

SLGS Securities XML

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Purpose:

The purpose of this document is to provide clear instructions for creating a valid Securities XML file, which can be used to transfer SLGS subscription securities from a “Portfolio Management System” into SLGSafe.

Until now, the SLGSafe subscription process required manual data entry of securities. With the addition of the new Securities XML file upload capability, SLGSafe users simply electronically exchange this information between systems, automatically filling in the Securities pages.

This document provides the technical information needed by the portfolio software providers in order to create a valid Securities XML document that SLGSafe can process.

Portfolio software and Securities XML file creation:

In order to electronically exchange SLGS Securities data, portfolio management software must be modified to export a valid XML file containing the necessary Securities data for completing a subscription. This file may have any name and file extension (‘.xml’ is the recommended file extension), and must be based on the SLGS Data Entry Securities Schema (copy and paste this link into a browser address bar: <http://www.publicdebt.treas.gov/xsd/SPSSDataEntrySecurities.xsd>). Also, the exported file must be located in a directory that is accessible to the user subscribing via SLGSafe.

XML File – Structure and Content

The XML file must adhere to standard XML well formedness and validity rules as described in the W3C XML 1.0 Specification (Third Edition).

(<http://www.w3.org/TR/2004/REC-xml-20040204/>)

Additionally, the XML file must contain the standard XML prologue (header) followed by the root element with its identifying attributes, and a body containing one or more Security entries. Each Security entry must contain a Principal Amount, Interest Rate, and Maturity Date element, along with an optional First Interest Payment Date element.

All tags must be properly closed and all values must be of valid data types matching the types defined in the schema for the respective element. The decimal types (Principal Amount, Interest Rate) must be true decimal values with a decimal point (Ex. '1.15'); zero values are permitted where appropriate (reference SLGS business rules for subscriptions). The dates must be in the format CCYY-MM-DD (Ex. '2005-01-25').

Following is a color-coded example of a valid Securities XML document:

```
<?xml version="1.0" encoding="UTF-8"?>
<bpd:SPSSDataEntrySecurities xmlns:bpd="http://www.publicdebt.treas.gov/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="
http://www.publicdebt.treas.gov/ http://www.publicdebt.treas.gov/xsd/SPSSDataEntrySecurities.xsd">
  <SPSSDataEntrySecurity>
    <PrincipalAmount>2000000.00</PrincipalAmount>
    <InterestRate>0.0</InterestRate>
    <MaturityDate>2006-02-01</MaturityDate>
  </SPSSDataEntrySecurity>
  <SPSSDataEntrySecurity>
    <PrincipalAmount>2000000.00</PrincipalAmount>
    <InterestRate>0.0</InterestRate>
    <MaturityDate>2006-08-01</MaturityDate>
  </SPSSDataEntrySecurity>
  <SPSSDataEntrySecurity>
    <PrincipalAmount>1800000.00</PrincipalAmount>
    <InterestRate>1.12</InterestRate>
    <MaturityDate>2010-08-01</MaturityDate>
    <FirstInterestPaymentDate>2005-08-01</FirstInterestPaymentDate>
  </SPSSDataEntrySecurity>
</bpd:SPSSDataEntrySecurities>
```

COLOR KEY

Mandatory XML prologue

Mandatory Root element

Mandatory Security entry (one or more)

Mandatory Security elements

Optional Security element

Security element data

The only allowable differences are: (1) the number of Security entries; (2) the data in each Security element; (3) the optional First Interest Payment Date element. The prologue, the root element, and the Security element tags must appear exactly as shown.

Validation:

The XML file is validated by the system before processing by SLGSafe. For validation to occur, the schema must be referenced in the 'schemaLocation' attribute of the root element exactly as in the example. Do not use another schema, or a copy of this schema in a different location.

If the file fails validation for any reason, the user will receive an error message indicating, "The XML file is not valid". This signifies a problem with either well formedness or schema rules. To determine the exact problem, test the XML file against the schema using an XML tool such as XMLSpy.

If the XML file and data pass the formedness or schema rules, SLGSafe will display the securities page as if the user had manually typed in the "exchanged data". Like any other entered data, the XML-entered securities are validated within SLGSafe using the related business rules.