStateCountry                   |            | CHOICE                                                     | m     | m       | 1         |
| 7     | 4     | attr String | sponsorState                          |            | <a href="#">ISO STATE AND OUTLYING AREA CODE USA</a>       | m     | m       | 1         |
| 7     | 4     | attr String | sponsorCountry                        |            | "US"                                                       | m     | m       | 1         |
| 7     | 4     | String      | sponsorCountry                        |            | CHOICE<br><a href="#">ISO FOREIGN COUNTRY CODE</a>         | m     | m       | 1         |
| 5     | 2     | NV          | trustees                              |            |                                                            | o     | o       | 1         |
| 6     | 1     | NV          | trustee                               |            |                                                            | m#    | m#      | 1000      |
| 7     | 1     | String      | trusteeName                           | 150        |                                                            | m     | m       | 1         |
| 7     | 2     | NV          | trusteeStateCountry                   |            | CHOICE                                                     | m     | m       | 1         |
| 7     | 2     | attr String | trusteeState                          |            | <a href="#">ISO STATE AND OUTLYING AREA CODE USA</a>       | m     | m       | 1         |
| 7     | 2     | attr String | trusteeCountry                        |            | "US"                                                       | m     | m       | 1         |
| 7     | 2     | String      | trusteeCountry                        |            | CHOICE<br><a href="#">ISO FOREIGN COUNTRY CODE</a>         | m     | m       | 1         |
| 5     | 3     | integer     | numOfExistingSeries                   | 8          | INTEGER_NONNEGATIVE_8<br>defined in<br>eis_NCEN_Common.xsd | m     | m       | 1         |

| Level | Order | Data Type    | Element/Attribute Length           | Max Length | Choice List                                          | N-CEN | N-CEN/A | Max Occur |
|-------|-------|--------------|------------------------------------|------------|------------------------------------------------------|-------|---------|-----------|
| 5     | 4     | NV           | seriesCIKs                         |            |                                                      | m#20  | m#20    | 1         |
| 6     | 1     | NV           | seriesCIK                          |            |                                                      | m#    | m#      | 5000      |
| 6     | 1     | attr String  | cik                                | 10         |                                                      | m     | m       | 1         |
| 5     | 6     | integer      | numOfNewSeriesRegistration         | 8          | INTEGER_NONNEGATIVE_8 defined in eis_NCEN_Common.xsd | m     | m       | 1         |
| 5     | 7     | Decimal      | newSeriesAggregateValue            | 24         |                                                      | m     | m       | 1         |
| 5     | 8     | integer      | numOfSeriesCurrentProspectus       | 8          | INTEGER_NONNEGATIVE_8 defined in eis_NCEN_Common.xsd | m     | m       | 1         |
| 5     | 9     | integer      | numOfExistingSeriesAdditionalUnits | 8          | INTEGER_NONNEGATIVE_8 defined in eis_NCEN_Common.xsd | m     | m       | 1         |
| 5     | 10    | Decimal      | additionalUnitsTotalValue          | 24         |                                                      | m     | m       | 1         |
| 5     | 11    | Decimal      | unitInPortfolioValue               | 24         |                                                      | m     | m       | 1         |
| 5     | 12    | Decimal      | totalAssetsSeries                  | 24         |                                                      | m     | m       | 1         |
| 4     | 5     | integer      | numOfContracts                     | 8          | INTEGER_NONNEGATIVE_8 defined in eis_NCEN_Common.xsd | m#21  | m#21    | 1         |
| 4     | 6     | NV           | contractSecurities                 |            |                                                      | m#21  | m#21    | 1         |
| 5     | 1     | NV           | contractSecurity                   |            |                                                      | m#    | m#      | 1000      |
| 5     | 1     | attr String  | separateAccountSecurityName        | 150        |                                                      | m     | m       | 1         |
| 5     | 1     | attr String  | separateAccountContractId          | 10         | CLASS_ID_TYPE defined in eis_Common_SC.xsd           | m     | m       | 1         |
| 5     | 1     | attr Decimal | separateAccountTotalAsset          | 24         |                                                      | m     | m       | 1         |
| 5     | 1     | attr integer | numContractsSold                   | 8          | INTEGER_NONNEGATIVE_8 defined in eis_NCEN_Common.xsd | m     | m       | 1         |
| 5     | 1     | attr Decimal | grossPremiumReceived               | 24         |                                                      | m     | m       | 1         |
| 5     | 1     | attr Decimal | grossPremiumReceivedSection1035    | 24         |                                                      | m     | m       | 1         |
| 5     | 1     | attr integer | numContractsAffected               | 8          | INTEGER_NONNEGATIVE_8 defined in eis_NCEN_Common.xsd | m     | m       | 1         |
| 5     | 1     | attr         | contractValueRedeemed              | 24         |                                                      | m     | m       | 1         |

| Level | Order | Data Type       | Element/Attribute Length           | Max Length | Choice List                 | N-CEN | N-CEN/A | Max Occur |
|-------|-------|-----------------|------------------------------------|------------|-----------------------------|-------|---------|-----------|
|       |       | Decimal         |                                    |            |                             |       |         |           |
| 5     | 1     | attr<br>Decimal | contractValueRedeemedSection1035   | 24         |                             | m     | m       | 1         |
| 5     | 1     | attr<br>integer | numContractsAffectedRedeemed       | 8          |                             | m     | m       | 1         |
| 4     | 7     | String          | isRule6C7Reliance                  |            | <a href="#">YES_NO_TYPE</a> | m#21  | m#21    | 1         |
| 4     | 8     | String          | isRule11A2Reliance                 |            | <a href="#">YES_NO_TYPE</a> | m#21  | m#21    | 1         |
| 4     | 9     | NV              | divestments                        |            |                             | o#6   | o#6     | 1         |
| 5     | 1     | NV              | divestment                         |            |                             | m#    | m#      | 1000      |
| 5     | 1     | attr<br>String  | divestmentSecurityName             | 150        |                             | m     | m       | 1         |
| 5     | 1     | attr<br>String  | divestmentSecurityTickerSymbol     | 12         |                             | m     | m       | 1         |
| 5     | 1     | attr<br>String  | divestmentSecurityCusipNo          | 10         |                             | m     | m       | 1         |
| 5     | 1     | attr<br>Decimal | divestedNumShares                  | 24         |                             | m     | m       | 1         |
| 5     | 1     | attr<br>date    | divestedDate                       |            | YYYY-MM-DD                  | m     | m       | 1         |
| 5     | 1     | attr<br>String  | divestmentStatuteName              | 150        |                             | m     | m       | 1         |
| 4     | 10    | NV              | registrantHeldSecurities           |            |                             | o#7   | o#7     | 1         |
| 5     | 1     | NV              | registrantHeldSecurity             |            |                             | m#    | m#      | 1000      |
| 5     | 1     | attr<br>String  | registrantHeldSecurityTickerSymbol | 12         |                             | m     | m       | 1         |
| 5     | 1     | attr<br>String  | registrantHoldsSecurityCusipNo     | 10         |                             | m     | m       | 1         |
| 5     | 1     | attr<br>Decimal | registrantNumShare                 | 24         |                             | m     | m       | 1         |
| 3     | 7     | NV              | attachmentsTab                     |            |                             | o     | o       | 1         |
| 4     | 1     | Boolean         | isLegalProceedings                 |            | "true" or "false"           | o     | o       | 1         |
| 4     | 2     | Boolean         | isProvisionFinancialSupport        |            | "true" or "false"           | o     | o       | 1         |
| 4     | 3     | Boolean         | isIPAReportInternalControl         |            | "true" or "false"           | o     | o       | 1         |
| 4     | 4     | Boolean         | isChangeAccPrinciples              |            | "true" or "false"           | o     | o       | 1         |
| 4     | 5     | Boolean         | isInfoRequiredEO                   |            | "true" or "false"           | o     | o       | 1         |
| 4     | 6     | Boolean         | isOtherInfoRequired                |            | "true" or "false"           | o     | o       | 1         |
| 4     | 7     | Boolean         | isMaterialAmendments               |            | "true" or "false"           | o#8   | o#8     | 1         |
| 4     | 8     | Boolean         | isInstDefiningRights               |            | "true" or "false"           | o#8   | o#8     | 1         |
| 4     | 9     | Boolean         | isNewOrAmendedInvAdvContracts      |            | "true" or "false"           | o#8   | o#8     | 1         |
| 4     | 10    | Boolean         | isInfoltem405                      |            | "true" or "false"           | o#8   | o#8     | 1         |
| 4     | 11    | Boolean         | isCodeOfEthics                     |            | "true" or "false"           | o#8   | o#8     | 1         |
| 3     | 8     | NV              | signature                          |            |                             | m     | m       | 1         |
| 3     | 8     | attr<br>String  | registrantSignedName               | 150        |                             | m     | m       | 1         |
| 3     | 8     | attr<br>date    | signedDate                         |            | YYYY-MM-DD                  | m     | m       | 1         |

| Level | Order | Data Type   | Element/Attribute Length | Max Length | Choice List | N-CEN | N-CEN/A | Max Occur         |
|-------|-------|-------------|--------------------------|------------|-------------|-------|---------|-------------------|
| 3     | 8     | attr String | signature                | 150        |             | m     | m       | 1                 |
| 3     | 8     | attr String | title                    | 150        |             | m     | m       | 1                 |
| 2     | 4     | NV          | documents                |            |             | o     | o       | 1                 |
| 3     | 1     | NV          | document                 |            |             | m#    | m#      | unbo<br>unde<br>d |
| 4     | 1     | String      | conformedName            | 32         |             | m#    | m#      | 1                 |
| 4     | 2     | String      | conformedDocumentType    |            |             | m#    | m#      | 1                 |
| 4     | 3     | String      | description              | 255        |             | o     | o       | 1                 |
| 4     | 4     | String      | contents                 |            |             | m#    | m#      | 1                 |

## 4 N-CEN SCHEMA DATA VALUE CONSTRAINTS

### 4.1 SUBMISSION\_TYPE

These are the valid values for elements with type <SUBMISSION\_TYPE> in the submission file:

| VALUE   | CODE DESCRIPTION                                               |
|---------|----------------------------------------------------------------|
| N-CEN   | Annual Report for Registered Investment Companies              |
| N-CEN/A | Amendment to Annual Report for Registered Investment Companies |

### 4.2 COMPANY\_CLASSIFICATION\_TYPE

These are the valid values for elements with type <COMPANY\_CLASSIFICATION\_TYPE> in the submission file:

| VALUE |
|-------|
| N-1A  |
| N-2   |
| N-3   |
| N-4   |
| N-5   |
| N-6   |
| S-6   |

### 4.3 CREDIT\_LINE\_COMMITTED\_TYPE

These are the valid values for elements with type <CREDIT\_LINE\_COMMITTED\_TYPE> in the submission file:

| VALUE       |
|-------------|
| Committed   |
| Uncommitted |

### 4.4 ASSET\_TYPE

These are the valid values for elements with type <ASSET\_TYPE> in the submission file:

| VALUE                         |
|-------------------------------|
| Short-term investment vehicle |
| Equity-common                 |
| Equity-preferred              |
| Debt                          |
| Derivative-commodity          |
| Derivative-credit             |
| Derivative-equity             |

| VALUE                                   |
|-----------------------------------------|
| Derivative-foreign exchange             |
| Derivative-interest rate                |
| Derivative-other                        |
| Structured note                         |
| Loan                                    |
| ABS-mortgage backed security            |
| ABS-asset backed commercial paper       |
| ABS-collateralized bond/debt obligation |
| ABS-other                               |
| Commodity                               |
| Real estate                             |
| Other                                   |

#### 4.5 CUSTODY\_TYPE

These are the valid values for elements with type <CUSTODY\_TYPE> in the submission file:

| VALUE                                                                                             |
|---------------------------------------------------------------------------------------------------|
| Bank - section 17(f)(1) (15 U.S.C. 80a-17(f)(1))                                                  |
| Member national securities exchange - rule 17f-1 (17 CFR 270.17f-1)                               |
| Self - rule 17f-2 (17 CFR 270.17f-2)                                                              |
| Securities depository - rule 17f-4 (17 CFR 270.17f-4)                                             |
| Foreign custodian - rule 17f-5 (17 CFR 270.17f-5)                                                 |
| Futures commission merchants and commodity clearing organizations - rule 17f-6 (17 CFR 270.17f-6) |
| Foreign securities depository - rule 17f-7 (17 CFR 270.17f-7)                                     |
| Insurance company sponsor - rule 26a-2 (17 CFR 270.26a-2)                                         |
| Other                                                                                             |

#### 4.6 RELY\_ON\_RULE\_TYPE

These are the valid values for elements with type <RELY\_ON\_RULE\_TYPE> in the submission file:

| VALUE                           |
|---------------------------------|
| Rule 10f-3 (17 CFR 270.10f-3)   |
| Rule 12d1-1 (17 CFR 270.12d1-1) |
| Rule 15a-4 (17 CFR 270.15a-4)   |
| Rule 17a-6 (17 CFR 270.17a-6)   |
| Rule 17a-7 (17 CFR 270.17a-7)   |
| Rule 17a-8 (17 CFR 270.17a-8)   |
| Rule 17e-1 (17 CFR 270.17e-1)   |

| VALUE                         |
|-------------------------------|
| Rule 22d-1 (17 CFR 270.22d-1) |
| Rule 23c-1 (17 CFR 270.23c-1) |
| Rule 32a-4 (17 CFR 270.32a-4) |
| Rule 6c-11 (17 CFR 270.6c-11) |

#### 4.7 PAYMENT\_TO\_AGENT\_MANAGER\_TYPE

These are the valid values for elements with type <PAYMENT\_TO\_AGENT\_MANAGER\_TYPE> in the submission file:

| VALUE                                                     |
|-----------------------------------------------------------|
| Revenue sharing split                                     |
| Non-revenue sharing split (other than administrative fee) |
| Administrative fee                                        |
| Cash collateral reinvestment fee                          |
| Indemnification fee                                       |
| Other                                                     |

#### 4.8 FUND\_TYPE

These are the valid values for elements with type <FUND\_TYPE> in the submission file:

| VALUE                        |
|------------------------------|
| Exchange-Traded Fund         |
| Exchange-Traded Managed Fund |
| Inverse of a benchmark       |
| Interval Fund                |
| Fund of Funds                |
| Money Market Fund            |
| Target Date Fund             |
| Underlying fund              |

#### 4.9 SECURITY\_TYPE

These are the valid values for elements with type <SECURITY\_TYPE> in the submission file:

| VALUE                  |
|------------------------|
| Common stock           |
| Preferred stock        |
| Warrants               |
| Convertible securities |
| Bonds                  |

| VALUE |
|-------|
| Other |

## 5 COMMON SCHEMA DATA VALUE CONSTRAINTS

### 5.1 YES\_NO\_TYPE

These are the valid values for elements with type <YES\_NO\_TYPE> in the submission file:

| VALUE |
|-------|
| Y     |
| N     |

## 6 ISO EXCHANGE LIST SCHEMA DATA VALUE CONSTRAINTS

### 6.1 ISO\_EXCHANGE\_CODE

These are the valid values for elements with type <ISO\_EXCHANGE\_CODE> in the submission file:

| VALUE | CODE DESCRIPTION                                          | COUNTRY                  |
|-------|-----------------------------------------------------------|--------------------------|
| N/A   | N/A                                                       | N/A                      |
| AATS  | ASSENT ATS                                                | UNITED STATES OF AMERICA |
| AQUA  | AQUA EQUITIES L.P.                                        | UNITED STATES OF AMERICA |
| ATDF  | AUTOMATED TRADING DESK FINANCIAL SERVICES, LLC            | UNITED STATES OF AMERICA |
| CORE  | ATD - CITIGROUP AGENCY OPTION AND EQUITIES ROUTING ENGINE | UNITED STATES OF AMERICA |
| BAML  | BANK OF AMERICA - MERRILL LYNCH INSTINCT X ATS            | UNITED STATES OF AMERICA |
| MLVX  | BANK OF AMERICA - MERRILL LYNCH VWAP CROSS                | UNITED STATES OF AMERICA |
| MLCO  | BANK OF AMERICA - MERRILL LYNCH OTC                       | UNITED STATES OF AMERICA |
| BARX  | BARCLAYS ATS                                              | UNITED STATES OF AMERICA |
| BARL  | BARCLAYS LIQUID MARKETS                                   | UNITED STATES OF AMERICA |
| BARD  | BARCLAYS FX – TRADING                                     | UNITED STATES OF AMERICA |
| BCDX  | BARCLAYS DIRECT EX ATS                                    | UNITED STATES OF AMERICA |
| BATS  | BATS Z-EXCHANGE                                           | UNITED STATES OF AMERICA |
| BATO  | BZX OPTIONS MARKET                                        | UNITED STATES OF AMERICA |
| BATY  | BATS Y-EXCHANGE, INC.                                     | UNITED STATES OF AMERICA |
| BZXD  | BATS Z-EXCHANGE DARK                                      | UNITED STATES OF AMERICA |
| BYXD  | BATS Y-EXCHANGE DARK                                      | UNITED STATES OF AMERICA |
| BBSF  | BLOOMBERG SEF LLC                                         | UNITED STATES OF AMERICA |
| BGCF  | BGC FINANCIAL INC                                         | UNITED STATES OF AMERICA |
| BGCD  | BGC DERIVATIVE MARKETS L.P.                               | UNITED STATES OF AMERICA |

| VALUE | CODE DESCRIPTION                    | COUNTRY                  |
|-------|-------------------------------------|--------------------------|
| BHSF  | BATS HOTSPOT SEF LLC                | UNITED STATES OF AMERICA |
| BIDS  | BIDS TRADING L.P.                   | UNITED STATES OF AMERICA |
| BLTD  | BLOOMBERG TRADEBOOK LLC             | UNITED STATES OF AMERICA |
| BPOL  | BLOOMBERG BPOOL                     | UNITED STATES OF AMERICA |
| BNYC  | CONVERGEX                           | UNITED STATES OF AMERICA |
| VTEX  | VORTEX                              | UNITED STATES OF AMERICA |
| NYFX  | MILLENNIUM                          | UNITED STATES OF AMERICA |
| BTEC  | ICAP ELECTRONIC BROKING (US)        | UNITED STATES OF AMERICA |
| ICSU  | ICAP SEF (US) LLC.                  | UNITED STATES OF AMERICA |
| CDED  | CITADEL SECURITIES                  | UNITED STATES OF AMERICA |
| CGMI  | CITIGROUP GLOBAL MARKETS            | UNITED STATES OF AMERICA |
| CICX  | CITI CROSS                          | UNITED STATES OF AMERICA |
| LQFI  | CITI LIQUIFI                        | UNITED STATES OF AMERICA |
| CBLC  | CITIBLOC                            | UNITED STATES OF AMERICA |
| CMSF  | CLEAR MARKETS NORTH AMERICA, INC.   | UNITED STATES OF AMERICA |
| CRED  | CREDIT SUISSE (US)                  | UNITED STATES OF AMERICA |
| CSLP  | CREDIT SUISSE LIGHT POOL            | UNITED STATES OF AMERICA |
| CAES  | CREDIT SUISSE AES CROSSFINDER       | UNITED STATES OF AMERICA |
| DBSX  | DEUTSCHE BANK SUPER X               | UNITED STATES OF AMERICA |
| DEAL  | DCX (DERIVATIVES CURRENCY EXCHANGE) | UNITED STATES OF AMERICA |
| EDGE  | BATS DIRECT EDGE                    | UNITED STATES OF AMERICA |
| EDDP  | EDGX EXCHANGE DARK                  | UNITED STATES OF AMERICA |
| EDGA  | EDGA EXCHANGE                       | UNITED STATES OF         |

| VALUE | CODE DESCRIPTION                           | COUNTRY                  |
|-------|--------------------------------------------|--------------------------|
|       |                                            | AMERICA                  |
| EDGD  | EDGA EXCHANGE DARK                         | UNITED STATES OF AMERICA |
| EDGX  | EDGX EXCHANGE                              | UNITED STATES OF AMERICA |
| EDGO  | EDGX OPTIONS MARKET                        | UNITED STATES OF AMERICA |
| EGMT  | EG MARKET TECHNOLOGIES                     | UNITED STATES OF AMERICA |
| ERIS  | ERIS EXCHANGE                              | UNITED STATES OF AMERICA |
| FAST  | FASTMATCH                                  | UNITED STATES OF AMERICA |
| FINR  | FINRA                                      | UNITED STATES OF AMERICA |
| OOTC  | OTHER OTC                                  | UNITED STATES OF AMERICA |
| FINO  | FINRA ORF (TRADE REPORTING FACILITY)       | UNITED STATES OF AMERICA |
| FINN  | FINRA/NASDAQ TRF(TRADE REPORTING FACILITY) | UNITED STATES OF AMERICA |
| FINY  | FINRA/NYSE TRF (TRADE REPORTING FACILITY)  | UNITED STATES OF AMERICA |
| XADF  | FINRA ALTERNATIVE DISPLAY FACILITY (ADF)   | UNITED STATES OF AMERICA |
| FSEF  | FTSEF LLC                                  | UNITED STATES OF AMERICA |
| FXAL  | FXALL                                      | UNITED STATES OF AMERICA |
| FXCM  | FXCM                                       | UNITED STATES OF AMERICA |
| G1XX  | G1 EXECUTION SERVICES                      | UNITED STATES OF AMERICA |
| GLLC  | GATE US LLC                                | UNITED STATES OF AMERICA |
| GLPS  | ESSEX RADEZ, LLC                           | UNITED STATES OF AMERICA |
| GLPX  | ACS EXECUTION SERVICES, LLC                | UNITED STATES OF AMERICA |
| GOVX  | GOVEX                                      | UNITED STATES OF AMERICA |
| GREE  | THE GREEN EXCHANGE                         | UNITED STATES OF AMERICA |
| GSEF  | GFI SWAPS EXCHANGE, LLC                    | UNITED STATES OF AMERICA |

| VALUE | CODE DESCRIPTION                 | COUNTRY                  |
|-------|----------------------------------|--------------------------|
| GTCO  | KCG AMERICAS LLC                 | UNITED STATES OF AMERICA |
| GTSX  | GTSX                             | UNITED STATES OF AMERICA |
| GTXS  | GTX SEF, LLC                     | UNITED STATES OF AMERICA |
| HEGX  | NADEX                            | UNITED STATES OF AMERICA |
| HPPO  | POTAMUS TRADING LLC              | UNITED STATES OF AMERICA |
| HSFX  | HOTSPOT FX                       | UNITED STATES OF AMERICA |
| ICEL  | ISLAND ECN LTD, THE              | UNITED STATES OF AMERICA |
| IEXG  | INVESTORS EXCHANGE               | UNITED STATES OF AMERICA |
| IFUS  | ICE FUTURES U.S.                 | UNITED STATES OF AMERICA |
| IMCC  | CREDITEX SECURITIES CORPORATION  | UNITED STATES OF AMERICA |
| ICES  | ICE SWAP TRADE LLC               | UNITED STATES OF AMERICA |
| IFED  | ICE FUTURES U.S. ENERGY DIVISION | UNITED STATES OF AMERICA |
| IMCG  | CREDITEX LLC                     | UNITED STATES OF AMERICA |
| IMIR  | ICE MARKETS RATES                | UNITED STATES OF AMERICA |
| IMCR  | ICE MARKETS CREDIT               | UNITED STATES OF AMERICA |
| IMFX  | ICE MARKETS FOREIGN EXCHANGE     | UNITED STATES OF AMERICA |
| IMEN  | ICE MARKETS ENERGY               | UNITED STATES OF AMERICA |
| IMAG  | ICE MARKETS AGRICULTURE          | UNITED STATES OF AMERICA |
| IMBD  | ICE MARKETS BONDS                | UNITED STATES OF AMERICA |
| IEPA  | INTERCONTINENTAL EXCHANGE        | UNITED STATES OF AMERICA |
| ISDA  | ISDAFIX                          | UNITED STATES OF AMERICA |
| ITGI  | ITG - POSIT                      | UNITED STATES OF AMERICA |
| JEFX  | JETX                             | UNITED STATES OF         |

| VALUE | CODE DESCRIPTION                        | COUNTRY                  |
|-------|-----------------------------------------|--------------------------|
|       |                                         | AMERICA                  |
| JPBX  | JPBX                                    | UNITED STATES OF AMERICA |
| JPMX  | JPMX                                    | UNITED STATES OF AMERICA |
| JSES  | JANE STREET EXECUTION SERVICES LLC      | UNITED STATES OF AMERICA |
| JSJX  | JANE STREET JX                          | UNITED STATES OF AMERICA |
| KNIG  | KNIGHT                                  | UNITED STATES OF AMERICA |
| ACKF  | KCG ACKNOWLEDGE FI                      | UNITED STATES OF AMERICA |
| KNCM  | KNIGHT CAPITAL MARKETS LLC              | UNITED STATES OF AMERICA |
| KNEM  | KNIGHT EQUITY MARKETS LP                | UNITED STATES OF AMERICA |
| KNLI  | KNIGHT LINK                             | UNITED STATES OF AMERICA |
| KNMX  | KNIGHT MATCH ATS                        | UNITED STATES OF AMERICA |
| LASF  | LATAM SEF                               | UNITED STATES OF AMERICA |
| LEVL  | LEVEL ATS                               | UNITED STATES OF AMERICA |
| LIUS  | LIQUIDNET, INC.                         | UNITED STATES OF AMERICA |
| LIUH  | LIQUIDNET, INC. H2O ATS                 | UNITED STATES OF AMERICA |
| LIFI  | LIQUIDNET, INC. FIXED INCOME ATS        | UNITED STATES OF AMERICA |
| LQED  | LIQUIDITYEDGE                           | UNITED STATES OF AMERICA |
| LTAA  | LUMINEX TRADING & ANALYTICS LLC         | UNITED STATES OF AMERICA |
| LMNX  | LUMINEX TRADING & ANALYTICS LLC - ATS   | UNITED STATES OF AMERICA |
| MIHI  | MIAMI INTERNATIONAL HOLDINGS, INC.      | UNITED STATES OF AMERICA |
| XMIO  | MIAMI INTERNATIONAL SECURITIES EXCHANGE | UNITED STATES OF AMERICA |
| MPRL  | MIAX PEARL, LLC                         | UNITED STATES OF AMERICA |
| MSCO  | MORGAN STANLEY AND CO. LLC              | UNITED STATES OF AMERICA |

| VALUE | CODE DESCRIPTION                                            | COUNTRY                  |
|-------|-------------------------------------------------------------|--------------------------|
| MSLP  | MORGAN STANLEY AUTOMATED LIQUIDITY PROVISION                | UNITED STATES OF AMERICA |
| MSTX  | MS TRAJECTORY CROSS                                         | UNITED STATES OF AMERICA |
| MSPL  | MS POOL                                                     | UNITED STATES OF AMERICA |
| MSRP  | MS RETAIL POOL                                              | UNITED STATES OF AMERICA |
| MTUS  | MTS US                                                      | UNITED STATES OF AMERICA |
| MTSB  | MTS BONDS.COM                                               | UNITED STATES OF AMERICA |
| BVUS  | BONDVISION US                                               | UNITED STATES OF AMERICA |
| MTXX  | MARKETAXESS CORPORATION                                     | UNITED STATES OF AMERICA |
| MTXC  | MARKETAXESS CORPORATION SINGLE-NAME CDS CENTRAL LIMIT ORDER | UNITED STATES OF AMERICA |
| MTXM  | MARKETAXESS CORPORATION MID-X TRADING SYSTEM                | UNITED STATES OF AMERICA |
| MTXA  | MARKETAXESS CANADA COMPANY                                  | UNITED STATES OF AMERICA |
| MTXS  | MARKETAXESS SEF CORPORATION                                 | UNITED STATES OF AMERICA |
| NBLX  | NOBLE EXCHANGE                                              | UNITED STATES OF AMERICA |
| NFSC  | NATIONAL FINANCIAL SERVICES, LLC                            | UNITED STATES OF AMERICA |
| XSTM  | FIDELITY CROSSSTREAM ATS                                    | UNITED STATES OF AMERICA |
| NFSD  | FIDELITY DARK                                               | UNITED STATES OF AMERICA |
| NFSA  | FIDELITY CROSSSTREAM                                        | UNITED STATES OF AMERICA |
| NMRA  | NOMURA SECURITIES INTERNATIONAL                             | UNITED STATES OF AMERICA |
| NODX  | NODAL EXCHANGE                                              | UNITED STATES OF AMERICA |
| NXUS  | NX ATS - CROSSING PLATFORM                                  | UNITED STATES OF AMERICA |
| NYPC  | NEW YORK PORTFOLIO CLEARING                                 | UNITED STATES OF AMERICA |
| OLLC  | OTCEX LLC                                                   | UNITED STATES OF AMERICA |
| OPRA  | OPTIONS PRICE REPORTING AUTHORITY                           | UNITED STATES OF         |

| VALUE | CODE DESCRIPTION          | COUNTRY                  |
|-------|---------------------------|--------------------------|
|       |                           | AMERICA                  |
| OTCM  | OTC MARKETS               | UNITED STATES OF AMERICA |
| CAVE  | CAVEAT EMPTOR             | UNITED STATES OF AMERICA |
| OTCB  | OTCQB MARKETPLACE         | UNITED STATES OF AMERICA |
| PINI  | OTC PINK NO INFORMATION   | UNITED STATES OF AMERICA |
| OTCQ  | OTCQX MARKETPLACE         | UNITED STATES OF AMERICA |
| PINL  | OTC PINK LIMITED          | UNITED STATES OF AMERICA |
| PINX  | OTC PINK MARKETPLACE      | UNITED STATES OF AMERICA |
| PSGM  | OTC GREY MARKET           | UNITED STATES OF AMERICA |
| PINC  | OTC PINK CURRENT          | UNITED STATES OF AMERICA |
| PDQX  | CODA MARKETS              | UNITED STATES OF AMERICA |
| PDQD  | CODA MARKETS ATS DARK     | UNITED STATES OF AMERICA |
| PIPE  | ARITAS SECURITIES LLC     | UNITED STATES OF AMERICA |
| PRSE  | PRAGMA ATS                | UNITED STATES OF AMERICA |
| PULX  | BLOCKCROSS ATS            | UNITED STATES OF AMERICA |
| RICX  | RIVERCROSS                | UNITED STATES OF AMERICA |
| RICD  | RIVERCROSS DARK           | UNITED STATES OF AMERICA |
| SCXS  | SEED SEF LLC              | UNITED STATES OF AMERICA |
| SGMA  | GOLDMAN SACH MTF          | UNITED STATES OF AMERICA |
| SGMT  | SIGMA X2                  | UNITED STATES OF AMERICA |
| SHAW  | D.E. SHAW                 | UNITED STATES OF AMERICA |
| SHAD  | D.E. SHAW DARK            | UNITED STATES OF AMERICA |
| SOHO  | TWO SIGMA SECURITIES, LLC | UNITED STATES OF AMERICA |

| VALUE | CODE DESCRIPTION                              | COUNTRY                  |
|-------|-----------------------------------------------|--------------------------|
| SSTX  | E-EXCHANGE                                    | UNITED STATES OF AMERICA |
| TERA  | TERAEXCHANGE                                  | UNITED STATES OF AMERICA |
| TFSU  | TFS GREEN UNITED STATES GREEN MARKETS         | UNITED STATES OF AMERICA |
| THRE  | THOMSON REUTERS (SEF) LLC                     | UNITED STATES OF AMERICA |
| TMID  | TRUMID ATS                                    | UNITED STATES OF AMERICA |
| TPSE  | TP SEF, INC.                                  | UNITED STATES OF AMERICA |
| TRCK  | TRACK ECN                                     | UNITED STATES OF AMERICA |
| TRUX  | TRUEEX LLC                                    | UNITED STATES OF AMERICA |
| TRU1  | TRUEEX LLC - DESIGNATED CONTRACT MARKET (DMC) | UNITED STATES OF AMERICA |
| TRU2  | TRUEEX LLC - SEF (SWAP EXECUTION FACILITY)    | UNITED STATES OF AMERICA |
| TRWB  | TRADEWEB LLC                                  | UNITED STATES OF AMERICA |
| BNDD  | TRADEWEB DIRECT LLC                           | UNITED STATES OF AMERICA |
| TWSF  | TW SEF LLC                                    | UNITED STATES OF AMERICA |
| DWSF  | DW SEF LLC                                    | UNITED STATES OF AMERICA |
| TSAD  | TRADITION SECURITIES AND DERIVATIVES INC.     | UNITED STATES OF AMERICA |
| TSBX  | TRIPLESHOT                                    | UNITED STATES OF AMERICA |
| TSEF  | TRADITION SEF                                 | UNITED STATES OF AMERICA |
| UBSA  | UBS ATS                                       | UNITED STATES OF AMERICA |
| UBSP  | UBS PIN (UBS PRICE IMPROVEMENT NETWORK)       | UNITED STATES OF AMERICA |
| VFCM  | VIRTU FINANCIAL CAPITAL MARKETS LLC           | UNITED STATES OF AMERICA |
| VIRT  | VIRTU FINANCIAL BD                            | UNITED STATES OF AMERICA |
| WEED  | WEEDEN AND CO MARKETS                         | UNITED STATES OF AMERICA |
| XWEE  | WEEDEN ATS                                    | UNITED STATES OF AMERICA |

| VALUE | CODE DESCRIPTION                  | COUNTRY                  |
|-------|-----------------------------------|--------------------------|
|       |                                   | AMERICA                  |
| WELX  | WELLS FARGO LIQUIDITY CROSS ATS   | UNITED STATES OF AMERICA |
| WSAG  | WALL STREET ACCESS                | UNITED STATES OF AMERICA |
| XAQS  | AUTOMATED EQUITY FINANCE MARKETS  | UNITED STATES OF AMERICA |
| XBOX  | BOSTON OPTIONS EXCHANGE           | UNITED STATES OF AMERICA |
| XCBO  | CHICAGO BOARD OPTIONS EXCHANGE    | UNITED STATES OF AMERICA |
| XCBF  | CBOE FUTURES EXCHANGE             | UNITED STATES OF AMERICA |
| CBSX  | CBOE STOCK EXCHANGE               | UNITED STATES OF AMERICA |
| C2OX  | C2 OPTIONS EXCHANGE INC.          | UNITED STATES OF AMERICA |
| XCBT  | CHICAGO BOARD OF TRADE            | UNITED STATES OF AMERICA |
| XKBT  | KANSAS CITY BOARD OF TRADE        | UNITED STATES OF AMERICA |
| FCBT  | CHICAGO BOARD OF TRADE (FLOOR)    | UNITED STATES OF AMERICA |
| XCFF  | CANTOR FINANCIAL FUTURES EXCHANGE | UNITED STATES OF AMERICA |
| XCHI  | CHICAGO STOCK EXCHANGE, INC       | UNITED STATES OF AMERICA |
| XCIS  | NATIONAL STOCK EXCHANGE, INC.     | UNITED STATES OF AMERICA |
| XCME  | CHICAGO MERCANTILE EXCHANGE       | UNITED STATES OF AMERICA |
| CMES  | CME SWAPS MARKETS (CME)           | UNITED STATES OF AMERICA |
| CBTS  | CME SWAPS MARKETS (CBOT)          | UNITED STATES OF AMERICA |
| XIOM  | INDEX AND OPTIONS MARKET          | UNITED STATES OF AMERICA |
| XIMM  | INTERNATIONAL MONETARY MARKET     | UNITED STATES OF AMERICA |
| CECS  | CME SWAPS MARKETS (COMEX)         | UNITED STATES OF AMERICA |
| GLBX  | CME GLOBEX                        | UNITED STATES OF AMERICA |
| NYMS  | CME SWAPS MARKETS (NYMEX)         | UNITED STATES OF AMERICA |

| VALUE | CODE DESCRIPTION                                             | COUNTRY                  |
|-------|--------------------------------------------------------------|--------------------------|
| FCME  | CHICAGO MERCANTILE EXCHANGE (FLOOR)                          | UNITED STATES OF AMERICA |
| XCUR  | CURRENEX                                                     | UNITED STATES OF AMERICA |
| XELX  | ELX                                                          | UNITED STATES OF AMERICA |
| XFCI  | FINANCIALCONTENT INDEXES                                     | UNITED STATES OF AMERICA |
| XGMX  | GLOBALCLEAR MERCANTILE EXCHANGE                              | UNITED STATES OF AMERICA |
| XINS  | INSTINET                                                     | UNITED STATES OF AMERICA |
| ICBX  | INSTINET CBX (US)                                            | UNITED STATES OF AMERICA |
| IBLX  | INSTINET BLX                                                 | UNITED STATES OF AMERICA |
| ICRO  | INSTINET VWAP CROSS                                          | UNITED STATES OF AMERICA |
| IIDX  | INSTINET IDX                                                 | UNITED STATES OF AMERICA |
| MOCX  | MOC CROSS                                                    | UNITED STATES OF AMERICA |
| RCBX  | INSTINET RETAIL CBX                                          | UNITED STATES OF AMERICA |
| XISX  | INTERNATIONAL SECURITIES EXCHANGE, LLC                       | UNITED STATES OF AMERICA |
| XISA  | INTERNATIONAL SECURITIES EXCHANGE, LLC - ALTERNATIVE MARKETS | UNITED STATES OF AMERICA |
| XISE  | INTERNATIONAL SECURITIES EXCHANGE, LLC - EQUITIES            | UNITED STATES OF AMERICA |
| GMNI  | ISE GEMINI EXCHANGE                                          | UNITED STATES OF AMERICA |
| MCRY  | ISE MERCURY, LLC                                             | UNITED STATES OF AMERICA |
| XMER  | MERCHANTS' EXCHANGE                                          | UNITED STATES OF AMERICA |
| XMGE  | MINNEAPOLIS GRAIN EXCHANGE                                   | UNITED STATES OF AMERICA |
| XNAS  | NASDAQ - ALL MARKETS                                         | UNITED STATES OF AMERICA |
| ESPD  | NASDAQ OMX ESPEED                                            | UNITED STATES OF AMERICA |
| BOSD  | NASDAQ OMX BX DARK                                           | UNITED STATES OF AMERICA |
| NASD  | NSDQ DARK                                                    | UNITED STATES OF         |

| VALUE | CODE DESCRIPTION                              | COUNTRY                  |
|-------|-----------------------------------------------|--------------------------|
|       |                                               | AMERICA                  |
| XBRT  | BRUT ECN                                      | UNITED STATES OF AMERICA |
| XNCM  | NASDAQ CAPITAL MARKET                         | UNITED STATES OF AMERICA |
| XPHL  | NASDAQ OMX PHLX                               | UNITED STATES OF AMERICA |
| XBOS  | NASDAQ OMX BX                                 | UNITED STATES OF AMERICA |
| XPBT  | NASDAQ OMX FUTURES EXCHANGE                   | UNITED STATES OF AMERICA |
| XPSX  | NASDAQ OMX PSX                                | UNITED STATES OF AMERICA |
| XPHO  | PHILADELPHIA OPTIONS EXCHANGE                 | UNITED STATES OF AMERICA |
| XNMS  | NASDAQ/NMS (GLOBAL MARKET)                    | UNITED STATES OF AMERICA |
| XNIM  | NASDAQ INTERMARKET                            | UNITED STATES OF AMERICA |
| XNGS  | NASDAQ/NGS (GLOBAL SELECT MARKET)             | UNITED STATES OF AMERICA |
| XNDQ  | NASDAQ OPTIONS MARKET                         | UNITED STATES OF AMERICA |
| XPOR  | PORTAL                                        | UNITED STATES OF AMERICA |
| XBXO  | NASDAQ OMX BX OPTIONS                         | UNITED STATES OF AMERICA |
| XNYM  | NEW YORK MERCANTILE EXCHANGE                  | UNITED STATES OF AMERICA |
| XNYE  | NEW YORK MERCANTILE EXCHANGE - OTC MARKETS    | UNITED STATES OF AMERICA |
| XNYL  | NEW YORK MERCANTILE EXCHANGE - ENERGY MARKETS | UNITED STATES OF AMERICA |
| XCEC  | COMMODITIES EXCHANGE CENTER                   | UNITED STATES OF AMERICA |
| XNYS  | NEW YORK STOCK EXCHANGE, INC.                 | UNITED STATES OF AMERICA |
| NYSD  | NYSE DARK                                     | UNITED STATES OF AMERICA |
| XNLI  | NYSE LIFFE                                    | UNITED STATES OF AMERICA |
| XASE  | NYSE MKT LLC                                  | UNITED STATES OF AMERICA |
| ARCX  | NYSE ARCA                                     | UNITED STATES OF AMERICA |

| VALUE | CODE DESCRIPTION                                                          | COUNTRY                  |
|-------|---------------------------------------------------------------------------|--------------------------|
| ARCO  | NYSE ARCA OPTIONS                                                         | UNITED STATES OF AMERICA |
| ARCD  | ARCA DARK                                                                 | UNITED STATES OF AMERICA |
| AMXO  | NYSE AMEX OPTIONS                                                         | UNITED STATES OF AMERICA |
| ALDP  | NYSE ALTERNEXT DARK                                                       | UNITED STATES OF AMERICA |
| XOCH  | ONECHICAGO, LLC                                                           | UNITED STATES OF AMERICA |
| XOTC  | OTCBB                                                                     | UNITED STATES OF AMERICA |
| XSEF  | SWAPEX, LLC                                                               | UNITED STATES OF AMERICA |
| XTIR  | TIRANA STOCK EXCHANGE                                                     | ALBANIA                  |
| XALG  | ALGIERS STOCK EXCHANGE                                                    | ALGERIA                  |
| XBDV  | BOLSA DE DIVIDA E VALORES DE ANGOLA (BODIVA) - ANGOLA SECURITIES EXCHANGE | ANGOLA                   |
| BACE  | BOLSA DE CEREALES DE BUENOS AIRES                                         | ARGENTINA                |
| BCFS  | BOLSA DE COMERCIO DE SANTA FE                                             | ARGENTINA                |
| XMVL  | MERCADO DE VALORES DEL LITORAL S.A.                                       | ARGENTINA                |
| ROFX  | ROSARIO FUTURE EXCHANGE                                                   | ARGENTINA                |
| XBCC  | BOLSA DE COMERCIO DE CORDOBA                                              | ARGENTINA                |
| MVCX  | MERCADO DE VALORES DE CORDOBA S.A.                                        | ARGENTINA                |
| XBCM  | BOLSA DE COMERCIO DE MENDOZA S.A.                                         | ARGENTINA                |
| XBCX  | MERCADO DE VALORES DE MENDOZA S.A.                                        | ARGENTINA                |
| XBUE  | BOLSA DE COMERCIO DE BUENOS AIRES                                         | ARGENTINA                |
| XMEV  | MERCADO DE VALORES DE BUENOS AIRES S.A.                                   | ARGENTINA                |
| XCNF  | BOLSA DE COMERCIO CONFEDERADA S.A.                                        | ARGENTINA                |
| XMAB  | MERCADO ABIERTO ELECTRONICO S.A.                                          | ARGENTINA                |
| XMTB  | MERCADO A TERMINO DE BUENOS AIRES S.A.                                    | ARGENTINA                |
| XROS  | BOLSA DE COMERCIO ROSARIO                                                 | ARGENTINA                |
| XROX  | MERCADO DE VALORES DE ROSARIO S.A.                                        | ARGENTINA                |
| XTUC  | NUEVA BOLSA DE COMERCIO DE TUCUMAN S.A.                                   | ARGENTINA                |
| XARM  | NASDAQ OMX ARMENIA                                                        | ARMENIA                  |
| APXL  | SYDNEY STOCK EXCHANGE LIMITED                                             | AUSTRALIA                |
| AWBX  | AUSTRALIAN WHEAT BOARD                                                    | AUSTRALIA                |
| AWEX  | AUSTRALIAN WOOL EXCHANGE                                                  | AUSTRALIA                |
| BLEV  | BLOCK EVENT                                                               | AUSTRALIA                |
| CGMA  | CITI MATCH AUSTRALIA                                                      | AUSTRALIA                |
| CHIA  | CHI-X AUSTRALIA                                                           | AUSTRALIA                |

| VALUE | CODE DESCRIPTION                                                 | COUNTRY    |
|-------|------------------------------------------------------------------|------------|
| CXAQ  | CHI-X AUSTRALIA -QUOTED MANAGED FUNDS                            | AUSTRALIA  |
| CXAC  | CHI-X MARKET AUSTRALIA - LIMIT VENUE                             | AUSTRALIA  |
| CXAW  | CHI-X AUSTRALIA - WARRANTS                                       | AUSTRALIA  |
| CXAV  | CHI-X VWAP                                                       | AUSTRALIA  |
| CXAM  | CHI-X MOC                                                        | AUSTRALIA  |
| CXAR  | CHI-X AUSTRALIA - TRANSFERABLE CUSTODY RECEIPT MARKET            | AUSTRALIA  |
| CXAP  | CHI-X AUSTRALIA MID-POINT VENUE                                  | AUSTRALIA  |
| CXAN  | CHI-X AUSTRALIA PRIMARY PEG (NEARPOINT) VENUE                    | AUSTRALIA  |
| CXAF  | CHI-X AUSTRALIA MARKET PEG (FARPOINT) VENUE                      | AUSTRALIA  |
| CLAU  | CLSA AUSTRALIA - DARK                                            | AUSTRALIA  |
| CSAU  | CREDIT SUISSE EQUITIES (AUSTRALIA) LIMITED                       | AUSTRALIA  |
| CFAU  | CROSSFINDER AUSTRALIA                                            | AUSTRALIA  |
| MAQX  | MACQUARIE INTERNAL MARKETS (AUSTRALIA)                           | AUSTRALIA  |
| MSAL  | MORGAN STANLEY AUSTRALIA SECURITIES LIMITED                      | AUSTRALIA  |
| NSXB  | BENDIGO STOCK EXCHANGE LIMITED                                   | AUSTRALIA  |
| SIGA  | SIGMA X AUSTRALIA                                                | AUSTRALIA  |
| SIMV  | SIM VENTURE SECURITIES EXCHANGE                                  | AUSTRALIA  |
| XASX  | ASX - ALL MARKETS                                                | AUSTRALIA  |
| ASXV  | ASX - VOLUMEMATCH                                                | AUSTRALIA  |
| XSFE  | ASX - TRADE24                                                    | AUSTRALIA  |
| ASXT  | ASX TRADEMATCH                                                   | AUSTRALIA  |
| ASXP  | ASX - PUREMATCH                                                  | AUSTRALIA  |
| ASXC  | ASX - CENTER POINT                                               | AUSTRALIA  |
| ASXB  | ASX BOOKBUILD                                                    | AUSTRALIA  |
| XFEX  | FINANCIAL AND ENERGY EXCHANGE GROUP                              | AUSTRALIA  |
| XNEC  | NATIONAL STOCK EXCHANGE OF AUSTRALIA LIMITED                     | AUSTRALIA  |
| XYIE  | YELDBROKER PTY LTD                                               | AUSTRALIA  |
| EGSI  | ERSTE GROUP BANK AG                                              | AUSTRIA    |
| XWBO  | WIENER BOERSE AG                                                 | AUSTRIA    |
| EXAA  | WIENER BOERSE AG, AUSTRIAN ENERGY EXCHANGE                       | AUSTRIA    |
| WBDM  | WIENER BOERSE AG DRITTER MARKT (THIRD MARKET)                    | AUSTRIA    |
| XVIE  | WIENER BOERSE AG, WERTPAPIERBOERSE (SECURITIES EXCHANGE)         | AUSTRIA    |
| WBGF  | WIENER BOERSE AG GEREGLTER FREIVERKEHR (SECOND REGULATED MARKET) | AUSTRIA    |
| WBAH  | WIENER BOERSE AG AMTLICHER HANDEL (OFFICIAL MARKET)              | AUSTRIA    |
| BSEX  | BAKU STOCK EXCHANGE                                              | AZERBAIJAN |

| VALUE | CODE DESCRIPTION                                              | COUNTRY                |
|-------|---------------------------------------------------------------|------------------------|
| XIBE  | BAKU INTERBANK CURRENCY EXCHANGE                              | AZERBAIJAN             |
| XBAA  | BAHAMAS INTERNATIONAL SECURITIES EXCHANGE                     | BAHAMAS                |
| BFEX  | BAHRAIN FINANCIAL EXCHANGE                                    | BAHRAIN                |
| XBAH  | BAHRAIN BOURSE                                                | BAHRAIN                |
| XCHG  | CHITTAGONG STOCK EXCHANGE LTD.                                | BANGLADESH             |
| XDHA  | DHAKA STOCK EXCHANGE LTD                                      | BANGLADESH             |
| XBAB  | BARBADOS STOCK EXCHANGE                                       | BARBADOS               |
| BAJM  | BARBADOS STOCK EXCHANGE - JUNIOR MARKET                       | BARBADOS               |
| BCSE  | BELARUS CURRENCY AND STOCK EXCHANGE                           | BELARUS                |
| BLPX  | BELGIAN POWER EXCHANGE                                        | BELGIUM                |
| BMTS  | MTS BELGIUM                                                   | BELGIUM                |
| MTSD  | MTS DENMARK                                                   | BELGIUM                |
| MTSF  | MTS FINLAND                                                   | BELGIUM                |
| XBRU  | EURONEXT - EURONEXT BRUSSELS                                  | BELGIUM                |
| ENXB  | EURONEXT - EASY NEXT                                          | BELGIUM                |
| MLXB  | EURONEXT - MARCHE LIBRE BRUSSELS                              | BELGIUM                |
| TNLB  | EURONEXT - TRADING FACILITY BRUSSELS                          | BELGIUM                |
| XBRD  | EURONEXT - EURONEXT BRUSSELS - DERIVATIVES                    | BELGIUM                |
| ALXB  | EURONEXT - ALTERNEXT BRUSSELS                                 | BELGIUM                |
| VPXB  | EURONEXT - VENTES PUBLIQUES BRUSSELS                          | BELGIUM                |
| XBDA  | BERMUDA STOCK EXCHANGE LTD                                    | BERMUDA                |
| XBOL  | BOLSA BOLIVIANA DE VALORES S.A.                               | BOLIVIA                |
| XBLB  | BANJA LUKA STOCK EXCHANGE                                     | BOSNIA AND HERZEGOVINA |
| BLBF  | BANJA LUKA STOCK EXCHANGE - FREE MARKET                       | BOSNIA AND HERZEGOVINA |
| XSSE  | SARAJEVO STOCK EXCHANGE                                       | BOSNIA AND HERZEGOVINA |
| XBOT  | BOTSWANA STOCK EXCHANGE                                       | BOTSWANA               |
| BOTV  | BOTSWANA STOCK EXCHANGE - VENTURE CAPITAL                     | BOTSWANA               |
| BOTE  | BOTSWANA STOCK EXCHANGE - EXCHANGE TRADED FUNDS (ETF)         | BOTSWANA               |
| BCMM  | BOLSA DE CEREAIS E MERCADORIAS DE MARINGÁ                     | BRAZIL                 |
| BOVM  | BOLSA DE VALORES MINAS-ESPÍRITO SANTO-BRASÍLIA                | BRAZIL                 |
| BRIX  | BRAZILIAN ENERGY EXCHANGE                                     | BRAZIL                 |
| BVMF  | BM&FBOVESPA S.A. - BOLSA DE VALORES, MERCADORIAS E FUTUROS    | BRAZIL                 |
| CETI  | CETIP S.A. - MERCADOS ORGANIZADOS                             | BRAZIL                 |
| SELC  | SISTEMA ESPECIAL DE LIQUIDACAO E CUSTODIA DE TITULOS PUBLICOS | BRAZIL                 |

| VALUE | CODE DESCRIPTION                              | COUNTRY        |
|-------|-----------------------------------------------|----------------|
| IBEX  | INDEPENDENT BULGARIAN ENERGY EXCHANGE         | BULGARIA       |
| MBUL  | MTF SOFIA                                     | BULGARIA       |
| XBUL  | BULGARIAN STOCK EXCHANGE                      | BULGARIA       |
| ABUL  | BULGARIAN STOCK EXCHANGE - ALTERNATIVE MARKET | BULGARIA       |
| XCSX  | CAMBODIA SECURITIES EXCHANGE                  | CAMBODIA       |
| XDSX  | DOUALA STOCK EXCHANGE                         | CAMEROON       |
| CAND  | CANDEAL.CA INC                                | CANADA         |
| CANX  | CANNEX FINANCIAL EXCHANGE LTS                 | CANADA         |
| CHIC  | CHI-X CANADA ATS                              | CANADA         |
| XCX2  | CX2                                           | CANADA         |
| COTC  | BMO CAPITAL MARKETS - CAD OTC TRADES          | CANADA         |
| IFCA  | ICE FUTURES CANADA                            | CANADA         |
| IVZX  | INVESCO CANADA PTF TRADES                     | CANADA         |
| LICA  | LIQUIDNET CANADA ATS                          | CANADA         |
| MATN  | MATCH NOW                                     | CANADA         |
| NEOE  | AEQUITAS NEO EXCHANGE                         | CANADA         |
| NGXC  | NATURAL GAS EXCHANGE                          | CANADA         |
| OMGA  | OMEGA ATS                                     | CANADA         |
| LYNX  | LYNX ATS                                      | CANADA         |
| TMXS  | TMX SELECT                                    | CANADA         |
| XATS  | ALPHA EXCHANGE                                | CANADA         |
| XBBK  | PERIMETER FINANCIAL CORP. - BLOCKBOOK ATS     | CANADA         |
| XCNQ  | CANADIAN NATIONAL STOCK EXCHANGE              | CANADA         |
| PURE  | PURE TRADING                                  | CANADA         |
| XCXD  | NASDAQ CXD                                    | CANADA         |
| XICX  | INSTINET CANADA CROSS                         | CANADA         |
| XMOC  | MONTREAL CLIMATE EXCHANGE                     | CANADA         |
| XMOD  | THE MONTREAL EXCHANGE / BOURSE DE MONTREAL    | CANADA         |
| XTSE  | TORONTO STOCK EXCHANGE                        | CANADA         |
| XTSX  | TSX VENTURE EXCHANGE                          | CANADA         |
| XTNX  | TSX VENTURE EXCHANGE - NEX                    | CANADA         |
| XBVC  | CAPE VERDE STOCK EXCHANGE                     | CAPE VERDE     |
| XCAY  | CAYMAN ISLANDS STOCK EXCHANGE                 | CAYMAN ISLANDS |
| BOVA  | BOLSA DE CORREDORES - BOLSA DE VALORES        | CHILE          |
| XBCL  | LA BOLSA ELECTRONICA DE CHILE                 | CHILE          |
| XSGO  | SANTIAGO STOCK EXCHANGE                       | CHILE          |
| CCFX  | CHINA FINANCIAL FUTURES EXCHANGE              | CHINA          |
| CSSX  | CHINA STAINLESS STEEL EXCHANGE                | CHINA          |

| VALUE | CODE DESCRIPTION                                             | COUNTRY        |
|-------|--------------------------------------------------------------|----------------|
| SGEX  | SHANGHAI GOLD EXCHANGE                                       | CHINA          |
| XCFE  | CHINA FOREIGN EXCHANGE TRADE SYSTEM                          | CHINA          |
| XDCE  | DALIAN COMMODITY EXCHANGE                                    | CHINA          |
| XSGE  | SHANGHAI FUTURES EXCHANGE                                    | CHINA          |
| XINE  | SHANGHAI INTERNATIONAL ENERGY EXCHANGE                       | CHINA          |
| XSHE  | SHENZHEN STOCK EXCHANGE                                      | CHINA          |
| XSEC  | SHENZHEN STOCK EXCHANGE - SHENZHEN - HONG KONG STOCK CONNECT | CHINA          |
| XSHG  | SHANGHAI STOCK EXCHANGE                                      | CHINA          |
| XSSC  | SHANGHAI STOCK EXCHANGE - SHANGHAI - HONG KONG STOCK CONNECT | CHINA          |
| XZCE  | ZHENGZHOU COMMODITY EXCHANGE                                 | CHINA          |
| XBOG  | BOLSA DE VALORES DE COLOMBIA                                 | COLOMBIA       |
| XBNV  | BOLSA NACIONAL DE VALORES, S.A.                              | COSTA RICA     |
| XCRO  | CROATIAN POWER EXCHANGE                                      | CROATIA        |
| XTRZ  | ZAGREB MONEY AND SHORT TERM SECURITIES MARKET INC            | CROATIA        |
| XZAG  | ZAGREB STOCK EXCHANGE                                        | CROATIA        |
| XZAM  | THE ZAGREB STOCK EXCHANGE MTF                                | CROATIA        |
| DCSX  | DUTCH CARIBBEAN SECURITIES EXCHANGE                          | CURACAO        |
| XCYS  | CYPRUS STOCK EXCHANGE                                        | CYPRUS         |
| XECM  | MTF - CYPRUS EXCHANGE                                        | CYPRUS         |
| XCYO  | CYPRUS STOCK EXCHANGE - OTC                                  | CYPRUS         |
| FTFS  | 42 FINANCIAL SERVICES                                        | CZECH REPUBLIC |
| XPRA  | PRAGUE STOCK EXCHANGE                                        | CZECH REPUBLIC |
| XPRM  | PRAGUE STOCK EXCHANGE - MTF                                  | CZECH REPUBLIC |
| XPXE  | POWER EXCHANGE CENTRAL EUROPE                                | CZECH REPUBLIC |
| XRMZ  | RM-SYSTEM CZECH STOCK EXCHANGE                               | CZECH REPUBLIC |
| XRMO  | RM-SYSTEM CZECH STOCK EXCHANGE (MTF)                         | CZECH REPUBLIC |
| DASI  | DANSKE BANK A/S - SYSTEMATIC INTERNALISER                    | DENMARK        |
| DKTC  | DANSK OTC                                                    | DENMARK        |
| GXGR  | GXG MARKETS A/S                                              | DENMARK        |
| GXGF  | GXG MTF FIRST QUOTE                                          | DENMARK        |
| GXGM  | GXG MTF                                                      | DENMARK        |
| NPGA  | GASPOINT NORDIC A/S                                          | DENMARK        |
| XCSE  | NASDAQ COPENHAGEN A/S                                        | DENMARK        |
| DCSE  | NASDAQ COPENHAGEN A/S - NORDIC@MID                           | DENMARK        |
| MNDK  | FIRST NORTH DENMARK – AUCTION ON DEMAND                      | DENMARK        |
| DNDK  | FIRST NORTH DENMARK - NORDIC@MID                             | DENMARK        |

| VALUE | CODE DESCRIPTION                                | COUNTRY            |
|-------|-------------------------------------------------|--------------------|
| FNDK  | FIRST NORTH DENMARK                             | DENMARK            |
| MCSE  | NASDAQ COPENHAGEN A/S – AUCTION ON DEMAND       | DENMARK            |
| XBVR  | BOLSA DE VALORES DE LA REPUBLICA DOMINICANA SA. | DOMINICAN REPUBLIC |
| XGUA  | BOLSA DE VALORES DE GUAYAQUIL                   | ECUADOR            |
| XQUI  | BOLSA DE VALORES DE QUITO                       | ECUADOR            |
| NILX  | NILE STOCK EXCHANGE                             | EGYPT              |
| XCAI  | EGYPTIAN EXCHANGE                               | EGYPT              |
| XSVA  | EL SALVADOR STOCK EXCHANGE                      | EL SALVADOR        |
| XTAL  | NASDAQ TALLINN AS                               | ESTONIA            |
| FNEE  | FIRST NORTH ESTONIA                             | ESTONIA            |
| VMFX  | THE FAROESE SECURITIES MARKET                   | FAROE ISLANDS      |
| XSPS  | SOUTH PACIFIC STOCK EXCHANGE                    | FIJI               |
| FGEX  | KAASUPORSSI - FINNISH GAS EXCHANGE              | FINLAND            |
| XHEL  | NASDAQ HELSINKI LTD                             | FINLAND            |
| FNFI  | FIRST NORTH FINLAND                             | FINLAND            |
| MNFI  | FIRST NORTH FINLAND – AUCTION ON DEMAND         | FINLAND            |
| MHEL  | NASDAQ HELSINKI LTD – AUCTION ON DEMAND         | FINLAND            |
| DHEL  | NASDAQ HELSINKI LTD - NORDIC@MID                | FINLAND            |
| DNFI  | FIRST NORTH FINLAND - NORDIC@MID                | FINLAND            |
| COAL  | LA COTE ALPHA                                   | FRANCE             |
| EPEX  | EPEX SPOT SE                                    | FRANCE             |
| FMTS  | MTS FRANCE SAS                                  | FRANCE             |
| GMTF  | GALAXY                                          | FRANCE             |
| LCHC  | LCH.CLEARNET                                    | FRANCE             |
| XAFR  | ALTERNATIVA FRANCE                              | FRANCE             |
| XBLN  | BLUENEXT                                        | FRANCE             |
| XPAR  | EURONEXT - EURONEXT PARIS                       | FRANCE             |
| ALXP  | EURONEXT - ALTERNEXT PARIS                      | FRANCE             |
| XSPM  | EURONEXT STRUCTURED PRODUCTS MTF                | FRANCE             |
| MTCH  | BONDMATCH                                       | FRANCE             |
| XMAT  | EURONEXT PARIS MATIF                            | FRANCE             |
| XMON  | EURONEXT PARIS MONEP                            | FRANCE             |
| XMLI  | EURONEXT - MARCHE LIBRE PARIS                   | FRANCE             |
| XPOW  | POWERNEXT                                       | FRANCE             |
| XPSF  | POWERNEXT - GAS SPOT AND FUTURES                | FRANCE             |
| XPOT  | POWERNEXT - OTF                                 | FRANCE             |
| XGSE  | GEORGIA STOCK EXCHANGE                          | GEORGIA            |
| 360T  | 360T                                            | GERMANY            |

| VALUE | CODE DESCRIPTION                                                | COUNTRY |
|-------|-----------------------------------------------------------------|---------|
| CATS  | CATS                                                            | GERMANY |
| DBOX  | DEUTSCHE BANK OFF EXCHANGE TRADING                              | GERMANY |
| AUTO  | AUTOBAHN FX                                                     | GERMANY |
| ECAG  | EUREX CLEARING AG                                               | GERMANY |
| FICX  | FINANCIAL INFORMATION CONTRIBUTORS EXCHANGE                     | GERMANY |
| TGAT  | TRADEGATE EXCHANGE                                              | GERMANY |
| XGRM  | TRADEGATE EXCHANGE - REGULIERTER MARKT                          | GERMANY |
| XGAT  | TRADEGATE EXCHANGE - FREIVERKEHR                                | GERMANY |
| XBER  | BOERSE BERLIN                                                   | GERMANY |
| ZOBX  | ZOBEX                                                           | GERMANY |
| BERC  | BOERSE BERLIN - BERLIN SECOND REGULATED MARKET                  | GERMANY |
| XEQT  | BOERSE BERLIN EQUIDUCT TRADING                                  | GERMANY |
| BERB  | BOERSE BERLIN - FREIVERKEHR                                     | GERMANY |
| EQTA  | BOERSE BERLIN EQUIDUCT TRADING - REGULIERTER MARKT              | GERMANY |
| EQTD  | BOERSE BERLIN EQUIDUCT TRADING - OTC                            | GERMANY |
| EQTB  | BOERSE BERLIN EQUIDUCT TRADING - BERLIN SECOND REGULATED MARKET | GERMANY |
| EQTC  | BOERSE BERLIN EQUIDUCT TRADING - FREIVERKEHR                    | GERMANY |
| BERA  | BOERSE BERLIN - REGULIERTER MARKT                               | GERMANY |
| XDUS  | BOERSE DUESSELDORF                                              | GERMANY |
| DUSD  | BOERSE DUESSELDORF - QUOTRIX MTF                                | GERMANY |
| DUSC  | BOERSE DUESSELDORF - QUOTRIX - REGULIERTER MARKT                | GERMANY |
| DUSB  | BOERSE DUESSELDORF - FREIVERKEHR                                | GERMANY |
| DUSA  | BOERSE DUESSELDORF - REGULIERTER MARKT                          | GERMANY |
| XQTX  | BOERSE DUESSELDORF - QUOTRIX                                    | GERMANY |
| XECB  | ECB EXCHANGE RATES                                              | GERMANY |
| XECC  | EUROPEAN COMMODITY CLEARING AG                                  | GERMANY |
| XEEE  | EUROPEAN ENERGY EXCHANGE                                        | GERMANY |
| XEE0  | EUROPEAN ENERGY EXCHANGE - NON-MTF MARKET                       | GERMANY |
| XEER  | EUROPEAN ENERGY EXCHANGE - REGULATED MARKET                     | GERMANY |
| XETR  | XETRA                                                           | GERMANY |
| XEUB  | EUREX BONDS                                                     | GERMANY |
| XETA  | XETRA - REGULIERTER MARKT                                       | GERMANY |
| XETB  | XETRA - FREIVERKEHR                                             | GERMANY |
| XEUP  | EUREX REPO GMBH                                                 | GERMANY |
| XERE  | EUREX REPO - FUNDING AND FINANCING PRODUCTS                     | GERMANY |

| VALUE | CODE DESCRIPTION                                               | COUNTRY |
|-------|----------------------------------------------------------------|---------|
| XEUM  | EUREX REPO SECLEND MARKET                                      | GERMANY |
| XERT  | EUREX REPO - TRIPARTY                                          | GERMANY |
| XEUR  | EUREX DEUTSCHLAND                                              | GERMANY |
| XFRA  | DEUTSCHE BOERSE AG                                             | GERMANY |
| XDBC  | DEUTSCHE BOERSE AG - CUSTOMIZED INDICES                        | GERMANY |
| FRAA  | BOERSE FRANKFURT - REGULIERTER MARKT                           | GERMANY |
| XDBX  | DEUTSCHE BOERSE AG - INDICES                                   | GERMANY |
| XDBV  | DEUTSCHE BOERSE AG - VOLATILITY INDICES                        | GERMANY |
| FRAB  | BOERSE FRANKFURT - FREIVERKEHR                                 | GERMANY |
| XHAM  | HANSEATISCHE WERTPAPIERBOERSE HAMBURG                          | GERMANY |
| HAMM  | BOERSE HAMBURG - LANG AND SCHWARZ EXCHANGE - REGULIERTER MARKT | GERMANY |
| HAML  | BOERSE HAMBURG - LANG AND SCHWARZ EXCHANGE                     | GERMANY |
| HAMN  | BOERSE HAMBURG - LANG AND SCHWARZ EXCHANGE - FREIVERKEHR       | GERMANY |
| HAMA  | BOERSE HAMBURG - REGULIERTER MARKT                             | GERMANY |
| HAMB  | BOERSE HAMBURG - FREIVERKEHR                                   | GERMANY |
| XHAN  | NIEDERSAECHSISCHE BOERSE ZU HANNOVER                           | GERMANY |
| HANB  | BOERSE HANNOVER - FREIVERKEHR                                  | GERMANY |
| HANA  | BOERSE HANNOVER - REGULIERTER MARKT                            | GERMANY |
| XINV  | INVESTRO                                                       | GERMANY |
| XMUN  | BOERSE MUENCHEN                                                | GERMANY |
| MUNC  | BOERSE MUENCHEN - MARKET MAKER MUNICH - REGULIERTER MARKT      | GERMANY |
| MUND  | BOERSE MUENCHEN - MARKET MAKER MUNICH - FREIVERKEHR MARKT      | GERMANY |
| MUNA  | BOERSE MUENCHEN - REGULIERTER MARKT                            | GERMANY |
| MUNB  | BOERSE MUENCHEN - FREIVERKEHR                                  | GERMANY |
| XSCO  | BOERSE FRANKFURT WARRANTS TECHNICAL                            | GERMANY |
| XSC1  | BOERSE FRANKFURT WARRANTS TECHNICAL 1                          | GERMANY |
| XSC2  | BOERSE FRANKFURT WARRANTS TECHNICAL 2                          | GERMANY |
| XSC3  | BOERSE FRANKFURT WARRANTS TECHNICAL 3                          | GERMANY |
| XSTU  | BOERSE STUTT GART                                              | GERMANY |
| STUD  | BOERSE STUTT GART - FREIVERKEHR - TECHNICAL PLATFORM 2         | GERMANY |
| STUC  | BOERSE STUTT GART - REGULIERTER MARKT - TECHNICAL PLATFORM 2   | GERMANY |
| XSTF  | BOERSE STUTT GART - TECHNICAL PLATFORM 2                       | GERMANY |
| EUWX  | EUWAX                                                          | GERMANY |
| STUA  | BOERSE STUTT GART - REGULIERTER MARKT                          | GERMANY |

| VALUE | CODE DESCRIPTION                                                         | COUNTRY        |
|-------|--------------------------------------------------------------------------|----------------|
| STUB  | BOERSE STUTTGART - FREIVERKEHR                                           | GERMANY        |
| XXSC  | FRANKFURT CEF SC                                                         | GERMANY        |
| XGHA  | GHANA STOCK EXCHANGE                                                     | GHANA          |
| GSXL  | THE GIBRALTAR STOCK EXCHANGE                                             | GIBRALTAR      |
| ASEX  | ATHENS STOCK EXCHANGE                                                    | GREECE         |
| ENAX  | ATHENS EXCHANGE ALTERNATIVE MARKET                                       | GREECE         |
| XADE  | ATHENS EXCHANGE S.A. DERIVATIVES MARKET                                  | GREECE         |
| HOTC  | HELLENIC EXCHANGE OTC MARKET                                             | GREECE         |
| XATH  | ATHENS EXCHANGE S.A. CASH MARKET                                         | GREECE         |
| XIPO  | HELEX ELECTRONIC BOOK BUILDING                                           | GREECE         |
| HDAT  | ELECTRONIC SECONDARY SECURITIES MARKET (HDAT)                            | GREECE         |
| HEMO  | LAGIE - OPERATOR OF THE ENERGY MARKET S.A.                               | GREECE         |
| XGTG  | BOLSA DE VALORES NACIONAL SA                                             | GUATEMALA      |
| XCIE  | CHANNEL ISLANDS STOCK EXCHANGE                                           | GUERNSEY, C.I. |
| GSCI  | THE GUYANA ASSOCIATION OF SECURITIES COMPANIES AND INTERMEDIARIES INC.   | GUYANA         |
| XBCV  | BOLSA CENTROAMERICANA DE VALORES S.A.                                    | HONDURAS       |
| CGMH  | CITI MATCH                                                               | HONG KONG      |
| CLHK  | CLSA HONG KONG - DARK                                                    | HONG KONG      |
| CSHK  | CREDIT SUISSE SECURITIES (HONG KONG) LIMITED                             | HONG KONG      |
| CFHK  | CROSSFINDER HONG KONG                                                    | HONG KONG      |
| DBHK  | DEUTSCHE BANK HONG KONG ATS                                              | HONG KONG      |
| EOTC  | E-OTC                                                                    | HONG KONG      |
| GSXH  | GSX HONG KONG                                                            | HONG KONG      |
| HSXA  | HSBC-X HONG KONG                                                         | HONG KONG      |
| JPMI  | JP MORGAN - JPMI MARKET                                                  | HONG KONG      |
| MAQH  | MACQUARIE INTERNAL MARKETS (HONG KONG)                                   | HONG KONG      |
| SIGH  | SIGMA X HONG KONG                                                        | HONG KONG      |
| TOCP  | TORA CROSSPOINT                                                          | HONG KONG      |
| UBSX  | UBS CROSS                                                                | HONG KONG      |
| XCGS  | CHINESE GOLD & SILVER EXCHANGE SOCIETY                                   | HONG KONG      |
| XHKF  | HONG KONG FUTURES EXCHANGE LTD.                                          | HONG KONG      |
| XHKG  | HONG KONG EXCHANGES AND CLEARING LTD                                     | HONG KONG      |
| SZSC  | STOCK EXCHANGE OF HONG KONG LIMITED - SHENZHEN - HONG KONG STOCK CONNECT | HONG KONG      |
| SHSC  | STOCK EXCHANGE OF HONG KONG LIMITED - SHANGHAI - HONG KONG STOCK CONNECT | HONG KONG      |
| XGEM  | HONG KONG GROWTH ENTERPRISES MARKET                                      | HONG KONG      |

| VALUE | CODE DESCRIPTION                                   | COUNTRY   |
|-------|----------------------------------------------------|-----------|
| XIHK  | INSTINET PACIFIC LTD                               | HONG KONG |
| XPST  | POSIT - ASIA PACIFIC                               | HONG KONG |
| BETA  | BETA MARKET                                        | HUNGARY   |
| HUPX  | HUNGARIAN POWER EXCHANGE                           | HUNGARY   |
| KCCP  | KELER CCP                                          | HUNGARY   |
| XBUD  | BUDAPEST STOCK EXCHANGE                            | HUNGARY   |
| XGAS  | CENTRAL EASTERN EUROPEAN GAS EXCHANGE LTD          | HUNGARY   |
| XICE  | NASDAQ ICELAND HF.                                 | ICELAND   |
| DICE  | NASDAQ ICELAND HF. - NORDIC@MID                    | ICELAND   |
| MICE  | NASDAQ ICELAND HF. – AUCTION ON DEMAND             | ICELAND   |
| DNIS  | FIRST NORTH ICELAND - NORDIC@MID                   | ICELAND   |
| FNIS  | FIRST NORTH ICELAND                                | ICELAND   |
| MNIS  | FIRST NORTH ICELAND – AUCTION ON DEMAND            | ICELAND   |
| ACEX  | ACE DERIVATIVES & COMMODITY EXCHANGE LTD           | INDIA     |
| CDSL  | CLEARCORP DEALING SYSTEMS (INDIA) LTD.             | INDIA     |
| ASTR  | CLEARCORP DEALING SYSTEMS INDIA LIMITED – ASTROID  | INDIA     |
| FXSW  | CLEARCORP DEALING SYSTEMS INDIA LIMITED – FX-SWAP  | INDIA     |
| FXCL  | CLEARCORP DEALING SYSTEMS INDIA LIMITED – FX-CLEAR | INDIA     |
| ICXL  | INDIAN COMMODITY EXCHANGE LTD.                     | INDIA     |
| ISEX  | INTER-CONNECTED STOCK EXCHANGE OF INDIA LTD        | INDIA     |
| MCXX  | MCX STOCK EXCHANGE LTD                             | INDIA     |
| NBOT  | NATIONAL BOARD OF TRADE LIMITED                    | INDIA     |
| NMCE  | NATIONAL MULTI-COMMODITY EXCHANGE OF INDIA         | INDIA     |
| OTCX  | OTC EXCHANGE OF INDIA                              | INDIA     |
| PXIL  | POWER EXCHANGE INDIA LTD.                          | INDIA     |
| XBAN  | BANGALORE STOCK EXCHANGE LTD                       | INDIA     |
| XBOM  | BSE LTD                                            | INDIA     |
| BSME  | BSE SME                                            | INDIA     |
| XCAL  | CALCUTTA STOCK EXCHANGE                            | INDIA     |
| XDES  | DELHI STOCK EXCHANGE                               | INDIA     |
| XIMC  | MULTI COMMODITY EXCHANGE OF INDIA LTD.             | INDIA     |
| XMDS  | MADRAS STOCK EXCHANGE                              | INDIA     |
| XNCD  | NATIONAL COMMODITY & DERIVATIVES EXCHANGE LTD      | INDIA     |
| XNSE  | NATIONAL STOCK EXCHANGE OF INDIA                   | INDIA     |
| XUSE  | UNITED STOCK EXCHANGE                              | INDIA     |

| VALUE | CODE DESCRIPTION                                                                      | COUNTRY   |
|-------|---------------------------------------------------------------------------------------|-----------|
| ICDX  | INDONESIA COMMODITY AND DERIVATIVES EXCHANGE                                          | INDONESIA |
| XBBJ  | JAKARTA FUTURES EXCHANGE (BURSA BERJANGKA JAKARTA)                                    | INDONESIA |
| XIDX  | INDONESIA STOCK EXCHANGE                                                              | INDONESIA |
| XJNB  | JAKARTA NEGOTIATED BOARD                                                              | INDONESIA |
| IMEX  | IRAN MERCANTILE EXCHANGE                                                              | IRAN      |
| XTEH  | TEHRAN STOCK EXCHANGE                                                                 | IRAN      |
| XIQS  | IRAQ STOCK EXCHANGE                                                                   | IRAQ      |
| AREX  | AREX - AUTOMATED RECEIVABLES EXCHANGE                                                 | IRELAND   |
| XPOS  | POSIT                                                                                 | IRELAND   |
| XCDE  | BAXTER FINANCIAL SERVICES                                                             | IRELAND   |
| XDUB  | IRISH STOCK EXCHANGE - ALL MARKET                                                     | IRELAND   |
| XEYE  | IRISH STOCK EXCHANGE - GEM - XETRA                                                    | IRELAND   |
| XMSM  | DUBLIN - IRISH STOCK EXCHANGE - MAIN SECURITIES MARKET (MSM)- ISE XETRA               | IRELAND   |
| XESM  | DUBLIN - IRISH STOCK EXCHANGE - ENTREPRISE SECURITIES MARKET (ESM)- ISE XETRA         | IRELAND   |
| XATL  | ATLANTIC SECURITIES MARKET                                                            | IRELAND   |
| XEBI  | ENERGY BROKING IRELAND GAS TRADING PLATFORM                                           | IRELAND   |
| XTAE  | TEL AVIV STOCK EXCHANGE                                                               | ISRAEL    |
| CGIT  | CASSA DI COMPENSAZIONE E GARANZIA SPA                                                 | ITALY     |
| CGQT  | CASSA DI COMPENSAZIONE E GARANZIA SPA - EQUITY CCP SERVICE                            | ITALY     |
| CGDB  | CASSA DI COMPENSAZIONE E GARANZIA SPA - BONDS CCP SERVICE                             | ITALY     |
| CGEB  | CASSA DI COMPENSAZIONE E GARANZIA SPA - EURO BONDS CCP SERVICE                        | ITALY     |
| CGTR  | CASSA DI COMPENSAZIONE E GARANZIA SPA - TRIPARTY REPO CCP SERVICE                     | ITALY     |
| CGQD  | CASSA DI COMPENSAZIONE E GARANZIA SPA - CCP EQUITY DERIVATIVES                        | ITALY     |
| CGCM  | CASSA DI COMPENSAZIONE E GARANZIA SPA - COLLATERALIZED MONEY MARKET GUARANTEE SERVICE | ITALY     |
| CGGD  | CASSA DI COMPENSAZIONE E GARANZIA SPA - CCP AGRICULTURAL COMMODITY DERIVATIVES        | ITALY     |
| CGND  | CASSA DI COMPENSAZIONE E GARANZIA SPA - CCP ENERGY DERIVATIVES                        | ITALY     |
| EMID  | E-MID                                                                                 | ITALY     |
| EMIR  | E-MID REPO                                                                            | ITALY     |
| EMIB  | E-MID - BANCA D'ITALIA SHARES TRADING MARKET                                          | ITALY     |
| EMDR  | E-MID - E-MIDER MARKET                                                                | ITALY     |

| VALUE | CODE DESCRIPTION                                   | COUNTRY     |
|-------|----------------------------------------------------|-------------|
| ETLX  | EUROTLX                                            | ITALY       |
| HMTF  | HI-MTF                                             | ITALY       |
| HRFQ  | HI-MTF RFQ                                         | ITALY       |
| HMOD  | HI-MTF ORDER DRIVEN                                | ITALY       |
| MTSO  | MTS S.P.A.                                         | ITALY       |
| MTSM  | MTS CORPORATE MARKET                               | ITALY       |
| SSOB  | BONDVISION ITALIA MTF                              | ITALY       |
| BOND  | BONDVISION ITALIA                                  | ITALY       |
| MTSC  | MTS ITALIA                                         | ITALY       |
| XGME  | GESTORE MERCATO ELETTRICO - ITALIAN POWER EXCHANGE | ITALY       |
| XMIL  | BORSA ITALIANA S.P.A.                              | ITALY       |
| XMOT  | EXTRAMOT                                           | ITALY       |
| MTAH  | BORSA ITALIANA EQUITY MTF                          | ITALY       |
| XDMI  | ITALIAN DERIVATIVES MARKET                         | ITALY       |
| XAIM  | AIM ITALIA - MERCATO ALTERNATIVO DEL CAPITALE      | ITALY       |
| SEDX  | SECURITISED DERIVATIVES MARKET                     | ITALY       |
| MTAA  | ELECTRONIC SHARE MARKET                            | ITALY       |
| MOTX  | ELECTRONIC BOND MARKET                             | ITALY       |
| MIVX  | MARKET FOR INVESTMENT VEHICLES                     | ITALY       |
| ETFP  | ELECTRONIC OPEN-END FUNDS AND ETC MARKET           | ITALY       |
| XBRV  | BOURSE REGIONALE DES VALEURS MOBILIERES            | IVORY COAST |
| XJAM  | JAMAICA STOCK EXCHANGE                             | JAMAICA     |
| BETP  | BLOOMBERG TRADEBOOK JAPAN LIMITED                  | JAPAN       |
| CHIJ  | CHI-X JAPAN                                        | JAPAN       |
| CHIS  | CHI-X JAPAN SELECT                                 | JAPAN       |
| KAIX  | KAI-X                                              | JAPAN       |
| CHIV  | CHI-X JAPAN VWAP CROSSING                          | JAPAN       |
| CITX  | CITI MATCH                                         | JAPAN       |
| CITD  | CITI DARK                                          | JAPAN       |
| CLJP  | CLSA JAPAN - DARK                                  | JAPAN       |
| CMET  | CLEAR MARKETS JAPAN, INC.                          | JAPAN       |
| CSJP  | CREDIT SUISSE EQUITIES (JAPAN) LIMITED             | JAPAN       |
| CFJP  | CROSSFINDER JAPAN                                  | JAPAN       |
| DRCT  | DAIWA DRECT                                        | JAPAN       |
| LXJP  | BARCLAYS LX JAPAN                                  | JAPAN       |
| MAQJ  | MACQUARIE INTERNAL MARKETS (JAPAN)                 | JAPAN       |
| MIZX  | MIZUHO INTERNAL CROSSING                           | JAPAN       |
| MSMS  | MORGAN STANLEY MUFG SECURITIES CO., LTD            | JAPAN       |

| VALUE | CODE DESCRIPTION                               | COUNTRY            |
|-------|------------------------------------------------|--------------------|
| NMRJ  | NOMURA SECURITIES CO LTD                       | JAPAN              |
| NXJP  | NX JAPAN                                       | JAPAN              |
| NXVW  | NX VWAP                                        | JAPAN              |
| NXSE  | NX SELECT JAPAN                                | JAPAN              |
| SBIJ  | SBI JAPANNEXT-J-MARKET                         | JAPAN              |
| SBIU  | SBI JAPANNEXT - U - MARKET                     | JAPAN              |
| XSBI  | SBI JAPANNEXT - X - MARKET                     | JAPAN              |
| SBIV  | SBI JAPANNEXT - VWAP CROSSING                  | JAPAN              |
| SIGJ  | SIGMA X JAPAN                                  | JAPAN              |
| XFKA  | FUKUOKA STOCK EXCHANGE                         | JAPAN              |
| XIJP  | INSTINET JAPAN                                 | JAPAN              |
| JASR  | JAPANCROSSING                                  | JAPAN              |
| XJPX  | JAPAN EXCHANGE GROUP                           | JAPAN              |
| XTK2  | TOKYO STOCK EXCHANGE - TOSTNET-2               | JAPAN              |
| XTAM  | TOKYO STOCK EXCHANGE-TOKYO PRO MARKET          | JAPAN              |
| XTK1  | TOKYO STOCK EXCHANGE - TOSTNET-1               | JAPAN              |
| XTK3  | TOKYO STOCK EXCHANGE - TOSTNET-3               | JAPAN              |
| XTKS  | TOKYO STOCK EXCHANGE                           | JAPAN              |
| XJAS  | TOKYO STOCK EXCHANGE JASDAQ                    | JAPAN              |
| XOSE  | OSAKA EXCHANGE                                 | JAPAN              |
| XOSJ  | OSAKA EXCHANGE J-NET                           | JAPAN              |
| XKAC  | OSAKA DOJIMA COMMODITY EXCHANGE                | JAPAN              |
| XNGO  | NAGOYA STOCK EXCHANGE                          | JAPAN              |
| XNKS  | CENTRAL JAPAN COMMODITIES EXCHANGE             | JAPAN              |
| XSAP  | SAPPORO SECURITIES EXCHANGE                    | JAPAN              |
| XTFF  | TOKYO FINANCIAL EXCHANGE                       | JAPAN              |
| XTKT  | TOKYO COMMODITY EXCHANGE                       | JAPAN              |
| XAMM  | AMMAN STOCK EXCHANGE                           | JORDAN             |
| ETSC  | ETS EURASIAN TRADING SYSTEM COMMODITY EXCHANGE | KAZAKHSTAN         |
| XKAZ  | KAZAKHSTAN STOCK EXCHANGE                      | KAZAKHSTAN         |
| XNAI  | NAIROBI STOCK EXCHANGE                         | KENYA              |
| XKFB  | KOREA FREEBOARD MARKET                         | KOREA, REPUBLIC OF |
| XKRX  | KOREA EXCHANGE (STOCK MARKET)                  | KOREA, REPUBLIC OF |
| XKON  | KOREA NEW EXCHANGE                             | KOREA, REPUBLIC OF |
| XKFE  | KOREA EXCHANGE (FUTURES MARKET)                | KOREA, REPUBLIC OF |

| VALUE | CODE DESCRIPTION                           | COUNTRY                |
|-------|--------------------------------------------|------------------------|
| XKCM  | KOREA EXCHANGE COMMODITY MARKET            | KOREA, REPUBLIC OF     |
| XKEM  | KOREA EXCHANGE EMISSIONS MARKET            | KOREA, REPUBLIC OF     |
| XKOS  | KOREA EXCHANGE (KOSDAQ)                    | KOREA, REPUBLIC OF     |
| XKUW  | KUWAIT STOCK EXCHANGE                      | KUWAIT                 |
| XKSE  | KYRGYZ STOCK EXCHANGE                      | KYRGYZSTAN             |
| XLAO  | LAO SECURITIES EXCHANGE                    | LAOS                   |
| XRIS  | NASDAQ RIGA AS                             | LATVIA                 |
| FNLV  | FIRST NORTH LATVIA                         | LATVIA                 |
| XBey  | BOURSE DE BEYROUTH - BEIRUT STOCK EXCHANGE | LEBANON                |
| XLSM  | LIBYAN STOCK MARKET                        | LIBYAN ARAB JAMAHIRIYA |
| XLGT  | LGT BANK AG - SYSTEMATIC INTERNALISER      | LIECHTENSTEIN          |
| BAPX  | BALTPOL                                    | LITHUANIA              |
| GETB  | LITHUANIAN NATURAL GAS EXCHANGE            | LITHUANIA              |
| XLIT  | AB NASDAQ VILNIUS                          | LITHUANIA              |
| FNLT  | FIRST NORTH LITHUANIA                      | LITHUANIA              |
| CCLX  | FINESTI S.A.                               | LUXEMBOURG             |
| XLUX  | LUXEMBOURG STOCK EXCHANGE                  | LUXEMBOURG             |
| EMTF  | EURO MTF                                   | LUXEMBOURG             |
| XVES  | VESTIMA                                    | LUXEMBOURG             |
| XMAE  | MACEDONIAN STOCK EXCHANGE                  | MACEDONIA              |
| XMDG  | MARCHE INTERBANCAIRE DES DEVISES M.I.D.    | MADAGASCAR             |
| XMSW  | MALAWI STOCK EXCHANGE                      | MALAWI                 |
| XKLS  | BURSA MALAYSIA                             | MALAYSIA               |
| MESQ  | ACE MARKET                                 | MALAYSIA               |
| XLFX  | LABUAN INTERNATIONAL FINANCIAL EXCHANGE    | MALAYSIA               |
| XRBM  | RINGGIT BOND MARKET                        | MALAYSIA               |
| MALX  | MALDIVES STOCK EXCHANGE                    | MALDIVES               |
| EWSM  | EUROPEAN WHOLESALE SECURITIES MARKET       | MALTA                  |
| XMAL  | MALTA STOCK EXCHANGE                       | MALTA                  |
| PROS  | PROSPECTS                                  | MALTA                  |
| GBOT  | BOURSE AFRICA LIMITED                      | MAURITIUS              |
| XAFX  | AFRICAN STOCK EXCHANGE                     | MAURITIUS              |
| XMAU  | STOCK EXCHANGE OF MAURITIUS LTD            | MAURITIUS              |
| CGMX  | CITI MEXICO RPI (RETAIL PRICE IMPROVEMENT) | MEXICO                 |
| XEMD  | MERCADO MEXICANO DE DERIVADOS              | MEXICO                 |

| VALUE | CODE DESCRIPTION                                   | COUNTRY                 |
|-------|----------------------------------------------------|-------------------------|
| XMEX  | BOLSA MEXICANA DE VALORES (MEXICAN STOCK EXCHANGE) | MEXICO                  |
| XMOL  | MOLDOVA STOCK EXCHANGE                             | MOLDOVA, REPUBLIC OF    |
| XULA  | MONGOLIAN STOCK EXCHANGE                           | MONGOLIA                |
| XMNX  | MONTENEGRO STOCK EXCHANGE                          | MONTENEGRO, REPUBLIC OF |
| XCAS  | CASABLANCA STOCK EXCHANGE                          | MOROCCO                 |
| XBVM  | MOZAMBIQUE STOCK EXCHANGE                          | MOZAMBIQUE              |
| XNAM  | NAMIBIAN STOCK EXCHANGE                            | NAMIBIA                 |
| XNEP  | NEPAL STOCK EXCHANGE                               | NEPAL                   |
| NZFX  | NEW ZEALAND FUTURES & OPTIONS                      | NEW ZEALAND             |
| XNZE  | NEW ZEALAND EXCHANGE LTD                           | NEW ZEALAND             |
| XMAN  | BOLSA DE VALORES DE NICARAGUA                      | NICARAGUA               |
| NASX  | NASD OTC MARKET                                    | NIGERIA                 |
| XNSA  | THE NIGERIAN STOCK EXCHANGE                        | NIGERIA                 |
| FISH  | FISH POOL ASA                                      | NORWAY                  |
| FSHX  | FISHEX                                             | NORWAY                  |
| ICAS  | ICAP ENERGY AS                                     | NORWAY                  |
| NEXO  | NOREXECO ASA                                       | NORWAY                  |
| NOPS  | NORD POOL SPOT AS                                  | NORWAY                  |
| NORX  | NASDAQ OMX COMMODITIES                             | NORWAY                  |
| STEE  | NASDAQ COMMODITIES - STEEL COMMODITY               | NORWAY                  |
| BULK  | NASDAQ COMMODITIES - BULK COMMODITY                | NORWAY                  |
| ELUK  | NASDAQ COMMODITIES - GBP POWER/ENERGY              | NORWAY                  |
| ELNO  | NASDAQ COMMODITIES - NOK POWER/ENERGY              | NORWAY                  |
| ELSE  | NASDAQ COMMODITIES - SEK POWER/ENERGY              | NORWAY                  |
| FREI  | NASDAQ COMMODITIES - FREIGHT COMMODITY             | NORWAY                  |
| ELEU  | NASDAQ COMMODITIES - EUR POWER/ENERGY              | NORWAY                  |
| NOSC  | NOS CLEARING ASA                                   | NORWAY                  |
| NOTC  | NORWEGIAN OVER THE COUNTER MARKET                  | NORWAY                  |
| OSLC  | SIX X-CLEAR AG                                     | NORWAY                  |
| XIMA  | INTERNATIONAL MARTIME EXCHANGE                     | NORWAY                  |
| XOSL  | OSLO BORS ASA                                      | NORWAY                  |
| XOAS  | OSLO AXESS                                         | NORWAY                  |
| XOAM  | NORDIC ALTERNATIVE BOND MARKET                     | NORWAY                  |
| XOSD  | OSLO BORS NORTH SEA - DARK POOL                    | NORWAY                  |
| MERK  | MERKUR MARKET                                      | NORWAY                  |
| XOSC  | OSLO CONNECT                                       | NORWAY                  |

| VALUE | CODE DESCRIPTION                                                                 | COUNTRY                               |
|-------|----------------------------------------------------------------------------------|---------------------------------------|
| XOAD  | OSLO AXESS NORTH SEA - DARK POOL                                                 | NORWAY                                |
| NIBR  | NORWEGIAN INTER BANK OFFERED RATE                                                | NORWAY                                |
| MERD  | MERKUR MARKET - DARK POOL                                                        | NORWAY                                |
| XMUS  | MUSCAT SECURITIES MARKET                                                         | OMAN                                  |
| NCEL  | PAKISTAN MERCANTILE EXCHANGE                                                     | PAKISTAN                              |
| XKAR  | THE PAKISTAN STOCK EXCHANGE LIMITED                                              | PAKISTAN                              |
| XPAE  | PALESTINE SECURITIES EXCHANGE                                                    | PALESTINIAN<br>TERRITORY,<br>OCCUPIED |
| XPTY  | BOLSA DE VALORES DE PANAMA, S.A.                                                 | PANAMA                                |
| XPOM  | PORT MORESBY STOCK EXCHANGE                                                      | PAPUA NEW<br>GUINEA                   |
| XVPA  | BOLSA DE VALORES Y PRODUCTOS DE ASUNCION SA                                      | PARAGUAY                              |
| XLIM  | BOLSA DE VALORES DE LIMA                                                         | PERU                                  |
| CLPH  | CLSA PHILIPPINES - DARK                                                          | PHILIPPINES                           |
| PDEX  | PHILIPPINE DEALING AND EXCHANGE CORP                                             | PHILIPPINES                           |
| XPHS  | PHILIPPINE STOCK EXCHANGE, INC.                                                  | PHILIPPINES                           |
| IENG  | INFOENGINE OTC                                                                   | POLAND                                |
| KDPW  | KDPW_CCP                                                                         | POLAND                                |
| PTPG  | POLISH TRADING POINT                                                             | POLAND                                |
| XWAR  | WARSAW STOCK EXCHANGE/EQUITIES/MAIN MARKET                                       | POLAND                                |
| TBSP  | WARSAW STOCK<br>EXCHANGE/BONDS/BONDSPOT/TREASURY BOND<br>MARKET                  | POLAND                                |
| PLPD  | WARSAW STOCK EXCHANGE/COMMODITIES/POLISH<br>POWER EXCHANGE/COMMODITY DERIVATIVES | POLAND                                |
| WGAS  | WARSAW STOCK EXCHANGE/COMMODITIES/POLISH<br>POWER EXCHANGE/GAS                   | POLAND                                |
| WIND  | WARSAW STOCK EXCHANGE/INDICES                                                    | POLAND                                |
| RPWC  | WARSAW STOCK<br>EXCHANGE/BONDS/CATALYST/BONDSPOT/REGULATED<br>MARKET             | POLAND                                |
| WETP  | WARSAW STOCK EXCHANGE/ ETPS                                                      | POLAND                                |
| WDER  | WARSAW STOCK EXCHANGE/FINANCIAL DERIVATIVES                                      | POLAND                                |
| WMTF  | WARSAW STOCK EXCHANGE/BONDS/CATALYST/MTF                                         | POLAND                                |
| XNCO  | WARSAW STOCK EXCHANGE/ EQUITIES/NEW<br>CONNECT-MTF                               | POLAND                                |
| PLPX  | WARSAW STOCK EXCHANGE/COMMODITIES/POLISH<br>POWER EXCHANGE/ENERGY MARKET         | POLAND                                |
| WBCL  | WARSAW STOCK<br>EXCHANGE/BONDS/CATALYST/LISTING                                  | POLAND                                |
| BOSP  | WARSAW STOCK                                                                     | POLAND                                |

| VALUE | CODE DESCRIPTION                                                   | COUNTRY                |
|-------|--------------------------------------------------------------------|------------------------|
|       | EXCHANGE/BONDS/CATALYST/BONDSPOT/MTF                               |                        |
| WBON  | WARSAW STOCK EXCHANGE/ BONDS/CATALYST/MAIN MARKET                  | POLAND                 |
| OMIC  | THE IBERIAN ENERGY CLEARING HOUSE                                  | PORTUGAL               |
| OPEX  | PEX-PRIVATE EXCHANGE                                               | PORTUGAL               |
| XLIS  | EURONEXT - EURONEXT LISBON                                         | PORTUGAL               |
| ALXL  | EURONEXT - ALTERNEXT LISBON                                        | PORTUGAL               |
| ENXL  | EURONEXT - EASYNEXT LISBON                                         | PORTUGAL               |
| MFOX  | EURONEXT - MERCADO DE FUTUROS E OPÇÕES                             | PORTUGAL               |
| WQXL  | EURONEXT - MARKET WITHOUT QUOTATIONS LISBON                        | PORTUGAL               |
| OMIP  | OPERADOR DE MERCADO IBERICO DE ENERGIA - PORTUGAL                  | PORTUGAL               |
| DSMD  | QATAR EXCHANGE                                                     | QATAR                  |
| TRPX  | TROP-X                                                             | REPUBLIC OF SEYCHELLES |
| BMFX  | SIBIU MONETARY- FINANCIAL AND COMMODITIES EXCHANGE                 | ROMANIA                |
| SBMF  | SPOT REGULATED MARKET - BMFMS                                      | ROMANIA                |
| BMFM  | DERIVATIVES REGULATED MARKET - BMFMS                               | ROMANIA                |
| BMFA  | BMFMS-ATS                                                          | ROMANIA                |
| XBRM  | ROMANIAN COMMODITIES EXCHANGE                                      | ROMANIA                |
| XBSE  | SPOT REGULATED MARKET - BVB                                        | ROMANIA                |
| XBSD  | DERIVATIVES REGULATED MARKET - BVB                                 | ROMANIA                |
| XRAS  | RASDAQ                                                             | ROMANIA                |
| XCAN  | CAN-ATS                                                            | ROMANIA                |
| XRPM  | ROMANIAN POWER MARKET                                              | ROMANIA                |
| MISX  | MOSCOW EXCHANGE                                                    | RUSSIA                 |
| RTSX  | MOSCOW EXCHANGE-DERIVATIVES AND CLASSICA MARKET                    | RUSSIA                 |
| NAMX  | NATIONAL MERCANTILE EXCHANGE                                       | RUSSIA                 |
| RPDX  | MOSCOW ENERGY EXCHANGE                                             | RUSSIA                 |
| RUSX  | NON-PROFIT PARTNERSHIP FOR THE DEVELOPMENT OF FINANCIAL MARKET RTS | RUSSIA                 |
| SPIM  | ST. PETERSBURG INTERNATIONAL MERCANTILE EXCHANGE                   | RUSSIA                 |
| XMOS  | MOSCOW STOCK EXCHANGE                                              | RUSSIA                 |
| XPET  | SAINT PETERSBURG EXCHANGE                                          | RUSSIA                 |
| XPIC  | SAINT-PETERSBURG CURRENCY EXCHANGE                                 | RUSSIA                 |
| XRUS  | INTERNET DIRECT-ACCESS EXCHANGE                                    | RUSSIA                 |
| XSAM  | SAMARA CURRENCY INTERBANK EXCHANGE                                 | RUSSIA                 |

| VALUE | CODE DESCRIPTION                                | COUNTRY               |
|-------|-------------------------------------------------|-----------------------|
| XSIB  | SIBERIAN EXCHANGE                               | RUSSIA                |
| ROTC  | RWANDA OTC MARKET                               | RWANDA                |
| RSEX  | RWANDA STOCK EXCHANGE                           | RWANDA                |
| XECS  | EASTERN CARIBBEAN SECURITIES EXCHANGE           | SAINT KITTS AND NEVIS |
| XSAU  | SAUDI STOCK EXCHANGE                            | SAUDI ARABIA          |
| XBEL  | BELGRADE STOCK EXCHANGE                         | SERBIA (REPUBLIC OF)  |
| CLTD  | CLEARTRADE EXCHANGE                             | SINGAPORE             |
| ECAL  | EUREX CLEARING ASIA PTE. LTD.                   | SINGAPORE             |
| EEAL  | EUREX EXCHANGE ASIA PTE. LTD.                   | SINGAPORE             |
| IFSG  | ICE FUTURES SINGAPORE                           | SINGAPORE             |
| JADX  | JOINT ASIAN DERIVATIVES EXCHANGE                | SINGAPORE             |
| SMEX  | SINGAPORE MERCANTILE EXCHANGE PTE LTD           | SINGAPORE             |
| TFSA  | TFS GREEN AUSTRALIAN GREEN MARKETS              | SINGAPORE             |
| XSES  | SINGAPORE EXCHANGE                              | SINGAPORE             |
| XSCE  | SINGAPORE COMMODITY EXCHANGE                    | SINGAPORE             |
| XSIM  | SINGAPORE EXCHANGE DERIVATIVES CLEARING LIMITED | SINGAPORE             |
| XSCA  | SINGAPORE CATALIST MARKET                       | SINGAPORE             |
| SPXE  | SPX                                             | SLOVAKIA              |
| XBRA  | BRATISLAVA STOCK EXCHANGE                       | SLOVAKIA              |
| EBRA  | BRATISLAVA STOCK EXCHANGE-MTF                   | SLOVAKIA              |
| XLJU  | LJUBLJANA STOCK EXCHANGE (OFFICIAL MARKET)      | SLOVENIA              |
| XLJM  | SI ENTER                                        | SLOVENIA              |
| XSOP  | BSP REGIONAL ENERGY EXCHANGE - SOUTH POOL       | SLOVENIA              |
| XJSE  | JOHANNESBURG STOCK EXCHANGE                     | SOUTH AFRICA          |
| YLDX  | JSE INTEREST RATE DERIVATIVES MARKET            | SOUTH AFRICA          |
| ALTX  | JSE ALTERNATE EXCHANGE                          | SOUTH AFRICA          |
| XBES  | JSE CASH BOND MARKET                            | SOUTH AFRICA          |
| XSFA  | JSE COMMODITY DERIVATIVES MARKET                | SOUTH AFRICA          |
| XSAF  | JSE EQUITY DERIVATIVES MARKET                   | SOUTH AFRICA          |
| BMEX  | BME - BOLSAS Y MERCADOS ESPANOL                 | SPAIN                 |
| XVAL  | BOLSA DE VALENCIA                               | SPAIN                 |
| XMRV  | MEFF FINANCIAL DERIVATIVES                      | SPAIN                 |
| XMCE  | MERCADO CONTINUO ESPANOL - CONTINUOUS MARKET    | SPAIN                 |
| XMAD  | BOLSA DE MADRID                                 | SPAIN                 |
| XLAT  | LATIBEX                                         | SPAIN                 |

| VALUE | CODE DESCRIPTION                                      | COUNTRY   |
|-------|-------------------------------------------------------|-----------|
| MARF  | MERCADO ALTERNATIVO DE RENTA FIJA                     | SPAIN     |
| XDRF  | AIAF - MERCADO DE RENTA FIJA                          | SPAIN     |
| XBIL  | BOLSA DE VALORES DE BILBAO                            | SPAIN     |
| XBAR  | BOLSA DE BARCELONA                                    | SPAIN     |
| BMCL  | BME CLEARING S.A.                                     | SPAIN     |
| MABX  | MERCADO ALTERNATIVO BURSATIL                          | SPAIN     |
| MERF  | MERCADO ELECTRONICO DE RENTA FIJA                     | SPAIN     |
| SEND  | SEND - SISTEMA ELECTRONICO DE NEGOCIACION DE DEUDA    | SPAIN     |
| SBAR  | BOLSA DE BARCELONA RENTA FIJA                         | SPAIN     |
| XMPW  | MEFF POWER DERIVATIVES                                | SPAIN     |
| SBIL  | BOLSA DE BILBAO RENTA FIJA                            | SPAIN     |
| IBGH  | IBERIAN GAS HUB                                       | SPAIN     |
| MIBG  | MERCADO ORGANIZADO DEL GAS                            | SPAIN     |
| OMEL  | OMI POLO ESPANOL S.A. (OMIE)                          | SPAIN     |
| PAVE  | ALTERNATIVE PLATFORM FOR SPANISH SECURITIES           | SPAIN     |
| XDPA  | CADE - MERCADO DE DEUDA PUBLICA ANOTADA               | SPAIN     |
| XNAF  | SISTEMA ESPANOL DE NEGOCIACION DE ACTIVOS FINANCIEROS | SPAIN     |
| XCOL  | COLOMBO STOCK EXCHANGE                                | SRI LANKA |
| XKHA  | KHARTOUM STOCK EXCHANGE                               | SUDAN     |
| XSWA  | SWAZILAND STOCK EXCHANGE                              | SWAZILAND |
| CRYD  | CRYEX - FX AND DIGITAL CURRENCIES                     | SWEDEN    |
| CRYX  | CRYEX                                                 | SWEDEN    |
| SEBX  | SEB - LIQUIDITY POOL                                  | SWEDEN    |
| ENSX  | SEB ENSKILDA                                          | SWEDEN    |
| XNGM  | NORDIC GROWTH MARKET                                  | SWEDEN    |
| NMTF  | NORDIC MTF                                            | SWEDEN    |
| XNDX  | NORDIC DERIVATIVES EXCHANGE                           | SWEDEN    |
| XNMR  | NORDIC MTF REPORTING                                  | SWEDEN    |
| XSAT  | AKTIETORGET                                           | SWEDEN    |
| XSTO  | NASDAQ STOCKHOLM AB                                   | SWEDEN    |
| XOPV  | OTC PUBLICATION VENUE                                 | SWEDEN    |
| NOED  | NASDAQ STOCKHOLM AB - NORWEGIAN EQ DERIVATIVES        | SWEDEN    |
| MNSE  | FIRST NORTH SWEDEN – AUCTION ON DEMAND                | SWEDEN    |
| MSTO  | NASDAQ STOCKHOLM AB – AUCTION ON DEMAND               | SWEDEN    |
| CSTO  | NASDAQ CLEARING AB                                    | SWEDEN    |
| PNED  | NASDAQ STOCKHOLM AB - PAN-NORDIC EQ                   | SWEDEN    |

| VALUE | CODE DESCRIPTION                                                 | COUNTRY     |
|-------|------------------------------------------------------------------|-------------|
|       | DERIVATIVES                                                      |             |
| FIED  | NASDAQ STOCKHOLM AB - FINNISH EQ DERIVATIVES                     | SWEDEN      |
| FNSE  | FIRST NORTH SWEDEN                                               | SWEDEN      |
| SEED  | NASDAQ STOCKHOLM AB - SWEDISH EQ DERIVATIVES                     | SWEDEN      |
| DNSE  | FIRST NORTH SWEDEN - NORDIC@MID                                  | SWEDEN      |
| DSTO  | NASDAQ STOCKHOLM AB - NORDIC@MID                                 | SWEDEN      |
| DKFI  | NASDAQ STOCKHOLM AB - DANISH FI DERIVATIVES                      | SWEDEN      |
| DKED  | NASDAQ STOCKHOLM AB - DANISH EQ DERIVATIVES                      | SWEDEN      |
| EUWB  | NASDAQ STOCKHOLM AB - EUR WB EQ DERIVATIVES                      | SWEDEN      |
| EBON  | NASDAQ STOCKHOLM AB - EUR FI DERIVATIVES                         | SWEDEN      |
| USWB  | NASDAQ STOCKHOLM AB - USD WB EQ DERIVATIVES                      | SWEDEN      |
| NOFI  | NASDAQ STOCKHOLM AB - NORWEGIAN FI DERIVATIVES                   | SWEDEN      |
| AIXE  | AIXECUTE                                                         | SWITZERLAND |
| DOTS  | SWISS DOTS BY CATS                                               | SWITZERLAND |
| EUCH  | EUREX ZURICH                                                     | SWITZERLAND |
| EUSC  | EUREX CH SECLEND MARKET                                          | SWITZERLAND |
| EUSP  | EUREX OTC SPOT MARKET                                            | SWITZERLAND |
| EURM  | EUREX REPO MARKET                                                | SWITZERLAND |
| S3FM  | SOCIETY3 FUNDERSMART                                             | SWITZERLAND |
| STOX  | STOXX LIMITED                                                    | SWITZERLAND |
| XSTX  | STOXX LIMITED - INDICES                                          | SWITZERLAND |
| XSCU  | STOXX LIMITED - CUSTOMIZED INDICES                               | SWITZERLAND |
| XSTV  | STOXX LIMITED - VOLATILITY INDICES                               | SWITZERLAND |
| UBSG  | UBS TRADING                                                      | SWITZERLAND |
| UBSF  | UBS FX                                                           | SWITZERLAND |
| UBSC  | UBS PIN-FX                                                       | SWITZERLAND |
| VLEX  | VONTOBEL LIQUIDITY EXTENDER                                      | SWITZERLAND |
| XBRN  | BX SWISS AG                                                      | SWITZERLAND |
| XSWX  | SIX SWISS EXCHANGE                                               | SWITZERLAND |
| XBTR  | SIX SWISS BILATERAL TRADING PLATFORM FOR STRUCTURED OTC PRODUCTS | SWITZERLAND |
| XQMH  | SIX SWISS EXCHANGE – STRUCTURED PRODUCTS                         | SWITZERLAND |
| XICB  | SIX CORPORATE BONDS AG                                           | SWITZERLAND |
| XSWM  | SIX SWISS EXCHANGE - SIX SWISS EXCHANGE AT MIDPOINT              | SWITZERLAND |
| XSLS  | SIX SWISS EXCHANGE - SLS                                         | SWITZERLAND |
| XVTX  | SIX SWISS EXCHANGE - BLUE CHIPS SEGMENT                          | SWITZERLAND |
| ZKBX  | ZURCHER KANTONALBANK SECURITIES EXCHANGE                         | SWITZERLAND |

| VALUE | CODE DESCRIPTION                                         | COUNTRY                 |
|-------|----------------------------------------------------------|-------------------------|
| KMUX  | ZURCHER KANTONALBANK - EKMU-X                            | SWITZERLAND             |
| XDSE  | DAMASCUS SECURITIES EXCHANGE                             | SYRIAN ARAB<br>REPUBLIC |
| ROCO  | TAIPEI EXCHANGE                                          | TAIWAN                  |
| XTAF  | TAIWAN FUTURES EXCHANGE                                  | TAIWAN                  |
| XTAI  | TAIWAN STOCK EXCHANGE                                    | TAIWAN                  |
| XDAR  | DAR ES SALAAM STOCK EXCHANGE                             | TANZANIA                |
| AFET  | AGRICULTURAL FUTURES EXCHANGE OF THAILAND                | THAILAND                |
| BEEEX | BOND ELECTRONIC EXCHANGE                                 | THAILAND                |
| TFEX  | THAILAND FUTURES EXCHANGE                                | THAILAND                |
| XBKK  | STOCK EXCHANGE OF THAILAND                               | THAILAND                |
| XMAI  | MARKET FOR ALTERNATIVE INVESTMENT                        | THAILAND                |
| XBKF  | STOCK EXCHANGE OF THAILAND - FOREIGN BOARD               | THAILAND                |
| CLMX  | CLIMEX                                                   | THE NETHERLANDS         |
| HCHC  | ICE CLEAR NETHERLANDS B.V.                               | THE NETHERLANDS         |
| NDEX  | ICE ENDEX DERIVATIVES B.V.                               | THE NETHERLANDS         |
| IMEQ  | ICE MARKETS EQUITY                                       | THE NETHERLANDS         |
| NDXS  | ICE ENDEX GAS B.V.                                       | THE NETHERLANDS         |
| NLPX  | APX POWER NL                                             | THE NETHERLANDS         |
| TOMX  | TOM MTF CASH MARKETS                                     | THE NETHERLANDS         |
| TOMD  | TOM MTF DERIVATIVES MARKET                               | THE NETHERLANDS         |
| XAMS  | EURONEXT - EURONEXT AMSTERDAM                            | THE NETHERLANDS         |
| XEUE  | EURONEXT EQF, EQUITIES AND INDICES DERIVATIVES           | THE NETHERLANDS         |
| XEUC  | EURONEXT COM, COMMODITIES FUTURES AND<br>OPTIONS         | THE NETHERLANDS         |
| TNLA  | EURONEXT - TRADED BUT NOT LISTED AMSTERDAM               | THE NETHERLANDS         |
| ALXA  | EURONEXT - ALTERNEXT AMSTERDAM                           | THE NETHERLANDS         |
| XEUI  | EURONEXT IRF, INTEREST RATE FUTURE AND<br>OPTIONS        | THE NETHERLANDS         |
| XEMS  | EMS EXCHANGE                                             | THE NETHERLANDS         |
| XNXC  | NXCHANGE                                                 | THE NETHERLANDS         |
| XTRN  | TRINIDAD AND TOBAGO STOCK EXCHANGE                       | TRINIDAD AND<br>TOBAGO  |
| XTUN  | BOURSE DE TUNIS                                          | TUNISIA                 |
| EXTR  | ENERGY EXCHANGE ISTANBUL                                 | TURKEY                  |
| XEID  | ELECTRICITY INTRA-DAY MARKET                             | TURKEY                  |
| XEDA  | ELECTRICITY DAY-AHEAD MARKET                             | TURKEY                  |
| XIST  | BORSA ISTANBUL                                           | TURKEY                  |
| XPMS  | BORSA ISTANBUL - PRECIOUS METALS AND DIAMONDS<br>MARKETS | TURKEY                  |

| VALUE | CODE DESCRIPTION                            | COUNTRY              |
|-------|---------------------------------------------|----------------------|
| XDSM  | BORSA ISTANBUL - DEBT SECURITIES MARKET     | TURKEY               |
| XEQY  | BORSA ISTANBUL - EQUITY MARKET              | TURKEY               |
| XFNO  | BORSA ISTANBUL - FUTURES AND OPTIONS MARKET | TURKEY               |
| ULTX  | ALT XCHANGE (U)                             | UGANDA               |
| XUGA  | UGANDA SECURITIES EXCHANGE                  | UGANDA               |
| EESE  | EAST EUROPEAN STOCK EXCHANGE                | UKRAINE              |
| PFTS  | PFTS STOCK EXCHANGE                         | UKRAINE              |
| PFTQ  | PFTS QUOTE DRIVEN                           | UKRAINE              |
| SEPE  | STOCK EXCHANGE PERSPECTIVA                  | UKRAINE              |
| UKEX  | UKRAINIAN EXCHANGE                          | UKRAINE              |
| XDFB  | JOINT-STOCK COMPANY "STOCK EXCHANGE INNEX"  | UKRAINE              |
| XKHR  | KHARKOV COMMODITY EXCHANGE                  | UKRAINE              |
| XKIE  | KIEV UNIVERSAL EXCHANGE                     | UKRAINE              |
| XKIS  | KIEV INTERNATIONAL STOCK EXCHANGE           | UKRAINE              |
| XODE  | ODESSA COMMODITY EXCHANGE                   | UKRAINE              |
| XPRI  | PRIDNEPROVSK COMMODITY EXCHANGE             | UKRAINE              |
| XUAX  | UKRAINIAN STOCK EXCHANGE                    | UKRAINE              |
| XUKR  | UKRAINIAN UNIVERSAL COMMODITY EXCHANGE      | UKRAINE              |
| DGCX  | DUBAI GOLD & COMMODITIES EXCHANGE DMCC      | UNITED ARAB EMIRATES |
| DIFX  | NASDAQ DUBAI                                | UNITED ARAB EMIRATES |
| DUMX  | DUBAI MERCANTILE EXCHANGE                   | UNITED ARAB EMIRATES |
| XADS  | ABU DHABI SECURITIES EXCHANGE               | UNITED ARAB EMIRATES |
| XDFM  | DUBAI FINANCIAL MARKET                      | UNITED ARAB EMIRATES |
| AFDL  | ABIDE FINANCIAL DRSP LIMITED APA            | UNITED KINGDOM       |
| AQXE  | AQUIS EXCHANGE                              | UNITED KINGDOM       |
| ARAX  | ARAX COMMODITIES LTD                        | UNITED KINGDOM       |
| ATLB  | ATLANTIC BROKERS LTD                        | UNITED KINGDOM       |
| AUTX  | AUTILLA                                     | UNITED KINGDOM       |
| AUTP  | AUTILLA - PRECIOUS METALS                   | UNITED KINGDOM       |
| AUTB  | AUTILLA - BASE METALS                       | UNITED KINGDOM       |
| BALT  | THE BALTIC EXCHANGE                         | UNITED KINGDOM       |
| BLTX  | BALTEX - FREIGHT DERIVATIVES MARKET         | UNITED KINGDOM       |
| BCXE  | BATS EUROPE                                 | UNITED KINGDOM       |
| BATE  | BATS EUROPE -BXE ORDER BOOKS                | UNITED KINGDOM       |
| CHIX  | BATS EUROPE - CXE ORDER BOOKS               | UNITED KINGDOM       |

| VALUE | CODE DESCRIPTION                                               | COUNTRY        |
|-------|----------------------------------------------------------------|----------------|
| BARO  | BATS EUROPE - REGULATED MARKET OFF BOOK                        | UNITED KINGDOM |
| BATF  | BATS EUROPE – BATS OFF-BOOK                                    | UNITED KINGDOM |
| CHIO  | BATS EUROPE - CXE - OFF-BOOK                                   | UNITED KINGDOM |
| BOTC  | OFF EXCHANGE IDENTIFIER FOR OTC TRADES REPORTED TO BATS EUROPE | UNITED KINGDOM |
| LISX  | BATS EUROPE - LIS SERVICE                                      | UNITED KINGDOM |
| CHID  | BATS EUROPE - CXE DARK ORDER BOOK                              | UNITED KINGDOM |
| BATD  | BATS EUROPE -BXE DARK ORDER BOOK                               | UNITED KINGDOM |
| BART  | BATS EUROPE - REGULATED MARKET INTEGRATED BOOK                 | UNITED KINGDOM |
| BARK  | BATS EUROPE - REGULATED MARKET DARK BOOK                       | UNITED KINGDOM |
| BATP  | BATS EUROPE - BXE PERIODIC                                     | UNITED KINGDOM |
| BGCI  | BGC BROKERS LP                                                 | UNITED KINGDOM |
| BGCB  | BGC BROKERS LP - TRAYPORT                                      | UNITED KINGDOM |
| BLOX  | BLOCKMATCH                                                     | UNITED KINGDOM |
| BMTF  | BLOOMBERG TRADING FACILITY LIMITED                             | UNITED KINGDOM |
| BOAT  | CINNOBER BOAT                                                  | UNITED KINGDOM |
| BOSC  | BONDSCAPE                                                      | UNITED KINGDOM |
| BRNX  | BERNSTEIN CROSS (BERN-X)                                       | UNITED KINGDOM |
| BTEE  | BROKERTEC EU MTF                                               | UNITED KINGDOM |
| EBSX  | EBS MTF                                                        | UNITED KINGDOM |
| CCO2  | CANTORCO2E.COM LIMITED                                         | UNITED KINGDOM |
| CGME  | CITI MATCH                                                     | UNITED KINGDOM |
| CHEV  | CA CHEUVREUX                                                   | UNITED KINGDOM |
| BLNK  | BLINK MTF                                                      | UNITED KINGDOM |
| CMEE  | CME EUROPE                                                     | UNITED KINGDOM |
| CMEC  | CME CLEARING EUROPE                                            | UNITED KINGDOM |
| CMED  | CME EUROPE - DERIVATIVES                                       | UNITED KINGDOM |
| CMMT  | CLEAR MARKETS EUROPE LIMITED                                   | UNITED KINGDOM |
| CRYP  | CRYPTO FACILITIES                                              | UNITED KINGDOM |
| CSEU  | CREDIT SUISSE (EUROPE)                                         | UNITED KINGDOM |
| CSBX  | CREDIT SUISSE AES EUROPE BENCHMARK CROSS                       | UNITED KINGDOM |
| CSCF  | CREDIT SUISSE AES CROSSFINDER EUROPE                           | UNITED KINGDOM |
| DBIX  | DEUTSCHE BANK INTERNALISATION                                  | UNITED KINGDOM |
| DBCR  | DEUTSCHE BANK - CENTRAL RISK BOOK                              | UNITED KINGDOM |
| DBCX  | DEUTSCHE BANK - CLOSE CROSS                                    | UNITED KINGDOM |
| DBDC  | DEUTSCHE BANK - DIRECT CAPITAL ACCESS                          | UNITED KINGDOM |
| DBSE  | DEUTSCHE BANK - SUPERX EU                                      | UNITED KINGDOM |
| DBMO  | DEUTSCHE BANK - MANUAL OTC                                     | UNITED KINGDOM |

| VALUE | CODE DESCRIPTION                                      | COUNTRY        |
|-------|-------------------------------------------------------|----------------|
| EMBX  | EMERGING MARKETS BOND EXCHANGE LIMITED                | UNITED KINGDOM |
| ENCL  | ENCLEAR                                               | UNITED KINGDOM |
| EQLD  | EQUILEND EUROPE LIMITED                               | UNITED KINGDOM |
| EXEU  | EXANE BNP PARIBAS                                     | UNITED KINGDOM |
| EXMP  | EXANE BNP PARIBAS - MID POINT                         | UNITED KINGDOM |
| EXOR  | EXANE BNP PARIBAS - CHILD ORDER CROSSING              | UNITED KINGDOM |
| EXVP  | EXANE BNP PARIBAS - VOLUME PROFILE CROSSING           | UNITED KINGDOM |
| EXBO  | EXANE BNP PARIBAS - BID-OFFER CROSSING                | UNITED KINGDOM |
| EXDC  | EXANE BNP PARIBAS - DIRECT CAPITAL ACCESS             | UNITED KINGDOM |
| EXCP  | EXANE BNP PARIBAS - CLOSING PRICE                     | UNITED KINGDOM |
| EXSI  | EXANE BNP PARIBAS - SYSTEMATIC INTERNALISER           | UNITED KINGDOM |
| EXLP  | EXANE BNP PARIBAS - LIQUIDITY PROVISION               | UNITED KINGDOM |
| FAIR  | CANTOR SPREADFAIR                                     | UNITED KINGDOM |
| GEMX  | GEMMA (GILT EDGED MARKET MAKERS' ASSOCIATION)         | UNITED KINGDOM |
| GFIC  | GFI CREDITMATCH                                       | UNITED KINGDOM |
| GFIN  | GFI ENERGYMATCH                                       | UNITED KINGDOM |
| GFIF  | GFI FOREXMATCH                                        | UNITED KINGDOM |
| GFIR  | GFI RATESMATCH                                        | UNITED KINGDOM |
| GMEG  | GMEX EXCHANGE                                         | UNITED KINGDOM |
| XLDX  | LONDON DERIVATIVES EXCHANGE                           | UNITED KINGDOM |
| XGCX  | GLOBAL COMMODITIES EXCHANGE                           | UNITED KINGDOM |
| XGSX  | GLOBAL SECURITIES EXCHANGE                            | UNITED KINGDOM |
| XGDX  | GLOBAL DERIVATIVES EXCHANGE                           | UNITED KINGDOM |
| GRIF  | GRIFFIN MARKETS LIMITED                               | UNITED KINGDOM |
| GRIO  | GRIFFIN MARKETS LIMITED - OTF                         | UNITED KINGDOM |
| GRSE  | THE GREEN STOCK EXCHANGE - ACB IMPACT MARKETS         | UNITED KINGDOM |
| GSIL  | GOLDMAN SACHS INTERNATIONAL                           | UNITED KINGDOM |
| GSBX  | GOLDMAN SACHS INTERNATIONAL - SIGMA BCN               | UNITED KINGDOM |
| GSSI  | GOLDMAN SACHS INTERNATIONAL - SYSTEMATIC INTERNALISER | UNITED KINGDOM |
| HPCS  | HPC SA                                                | UNITED KINGDOM |
| HSXE  | HSBC-X UNITED KINGDOM                                 | UNITED KINGDOM |
| IBAL  | ICE BENCHMARK ADMINISTRATION                          | UNITED KINGDOM |
| ICAP  | ICAP EUROPE                                           | UNITED KINGDOM |
| ICSE  | ICAP SECURITIES                                       | UNITED KINGDOM |
| ICTQ  | ICAP TRUEQUOTE                                        | UNITED KINGDOM |
| WCLK  | ICAP WCLK                                             | UNITED KINGDOM |
| ICAH  | TRAYPORT                                              | UNITED KINGDOM |

| VALUE | CODE DESCRIPTION                                       | COUNTRY        |
|-------|--------------------------------------------------------|----------------|
| ICEN  | ICAP ENERGY                                            | UNITED KINGDOM |
| IGDL  | ICAP GLOBAL DERIVATIVES LIMITED                        | UNITED KINGDOM |
| ISDX  | ICAP SECURITIES & DERIVATIVES EXCHANGE LIMITED         | UNITED KINGDOM |
| IFEU  | ICE FUTURES EUROPE                                     | UNITED KINGDOM |
| CXRT  | CREDITEX BROKERAGE LLP - MTF                           | UNITED KINGDOM |
| IMCO  | ICE MARKETS COMMODITIES                                | UNITED KINGDOM |
| IFUT  | ICE FUTURES EUROPE - EUROPEAN UTILITIES DIVISION       | UNITED KINGDOM |
| CXOT  | CREDITEX BROKERAGE LLP - OTF                           | UNITED KINGDOM |
| IFLL  | ICE FUTURES EUROPE - FINANCIAL PRODUCTS DIVISION       | UNITED KINGDOM |
| IFLX  | ICE FUTURES EUROPE - AGRICULTURAL PRODUCTS DIVISION    | UNITED KINGDOM |
| IFLO  | ICE FUTURES EUROPE - EQUITY PRODUCTS DIVISION          | UNITED KINGDOM |
| IFEN  | ICE FUTURES EUROPE - OIL AND REFINED PRODUCTS DIVISION | UNITED KINGDOM |
| ISWA  | I-SWAP                                                 | UNITED KINGDOM |
| JPSI  | J.P. MORGAN SECURITIES PLC                             | UNITED KINGDOM |
| KLEU  | KNIGHT LINK EUROPE                                     | UNITED KINGDOM |
| LCUR  | CURRENEX LDFX                                          | UNITED KINGDOM |
| LIQU  | LIQUIDNET SYSTEMS                                      | UNITED KINGDOM |
| LIQH  | LIQUIDNET H20                                          | UNITED KINGDOM |
| LIQF  | LIQUIDNET EUROPE LIMITED                               | UNITED KINGDOM |
| LMAX  | LMAX                                                   | UNITED KINGDOM |
| LMAF  | LMAX - FX                                              | UNITED KINGDOM |
| LMAO  | LMAX - INDICES/RATES/COMMODITIES                       | UNITED KINGDOM |
| LMAD  | LMAX - DERIVATIVES                                     | UNITED KINGDOM |
| LMAE  | LMAX - EQUITIES                                        | UNITED KINGDOM |
| LMEC  | LME CLEAR                                              | UNITED KINGDOM |
| LOTC  | OTC MARKET                                             | UNITED KINGDOM |
| PLDX  | PLUS DERIVATIVES EXCHANGE                              | UNITED KINGDOM |
| LPPM  | LONDON PLATINUM AND PALLADIUM MARKET                   | UNITED KINGDOM |
| MAEL  | MARKETAXESS EUROPE LIMITED                             | UNITED KINGDOM |
| MFGL  | MF GLOBAL ENERGY MTF                                   | UNITED KINGDOM |
| MLXN  | BANK OF AMERICA - MERRILL LYNCH INSTINCT X - EUROPE    | UNITED KINGDOM |
| MLAX  | BANK OF AMERICA - MERRILL LYNCH AUCTION CROSS          | UNITED KINGDOM |
| MLEU  | BANK OF AMERICA - MERRILL LYNCH OTC - EUROPE           | UNITED KINGDOM |
| MLVE  | BANK OF AMERICA - MERRILL LYNCH VWAP CROSS - EUROPE    | UNITED KINGDOM |

| VALUE | CODE DESCRIPTION                                            | COUNTRY        |
|-------|-------------------------------------------------------------|----------------|
| MSIP  | MORGAN STANLEY AND CO. INTERNATIONAL PLC                    | UNITED KINGDOM |
| MYTR  | MYTREASURY                                                  | UNITED KINGDOM |
| N2EX  | N2EX                                                        | UNITED KINGDOM |
| NDCM  | ICE ENDEX GAS SPOT LTD                                      | UNITED KINGDOM |
| NEXS  | NEX SEF                                                     | UNITED KINGDOM |
| NOFF  | NOMURA OTC TRADES                                           | UNITED KINGDOM |
| NOSI  | NOMURA SYSTEMATIC INTERNALISER                              | UNITED KINGDOM |
| NURO  | NASDAQ OMX EUROPE                                           | UNITED KINGDOM |
| XNLX  | NASDAQ OMX NLX                                              | UNITED KINGDOM |
| NURD  | NASDAQ EUROPE (NURO) DARK                                   | UNITED KINGDOM |
| NXEU  | NX                                                          | UNITED KINGDOM |
| OTCE  | OTCEX                                                       | UNITED KINGDOM |
| PEEL  | PEEL HUNT LLP UK                                            | UNITED KINGDOM |
| XRSP  | PEEL HUNT RETAIL                                            | UNITED KINGDOM |
| XPHX  | PEEL HUNT CROSSING                                          | UNITED KINGDOM |
| PIEU  | ARITAS FINANCIAL LTD                                        | UNITED KINGDOM |
| PIRM  | PIRUM                                                       | UNITED KINGDOM |
| QWIX  | Q-WIXX PLATFORM                                             | UNITED KINGDOM |
| RBCE  | RBC EUROPE LIMITED                                          | UNITED KINGDOM |
| RBSX  | RBS CROSS                                                   | UNITED KINGDOM |
| RTSL  | REUTERS TRANSACTION SERVICES LIMITED                        | UNITED KINGDOM |
| TRFW  | REUTERS TRANSACTION SERVICES LIMITED -<br>FORWARDS MATCHING | UNITED KINGDOM |
| TRAL  | REUTERS TRANSACTION SERVICES LIMITED - FXALL<br>RFQ         | UNITED KINGDOM |
| SECF  | SECFINEX                                                    | UNITED KINGDOM |
| SGMX  | SIGMA X MTF                                                 | UNITED KINGDOM |
| SHAR  | ASSET MATCH                                                 | UNITED KINGDOM |
| SPEC  | SPECTRONLIVE                                                | UNITED KINGDOM |
| SPRZ  | SPREADZERO                                                  | UNITED KINGDOM |
| SSEX  | SOCIAL STOCK EXCHANGE                                       | UNITED KINGDOM |
| SWAP  | SWAPSTREAM                                                  | UNITED KINGDOM |
| TFSV  | VOLBROKER                                                   | UNITED KINGDOM |
| FXOP  | TRADITION-NEX OTF                                           | UNITED KINGDOM |
| TIPE  | THE PROPERTY INVESTMENT EXCHANGE                            | UNITED KINGDOM |
| TRDE  | TRADITION ELECTRONIC TRADING PLATFORM                       | UNITED KINGDOM |
| TFSG  | TRADITION ENERGY                                            | UNITED KINGDOM |
| TCDS  | TRADITION CDS                                               | UNITED KINGDOM |
| TRDX  | TRAD-X                                                      | UNITED KINGDOM |

| VALUE | CODE DESCRIPTION                           | COUNTRY        |
|-------|--------------------------------------------|----------------|
| VOLA  | TRADITION - VOLATIS                        | UNITED KINGDOM |
| NAVE  | NAVESIS-MTF                                | UNITED KINGDOM |
| PARX  | PARFX                                      | UNITED KINGDOM |
| EMCH  | FINACOR EMATCH                             | UNITED KINGDOM |
| ELIX  | ELIXIUM                                    | UNITED KINGDOM |
| TREU  | TRADEWEB EUROPE LIMITED                    | UNITED KINGDOM |
| TREO  | TRADEWEB EUROPE LIMITED - OTF              | UNITED KINGDOM |
| TREA  | TRADEWEB EUROPE LIMITED - APA              | UNITED KINGDOM |
| TRQX  | TURQUOISE                                  | UNITED KINGDOM |
| TRQM  | TURQUOISE DARK                             | UNITED KINGDOM |
| UBSL  | UBS EMEA EQUITIES TRADING                  | UNITED KINGDOM |
| UBSE  | UBS PIN (EMEA)                             | UNITED KINGDOM |
| UKPX  | APX POWER UK                               | UNITED KINGDOM |
| VEGA  | VEGA-CHI                                   | UNITED KINGDOM |
| WINS  | WINTERFLOOD SECURITIES LIMITED             | UNITED KINGDOM |
| XALT  | ALTEX-ATS                                  | UNITED KINGDOM |
| XCOR  | ICMA                                       | UNITED KINGDOM |
| XGCL  | GLOBAL COAL LIMITED                        | UNITED KINGDOM |
| XLBM  | LONDON BULLION MARKET                      | UNITED KINGDOM |
| XLCH  | LCH.CLEARNET LTD                           | UNITED KINGDOM |
| XLDN  | EURONEXT - EURONEXT LONDON                 | UNITED KINGDOM |
| XLME  | LONDON METAL EXCHANGE                      | UNITED KINGDOM |
| XLON  | LONDON STOCK EXCHANGE                      | UNITED KINGDOM |
| XLOD  | LONDON STOCK EXCHANGE - DERIVATIVES MARKET | UNITED KINGDOM |
| XMTS  | EUROMTS LTD                                | UNITED KINGDOM |
| HUNG  | MTS HUNGARY                                | UNITED KINGDOM |
| RMTS  | MTS ISRAEL                                 | UNITED KINGDOM |
| MTSS  | MTS INTERDEALER SWAPS MARKET               | UNITED KINGDOM |
| MTSG  | MTS GREECE                                 | UNITED KINGDOM |
| MTSA  | MTS AUSTRIA                                | UNITED KINGDOM |
| MCZK  | MTS CZECH REPUBLIC                         | UNITED KINGDOM |
| GMTS  | MTS GERMANY                                | UNITED KINGDOM |
| VMTS  | MTS SLOVENIA                               | UNITED KINGDOM |
| UKGD  | UK GILTS MARKET                            | UNITED KINGDOM |
| IMTS  | MTS IRELAND                                | UNITED KINGDOM |
| SMTS  | MTS SPAIN                                  | UNITED KINGDOM |
| AMTS  | MTS NETHERLANDS                            | UNITED KINGDOM |
| EMTS  | EUROMTS                                    | UNITED KINGDOM |

| VALUE | CODE DESCRIPTION                                                | COUNTRY        |
|-------|-----------------------------------------------------------------|----------------|
| MTSW  | MTS SWAP MARKET                                                 | UNITED KINGDOM |
| PORT  | MTS PORTUGAL                                                    | UNITED KINGDOM |
| BVUK  | BONDVISION UK                                                   | UNITED KINGDOM |
| XSGA  | ALPHA Y                                                         | UNITED KINGDOM |
| XSMP  | SMARTPOOL                                                       | UNITED KINGDOM |
| XSWB  | SWX SWISS BLOCK                                                 | UNITED KINGDOM |
| XTUP  | TULLETT PREBON PLC                                              | UNITED KINGDOM |
| TBEN  | TULLETT PREBON PLC - TP ENERGY                                  | UNITED KINGDOM |
| TPEQ  | TULLETT PREBON PLC - TP EQUITYTRADE                             | UNITED KINGDOM |
| XTPE  | TULLETT PREBON PLC - TP ENERGYTRADE                             | UNITED KINGDOM |
| TPSD  | TULLETT PREBON PLC - TP SWAPDEAL                                | UNITED KINGDOM |
| TPRE  | TULLETT PREBON PLC - TP REPO                                    | UNITED KINGDOM |
| TPFD  | TULLETT PREBON PLC - TP FORWARDDEAL                             | UNITED KINGDOM |
| TPCD  | TULLETT PREBON PLC - TP CREDITDEAL                              | UNITED KINGDOM |
| TBLA  | TULLETT PREBON PLC - TP TRADEBLADE                              | UNITED KINGDOM |
| TPEL  | TULLETT PREBON PLC – TULLETT PREBON (EUROPE) LIMITED            | UNITED KINGDOM |
| TPSL  | TULLETT PREBON PLC – TULLETT PREBON (SECURITIES) LIMITED        | UNITED KINGDOM |
| XUBS  | UBS MTF                                                         | UNITED KINGDOM |
| BVUR  | BOLSA ELECTRONICA DE VALORES DEL URUGUAY                        | URUGUAY        |
| UFEX  | UFEX                                                            | URUGUAY        |
| XMNT  | BOLSA DE VALORES DE MONTEVIDEO                                  | URUGUAY        |
| XCET  | UZBEK COMMODITY EXCHANGE                                        | UZBEKISTAN     |
| XCUE  | UZBEKISTAN REPUBLICAN CURRENCY EXCHANGE                         | UZBEKISTAN     |
| XKCE  | KHOREZM INTERREGION COMMODITY EXCHANGE                          | UZBEKISTAN     |
| XSTE  | REPUBLICAN STOCK EXCHANGE                                       | UZBEKISTAN     |
| XUNI  | UNIVERSAL BROKER'S EXCHANGE 'TASHKENT'                          | UZBEKISTAN     |
| GXMA  | GX MARKETCENTER                                                 | VANUATU        |
| BVCA  | CARACAS STOCK EXCHANGE                                          | VENEZUELA      |
| HSTC  | HANOI STOCK EXCHANGE                                            | VIET NAM       |
| XHNX  | HANOI STOCK EXCHANGE (UNLISTED PUBLIC COMPANY TRADING PLATFORM) | VIET NAM       |
| XSTC  | HOCHIMINH STOCK EXCHANGE                                        | VIET NAM       |
| XLUS  | LUSAKA STOCK EXCHANGE                                           | ZAMBIA         |
| XZIM  | ZIMBABWE STOCK EXCHANGE                                         | ZIMBABWE       |
| XOFF  | OFF-EXCHANGE TRANSACTIONS - LISTED INSTRUMENTS                  |                |
| XXXX  | NO MARKET (E.G. UNLISTED)                                       |                |

## 7 ISO STATE CODES SCHEMA DATA VALUE CONSTRAINTS

### 7.1 ISO\_COUNTRY\_CODE

These are the valid values for elements with type <ISO\_COUNTRY\_CODE> element in the submission file:

| VALUE | CODE DESCRIPTION                 |
|-------|----------------------------------|
| AF    | AFGHANISTAN                      |
| AX    | ALAND ISLANDS                    |
| AL    | ALBANIA                          |
| DZ    | ALGERIA                          |
| AS    | AMERICAN SAMOA                   |
| AD    | ANDORRA                          |
| 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 (PLURINATIONAL STATE OF) |
| BQ    | BONAIRE, SINT EUSTATIUS AND SABA |
| BA    | BOSNIA AND HERZEGOVINA           |
| BW    | BOTSWANA                         |
| BV    | BOUVET ISLAND                    |
| BR    | BRAZIL                           |
| IO    | BRITISH INDIAN OCEAN TERRITORY   |

| VALUE | CODE DESCRIPTION                      |
|-------|---------------------------------------|
| BN    | BRUNEI DARUSSALAM                     |
| BG    | BULGARIA                              |
| BF    | BURKINA FASO                          |
| BI    | BURUNDI                               |
| CV    | CABO VERDE                            |
| KH    | CAMBODIA                              |
| CM    | CAMEROON                              |
| CA    | CANADA                                |
| 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                                  |
| CW    | CURACAO                               |
| CY    | CYPRUS                                |
| CZ    | CZECHIA                               |
| 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                              |

| VALUE | CODE DESCRIPTION                  |
|-------|-----------------------------------|
| 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                            |
| 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                            |

| VALUE | CODE DESCRIPTION                           |
|-------|--------------------------------------------|
| IT    | ITALY                                      |
| JM    | JAMAICA                                    |
| JP    | JAPAN                                      |
| JE    | JERSEY                                     |
| JO    | JORDAN                                     |
| KZ    | KAZAKSTAN                                  |
| KE    | KENYA                                      |
| KI    | KIRIBATI                                   |
| KP    | KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF     |
| KR    | KOREA, REPUBLIC OF                         |
| KW    | KUWAIT                                     |
| KG    | KYRGYZSTAN                                 |
| 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    | MACAU                                      |
| 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                                     |

| VALUE | CODE DESCRIPTION                |
|-------|---------------------------------|
| MN    | MONGOLIA                        |
| ME    | MONTENEGRO                      |
| MS    | MONTserrat                      |
| MA    | MOROCCO                         |
| MZ    | MOZAMBIQUE                      |
| MM    | MYANMAR                         |
| NA    | NAMIBIA                         |
| NR    | NAURU                           |
| NP    | NEPAL                           |
| NL    | NETHERLANDS                     |
| NC    | NEW CALEDONIA                   |
| NZ    | NEW ZEALAND                     |
| NI    | NICARAGUA                       |
| 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                     |
| PM    | PITCAIRN                        |
| PL    | POLAND                          |
| PT    | PORTUGAL                        |
| PR    | PUERTO RICO                     |
| QA    | QATAR                           |
| RE    | REUNION                         |
| RO    | ROMANIA                         |
| RU    | RUSSIAN FEDERATION              |
| RW    | RWANDA                          |
| BL    | SAINT BARTHELEMY                |

| VALUE | CODE DESCRIPTION                             |
|-------|----------------------------------------------|
| 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                                       |
| SC    | SEYCHELLES                                   |
| SL    | SIERRA LEONE                                 |
| SG    | SINGAPORE                                    |
| SX    | SINT MAARTEN (DUTCH PART)                    |
| SK    | SLOVAKIA                                     |
| SI    | SLOVENIA                                     |
| SB    | SOLOMON ISLANDS                              |
| SO    | SOMALIA                                      |
| ZA    | SOUTH AFRICA                                 |
| GS    | SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS |
| SS    | SOUTH SUDAN                                  |
| 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                                         |

| VALUE | CODE DESCRIPTION                     |
|-------|--------------------------------------|
| 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    | UNITES STATES OF AMERICA             |
| UM    | UNITED STATES MINOR OUTLYING ISLANDS |
| UY    | URUGUAY                              |
| UZ    | UZBEKISTAN                           |
| VU    | VANUATU                              |
| VE    | VENEZUELA                            |
| 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                             |
| XX    | UNKNOWN                              |
| C2    | ASHMORE & CARTIER IS                 |
| E5    | CANAL ZONE                           |
| E6    | MONTREAL, CANADA                     |
| E7    | CANTON/ENDERBURY IS                  |
| 2N    | CZECH REPUBLIC                       |
| G5    | CZECHOSLOVAKIA                       |
| I7    | GAZA STRIP                           |
| X9    | GERMANY (BERLIN)                     |
| I8    | GERMANY (WEST)                       |
| I9    | GERMANY, FED. REP.                   |
| L1    | IRAQ-SAUDI                           |

| VALUE | CODE DESCRIPTION     |
|-------|----------------------|
| L4    | ISRAEL-JORDAN        |
| L5    | ISRAEL-SYRIA         |
| M1    | JOHNSTON ATOLL       |
| O6    | MIDWAY ISLAND        |
| P8    | NETHERLANDS ANTILLES |
| Q9    | PACIFIC ISLANDS TRU  |
| R3    | PARACEL ISLANDS      |
| T4    | SOUTHERN RHODESIA    |
| U2    | SOVIET UNION         |
| U4    | SPANISH NORTH AFRICA |
| U6    | SPRATLY ISLAND       |
| X7    | WAKE ISLAND          |
| 2F    | EAST TIMOR           |
| Y2    | YUGOSLAVIA           |

## 7.2 ISO\_FOREIGN\_COUNTRY\_CODE

The valid values for the element type <ISO\_FOREIGN\_COUNTRY\_CODE> in the submission file are the same as for ISO\_COUNTRY\_CODE excluding “US”.

## 7.3 ISO\_STATE\_AND\_OUTLYING\_AREA\_CODE\_USA

These are the valid values for the <ISO\_STATE\_AND\_OUTLYING\_AREA\_CODE\_USA> element in the submission file:

| VALUE | CODE DESCRIPTION     |
|-------|----------------------|
| US-AL | ALABAMA              |
| US-AK | ALASKA               |
| US-AZ | ARIZONA              |
| US-AR | ARKANSAS             |
| US-CA | CALIFORNIA           |
| US-CO | COLORADO             |
| US-CT | CONNECTICUT          |
| US-DE | DELAWARE             |
| US-DC | DISTRICT OF COLUMBIA |
| US-FL | FLORIDA              |
| US-GA | GEORGIA              |
| US-HI | HAWAII               |
| US-ID | IDAHO                |
| US-IL | ILLINOIS             |

| VALUE | CODE DESCRIPTION |
|-------|------------------|
| US-IN | INDIANA          |
| US-IA | IOWA             |
| US-KS | KANSAS           |
| US-KY | KENTUCKY         |
| US-LA | LOUISIANA        |
| US-ME | MAINE            |
| US-MD | MARYLAND         |
| US-MA | MASSACHUSETTS    |
| US-MI | MICHIGAN         |
| US-MN | MINNESOTA        |
| US-MS | MISSISSIPPI      |
| US-MO | MISSOURI         |
| US-MT | MONTANA          |
| US-NE | NEBRASKA         |
| US-NV | NEVADA           |
| US-NH | NEW HAMPSHIRE    |
| US-NJ | NEW JERSEY       |
| US-NM | NEW MEXICO       |
| US-NY | NEW YORK         |
| US-NC | NORTH CAROLINA   |
| US-ND | NORTH DAKOTA     |
| US-OH | OHIO             |
| US-OK | OKLAHOMA         |
| US-OR | OREGON           |
| US-PA | PENNSYLVANIA     |
| US-RI | RHODE ISLAND     |
| US-SC | SOUTH CAROLINA   |
| US-SD | SOUTH DAKOTA     |
| US-TN | TENNESSEE        |
| US-TX | TEXAS            |
| US-UT | UTAH             |
| US-VT | VERMONT          |
| US-VA | VIRGINIA         |
| US-WA | WASHINGTON       |
| US-WV | WEST VIRGINIA    |
| US-WI | WISCONSIN        |
| US-WY | WYOMING          |
| US-AS | AMERICAN SAMOA   |

| VALUE | CODE DESCRIPTION                     |
|-------|--------------------------------------|
| US-GU | GUAM                                 |
| US-MP | NORTHERN MARIANA ISLANDS             |
| US-PR | PUERTO RICO                          |
| US-UM | UNITED STATES MINOR OUTLYING ISLANDS |
| US-VI | VIRGIN ISLANDS, U.S.                 |

## 8 BASIC SUBMISSION CONSTRUCTION

### 8.1 General Formatting of XML Files

The following rules apply to the submission file of an XML-format Form N-CEN submission:

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 submission 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 a person. A single line XML file is not viewer-friendly and should be avoided.
4. The `<?xml version="1.0"?>` declaration line is optional; however, if it is included it must be the first line in the file. Any text entered 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 filer ID value which cannot be longer than 10 characters, this specification is correct:

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

6. The specification below 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>
```

### 8.2 XML Submission File Rules

The following rules apply to the supporting document XML-format:

1. The `<?xml version="1.0"?>` declaration line is optional; however, if it is included it must be the first line in the file. Any text entered before this line, even white space, will cause an error. The version value must be “1.0”. Any other value for version will cause an error.
2. The XML elements cannot have any namespaces.  
For e.g.: It has to be `<contactName>` and not `<ns1:contactName>`
3. The order of any `<notificationEmailAddress>` elements does not matter.
4. The submission file must conform to the XML schema files. Any violation of this schema will result in the suspension of the filing.

### 8.2.1 Enclosing a Document

1. Allowable file extensions are .pdf, .txt, .htm, .jpg, .xml and .gif.
2. The names of attached document files must follow the EDGAR file naming conventions:
  - File names cannot exceed 32 characters, including the file extension.
  - Valid characters are lowercase letters, digits 0-9, up to one underscore, up to one hyphen, and up to one period.
  - First character must be a letter.
  - Spaces are not allowed.
  - File name must have an allowable file extension.
3. The <description> is optional, but all other elements must be present and must have a value.
4. The <contents> element must contain a MIME encoded document. You can use any standard 64-character set based MIME encoding algorithm to create a MIME document.
5. The XML for an enclosed supporting document looks like this:

```
<documents>
  <document>
    < conformedName>test1.txt</ conformedName>
    < conformedDocumentType>????</ conformedDocumentType>
    < description> Description field text here... </ description>
    < contents> dGVzdGA= </ contents>
  </document>
  <document>
    < conformedName>test2.txt</ conformedName>
    < conformedDocumentType>????</ conformedDocumentType>
    < description> Description field text here... </ description>
    < contents> dGVzdGA= </ contents>
  </document>
</documents>
```

## 9 ERROR REPORTING

EDGAR will generate an error for each violation of an XML schema constraint, as well as for each violation of an N-CEN filing business rule. The schema files do not enforce all error checks, so it is possible to construct a submission that meets all the schema constraints yet is still SUSPENDED.

This table summarizes the errors that can result from violations of schema constraints and EDGAR business rules. This is not an all-inclusive list.

**Table 9-1: Submission Errors and Severity**

| Error Condition                                                            | Severity  |
|----------------------------------------------------------------------------|-----------|
| Elements not in sequence prescribed in Section 3.4                         | SUSPENDED |
| Inclusion of XML-style sheet reference or any other Processing Instruction | SUSPENDED |
| Inclusion of an element not prescribed in the schema                       | SUSPENDED |
| String value exceeds maximum length constraint                             | SUSPENDED |
| Element constrained by a Choice List has an invalid value                  | SUSPENDED |
| Mandatory element has no value or an invalid value                         | SUSPENDED |
| Special character (&, <, >) not provided as escape sequence                | SUSPENDED |
| Date, Boolean, or Decimal element does not have a value                    | SUSPENDED |
| Duplicate Notification Address                                             | WARNING   |
| “NA” or blank field has a value                                            | WARNING   |
| Invalid Issuer CIK                                                         | SUSPENDED |
| Improperly formatted email address                                         | SUSPENDED |
| Exceeding a “Max Occur” limit from Section 3.4                             | SUSPENDED |

You may sometimes get multiple error messages reporting the same error. The XML parser EDGAR used to process an N-CEN submission generates messages that are rather technical in nature and require an understanding of the XML schema language. Whenever possible, EDGAR generates a more “friendly” error message to give a precise description of the error.

## Appendix A. ACRONYMS

| Acronym | Description                                        |
|---------|----------------------------------------------------|
| 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                         |
| XBRL    | eXtensible Business Reporting Language             |