Guide to Schemas for ISM

ISM Schema Guide

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Chapter 1 - Introduction

1.1 - Purpose

This is an informative supplement for ISM. This guide is generated from the ISM Schemas and provides a consolidated reference for the schemas of this specification.

Chapter 2 - Schema Files

2.1 - ARH-ISM-NTK.rng

```
<grammar xmlns:ntk="urn:us:gov:ic:ntk"
                 xmlns:arh="urn:us:gov:ic:arh"
                 xmlns="http://relaxng.org/ns/structure/1.0"
                 ism:resourceElement="true"
                 ism:compliesWith="USGov"
                 ism:createDate="2011-12-01"
                 ism:DESVersion="202111"
                 ism:classification="U"
                 ism:ownerProducer="USA"
                 ns="http://relaxng.org/ns/structure/1.0"
                 datatypeLibrary="http://www.w3.org/2001/XMLSchema-datatypes">
            <include href="./NTK.rng" ns="urn:us:gov:ic:ntk"/>
            <start>
                <choice>
                    <ref name="Security.ele"/>
                    <ref name="ExternalSecurity.ele"/>
                </choice>
            </start>
            <define name="Security.ele">
                <element>
                    <name ns="urn:us:gov:ic:arh">Security</name>
                    <ref name="SecurityType.class"/>
                </element>
            </define>
            <define name="ExternalSecurity.ele">
                <element>
                    <name ns="urn:us:gov:ic:arh">ExternalSecurity</name>
                    <ref name="ExternalSecurityType.class"/>
                </element>
            </define>
            <define name="DESVersion.att">
                <attribute name="arh:DESVersion">
                    <data type="string">
                        <param name="pattern">[0-9]{6}(\.[0-9]{6})?(\-.{1,23})?</param>
                    </data>
                </attribute>
            </define>
            <define name="SecurityType.class">
                <optional>
                    <ref name="Access.ele"/>
                </optional>
                <optional>
<!-- ISM's NoticeList -->

<ref name="NoticeList.ele"/>
                </optional>
                <ref name="ARHResourceNodeAttributeGroup.att"/>
            </define>
            <define name="ExternalSecurityType.class">
```

```xml
                        <optional>
        <!-- NTK's NoticeList -->

        <ref name="ExternalAccess.ele"/>
                            </optional>
                            <optional>
                                <ref name="NoticeExternalList.ele"/>
                            </optional>
                            <ref name="ARHExternalResourceNodeAttributeGroup.att"/>
                    </define>
                    <define name="ARHExternalResourceNodeAttributeGroup.att">
        <!-- ISM's SecurityAttributesGroup -->

    <ref name="SecurityAttributesGroup.att"/>
                        <ref name="DESVersion.att"/>
                        <ref name="ISMCATCESVersion.att"/>
                        <ref name="noticeType.att"/>
                        <ref name="noticeDate.att"/>
                        <ref name="noticeReason.att"/>
                        <ref name="unregisteredNoticeType.att"/>
                        <ref name="excludeFromRollup.att"/>
                        <ref name="ISMResourceAttributeOptionGroup.att"/>
                    </define>
                    <define name="ARHResourceNodeAttributeGroup.att">
                        <ref name="SecurityAttributesGroup.att"/>
                        <ref name="DESVersion.att"/>
                        <ref name="ISMCATCESVersion.att"/>
                        <ref name="noticeType.att"/>
                        <ref name="noticeDate.att"/>
                        <ref name="noticeReason.att"/>
                        <ref name="unregisteredNoticeType.att"/>
                        <ref name="ISMResourceAttributeOptionGroup.att"/>
                    </define>
                </grammar>
```

2.2 - IC-ARH.xsd

```xml
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
                    xmlns:arh="urn:us:gov:ic:arh"
                    xmlns:ntk="urn:us:gov:ic:ntk"
                    xmlns:xhtml="http://www.w3.org/1999/xhtml-StopBrowserRendering"
                    targetNamespace="urn:us:gov:ic:arh"
                    attributeFormDefault="qualified"
                    elementFormDefault="qualified"
                    xml:lang="en"
                    ism:compliesWith="USGov USIC"
                    ism:resourceElement="true"
                    ism:createDate="2019-09-18"
                    ism:DESVersion="202111"
                    ism:ISMCATCESVersion="202205"
                    ism:classification="U"
                    ism:ownerProducer="USA"
                    version="202111.202211">
            <xs:annotation>
                <xs:documentation>
                    <xhtml:h1 ism:ownerProducer="USA" ism:classification="U">Access Rights and Handling
        (ARH)</xhtml:h1>
                </xs:documentation>
                <xs:documentation>
                    <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Notices</xhtml:h2>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U"> Distribution Notice:
    This document has been approved for Public Release and is available for use without restriction.

     </xhtml:p>
                </xs:documentation>
                <xs:documentation>
                    <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Description</xhtml:h2>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U"> W3C XML Access Rights and
        Handling (ARH) Schema for XML Data Encoding Specification for Information Security
        Marking Metadata (ISM.XML). </xhtml:p>
                </xs:documentation>
                <xs:documentation>
                    <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Introduction</xhtml:h2>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">This XML Schema file is one
    component of the XML Data Encoding Specification (DES). Please see the document
    titled <xhtml:i>
                            <xhtml:a href="../../Documents/ISM/DesIsmXml.pdf">XML Data Encoding
            Specification for Information Security Marking Metadata</xhtml:a>
                        </xhtml:i> for a complete description of the encoding as well as a list of all
    components.</xhtml:p>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U"> It is envisioned that this
    schema or its components, as well as other parts of the DES may be overridden for
    localized implementations. Therefore, permission to use, copy, modify and distribute
    this XML Schema and the other parts of the DES for any purpose is hereby granted in
    perpetuity. </xhtml:p>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U"> Please reference the preceding
    two paragraphs in all copies or variations. The developers make no representation
    about the suitability of the schema or DES for any purpose. It is provided "as is"
    without expressed or implied warranty. </xhtml:p>
```

```xml
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U"> If you modify this XML Schema
in any way label your schema as a variant of ARH.XML. </xhtml:p>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U"> Please direct all questions,
bug reports,or suggestions for changes to the points of contact identified in the
document referenced above. </xhtml:p>
                </xs:documentation>
                <xs:documentation>
                        <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Implementation Notes</xhtml:h2>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U"> The document elements for ARH
are: <xhtml:ul>
                                <xhtml:li ism:ownerProducer="USA" ism:classification="U">
                                        <xhtml:a href="IC-ARH_xsd_Element_arh_ExternalSecurity.html#ExternalSecurity">arh:ExternalSecurity</xhtml:a>
                                </xhtml:li>
                                <xhtml:li ism:ownerProducer="USA" ism:classification="U">
                                        <xhtml:a href="IC-ARH_xsd_Element_arh_Security.html#Security">arh:Security</xhtml:a>
                                </xhtml:li>
                        </xhtml:ul>
                        </xhtml:p>
                </xs:documentation>
                <xs:documentation>
                        <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Creators</xhtml:h2>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">Office of the Director of
National Intelligence Intelligence Community Chief Information Officer</xhtml:p>
                </xs:documentation>
        </xs:annotation>

        <xs:import namespace="urn:us:gov:ic:ism" schemaLocation="./IC-ISM.xsd"/>
        <xs:import namespace="urn:us:gov:ic:ntk" schemaLocation="./IC-NTK.xsd"/>

        <xs:element name="Security" type="arh:SecurityType">
                <xs:annotation>
                        <xs:documentation>
                                <xhtml:p ism:classification="U" ism:ownerProducer="USA"> Used for expressing the
    access rights and handling information for a data object that is present in the
    same instant document or is the instance document containing this element.
</xhtml:p>
                        </xs:documentation>
                </xs:annotation>
        </xs:element>

        <xs:element name="ExternalSecurity" type="arh:ExternalSecurityType">
                <xs:annotation>
                        <xs:documentation>
                                <xhtml:p ism:classification="U" ism:ownerProducer="USA"> Used for expressing the
    access rights and handling information for a data object that is external to
    instant document containing this element. </xhtml:p>
                        </xs:documentation>
                </xs:annotation>
        </xs:element>

        <xs:attribute name="DESVersion" type="xs:string">
                <xs:annotation>
                        <xs:documentation xml:lang="en">
                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">The version number of the
```

```
DES</xhtml:p>
                </xs:documentation>
        </xs:annotation>
</xs:attribute>

<xs:complexType name="SecurityType">
        <xs:annotation>
                <xs:documentation>
                        <xhtml:p ism:classification="U" ism:ownerProducer="USA"> A type for expressing the
access rights and handling information for a data object that is internal to
instant document or the instance document itself. </xhtml:p>
                </xs:documentation>
        </xs:annotation>
        <xs:sequence>
                <xs:element ref="ntk:Access" minOccurs="0" maxOccurs="1"/>
                <xs:element ref="ism:NoticeList" minOccurs="0" maxOccurs="1"/>
        </xs:sequence>
        <xs:attributeGroup ref="arh:ResourceNodeAttributeGroup"/>
</xs:complexType>

<xs:complexType name="ExternalSecurityType">
        <xs:annotation>
                <xs:documentation>
                        <xhtml:p ism:classification="U" ism:ownerProducer="USA"> A type for expressing the
access rights and handling information for a data object that is external to
instant document. </xhtml:p>
                </xs:documentation>
        </xs:annotation>
        <xs:sequence>
                <xs:element ref="ntk:ExternalAccess" minOccurs="0" maxOccurs="1"/>
                <xs:element ref="ism:NoticeExternalList" minOccurs="0" maxOccurs="1"/>
        </xs:sequence>
        <xs:attributeGroup ref="arh:ExternalResourceNodeAttributeGroup"/>
</xs:complexType>

<xs:attributeGroup name="ExternalResourceNodeAttributeGroup">
        <xs:annotation>
                <xs:documentation>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U"> An attribute group to be
used on the element that represents the resource node of an external document.
This node's ISM attributes would be used to generate banner marks and the E.O.
13526 classification authority block.</xhtml:p>
                </xs:documentation>
        </xs:annotation>
        <xs:attributeGroup ref="ism:ResourceNodeAttributeOptionGroup"/>
        <xs:attributeGroup ref="arh:ARHRootNodeAttributeOptionGroup"/>
        <xs:attribute ref="ism:excludeFromRollup" fixed="true" use="required"/>
</xs:attributeGroup>

<xs:attributeGroup name="ResourceNodeAttributeGroup">
        <xs:annotation>
                <xs:documentation>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U"> An attribute group to be
used on the element that represents the resource node of an instance document.
```

```
                        This node's ISM attributes would be used to generate banner marks and the E.O.
                        13526 classification authority block.</xhtml:p>
                                        </xs:documentation>
                        </xs:annotation>
                        <xs:attributeGroup ref="ism:ResourceNodeAttributeOptionGroup"/>
                        <xs:attributeGroup ref="arh:ARHRootNodeAttributeOptionGroup"/>
                </xs:attributeGroup>

                <xs:attributeGroup name="ARHRootNodeAttributeOptionGroup">
                        <xs:annotation>
                                <xs:documentation>
                                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">An attribute group to be
                        used on the root node of a schema implementing ARH. This group could be used in
                        a schema where many element may be the root node.</xhtml:p>
                                </xs:documentation>
                        </xs:annotation>
                        <xs:attributeGroup ref="ism:ISMRootNodeAttributeOptionGroup"/>
                        <xs:attribute ref="ntk:DESVersion" use="optional"/>
                        <xs:attribute ref="arh:DESVersion" use="optional"/>
                </xs:attributeGroup>

        </xs:schema>
```

2.3 - IC-ISM.xsd

```xml
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
                        xmlns="urn:us:gov:ic:ism"
                        xmlns:ismcat="urn:us:gov:ic:ismcat"
                        xmlns:ism25x="urn:us:gov:ic:cvenum:ism:25x"
                        xmlns:ismdissem="urn:us:gov:ic:cvenum:ism:dissem"
                        xmlns:ismcatfgio="urn:us:gov:ic:cvenum:ismcat:fgiopen"
                        xmlns:ismcatfgip="urn:us:gov:ic:cvenum:ismcat:fgiprotected"
                        xmlns:ismhighwaternato="urn:us:gov:ic:cvenum:ism:HighWaterNATO"
                        xmlns:ismnonic="urn:us:gov:ic:cvenum:ism:nonic"
                        xmlns:ismnotice="urn:us:gov:ic:cvenum:ism:notice"
                        xmlns:ismnoticeprose="urn:us:gov:ic:cvenum:ism:noticeprose"
                        xmlns:ismcatownpro="urn:us:gov:ic:cvenum:ismcat:ownerproducer"
                        xmlns:ismcatrelto="urn:us:gov:ic:cvenum:ismcat:relto"
                        xmlns:ismscicon="urn:us:gov:ic:cvenum:ism:scicontrols"
                        xmlns:ismclassall="urn:us:gov:ic:cvenum:ism:classification:all"
                        xmlns:ismsar="urn:us:gov:ic:cvenum:ism:sar"
                        xmlns:ismnonus="urn:us:gov:ic:cvenum:ism:nonuscontrols"
                        xmlns:ismatomic="urn:us:gov:ic:cvenum:ism:atomicEnergyMarkings"
                        xmlns:ismpoctyp="urn:us:gov:ic:cvenum:ism:pocType"
                        xmlns:xhtml="http://www.w3.org/1999/xhtml-StopBrowserRendering"
                        xmlns:ismexempt="urn:us:gov:ic:cvenum:ism:exemptfrom"
                        xmlns:ismcomplies="urn:us:gov:ic:cvenum:ism:complieswith"
                        xmlns:ismcuibasic="urn:us:gov:ic:cvenum:ism:cuibasic"
                        xmlns:ismcuispecified="urn:us:gov:ic:cvenum:ism:cuispecified"
                        xmlns:ismsecondbannerline="urn:us:gov:ic:cvenum:ism:secondbannerline"
                        targetNamespace="urn:us:gov:ic:ism"
                        elementFormDefault="qualified"
                        attributeFormDefault="qualified"
                        xml:lang="en"
                        ism:resourceElement="true"
                        ism:compliesWith="USGov"
                        ism:createDate="2011-12-01"
                        ism:ISMCATCESVersion="202205"
                        ism:DESVersion="202111"
                        ism:classification="U"
                        ism:ownerProducer="USA"
                        version="202111.202211">
            <xsd:annotation>
                <xsd:documentation>
                    <xhtml:h1 ism:ownerProducer="USA" ism:classification="U">Intelligence Community
        Technical Specification XML Data Encoding Specification for Information Security
        Marking Metadata (ISM.XML)</xhtml:h1>
                </xsd:documentation>
                <xsd:documentation>
                    <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Notices</xhtml:h2>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">Distribution Notice:
    This document has been approved for Public Release and is available for use without restriction.
</xhtml:p>
                </xsd:documentation>
                <xsd:documentation>
                    <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Description</xhtml:h2>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">W3C XML Schema for the XML Data
```

```
Encoding Specification Intelligence Community Metadata Standard for Information
Security Marking (ISM.XML).</xhtml:p>
            </xsd:documentation>
            <xsd:documentation>
                <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Introduction</xhtml:h2>
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">This XML Schema file is one
component of the XML Data Encoding Specification (DES). Please see the document
titled <xhtml:i>
                        <xhtml:a href="../../Documents/ISM/DesIsmXml.pdf">XML Data Encoding
        Specification for Information Security Marking Metadata</xhtml:a>
                    </xhtml:i> for a complete description of the encoding as well as a list of all
components.</xhtml:p>
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">This schema and its components,
as well as other parts of the DES may be overridden for localized implementations.
Therefore, permission to use, copy, modify, and distribute this XML Schema and the
other parts of the DES for any purpose is hereby granted in perpetuity.</xhtml:p>
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">Please reference the preceding
two paragraphs in all copies or variations. The developers make no representation
about the suitability of the schema or DES for any purpose. It is provided "as is"
without expressed or implied warranty.</xhtml:p>
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">If you modify this XML Schema in
any way, label your schema as a variant of ISM.XML.</xhtml:p>
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">Please direct all questions, bug
reports, and suggestions for changes to the points of contact identified in the
document referenced above.</xhtml:p>
            </xsd:documentation>
            <xsd:documentation>
                <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Implementation Notes</xhtml:h2>
                <xhtml:ul>
                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">The IC ISM schema is not a
    standalone construct; it should be imported into a parent XML schema.</xhtml:li>
                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Refer to the <xhtml:i>
                        <xhtml:a href="../../Documents/ISM/DesIsmXml.pdf">XML Data Encoding
            Specification for Information Security Marking Metadata</xhtml:a>
                        </xhtml:i> Data Encoding Specification (ISM.XML DES) for an explanation of the
    relationships of the IC ISM attributes and the associated controlled
    vocabularies. The Intelligence Community Markings System Register and Manual
    provide additional business rules (that may be classified) not provided in this
    schema or the associated documentation.</xhtml:li>
                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">The IC ISM attributes are
    intended to support all Intelligence Community Markings System Register and
    Manual markings. However, the attribute values are NOT intended to be verbatim
    pieces of portion marks and banners. Instead, the values should be interpreted
    by XSLT stylesheets or other formatting specifications to produce the required
    portion marks and banners.</xhtml:li>
                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">The controlled vocabularies
    containing the required values for populating the attributes are described in
    the ISM.XML DES.</xhtml:li>
                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Attribute group
    "SecurityAttributesGroup" should be referenced in the attribute definition list
    of any element that REQUIRES security metadata.</xhtml:li>
                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Attribute group
    "SecurityAttributesOptionGroup" may be referenced in the attribute definition
    list of any element for which security metadata may be appropriate but is not
```

```
                  required (such as, an individual cell of a table).</xhtml:li>
                                   <xhtml:li ism:ownerProducer="USA" ism:classification="U">Elements declared in this
                  specification are conveniences to developers of Schema. Their use is not
                  required but was determined to be helpful for many Schemas that would otherwise
                  have to declare these simple elements. Schema developers are free to implement
                  their own versions of these elements. </xhtml:li>
                                   <xhtml:li ism:ownerProducer="USA" ism:classification="U">This file provides an
                  XML-based schema for specification of metadata for classification and controls
                  markings. The goal of the IC ISM XML Schema is to provide a common set of XML
                  attributes for implementing security-based metadata throughout the IC. The IC
                  ISM XML Schema provides markup for the tokens that are used to format the
                  Intelligence Community Markings System Register and Manual markings. </xhtml:li>
                                   <xhtml:li ism:ownerProducer="USA" ism:classification="U">The IC ISM XML Schema may
                  be incorporated into organizational XML-based schemas by (a) declaring the IC
                  ISM namespace and (b) inserting an "import" statement: <xhtml:code>
                      &lt;xsd:schema xmlns="...my namespace name..." targetNamespace="...my
                      namespace name..." xmlns:xsd="http://www.w3.org/2001/XMLSchema"
                      xmlns:ism="urn:us:gov:ic:ism"&gt; ... &lt;xsd:import
                      namespace="urn:us:gov:ic:ism schemaLocation="IC-ISM.xsd" /&gt; </xhtml:code>
                                   </xhtml:li>
                            </xhtml:ul>
                     </xsd:documentation>
                     <xsd:documentation>
                            <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Creators</xhtml:h2>
                            <xhtml:p ism:ownerProducer="USA" ism:classification="U">Office of the Director of
          National Intelligence Intelligence Community Chief Information Officer</xhtml:p>
                     </xsd:documentation>
               </xsd:annotation>
               <!--****************************************************-->

<!--Start Import Statements NOTE: Two CVE files XmlEncodings/CVEnums/ISM/CVEnumISMAttributes.xml and XmlEncodings/CVEnums/ISM/CVEnumISMClassificationUS.xml are not used in the schema.-->

<!--****************************************************-->

<xsd:import namespace="urn:us:gov:ic:cvenum:ism:25x"
                     schemaLocation="./CVEGenerated/CVEnumISM25X.xsd"/>
               <xsd:import namespace="urn:us:gov:ic:cvenum:ism:atomicEnergyMarkings"
                     schemaLocation="./CVEGenerated/CVEnumISMAtomicEnergyMarkings.xsd"/>
               <xsd:import namespace="urn:us:gov:ic:cvenum:ism:classification:all"
                     schemaLocation="./CVEGenerated/CVEnumISMClassificationAll.xsd"/>
               <xsd:import namespace="urn:us:gov:ic:cvenum:ism:dissem"
                     schemaLocation="./CVEGenerated/CVEnumISMDissem.xsd"/>
               <xsd:import namespace="urn:us:gov:ic:cvenum:ismcat:fgiopen"
                     schemaLocation="../ISMCAT/CVEGenerated/CVEnumISMCATFGIOpen.xsd"/>
               <xsd:import namespace="urn:us:gov:ic:cvenum:ismcat:fgiprotected"
                     schemaLocation="../ISMCAT/CVEGenerated/CVEnumISMCATFGIProtected.xsd"/>
               <xsd:import namespace="urn:us:gov:ic:cvenum:ism:HighWaterNATO"
                     schemaLocation="./CVEGenerated/CVEnumISMHighWaterNATO.xsd"/>
               <xsd:import namespace="urn:us:gov:ic:cvenum:ism:nonic"
                     schemaLocation="./CVEGenerated/CVEnumISMNonIC.xsd"/>
               <xsd:import namespace="urn:us:gov:ic:cvenum:ism:nonuscontrols"
                     schemaLocation="./CVEGenerated/CVEnumISMNonUSControls.xsd"/>
               <xsd:import namespace="urn:us:gov:ic:cvenum:ism:notice"
                     schemaLocation="./CVEGenerated/CVEnumISMNotice.xsd"/>
```

```xml
            <xsd:import namespace="urn:us:gov:ic:cvenum:ism:noticeprose"
                    schemaLocation="./CVEGenerated/CVEnumISMNoticeProse.xsd"/>
            <xsd:import namespace="urn:us:gov:ic:cvenum:ismcat:ownerproducer"
                    schemaLocation="../ISMCAT/CVEGenerated/CVEnumISMCATOwnerProducer.xsd"/>
            <xsd:import namespace="urn:us:gov:ic:cvenum:ism:pocType"
                    schemaLocation="./CVEGenerated/CVEnumISMPocType.xsd"/>
            <xsd:import namespace="urn:us:gov:ic:cvenum:ismcat:relto"
                    schemaLocation="../ISMCAT/CVEGenerated/CVEnumISMCATRelTo.xsd"/>
            <xsd:import namespace="urn:us:gov:ic:cvenum:ism:sar"
                    schemaLocation="./CVEGenerated/CVEnumISMSAR.xsd"/>
            <xsd:import namespace="urn:us:gov:ic:cvenum:ism:scicontrols"
                    schemaLocation="./CVEGenerated/CVEnumISMSCIControls.xsd"/>
            <xsd:import namespace="urn:us:gov:ic:cvenum:ism:exemptfrom"
                    schemaLocation="./CVEGenerated/CVEnumISMExemptFrom.xsd"/>
            <xsd:import namespace="urn:us:gov:ic:cvenum:ism:complieswith"
                    schemaLocation="./CVEGenerated/CVEnumISMCompliesWith.xsd"/>
            <xsd:import namespace="urn:us:gov:ic:cvenum:ism:cuibasic"
                    schemaLocation="./CVEGenerated/CVEnumISMCUIBasic.xsd"/>
            <xsd:import namespace="urn:us:gov:ic:cvenum:ism:cuispecified"
                    schemaLocation="./CVEGenerated/CVEnumISMCUISpecified.xsd"/>
            <xsd:import namespace="urn:us:gov:ic:cvenum:ism:secondbannerline"
                    schemaLocation="./CVEGenerated/CVEnumISMSecondBannerLine.xsd"/>
            <!--****************************************************-->

<!--End Import Statements-->

<!--****************************************************-->

<!--****************************************************-->

<!--Start All case-insensitive alphabetically-->

<!--****************************************************-->


<xsd:attribute name="atomicEnergyMarkings"
                    type="ismatomic:CVEnumISMatomicEnergyMarkings">
            <xsd:annotation>
                <xsd:documentation>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">Applicable atomic energy
        information markings for a document or portion</xhtml:p>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is used at
        both resource and portion levels. The permissible values for this simple type
        are defined in the ISM Atomic Energy Markings CVE:
        CVEnumISMAtomicEnergyMarkings.xml.</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
        </xsd:attribute>

        <xsd:attribute name="classification" type="ismclassall:CVEnumISMClassificationAll">
            <xsd:annotation>
                <xsd:documentation>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">The highest level of
        classification applicable to the containing document or portion</xhtml:p>
```

```
                              <xhtml:p ism:ownerProducer="USA" ism:classification="U">The Classification element
is always used in conjunction with the Owner Producer element. Taken together,
the two elements specify the classification category (TS, S, C, R, or U) and the
type of classification (US, non-US, or Joint). This attribute is used to render
portion marks and security banners.</xhtml:p>
                              <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is used at
both resource and portion levels. The permissible values for this simple type
are defined in the ISM Classification All CVE:
CVEnumISMClassificationAll.xml</xhtml:p>
                       </xsd:documentation>
                </xsd:annotation>
        </xsd:attribute>

        <xsd:attribute name="classificationReason">
                <xsd:annotation>
                       <xsd:documentation xml:lang="en">
                              <xhtml:p ism:ownerProducer="USA" ism:classification="U">One or more reason
indicators or explanatory text describing the basis for an original
classification decision</xhtml:p>
                              <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute corresponds
to the "Reason" line of a document's classification authority block, and it is
only used, and only allowed, when classification is the result of an original
classification decision. It is used primarily at the resource level.</xhtml:p>
                       </xsd:documentation>
                </xsd:annotation>
                <xsd:simpleType>
                       <xsd:restriction base="xsd:string">
                              <xsd:maxLength value="4096"/>
                       </xsd:restriction>
                </xsd:simpleType>
        </xsd:attribute>

        <xsd:attribute name="classifiedBy">
                <xsd:annotation>
                       <xsd:documentation xml:lang="en">
                              <xhtml:p ism:ownerProducer="USA" ism:classification="U">The identity, by name or
personal identifier and position title, of the original classification authority
for a document</xhtml:p>
                              <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute corresponds
to the "Classified By" line of a resource's classification authority block. It
is used primarily at the resource level. </xhtml:p>
                       </xsd:documentation>
                </xsd:annotation>
                <xsd:simpleType>
                       <xsd:restriction base="xsd:string">
                              <xsd:maxLength value="1024"/>
                       </xsd:restriction>
                </xsd:simpleType>
        </xsd:attribute>

        <xsd:attribute name="compilationReason">
                <xsd:annotation>
                       <xsd:documentation xml:lang="en">
                              <xhtml:p ism:ownerProducer="USA" ism:classification="U">The reason that the
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classification of the document is more restrictive than the simple roll-up of
the marked portions of the document</xhtml:p>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is an
indicator that there is not accidental over-classification of the document.
Users must exercise special care beyond that indicated by the portion marks when
using this information.</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <xsd:simpleType>
                <xsd:restriction base="xsd:string">
                    <xsd:maxLength value="1024"/>
                </xsd:restriction>
            </xsd:simpleType>
    </xsd:attribute>

    <xsd:attribute name="compliesWith" type="ismcomplies:CVEnumISMCompliesWith">
        <xsd:annotation>
            <xsd:documentation>
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">The ISM rule sets a document
complies with</xhtml:p>
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is used at
the resource level. The permissible values for this simple type are defined in
the ISM Complies With CVE: CVEnumISMCompliesWith.xml</xhtml:p>
            </xsd:documentation>
        </xsd:annotation>
    </xsd:attribute>

    <xsd:attribute name="createDate">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                <xhtml:p ism:classification="U" ism:ownerProducer="USA">The date when ISM metadata
was added or updated</xhtml:p>
                <xhtml:p ism:classification="U" ism:ownerProducer="USA">This date is used by some
constraint rules to determine if ISM markings are valid. For example, this date
is used to check deprecation of some marks. </xhtml:p>
            </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleType>
            <xsd:restriction base="xsd:date"/>
        </xsd:simpleType>
    </xsd:attribute>

    <xsd:attribute name="cuiBasic" type="ismcuibasic:CVEnumISMCUIBasic">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">Applicable CUI Basic
markings for a document or portion</xhtml:p>
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is rendered
in portion marks and banners. The permissible values for this attribute are
defined in the ISM Dissemination CVE: CVEnumISMCUIBasic.xml</xhtml:p>
            </xsd:documentation>
        </xsd:annotation>
    </xsd:attribute>
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<xsd:attributeGroup name="CUIONLYattributesGroup">
        <xsd:annotation>
                <xsd:documentation xml:lang="en">
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">Basic security attributes
group for documents that are CUI but have no NSI (National Security
Information). These documents have @ism:compliesWith="US.CUI-ONLY". Note
cuiControlledBy is optional for portion marks but required by constraint rules
for the resource element.</xhtml:p>
                </xsd:documentation>
        </xsd:annotation>
        <xsd:attribute ref="cuiBasic" use="optional"/>
        <xsd:attribute ref="cuiSpecified" use="optional"/>
        <xsd:attribute ref="cuiDecontrolDate" use="optional"/>
        <xsd:attribute ref="cuiDecontrolEvent" use="optional"/>
        <xsd:attribute ref="cuiControlledBy" use="optional"/>
        <xsd:attribute ref="cuiControlledByOffice" use="optional"/>
        <xsd:attribute ref="cuiPOC" use="optional"/>
        <xsd:attribute ref="noticeType" use="optional"/>
</xsd:attributeGroup>

<xsd:attribute name="cuiSpecified" type="ismcuispecified:CVEnumISMCUISpecified">
        <xsd:annotation>
                <xsd:documentation xml:lang="en">
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">Applicable CUI Specified
markings for a document or portion</xhtml:p>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is rendered
in portion marks and banners. The permissible values for this attribute are
defined in the ISM Dissemination CVE: CVEnumISMCUISpecified.xml</xhtml:p>
                </xsd:documentation>
        </xsd:annotation>
</xsd:attribute>

<xsd:attribute name="cuiControlledBy">
        <xsd:annotation>
                <xsd:documentation xml:lang="en">
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">The identity, by name or
personal identifier and position title, of the CUI controlling authority for a
document containing CUI information</xhtml:p>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute corresponds
to the 32-CFR Parts 2002.20(d) requirement that all documents containing CUI
must carry an indicator of who designated the CUI within it. </xhtml:p>
                </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleType>
                <xsd:restriction base="xsd:string">
                        <xsd:maxLength value="1024"/>
                </xsd:restriction>
        </xsd:simpleType>
</xsd:attribute>

<xsd:attribute name="cuiControlledByOffice">
        <xsd:annotation>
                <xsd:documentation xml:lang="en">
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">Office in an agency or
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department that is responsible for labeling and controlling information as
CUI.</xhtml:p>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">Ref DOD INSTRUCTION
5200.48</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <xsd:simpleType>
                <xsd:restriction base="xsd:string">
                    <xsd:maxLength value="1024"/>
                </xsd:restriction>
            </xsd:simpleType>
    </xsd:attribute>

    <xsd:attribute name="cuiPOC">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">Point of Contact for
labeling and controlling information as CUI.</xhtml:p>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">Ref DOD INSTRUCTION
5200.48</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <xsd:simpleType>
                <xsd:restriction base="xsd:string">
                    <xsd:maxLength value="1024"/>
                </xsd:restriction>
            </xsd:simpleType>
    </xsd:attribute>

    <xsd:attribute name="cuiDecontrolDate">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">The specific date when a CUI
resource is subject to automatic CUI decontrol procedures </xhtml:p>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute corresponds
to the 32-CFR Parts 2002.20(e) requirement that, where feasible, designating
agencies must include a specific decontrolling date or event with all CUI.
</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <xsd:simpleType>
                <xsd:restriction base="xsd:date"/>
            </xsd:simpleType>
    </xsd:attribute>

    <xsd:attribute name="cuiDecontrolEvent">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">A description of an event
upon which CUI information shall be subject to automatic decontrol procedures. </xhtml:p>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute corresponds
to the 32-CFR Parts 2002.20(e) requirement that, where feasible, designating
agencies must include a specific decontrolling date or event with all
CUI.</xhtml:p>
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                                        </xsd:documentation>
                                </xsd:annotation>
                                <xsd:simpleType>
                                        <xsd:restriction base="xsd:string">
                                                <xsd:maxLength value="1024"/>
                                        </xsd:restriction>
                                </xsd:simpleType>
                        </xsd:attribute>

                        <xsd:attribute name="declassDate">
                                <xsd:annotation>
                                        <xsd:documentation xml:lang="en">
                                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">The specific date when the
resource is subject to automatic declassification procedures if not properly
exempted from automatic declassification</xhtml:p>
                                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute corresponds
to the "Declassify On" line of a resource's classification authority block. It
is used primarily at the resource level. </xhtml:p>
                                        </xsd:documentation>
                                </xsd:annotation>
                                <xsd:simpleType>
                                        <xsd:restriction base="xsd:date"/>
                                </xsd:simpleType>
                        </xsd:attribute>

                        <xsd:attribute name="declassEvent">
                                <xsd:annotation>
                                        <xsd:documentation xml:lang="en">
                                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">A description of an event
upon which the information shall be subject to automatic declassification
procedures if not properly exempted from automatic declassification A
description of an event upon which the information shall be automatically
declassified if not properly exempted from automatic declassification.</xhtml:p>
                                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute corresponds
to the "Declassify On" line of a resource's classification authority block. It
is used primarily at the resource level.</xhtml:p>
                                        </xsd:documentation>
                                </xsd:annotation>
                                <xsd:simpleType>
                                        <xsd:restriction base="xsd:string">
                                                <xsd:maxLength value="1024"/>
                                        </xsd:restriction>
                                </xsd:simpleType>
                        </xsd:attribute>

                        <xsd:attribute name="declassException" type="ism25x:CVEnumISM25X">
                                <xsd:annotation>
                                        <xsd:documentation xml:lang="en">
                                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">The exemption from automatic
declassification that is claimed for a document</xhtml:p>
                                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">This element is used in
conjunction with the Declassification Date or Declassification Event, and it
corresponds to the "Declassify On" line of a resource's classification authority
block. It is used primarily at the resource level. The permissible values for
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this attribute are defined in the ISM N25X CVE: CVEnumISMN25X.xml.</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
    </xsd:attribute>

    <xsd:attribute name="derivativelyClassifiedBy">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">The identity, by name or
personal identifier, of the derivative classification authority</xhtml:p>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute corresponds
to the "Classified By" line of a resource's classification authority block, and
it is used primarily at the resource level.</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <xsd:simpleType>
                <xsd:restriction base="xsd:string">
                    <xsd:maxLength value="1024"/>
                </xsd:restriction>
            </xsd:simpleType>
    </xsd:attribute>

    <xsd:attribute name="derivedFrom">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">A citation of the
authoritative source or sources of the classification markings used in a
derivative classification decision for a classified document</xhtml:p>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute corresponds
to the "Derived From" line of a document's classification authority block, and
it is used primarily at the resource level.</xhtml:p>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">ISOO Guidance: The source of
derivative classification. (1) The derivative classifier shall concisely
identify the source document or the classification guide on the ''Derived From''
line, including the agency and, where available, the office of origin, and the
date of the source or guide. An example might appear as: Derived From: Memo,
''Funding Problems,'' October 20, 2008, Office of Administration, Department of
Good Works or Derived From: CG No. 1, Department of Good Works, dated October
20, 2008 (i) When a document is classified derivatively on the basis of more
than one source document or classification guide, the ''Derived From'' line
shall appear as: Derived From: Multiple Sources (ii) The derivative classifier
shall include a listing of the source materials on, or attached to, each
derivatively classified document.</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <xsd:simpleType>
                <xsd:restriction base="xsd:string">
                    <xsd:maxLength value="1024"/>
                </xsd:restriction>
            </xsd:simpleType>
    </xsd:attribute>

    <xsd:attribute name="DESVersion">
            <xsd:annotation>
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            <xsd:documentation xml:lang="en">
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">The version number of the
specification. This attribute is intended for processing systems to determine
the appropriate versions of Schema, Schematron, and CVE values for validation
and interpretation of an instance document. </xhtml:p>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">If there are multiple of
this attribute specified in an instance document, the first one in document
order is the one that will apply to the entire document. Document order is
defined in <xhtml:a href="https://www.w3.org/TR/xpath-datamodel/#document-order">https://www.w3.org/TR/xpath-datamodel/#document-order</xhtml:a>
                    </xhtml:p>
            </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleType>
                <xsd:restriction base="xsd:string">
                        <xsd:pattern value="[0-9]{6}(\.[0-9]{6})?(\-.{1,23})?"/>
                </xsd:restriction>
        </xsd:simpleType>
 </xsd:attribute>

 <xsd:attribute name="displayOnlyTo" type="ismcatrelto:CVEnumISMCATRelTo">
        <xsd:annotation>
                <xsd:documentation xml:lang="en">
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">The set of countries and/or
international organizations associated with a "Display Only To"
marking</xhtml:p>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">The "Display Only To"
marking indicates that a document is authorized for foreign viewing by
appropriate affiliates of approved countries and/or international organizations
without providing the foreign recipient with a copy for retention in any medium
(physical or electronic).</xhtml:p>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is used at
both the resource and the portion levels. The permissible values for this
attribute are defined in the ISM Rel To CVE: CVEnumISMRelTo.xml.</xhtml:p>
                </xsd:documentation>
        </xsd:annotation>
 </xsd:attribute>

 <xsd:attribute name="disseminationControls" type="ismdissem:CVEnumISMDissem">
        <xsd:annotation>
                <xsd:documentation xml:lang="en">
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">Applicable dissemination
control markings for a document or portion</xhtml:p>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is rendered
in portion marks and banners. The permissible values for this attribute are
defined in the ISM Dissemination CVE: CVEnumISMDissem.xml</xhtml:p>
                </xsd:documentation>
        </xsd:annotation>
 </xsd:attribute>

 <xsd:attribute name="excludeFromRollup">
        <xsd:annotation>
                <xsd:documentation xml:lang="en">
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">An indicator that an
element's ISM attributes do not contribute to the "rollup" classification of the
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document</xhtml:p>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">@ism:excludeFromRollup is
most often used when providing the security attributes of a referenced or
linked-to resource. This attribute provides a mechanism to assert a
more-restrictive classification of a resource pointed to by a link or reference
without impacting the document's resource markings.</xhtml:p>
                    </xsd:documentation>
              </xsd:annotation>
              <xsd:simpleType>
                    <xsd:restriction base="xsd:boolean"/>
              </xsd:simpleType>
  </xsd:attribute>

  <xsd:attribute name="exemptFrom" type="ismexempt:CVEnumISMExemptFrom">
          <xsd:annotation>
                  <xsd:documentation>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">Specific exemptions within
an ISM rule set that are claimed for a document</xhtml:p>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is used on
the resource node of a document in conjunction with @compliesWith. The
permissible values for this simple type are defined in the ISM Exempt From CVE:
CVEnumISMExemptFrom.xml</xhtml:p>
                  </xsd:documentation>
          </xsd:annotation>
  </xsd:attribute>

  <xsd:attribute name="FGIsourceOpen" type="ismcatfgio:CVEnumISMCATFGIOpen">
          <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">The set of countries and/or
international organizations whose information is derivatively sourced in a
document when the source of the information is not concealed (also used for
cases when the source is unknown)</xhtml:p>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">FGI markings protect
foreign-owned or foreign-produced information and are applied based on sharing
agreements or arrangements with the source country or organization.</xhtml:p>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is used at
both the resource and the portion levels. The permissible values for this
attribute are defined in the ISM FGI Open CVE: CVEnumISMFGIOpen.xml. Note: the
value "UNKNOWN" is allowed in cases where the source of the information is not
known.</xhtml:p>
                  </xsd:documentation>
          </xsd:annotation>
  </xsd:attribute>

  <xsd:attribute name="FGIsourceProtected" type="ismcatfgip:CVEnumISMCATFGIProtected">
          <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">The set of countries and/or
international organizations whose information is derivatively sourced in a
document when the source of the information must be concealed</xhtml:p>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute has specific
rules concerning its usage:</xhtml:p>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">PROTECTED SPACES — Within
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protected internal organizational spaces, this attribute may be used to maintain
a formal record of the foreign country or countries and/or registered
international organization(s) that are the non-disclosable owner(s) and/or
producer(s) of information which is categorized as foreign government
information according to Security Markings Program guidelines. If the data
element is employed in this manner, then additional measures must be taken prior
to dissemination of the resource to shared spaces so that any indications of the
non-disclosable owner(s) and/or producer(s) of information within the resource
are eliminated. In all cases, the corresponding portion marking or banner
marking should be compliant with Security Markings Program guidelines for FGI
when the source must be concealed. In other words, even if the data element is
being employed within protected internal organizational spaces to maintain a
formal record of the non-disclosable owner(s) and/or producer(s) within an XML
resource, if the resource is rendered for display within the protected internal
organizational spaces in any format by a stylesheet or as a result of any other
transformation process, then the non-disclosable owner(s) and/or producer(s)
should not be included in the corresponding portion marking or banner
marking.**</xhtml:p>**
                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">SHARED SPACES — Within
shared spaces, the data element serves only to indicate the presence of FGI; in
this case, this element's value will always be "FGI". The data element may also
be employed in this manner within protected internal organizational
spaces.**</xhtml:p>**
                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">Permissible values for this
attribute are defined in the ISM FGI Protected CVE: CVEnumISMFGIProtected.xml.
Note: the value "FGI" is permitted in the case outlined for "shared
spaces".**</xhtml:p>**
                        </xsd:documentation>
                </xsd:annotation>
        </xsd:attribute>

  <xsd:attribute name="handleViaChannels" type="xsd:string">
                <xsd:annotation>
                        <xsd:documentation>
                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">Handle VIA Channels that may
appear in the second banner line. **</xhtml:p>**
                        </xsd:documentation>
                </xsd:annotation>
  </xsd:attribute>

  <xsd:attribute name="hasApproximateMarkings" type="xsd:boolean">
                <xsd:annotation>
                        <xsd:documentation>
                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">When true, indicates the ISM
markings specified are estimated (e.g. system high).**</xhtml:p>**
                        </xsd:documentation>
                </xsd:annotation>
  </xsd:attribute>

  <xsd:attribute name="ISMCATCESVersion">
                <xsd:annotation>
                        <xsd:documentation xml:lang="en">
                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">The version number of the
ISMCAT CES used in the document**</xhtml:p>**

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                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">If there are multiple
@ISMCATCESVersion attributes specified in an instance document, the first one in
document order is the one that will apply to the entire document.</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <xsd:simpleType>
                <xsd:restriction base="xsd:string">
                    <xsd:pattern value="[0-9]{6}(\.[0-9]{6})?(\-.{1,23})?"/>
                </xsd:restriction>
            </xsd:simpleType>
    </xsd:attribute>

    <xsd:attribute name="highWaterNATO" type="ismhighwaternato:CVEnumISMHighWaterNATO">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">Applicable NATO highwater
markings for a document or portion</xhtml:p>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is rendered
in portion marks and banners. The permissible values for this attribute are
defined in the ISM HighWater NATO CVE: CVEnumISMHighWaterNATO.xml</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
    </xsd:attribute>

    <xsd:attributeGroup name="ISMNoticeBaseAttributeGroup">
            <xsd:annotation>
                <xsd:documentation>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">The group of Information
Security Marking attributes for use on a notice element without the
externalNotice element</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <xsd:attribute ref="noticeType" use="optional"/>
            <xsd:attribute ref="noticeProseID" use="optional"/>
            <xsd:attribute ref="noticeReason" use="optional"/>
            <xsd:attribute ref="noticeDate" use="optional"/>
            <xsd:attribute ref="unregisteredNoticeType" use="optional"/>
    </xsd:attributeGroup>

    <xsd:attributeGroup name="ISMNoticeAttributeGroup">
            <xsd:annotation>
                <xsd:documentation>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">The group of Information
Security Marking attributes for use on a notice element adding optional
externalNotice</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <xsd:attributeGroup ref="ISMNoticeBaseAttributeGroup"/>
            <xsd:attribute ref="externalNotice" use="optional"/>
    </xsd:attributeGroup>

    <xsd:attributeGroup name="ISMNoticeExternalAttributeGroup">
            <xsd:annotation>
                <xsd:documentation>
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                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">The group of Information
Security Marking attributes for use on a notice element adding required
externalNotice=true</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <xsd:attributeGroup ref="ISMNoticeBaseAttributeGroup"/>
            <xsd:attribute ref="externalNotice" use="required" fixed="true"/>
    </xsd:attributeGroup>


    <xsd:attributeGroup name="ISMResourceAttributeGroup">
            <xsd:annotation>
                <xsd:documentation>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">An attribute group to be
used on the element that represents the resource node of an instance
document.</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <xsd:attribute ref="resourceElement" use="required"/>
            <xsd:attribute ref="compliesWith" use="required"/>
            <xsd:attribute ref="createDate" use="required"/>
            <xsd:attribute ref="exemptFrom" use="optional"/>
            <xsd:attribute ref="noAggregation" use="optional"/>
    </xsd:attributeGroup>

    <xsd:attributeGroup name="ISMResourceAttributeOptionGroup">
            <xsd:annotation>
                <xsd:documentation>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">An attribute group to be
used on the element that represents the resource node of an instance
document.</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <xsd:attribute ref="resourceElement" use="optional"/>
            <xsd:attribute ref="compliesWith" use="optional"/>
            <xsd:attribute ref="createDate" use="optional"/>
            <xsd:attribute ref="exemptFrom" use="optional"/>
            <xsd:attribute ref="noAggregation" use="optional"/>
    </xsd:attributeGroup>

    <xsd:attributeGroup name="ISMRootNodeAttributeGroup">
            <xsd:annotation>
                <xsd:documentation>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">An attribute group to be
used on the root node of a schema implementing ISM. ISM being entirely
attributes based groups such as this are the only way to specify required
use.</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <xsd:attribute ref="DESVersion" use="required"/>
            <xsd:attribute ref="ISMCATCESVersion" use="required"/>
    </xsd:attributeGroup>

    <xsd:attributeGroup name="ISMRootNodeAttributeOptionGroup">
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                        <xsd:annotation>
                                <xsd:documentation>
                                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">An attribute group to be
used on the root node of a schema implementing ISM. ISM being entirely
attributes based groups such as this are the only way to specify required use.
This group has all the attributes as optional. This group could be used in a
schema where many element may be the root node. When the element is acting as
the root element it should have attributes used similar to
ISMRootNodeAttributeGroup.</xhtml:p>
                                </xsd:documentation>
                        </xsd:annotation>
                        <xsd:attribute ref="DESVersion" use="optional"/>
                        <xsd:attribute ref="ISMCATCESVersion" use="optional"/>
        </xsd:attributeGroup>

        <xsd:simpleType name="LongStringType">
                <xsd:annotation>
                        <xsd:documentation>
                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">A long string, less than or
equal to 32000 characters.</xhtml:p>
                        </xsd:documentation>
                </xsd:annotation>
                <xsd:restriction base="xsd:string">
                        <xsd:maxLength value="32000"/>
                </xsd:restriction>
        </xsd:simpleType>

        <xsd:complexType name="LongStringWithSecurityType">
                <xsd:annotation>
                        <xsd:documentation ism:ownerProducer="USA" ism:classification="U">
                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">Event to Capture a long
string, less than or equal to 32000 characters for ISM attributes.</xhtml:p>
                        </xsd:documentation>
                </xsd:annotation>
                <xsd:simpleContent>
                        <xsd:extension base="LongStringType">
                                <xsd:attributeGroup ref="SecurityAttributesGroup"/>
                        </xsd:extension>
                </xsd:simpleContent>
        </xsd:complexType>

        <xsd:attribute name="noAggregation" type="xsd:boolean">
                <xsd:annotation>
                        <xsd:documentation ism:ownerProducer="USA" ism:classification="U">
                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">When true, an indicator that
there is no classification by compilation across any combination of portions
extracted from the document.</xhtml:p>
                        </xsd:documentation>
                </xsd:annotation>

        </xsd:attribute>
        <xsd:attribute name="nonICmarkings" type="ismnonic:CVEnumISMNonIC">
                <xsd:annotation>
                        <xsd:documentation xml:lang="en">
```

```xml
                              <xhtml:p ism:ownerProducer="USA" ism:classification="U">One or more indicators of an
expansion or limitation on the distribution of a document or portion originating
from non-intelligence components</xhtml:p>
                              <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is used at
both the resource and the portion levels, and it is rendered in portion marks
and security banners. The permissible values for this attribute are defined in
the ISM Non-IC CVE: CVEnumISMNonIC.xml</xhtml:p>
                      </xsd:documentation>
                </xsd:annotation>
        </xsd:attribute>

        <xsd:attribute name="nonUSControls" type="ismnonus:CVEnumISMNonUSControls">
                <xsd:annotation>
                      <xsd:documentation xml:lang="en">
                              <xhtml:p ism:ownerProducer="USA" ism:classification="U">One or more indicators of an
expansion or limitation on the distribution of a document or portion originating
from non-US components (foreign government or international
organization).</xhtml:p>
                              <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is used at
both the resource and the portion levels, and it is rendered in portion marks
and security banners. The permissible values for this attribute are defined in
the ISM Non-US Controls CVE: CVEnumISMNonUSControls.xml</xhtml:p>
                      </xsd:documentation>
                </xsd:annotation>
        </xsd:attribute>

        <xsd:complexType name="NoticeBaseType">
                <xsd:annotation>
                      <xsd:documentation>
                              <xhtml:p ism:ownerProducer="USA" ism:classification="U">Base type for Notices. Does
not include any attributes.</xhtml:p>
                      </xsd:documentation>
                </xsd:annotation>
                <xsd:sequence minOccurs="1" maxOccurs="1">
                      <xsd:element ref="NoticeText" minOccurs="0" maxOccurs="unbounded"/>
                </xsd:sequence>
        </xsd:complexType>

        <xsd:complexType name="NoticeType">
                <xsd:annotation>
                      <xsd:documentation>
                              <xhtml:p ism:ownerProducer="USA" ism:classification="U">A single Notice that may
consist of 1 or more NoticeText</xhtml:p>
                      </xsd:documentation>
                </xsd:annotation>
                <xsd:complexContent>
                      <xsd:extension base="NoticeBaseType">
                              <xsd:attributeGroup ref="NoticeAttributesOptionGroup"/>
                      </xsd:extension>
                </xsd:complexContent>
        </xsd:complexType>

        <xsd:complexType name="NoticeExternalType">
                <xsd:annotation>
```

```xml
                    <xsd:documentation>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">A single Notice that may
consist of 1 or more NoticeText for use when the notice refers to something
external.</xhtml:p>
                    </xsd:documentation>
                </xsd:annotation>
                <xsd:complexContent>
                    <xsd:extension base="NoticeBaseType">
                        <xsd:attributeGroup ref="NoticeExternalAttributesOptionGroup"/>
                    </xsd:extension>
                </xsd:complexContent>
 </xsd:complexType>

 <xsd:element name="Notice" type="NoticeType">
        <xsd:annotation>
                <xsd:documentation>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">A single Notice that may
consist of 0 or more NoticeText</xhtml:p>
                </xsd:documentation>
        </xsd:annotation>
 </xsd:element>

 <xsd:element name="NoticeExternal" type="NoticeExternalType">
        <xsd:annotation>
                <xsd:documentation>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">A single Notice that may
consist of 0 or more NoticeText for use when the notice refers to something
external.</xhtml:p>
                </xsd:documentation>
        </xsd:annotation>
 </xsd:element>

 <xsd:attributeGroup name="NoticeAttributesGroup">
        <xsd:annotation>
                <xsd:documentation xml:lang="en">
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">The group of Information
Security Marking attributes for use on a notice element in which the use of
attributes 'classification' and 'ownerProducer' is required.</xhtml:p>
                </xsd:documentation>
        </xsd:annotation>
        <xsd:attributeGroup ref="ISMNoticeAttributeGroup"/>
        <xsd:attributeGroup ref="SecurityAttributesOptionGroup"/>
 </xsd:attributeGroup>

 <xsd:attributeGroup name="NoticeAttributesOptionGroup">
        <xsd:annotation>
                <xsd:documentation xml:lang="en">
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">The group of Information
Security Marking attributes for use on a notice element in which the use of
Security on the notice is optional.</xhtml:p>
                </xsd:documentation>
        </xsd:annotation>
        <xsd:attributeGroup ref="ISMNoticeAttributeGroup"/>
        <xsd:attributeGroup ref="SecurityAttributesOptionGroup"/>
```

```
        </xsd:attributeGroup>

        <xsd:attributeGroup name="NoticeExternalAttributesGroup">
                <xsd:annotation>
                        <xsd:documentation xml:lang="en">
                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">The group of Information
Security Marking attributes for use on a notice element in which the use of
attributes 'classification' and 'ownerProducer' is required and the notice is
for something external to the object.</xhtml:p>
                        </xsd:documentation>
                </xsd:annotation>
                <xsd:attributeGroup ref="ISMNoticeExternalAttributeGroup"/>
                <xsd:attributeGroup ref="SecurityAttributesGroup"/>
        </xsd:attributeGroup>

        <xsd:attributeGroup name="NoticeExternalAttributesOptionGroup">
                <xsd:annotation>
                        <xsd:documentation xml:lang="en">
                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">The group of Information
Security Marking attributes for use on a notice element in which the use of
Security on the notice is optional and the notice is for something external to
the object.</xhtml:p>
                        </xsd:documentation>
                </xsd:annotation>
                <xsd:attributeGroup ref="ISMNoticeExternalAttributeGroup"/>
                <xsd:attributeGroup ref="SecurityAttributesOptionGroup"/>
        </xsd:attributeGroup>


        <xsd:attribute name="noticeDate">
                <xsd:annotation>
                        <xsd:documentation xml:lang="en">
                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">A date associated with a
notice (for example, the DoD Distribution notice date)</xhtml:p>
                        </xsd:documentation>
                </xsd:annotation>
                <xsd:simpleType>
                        <xsd:restriction base="xsd:date"/>
                </xsd:simpleType>
        </xsd:attribute>

        <xsd:element name="NoticeList" type="ism:NoticeListType">
                <xsd:annotation>
                        <xsd:documentation xml:lang="en">
                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">A list of Notices that may consist
of 0 or more ISM attributes</xhtml:p>
                        </xsd:documentation>
                </xsd:annotation>
        </xsd:element>

        <xsd:complexType name="NoticeListType">
                <xsd:annotation>
                        <xsd:documentation>
                                <xhtml:p ism:ownerProducer="USA" ism:classification="U">A list of Notices</xhtml:p>
```

```xml
                    </xsd:documentation>
            </xsd:annotation>
            <xsd:sequence minOccurs="1" maxOccurs="1">
                    <xsd:element ref="Notice" minOccurs="1" maxOccurs="unbounded"/>
            </xsd:sequence>
            <xsd:attributeGroup ref="SecurityAttributesGroup"/>
    </xsd:complexType>

    <xsd:element name="NoticeExternalList" type="ism:NoticeExternalListType">
            <xsd:annotation>
                    <xsd:documentation>
                            <xhtml:p ism:ownerProducer="USA" ism:classification="U">A list of external Notices</xhtml:p>
                    </xsd:documentation>
            </xsd:annotation>
    </xsd:element>

    <xsd:complexType name="NoticeExternalListType">
            <xsd:annotation>
                    <xsd:documentation>
                            <xhtml:p ism:ownerProducer="USA" ism:classification="U">A list of external Notices</xhtml:p>
                    </xsd:documentation>
            </xsd:annotation>
            <xsd:sequence minOccurs="1" maxOccurs="1">
                    <xsd:element ref="NoticeExternal" minOccurs="1" maxOccurs="unbounded"/>
            </xsd:sequence>
            <xsd:attributeGroup ref="SecurityAttributesGroup"/>
    </xsd:complexType>

    <xsd:attribute name="noticeReason">
            <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                            <xhtml:p ism:ownerProducer="USA" ism:classification="U">A reason associated with a
notice (for example, the DoD Distribution reason)</xhtml:p>
                    </xsd:documentation>
            </xsd:annotation>
            <xsd:simpleType>
                    <xsd:restriction base="xsd:string">
                            <xsd:maxLength value="2048"/>
                    </xsd:restriction>
            </xsd:simpleType>
    </xsd:attribute>

    <xsd:element name="NoticeText">
            <xsd:annotation>
                    <xsd:documentation>
                            <xhtml:p ism:ownerProducer="USA" ism:classification="U">The actual text of a
notice.</xhtml:p>
                    </xsd:documentation>
            </xsd:annotation>
            <xsd:complexType>
                    <xsd:simpleContent>
                            <xsd:extension base="LongStringWithSecurityType">
                                    <xsd:attributeGroup ref="POCAttributeGroup"/>
                            </xsd:extension>
```

```xml
                              </xsd:simpleContent>
                        </xsd:complexType>
                  </xsd:element>

                  <xsd:attribute name="noticeType" type="ismnotice:CVEnumISMNotice">
                        <xsd:annotation>
                              <xsd:documentation xml:lang="en">
                                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">An indicator that the
containing element contains a security-related notice. This attribute is used to
categorize which of the required notices is specified in the element. These
categories include those described in the Intelligence Community Markings System
Register and Manual, as well as additional well-defined and formally recognized
security notice types described in other directives, such as US-Person and DoD
Distribution. The element could contain any structure that the implementing
schema defines, and rendering details are relegated to the implementing schema.
The permissible values for this attribute are defined in the ISM Notice CVE:
CVEnumISMNotice.xml</xhtml:p>
                              </xsd:documentation>
                        </xsd:annotation>
                  </xsd:attribute>

                  <xsd:attribute name="noticeProseID" type="ismnoticeprose:CVEnumISMNoticeProse">
                        <xsd:annotation>
                              <xsd:documentation xml:lang="en">
                                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">An indicator that can be
used to identify a security-related notice in an out-of-band fashion without
actually having the notice text in the record but rather a notice text prose
identifier. This prose identifier maps to the notice text which is stored in a
CVE. The permissible values for this attribute are defined in the ISM Notice
Prose CVE: CVEnumISMNoticeProse.xml</xhtml:p>
                              </xsd:documentation>
                        </xsd:annotation>
                  </xsd:attribute>

                  <xsd:attribute name="externalNotice">
                        <xsd:annotation>
                              <xsd:documentation xml:lang="en">
                                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">An indicator that an element
contains a security-related notice for information NOT contained in
document</xhtml:p>
                                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">This flag allows for a
notice to exist in a document without the data that would normally require the
notice. For example, a document could contain a FISA notice without FISA data
present. Source citations are a common use case for this attribute.</xhtml:p>
                              </xsd:documentation>
                        </xsd:annotation>
                        <xsd:simpleType>
                              <xsd:restriction base="xsd:boolean"/>
                        </xsd:simpleType>
                  </xsd:attribute>

                  <xsd:attribute name="ownerProducer" type="ismcatownpro:CVEnumISMCATOwnerProducer">
                        <xsd:annotation>
                              <xsd:documentation xml:lang="en">
```

```
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">The set of national
governments and/or international organizations that have purview over the
containing classification marking</xhtml:p>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">This element is always used
in conjunction with the Classification element. Taken together, the two elements
specify the classification category (TS, S, C, R, or U) and the type of
classification (US, non-US, or Joint). The permissable values for this attribute
are defined in the ISMCAT Owner Producer CVE:
CVEnumISMCATOwnerProducer.xml.</xhtml:p>
                    </xsd:documentation>
                </xsd:annotation>
        </xsd:attribute>

        <xsd:attribute name="joint" type="xsd:boolean">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">When true, an indicator that
entities in the @ism:ownerProducer attribute are JOINT owners of the
data</xhtml:p>
                    </xsd:documentation>
                </xsd:annotation>
        </xsd:attribute>

        <xsd:attributeGroup name="POCAttributeGroup">
                <xsd:annotation>
                    <xsd:documentation>
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">An attribute group to be
used on the element that represents an entity that can be designated as a
point-of-contact. This node may be a single person or an organization.</xhtml:p>
                    </xsd:documentation>
                </xsd:annotation>
                <xsd:attribute ref="ism:pocType"/>
        </xsd:attributeGroup>

        <xsd:attribute name="pocType" type="ismpoctyp:CVEnumISMPocType">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">Indicates that the element
specifies a point-of-contact (POC) and the methods with which to contact that
individual. As certain POCs are required for different reasons (ICD-710
compliance, DoD Distribution statements, etc), the values for this attribute
specify the reason(s) why the POC is provided.</xhtml:p>
                    </xsd:documentation>
                </xsd:annotation>
        </xsd:attribute>

        <xsd:attribute name="releasableTo" type="ismcatrelto:CVEnumISMCATRelTo">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is used at
both the resource and the portion levels. One or more indicators identifying the
country or countries and/or international organization(s) to which classified
information may be released based on the determination of an originator in
accordance with established foreign disclosure procedures. This element is used
```

```xml
in conjunction with the Dissemination Controls element. It is manifested in
portion marks and security banners. PERMISSIBLE VALUES The permissible values
for this attribute are defined in the Controlled Value Enumeration:
CVEnumISMRelTo.xml</html:p>
                    </xsd:documentation>
            </xsd:annotation>
  </xsd:attribute>

  <xsd:attribute name="resourceElement">
            <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                            <xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is used to
designate which element has the ISM attributes representing the classification
for the entire resource. Every document must have at least one element with this
indicator as true. It should be rare that a document has more than one. Mainly
this would occur in some sort of aggregation schema. In the aggregation case,
the first @resourceElement attribute in XML document order is the one used for
all constraint rules.</xhtml:p>
                    </xsd:documentation>
            </xsd:annotation>
            <xsd:simpleType>
                    <xsd:restriction base="xsd:boolean"/>
            </xsd:simpleType>
  </xsd:attribute>

  <xsd:attributeGroup name="ResourceNodeAttributeGroup">
            <xsd:annotation>
                    <xsd:documentation>
                            <xhtml:p ism:ownerProducer="USA" ism:classification="U">An attribute group to be
used on the element that represents the resource node of an instance document.
This node's ISM attributes would be used to generate banner marks and the E.O.
13526 classification authority block. Implementing Schemas might use this on the
Root node or any other node.</xhtml:p>
                    </xsd:documentation>
            </xsd:annotation>
            <xsd:attributeGroup ref="ISMResourceAttributeGroup"/>
            <xsd:attributeGroup ref="SecurityAttributesGroup"/>
            <xsd:attributeGroup ref="ISMNoticeAttributeGroup"/>
  </xsd:attributeGroup>

  <xsd:attributeGroup name="ResourceNodeAttributeOptionGroup">
            <xsd:annotation>
                    <xsd:documentation>
                            <xhtml:p ism:ownerProducer="USA" ism:classification="U">An attribute group to be
used on the element that represents the resource node of an instance document.
This node's ISM attributes would be used to generate banner marks and the E.O.
13526 classification authority block. Implementing Schemas might use this on the
Root node or any other node. This group has all the attributes as optional. It
could be used in a schema where many nodes may be the resource element. When the
element is acting as the resource element it should have attributes used similar
to ResourceNodeAttributeGroup.</xhtml:p>
                    </xsd:documentation>
            </xsd:annotation>
            <xsd:attributeGroup ref="ISMResourceAttributeOptionGroup"/>
```

```xml
			<xsd:attributeGroup ref="SecurityAttributesOptionGroup"/>
			<xsd:attributeGroup ref="ISMNoticeAttributeGroup"/>
	</xsd:attributeGroup>

	<xsd:attribute name="SARIdentifier" type="ismsar:CVEnumISMSAR">
		<xsd:annotation>
			<xsd:documentation xml:lang="en">
				<xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is used at
both the resource and the portion levels. One or more indicators identifying the
defense or intelligence programs for which special access is required. It is
manifested in portion marks and security banners. PERMISSIBLE VALUES The
permissible values for this attribute are defined in the Controlled Value
Enumeration: CVEnumISMSAR.xml</xhtml:p>
			</xsd:documentation>
		</xsd:annotation>
	</xsd:attribute>

	<xsd:attribute name="SCIcontrols" type="ismscicon:CVEnumISMSCIControls">
		<xsd:annotation>
			<xsd:documentation xml:lang="en">
				<xhtml:p ism:ownerProducer="USA" ism:classification="U">This attribute is used at
both the resource and the portion levels. One or more indicators identifying
sensitive compartmented information control system(s). It is manifested in
portion marks and security banners. PERMISSIBLE VALUES The permissible values
for this attribute are defined in the Controlled Value Enumeration:
CVEnumISMSCIControls.xml</xhtml:p>
			</xsd:documentation>
		</xsd:annotation>
	</xsd:attribute>

	<xsd:attribute name="secondBannerLine"
			type="ismsecondbannerline:CVEnumISMSecondBannerLine">
		<xsd:annotation>
			<xsd:documentation>
				<xhtml:p ism:ownerProducer="USA" ism:classification="U">Tokens that contain markings
used to support administrative and legal processes for handling and protecting
documents. When they appear in a document, these tokens form a second line that
is placed below the banner. </xhtml:p>
			</xsd:documentation>
		</xsd:annotation>
	</xsd:attribute>

	<xsd:attributeGroup name="SecurityAttributesGroup">
		<xsd:annotation>
			<xsd:documentation>
				<xhtml:p ism:ownerProducer="USA" ism:classification="U">The group of Information
Security Marking attributes in which the use of attributes 'classification' and
'ownerProducer' is required.</xhtml:p>
			</xsd:documentation>
			<xsd:documentation>
				<xhtml:p ism:ownerProducer="USA" ism:classification="U">This group is to be
contrasted with group 'SecurityAttributesOptionGroup' in which use of those
attributes is optional.</xhtml:p>
			</xsd:documentation>
```

```
            </xsd:annotation>
            <xsd:attribute ref="classification" use="required"/>
            <xsd:attribute ref="ownerProducer" use="required"/>
            <xsd:attribute ref="joint" use="optional"/>
            <xsd:attribute ref="SCIcontrols" use="optional"/>
            <xsd:attribute ref="SARIdentifier" use="optional"/>
            <xsd:attribute ref="atomicEnergyMarkings" use="optional"/>
            <xsd:attribute ref="disseminationControls" use="optional"/>
            <xsd:attribute ref="displayOnlyTo" use="optional"/>
            <xsd:attribute ref="FGIsourceOpen" use="optional"/>
            <xsd:attribute ref="FGIsourceProtected" use="optional"/>
            <xsd:attribute ref="releasableTo" use="optional"/>
            <xsd:attribute ref="nonICmarkings" use="optional"/>
            <xsd:attribute ref="classifiedBy" use="optional"/>
            <xsd:attribute ref="compilationReason" use="optional"/>
            <xsd:attribute ref="derivativelyClassifiedBy" use="optional"/>
            <xsd:attribute ref="classificationReason" use="optional"/>
            <xsd:attribute ref="nonUSControls" use="optional"/>
            <xsd:attribute ref="derivedFrom" use="optional"/>
            <xsd:attribute ref="declassDate" use="optional"/>
            <xsd:attribute ref="declassEvent" use="optional"/>
            <xsd:attribute ref="declassException" use="optional"/>
            <xsd:attribute ref="hasApproximateMarkings" use="optional"/>
            <xsd:attribute ref="highWaterNATO" use="optional"/>
            <xsd:attribute ref="cuiBasic" use="optional"/>
            <xsd:attribute ref="cuiSpecified" use="optional"/>
            <xsd:attribute ref="cuiDecontrolDate" use="optional"/>
            <xsd:attribute ref="cuiDecontrolEvent" use="optional"/>
            <xsd:attribute ref="cuiControlledBy" use="optional"/>
            <xsd:attribute ref="cuiControlledByOffice" use="optional"/>
            <xsd:attribute ref="cuiPOC" use="optional"/>
            <xsd:attribute ref="secondBannerLine" use="optional"/>
            <xsd:attribute ref="handleViaChannels" use="optional"/>
    </xsd:attributeGroup>

    <xsd:attributeGroup name="SecurityAttributesOptionGroup">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">The group of Information
Security Marking attributes in which the use of attributes 'classification' and
'ownerProducer' is optional. This group is to be contrasted with group
'SecurityAttributesGroup' in which use of these attributes is
required.</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <xsd:attribute ref="classification" use="optional"/>
            <xsd:attribute ref="ownerProducer" use="optional"/>
            <xsd:attribute ref="joint" use="optional"/>
            <xsd:attribute ref="SCIcontrols" use="optional"/>
            <xsd:attribute ref="SARIdentifier" use="optional"/>
            <xsd:attribute ref="atomicEnergyMarkings" use="optional"/>
            <xsd:attribute ref="disseminationControls" use="optional"/>
            <xsd:attribute ref="displayOnlyTo" use="optional"/>
            <xsd:attribute ref="FGIsourceOpen" use="optional"/>
```

```xml
                <xsd:attribute ref="FGIsourceProtected" use="optional"/>
                <xsd:attribute ref="releasableTo" use="optional"/>
                <xsd:attribute ref="nonICmarkings" use="optional"/>
                <xsd:attribute ref="classifiedBy" use="optional"/>
                <xsd:attribute ref="compilationReason" use="optional"/>
                <xsd:attribute ref="derivativelyClassifiedBy" use="optional"/>
                <xsd:attribute ref="classificationReason" use="optional"/>
                <xsd:attribute ref="highWaterNATO" use="optional"/>
                <xsd:attribute ref="nonUSControls" use="optional"/>
                <xsd:attribute ref="derivedFrom" use="optional"/>
                <xsd:attribute ref="declassDate" use="optional"/>
                <xsd:attribute ref="declassEvent" use="optional"/>
                <xsd:attribute ref="declassException" use="optional"/>
                <xsd:attribute ref="hasApproximateMarkings" use="optional"/>
                <xsd:attribute ref="cuiBasic" use="optional"/>
                <xsd:attribute ref="cuiSpecified" use="optional"/>
                <xsd:attribute ref="cuiDecontrolDate" use="optional"/>
                <xsd:attribute ref="cuiDecontrolEvent" use="optional"/>
                <xsd:attribute ref="cuiControlledBy" use="optional"/>
                <xsd:attribute ref="cuiControlledByOffice" use="optional"/>
                <xsd:attribute ref="cuiPOC" use="optional"/>
                <xsd:attribute ref="secondBannerLine" use="optional"/>
                <xsd:attribute ref="handleViaChannels" use="optional"/>
    </xsd:attributeGroup>

    <xsd:simpleType name="ShortStringType">
            <xsd:annotation>
                    <xsd:documentation>
                            <xhtml:p ism:ownerProducer="USA" ism:classification="U">A short string, less than or
equal to 256 characters.</xhtml:p>
                    </xsd:documentation>
            </xsd:annotation>
            <xsd:restriction base="xsd:string">
                    <xsd:maxLength value="256"/>
            </xsd:restriction>
    </xsd:simpleType>

    <xsd:complexType name="ShortStringWithSecurityType">
            <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                            <xhtml:p ism:ownerProducer="USA" ism:classification="U">Event to Capture a short
string, less than or equal to 256 characters for ISM attributes.</xhtml:p>
                    </xsd:documentation>
            </xsd:annotation>
            <xsd:simpleContent>
                    <xsd:extension base="ShortStringType">
                            <xsd:attributeGroup ref="SecurityAttributesGroup"/>
                    </xsd:extension>
            </xsd:simpleContent>
    </xsd:complexType>

    <xsd:attribute name="unregisteredNoticeType">
            <xsd:annotation>
                    <xsd:documentation xml:lang="en">
```

```
                                          <xhtml:p ism:ownerProducer="USA" ism:classification="U">A notice that is of a
                   category that is not described in the Intelligence Community Markings System
                   Register and Manual and/or is not sufficiently defined to be represented in the
                   Controlled Value Enumeration CVEnumISMNotice.xml. This attribute can be used by
                   specifications that import ISM to represent a wider variety of security-related
                   notices.</xhtml:p>
                                      </xsd:documentation>
                                  </xsd:annotation>
                                  <xsd:simpleType>
                                      <xsd:restriction base="xsd:string">
                                          <xsd:maxLength value="2048"/>
                                      </xsd:restriction>
                                  </xsd:simpleType>
                          </xsd:attribute>
                          <!--********************************************************-->


<!--End All case-insensitive alphabetically-->


<!--********************************************************-->


<xsd:annotation>
                          <xsd:documentation>
                              <xhtml:p ism:ownerProducer="USA" ism:classification="U">Include all of the generated CVE
              types applicable.</xhtml:p>
                          </xsd:documentation>
                      </xsd:annotation>
                      <xsd:annotation>
                          <xsd:documentation>
                              <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Formal Change List</xhtml:h2>
                              <xhtml:table ism:ownerProducer="USA" ism:classification="U">
                                  <xhtml:caption>Change History</xhtml:caption>
                                  <xhtml:thead>
                                      <xhtml:tr>
                                          <xhtml:td>Version</xhtml:td>
                                          <xhtml:td>Date</xhtml:td>
                                          <xhtml:td>By</xhtml:td>
                                          <xhtml:td>Description</xhtml:td>
                                      </xhtml:tr>
                                  </xhtml:thead>
                                  <xhtml:tbody>
                                      <xhtml:tr>
                                          <xhtml:td>2016-SEP</xhtml:td>
                                          <xhtml:td>2016-02-17</xhtml:td>
                                          <xhtml:td>ODNI/IC CIO/IAD</xhtml:td>
                                          <xhtml:td>
                                              <xhtml:ul>
                                                  <xhtml:li ism:ownerProducer="USA" ism:classification="U"> The schema
                   change logs will no longer be maintained as of the 2016-SEP
                   release. The existing change logs will only serve as legacy
                   information. For changes to schema as of and after 2016-SEP,
                   reference the change history in the DES.</xhtml:li>
                                              </xhtml:ul>
                                          </xhtml:td>
                                      </xhtml:tr>
```

```
                    <xhtml:tr>
                         <xhtml:td>12</xhtml:td>
                         <xhtml:td>2013-05-20</xhtml:td>
                         <xhtml:td>ODNI/OCIO/ME/D&amp;I</xhtml:td>
                         <xhtml:td>
                              <xhtml:ul>
                                   <xhtml:li ism:ownerProducer="USA" ism:classification="U">Decoupled
the specification from the country code CVEs. Created a new
ISMCAT specification that can rev independently of
ISM.</xhtml:li>
                              </xhtml:ul>
                         </xhtml:td>
                    </xhtml:tr>
                    <xhtml:tr>
                         <xhtml:td>11</xhtml:td>
                         <xhtml:td>2013-02-15</xhtml:td>
                         <xhtml:td>ODNI/OCIO/ME/D&amp;I</xhtml:td>
                         <xhtml:td>
                              <xhtml:ul>
                                   <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added joint
attribute for signifying that multiple values in the
ownerProducer attribute are both producers of the
portion/document.</xhtml:li>
                                   <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added
attribute for joint ownership. [artf13902].</xhtml:li>
                              </xhtml:ul>
                         </xhtml:td>
                    </xhtml:tr>
                    <xhtml:tr>
                         <xhtml:td>9</xhtml:td>
                         <xhtml:td>2012-3-19</xhtml:td>
                         <xhtml:td>ODNI/OCIO/ME/D&amp;I</xhtml:td>
                         <xhtml:td>
                              <xhtml:ul>
                                   <xhtml:li ism:ownerProducer="USA" ism:classification="U">Changed
DESVersion attribute from xsd:int to ShortStringType. </xhtml:li>
                                   <xhtml:li ism:ownerProducer="USA" ism:classification="U">Changed
declaration of NoticeText to be simple content.
[artf12153].</xhtml:li>
                              </xhtml:ul>
                         </xhtml:td>
                    </xhtml:tr>
                    <xhtml:tr>
                         <xhtml:td>8</xhtml:td>
                         <xhtml:td>2011-12-22</xhtml:td>
                         <xhtml:td>Sun, ODNI/OCIO/ICEA</xhtml:td>
                         <xhtml:td>
                              <xhtml:ul>
                                   <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added
unique namespaces to generated CVE schema fragments. </xhtml:li>
                                   <xhtml:li ism:ownerProducer="USA" ism:classification="U">Removed
CVEGenerated schema import from and moved schema fragment
imports directly to the base ISM schema.</xhtml:li>
                              </xhtml:ul>
```

```
                                    </xhtml:td>
                            </xhtml:tr>
                            <xhtml:tr>
                                    <xhtml:td>7</xhtml:td>
                                    <xhtml:td>2011-08-10</xhtml:td>
                                    <xhtml:td>Colbert, ODNI/OCIO/ICEA</xhtml:td>
                                    <xhtml:td>
                                            <xhtml:ul>
                                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added a
complex type for NoticeList</xhtml:li>
                                            </xhtml:ul>
                                    </xhtml:td>
                            </xhtml:tr>
                            <xhtml:tr>
                                    <xhtml:td>7</xhtml:td>
                                    <xhtml:td>2011-07-14</xhtml:td>
                                    <xhtml:td>
                                            <xhtml:ul>
                                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Colbert,
ODNI/OCIO/ICEA</xhtml:li>
                                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Gilsenan,
ODNI/OCIO/ICEA</xhtml:li>
                                            </xhtml:ul>
                                    </xhtml:td>
                                    <xhtml:td>
                                            <xhtml:ul>
                                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Renamed
@ism:notice to @ism:noticeType</xhtml:li>
                                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Removed
@ism:ORCONPOC and @ism:noticePOC. They're replaced with the new
@ism:pocType attribute, which indicates that an element
specifies a point-of-contact's name and contact
method.</xhtml:li>
                                            </xhtml:ul>
                                    </xhtml:td>
                            </xhtml:tr>
                            <xhtml:tr>
                                    <xhtml:td>7</xhtml:td>
                                    <xhtml:td>2011-07-07</xhtml:td>
                                    <xhtml:td>
                                            <xhtml:ul>
                                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Colbert,
ODNI/OCIO/ICEA</xhtml:li>
                                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Gilsenan,
ODNI/OCIO/ICEA</xhtml:li>
                                            </xhtml:ul>
                                    </xhtml:td>
                                    <xhtml:td>
                                            <xhtml:ul>
                                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added
version information to the header</xhtml:li>
                                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Removed
ACCM attribute</xhtml:li>
                                            </xhtml:ul>
```

```
                                    </xhtml:td>
                            </xhtml:tr>
                            <xhtml:tr>
                                    <xhtml:td>7</xhtml:td>
                                    <xhtml:td>2011-06-10</xhtml:td>
                                    <xhtml:td>Hansen, ODNI/OCIO/ICEA</xhtml:td>
                                    <xhtml:td>
                                            <xhtml:ul>
                                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Removed
@fixed="true" from the resourceElement attribute definition in
the ISMResourceNodeAttributeGroup and
ISMResourceNodeAttributeOptionGroup</xhtml:li>
                                            </xhtml:ul>
                                    </xhtml:td>
                            </xhtml:tr>
                            <xhtml:tr>
                                    <xhtml:td>7</xhtml:td>
                                    <xhtml:td>2011-05-11</xhtml:td>
                                    <xhtml:td>Colbert, ODNI/OCIO/ICEA</xhtml:td>
                                    <xhtml:td>
                                            <xhtml:ul>
                                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added
ORCONPOC attribute and POCAttributeGroup</xhtml:li>
                                            </xhtml:ul>
                                    </xhtml:td>
                            </xhtml:tr>
                            <xhtml:tr>
                                    <xhtml:td>7</xhtml:td>
                                    <xhtml:td>2011-04-26</xhtml:td>
                                    <xhtml:td>Colbert, ODNI/OCIO/ICEA</xhtml:td>
                                    <xhtml:td>
                                            <xhtml:ul>
                                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added
String types LongStringType, ShortStringType,
LongStringWithSecurityType, and
ShortStringWithSecurityType</xhtml:li>
                                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added
attribute unregisteredNoticeType and included it in
ISMNoticeAttributeGroup</xhtml:li>
                                            </xhtml:ul>
                                    </xhtml:td>
                            </xhtml:tr>
                            <xhtml:tr>
                                    <xhtml:td>7</xhtml:td>
                                    <xhtml:td>2011-04-22</xhtml:td>
                                    <xhtml:td>Colbert, ODNI/OCIO/ICEA</xhtml:td>
                                    <xhtml:td>
                                            <xhtml:ul>
                                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Explicitly
declared minOccurs and maxOccurs where appropriate.</xhtml:li>
                                            </xhtml:ul>
                                    </xhtml:td>
                            </xhtml:tr>
                            <xhtml:tr>
```

```
                            <xhtml:td>7</xhtml:td>
                            <xhtml:td>2011-04-19</xhtml:td>
                            <xhtml:td>Hodges, ODNI/OCIO/ICEA</xhtml:td>
                            <xhtml:td>
                                    <xhtml:ul>
                                            <xhtml:li ism:ownerProducer="USA" ism:classification="U">(CR 2010-4)
Add ISMNoticeAttributeGroup to hold the Notice specific
attributes and changed the NoticeAttribute groups to reference
it. ISMResourceAttributeGroup also added and Resource specific
attributes have been removed from the ResourceAttribute groups
and the new group added.</xhtml:li>
                                    </xhtml:ul>
                            </xhtml:td>
                    </xhtml:tr>
                    <xhtml:tr>
                            <xhtml:td>7</xhtml:td>
                            <xhtml:td>2011-04-15</xhtml:td>
                            <xhtml:td>Colbert, ODNI/OCIO/ICEA</xhtml:td>
                            <xhtml:td>
                                    <xhtml:ul>
                                            <xhtml:li ism:ownerProducer="USA" ism:classification="U">Add
elements NoticeList, Notice, and NoticeText</xhtml:li>
                                    </xhtml:ul>
                            </xhtml:td>
                    </xhtml:tr>
                    <xhtml:tr>
                            <xhtml:td>6</xhtml:td>
                            <xhtml:td>2011-01-27</xhtml:td>
                            <xhtml:td>ODNI/OCIO/ICEA</xhtml:td>
                            <xhtml:td>
                                    <xhtml:ul>
                                            <xhtml:li ism:ownerProducer="USA" ism:classification="U">Add
ACCM</xhtml:li>
                                    </xhtml:ul>
                            </xhtml:td>
                    </xhtml:tr>
                    <xhtml:tr>
                            <xhtml:td>5</xhtml:td>
                            <xhtml:td>2010-09-25</xhtml:td>
                            <xhtml:td>ODNI/OCIO/ICEA</xhtml:td>
                            <xhtml:td>
                                    <xhtml:ul>
                                            <xhtml:li ism:ownerProducer="USA" ism:classification="U">Add
atomicEnergyMarkings</xhtml:li>
                                            <xhtml:li ism:ownerProducer="USA" ism:classification="U">Remove
typeOfExemptedSource and dateOfExemptedSource</xhtml:li>
                                            <xhtml:li ism:ownerProducer="USA" ism:classification="U">Add
ResourceNodeAttributeOptionGroup</xhtml:li>
                                            <xhtml:li ism:ownerProducer="USA" ism:classification="U">Add
ISMRootNodeAttributeOptionGroup</xhtml:li>
                                    </xhtml:ul>
                            </xhtml:td>
                    </xhtml:tr>
                    <xhtml:tr>
```

```
                              <xhtml:td>4</xhtml:td>
                              <xhtml:td>2010-06-01</xhtml:td>
                              <xhtml:td>ODNI OCIO ICIS</xhtml:td>
                              <xhtml:td>
                                  <xhtml:ul>
                                      <xhtml:li ism:ownerProducer="USA" ism:classification="U">Add DoD
Distro statements</xhtml:li>
                                      <xhtml:li ism:ownerProducer="USA" ism:classification="U">Add NATO
refactor</xhtml:li>
                                      <xhtml:li ism:ownerProducer="USA" ism:classification="U">Add Use of
Generated CVE schema types</xhtml:li>
                                  </xhtml:ul>
                              </xhtml:td>
                      </xhtml:tr>
                      <xhtml:tr>
                              <xhtml:td>3</xhtml:td>
                              <xhtml:td>2010-01-22</xhtml:td>
                              <xhtml:td>ODNI OCIO ICIS</xhtml:td>
                              <xhtml:td>
                                  <xhtml:ul>
                                      <xhtml:li ism:ownerProducer="USA" ism:classification="U">(CR
2010-02) Add notice attribute, NoticeAttributesGroup and
NoticeAttributesOptionGroup</xhtml:li>
                                      <xhtml:li ism:ownerProducer="USA" ism:classification="U">Final
review before signature 2010-06-06 <xhtml:ul>
                                          <xhtml:li ism:ownerProducer="USA" ism:classification="U">Remove comment about LES not being in the Register
        since it is now in the register.</xhtml:li>
                                          <xhtml:li ism:ownerProducer="USA" ism:classification="U">Correct NoticeAttributesOptionGroup to have
        SecurityAttributesOptionGroup so that NoteInline in PUBS
        works correctly. </xhtml:li>
                                      </xhtml:ul>
                                  </xhtml:li>
                                  </xhtml:ul>
                              </xhtml:td>
                      </xhtml:tr>
                      <xhtml:tr>
                              <xhtml:td>2</xhtml:td>
                              <xhtml:td>2009-12-01</xhtml:td>
                              <xhtml:td>ODNI OCIO ICIS</xhtml:td>
                              <xhtml:td>
                                  <xhtml:ul>
                                      <xhtml:li ism:ownerProducer="USA" ism:classification="U">(CR
2009-09) Added "compilationReason" to allow capturing
information about the reason that the document or portion bears
a more restrictive classification than the data would appear to
support.</xhtml:li>
                                      <xhtml:li ism:ownerProducer="USA" ism:classification="U">(CR
2009-07) Point to CVE files for enumeration values.</xhtml:li>
                                      <xhtml:li ism:ownerProducer="USA" ism:classification="U">(CR
2009-22) Change declassException and typeOfExemptedSource to
NMTOKEN.</xhtml:li>
                                      <xhtml:li ism:ownerProducer="USA" ism:classification="U">(CR
2009-16) Add ability to specify DES Version.</xhtml:li>
                                      <xhtml:li ism:ownerProducer="USA" ism:classification="U">(CR
```

```
2009-05) Add createDate, excludeFromRollup, resourceElement to
allow ISM rules to be independent of implementing
schema.</xhtml:li>
                                <xhtml:li ism:ownerProducer="USA" ism:classification="U">(CR
2009-05) Add ISMRootNodeAttributeGroup and
ResourceNodeAttributeGroup.</xhtml:li>
                        </xhtml:ul>
                    </xhtml:td>
            </xhtml:tr>
            <xhtml:tr>
                    <xhtml:td>2.1</xhtml:td>
                    <xhtml:td>2008-08-19</xhtml:td>
                    <xhtml:td>ODNI OCIO ICIS</xhtml:td>
                    <xhtml:td>Updated to support IC Standard for Information Security Marking
Metadata (2007-500-2) <xhtml:ul>
                                <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added
"DerivativelyClassifiedBy" to allow capturing information about
a derivative classifier separate from an original
classifier</xhtml:li>
                        </xhtml:ul>
                    </xhtml:td>
            </xhtml:tr>
            <xhtml:tr>
                    <xhtml:td>2.0</xhtml:td>
                    <xhtml:td>2004-04-30</xhtml:td>
                    <xhtml:td>IC MWG</xhtml:td>
                    <xhtml:td>Updated to support changes to the CAPCO Register and
Implementation Manual. <xhtml:ul>
                                <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added
"ownerProducer" as a required attribute for entity
"SecurityAttributes" and as an optional attribute for entity
"SecurityAttributesOption." Purpose is to provide a single
method for specification of US, non-US, and joint
classifications.</xhtml:li>
                                <xhtml:li ism:ownerProducer="USA" ism:classification="U">Changed the
enumerated list that is the declared value of attribute
"classification" in order to accommodate non-US
classifications.</xhtml:li>
                                <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added
optional attribute "SARIdentifier" as a separate container for
DoD/DoE special-access-required nicknames, codewords, or
trigraph/ digraph to support elevation of SAR to the same level
as SCI controls.</xhtml:li>
                                <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added
optional attributes "classifiedBy" and "classificationReason" to
support generation of EO 12958 classification/declassification
blocks.</xhtml:li>
                                <xhtml:li ism:ownerProducer="USA" ism:classification="U">Changed the
declared value of "derivedFrom" to CDATA to allow the titles and
dates of source documents or classification guides to be
specified.</xhtml:li>
                                <xhtml:li ism:ownerProducer="USA" ism:classification="U">Replaced
the single attribute "declassification" with distinct attri-
butes for date-determined and event-determined declassification
```

```
                                      and for the 25X declassification exceptions.</xhtml:li>
                                               <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added
                              attributes "typeOfExemptedSource" and "dateOfExemptedSource" for
                              use in specifying that one or more sources was marked OADR, X1
                              through X8, or X-Foreign Relations.</xhtml:li>
                                               <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added
                              attribute "declassManualReview" for use in forcing "MR" to
                              appear in header and footer banners (regardless of whether any
                              caveats in the portions would necessitate manual
                              review).</xhtml:li>
                                          </xhtml:ul>
                                      </xhtml:td>
                                  </xhtml:tr>
                                  <xhtml:tr>
                                      <xhtml:td>1.0</xhtml:td>
                                      <xhtml:td>2002-07-05</xhtml:td>
                                      <xhtml:td>IC MWG</xhtml:td>
                                      <xhtml:td>Released as a registered, production XML entity set</xhtml:td>
                                  </xhtml:tr>
                              </xhtml:tbody>
                          </xhtml:table>
                      </xsd:documentation>
                  </xsd:annotation>
                  <xsd:annotation>
                      <xsd:documentation>
                          <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Formal CVE Change
    List</xhtml:h2>
                          <xhtml:table ism:ownerProducer="USA" ism:classification="U">
                              <xhtml:caption>Change History</xhtml:caption>
                              <xhtml:thead>
                                  <xhtml:tr>
                                      <xhtml:td>Version</xhtml:td>
                                      <xhtml:td>Date</xhtml:td>
                                      <xhtml:td>By</xhtml:td>
                                      <xhtml:td>Description</xhtml:td>
                                  </xhtml:tr>
                              </xhtml:thead>
                              <xhtml:tbody>
                                  <xhtml:tr>
                                      <xhtml:td>7</xhtml:td>
                                      <xhtml:td>2011-07-18</xhtml:td>
                                      <xhtml:td>Colbert, ODNI/OCIO/ICEA</xhtml:td>
                                      <xhtml:td>
                                          <xhtml:ul>
                                              <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added
                              pocType</xhtml:li>
                                          </xhtml:ul>
                                      </xhtml:td>
                                  </xhtml:tr>
                                  <xhtml:tr>
                                      <xhtml:td>7</xhtml:td>
                                      <xhtml:td>2011-01-27</xhtml:td>
                                      <xhtml:td>ODNI/OCIO/ICEA</xhtml:td>
                                      <xhtml:td>
```

```
                                        <xhtml:ul>
                                                <xhtml:li ism:ownerProducer="USA" ism:classification="U">Remove ACCM
                as attribute and move its values to nonICmarkings</xhtml:li>
                                        </xhtml:ul>
                                </xhtml:td>
                        </xhtml:tr>
                        <xhtml:tr>
                                <xhtml:td>6</xhtml:td>
                                <xhtml:td>2011-01-27</xhtml:td>
                                <xhtml:td>ODNI/OCIO/ICEA</xhtml:td>
                                <xhtml:td>
                                        <xhtml:ul>
                                                <xhtml:li ism:ownerProducer="USA" ism:classification="U">Add
                ACCM</xhtml:li>
                                        </xhtml:ul>
                                </xhtml:td>
                        </xhtml:tr>
                        <xhtml:tr>
                                <xhtml:td>5</xhtml:td>
                                <xhtml:td>2010-09-25</xhtml:td>
                                <xhtml:td>ODNI/OCIO/ICEA</xhtml:td>
                                <xhtml:td>
                                        <xhtml:ul>
                                                <xhtml:li ism:ownerProducer="USA" ism:classification="U">Add
                atomicEnergyMarkings</xhtml:li>
                                                <xhtml:li ism:ownerProducer="USA" ism:classification="U">Remove
                typeOfExemptedSource</xhtml:li>
                                        </xhtml:ul>
                                </xhtml:td>
                        </xhtml:tr>
                </xhtml:tbody>
        </xhtml:table>
    </xsd:documentation>
  </xsd:annotation>
</xsd:schema>
```

2.4 - IC-NTK.xsd

```xml
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
                    xmlns:ntk="urn:us:gov:ic:ntk"
                    xmlns:ap="urn:us:gov:ic:cvenum:ntk:accesspolicy"
                    xmlns:xhtml="http://www.w3.org/1999/xhtml-StopBrowserRendering"
                    attributeFormDefault="qualified"
                    elementFormDefault="qualified"
                    targetNamespace="urn:us:gov:ic:ntk"
                    xml:lang="en"
                    ism:compliesWith="USGov USIC"
                    ism:resourceElement="true"
                    ism:createDate="2019-09-18"
                    ism:DESVersion="202111"
                    ism:ISMCATCESVersion="202205"
                    ism:classification="U"
                    ism:ownerProducer="USA"
                    version="202111.202211">
        <xsd:annotation>
            <xsd:documentation>
                <xhtml:h1 ism:ownerProducer="USA" ism:classification="U">Need-To-Know Metadata
(NTK)</xhtml:h1>
            </xsd:documentation>

            <xsd:documentation>
                <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Notices</xhtml:h2>
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">Distribution Notice:
    This document has been approved for Public Release and is available for use without restriction.
</xhtml:p>
            </xsd:documentation>

            <xsd:documentation>
                <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Description</xhtml:h2>
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">W3C XML Schema for Need-To-Know
metadata (NTK) in the XML Data Encoding Specification for Information Security
Marking Metadata (ISM.XML).</xhtml:p>
            </xsd:documentation>
            <xsd:documentation>
                <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Introduction</xhtml:h2>
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">This XML Schema file is one
component of the XML Data Encoding Specification (DES). Please see the document
titled <xhtml:i>
                        <xhtml:a href="../../Documents/ISM/DesIsmXml.pdf">XML Data Encoding
            Specification for Information Security Marking Metadata</xhtml:a>
                </xhtml:i> for a complete description of the encoding as well as a list of all
components.</xhtml:p>
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">It is envisioned that this
schema or its components, as well as other parts of the DES may be overridden for
localized implementations. Therefore, permission to use, copy, modify and distribute
this XML Schema and the other parts of the DES for any purpose is hereby granted in
perpetuity.</xhtml:p>
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">Please reference the preceding
two paragraphs in all copies or variations. The developers make no representation
about the suitability of the schema or DES for any purpose. It is provided "as is"
```

```xml
                without expressed or implied warranty.</xhtml:p>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">If you modify this XML Schema in
        any way label your schema as a variant of NTK.XML.</xhtml:p>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">Please direct all questions, bug
        reports,or suggestions for changes to the points of contact identified in the
        document referenced above.</xhtml:p>
                </xsd:documentation>
                <xsd:documentation>
                    <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Implementation Notes</xhtml:h2>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">The document element for NTK is
                <xhtml:a href="IC-NTK_xsd_Element_ntk_Access.html">ntk:Access</xhtml:a>.
        However, the NTK schema is not a standalone construct; it should be imported into a
        parent XML schema.</xhtml:p>
                </xsd:documentation>
                <xsd:documentation>
                    <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Creators</xhtml:h2>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">Office of the Director of
        National Intelligence Intelligence Community Chief Information Officer</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <!--*****************************************************-->


<!--Start Import Statements-->


<!--*****************************************************-->


<xsd:import namespace="urn:us:gov:ic:ism" schemaLocation="./IC-ISM.xsd"/>
                <!--*****************************************************-->


<!--End Import Statements-->


<!--*****************************************************-->


<!--*****************************************************-->


<!--Start All case-insensitive alphabetically-->


<!--*****************************************************-->



<xsd:element name="Access" type="ntk:RequiresType">
            <xsd:annotation>
                <xsd:documentation>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">A way of describing a
        formalized Need to Know required for a document. NTK requires being inside a
        schema that implements ISM therefore some element in the implementing schema
        MUST have ism:ISMRootNodeAttributeGroup and ism:ResourceNodeAttributeGroup since
        both of those are required for a valid ISM implementation. In addition the root
        node of the implementing schema must have ntk:NTKRootNodeAttributeGroup
        specified.</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
```

```xml
<xsd:element name="ExternalAccess" type="ntk:RequiresType">
  <xsd:annotation>
    <xsd:documentation>
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">A way of describing a
formalized Need to Know required for an EXTERNAL document. NTK requires being
inside a schema that implements ISM therefore some element in the implementing
schema MUST have ism:ISMRootNodeAttributeGroup and
ism:ResourceNodeAttributeGroup since both of those are required for a valid ISM
implementation. In addition the root node of the implementing schema must have
ntk:NTKRootNodeAttributeGroup specified.</xhtml:p>
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>

<xsd:element name="AccessProfile" type="ntk:AccessProfileType">
  <xsd:annotation>
    <xsd:documentation>
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">An access policy name
followed by 1 or more values representing a profile that a user wanting access
to the document must meet. Logic for the profile list being boolean AND vs OR is
Access Policy defined.</xhtml:p>
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>

<xsd:element name="AccessProfileList" type="ntk:AccessProfileListType">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">A list of access policy names.</xhtml:p>
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>

<xsd:complexType name="AccessProfileListType">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">A list of access policy names.</xhtml:p>
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence minOccurs="1" maxOccurs="1">
    <xsd:element ref="ntk:AccessProfile" minOccurs="1" maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:complexType>

<xsd:complexType name="AccessProfileType">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">A list of words, codes and/or phrases: a lexicon.</xhtml:p>
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence minOccurs="1" maxOccurs="1">
    <xsd:element ref="ntk:AccessPolicy" minOccurs="1" maxOccurs="1"/>
    <xsd:element ref="ntk:ProfileDes" minOccurs="0" maxOccurs="1"/>
    <xsd:element ref="ntk:VocabularyType" maxOccurs="unbounded" minOccurs="0"/>
```

```xml
            <xsd:element ref="ntk:AccessProfileValue" minOccurs="0" maxOccurs="unbounded"/>
        </xsd:sequence>
        <xsd:attributeGroup ref="ism:SecurityAttributesOptionGroup"/>
    </xsd:complexType>


    <xsd:element name="AccessProfileValue" type="ntk:AccessProfileValueType">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">A system name followed by 1 or more
   values representing a profile that a user wanting access to the document must meet.
   Logic for the profile list being boolean AND vs OR is System defined.</xhtml:p>
            </xsd:documentation>
        </xsd:annotation>
    </xsd:element>


    <xsd:complexType name="AccessProfileValueType">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">A list of words, codes
   and/or phrases: a lexicon</xhtml:p>
            </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleContent>
            <xsd:extension base="ntk:StringWithSecurityType">
                <xsd:attribute name="vocabulary" type="xsd:anyURI" use="required">
                    <xsd:annotation>
                        <xsd:documentation xml:lang="en">
                            <xhtml:p ism:ownerProducer="USA" ism:classification="U">A list of words,
                   codes and/or phrases: a lexicon.</xhtml:p>
                        </xsd:documentation>
                    </xsd:annotation>
                </xsd:attribute>
            </xsd:extension>
        </xsd:simpleContent>
    </xsd:complexType>


    <xsd:element name="AccessPolicy" type="ntk:URICommonType">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">A logical grouping indicating
   that one of the included access policies is required.</xhtml:p>
            </xsd:documentation>
        </xsd:annotation>
    </xsd:element>


    <xsd:complexType name="AccessType">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">A way of describing a formalized
   Need to Know required for an EXTERNAL document. NTK requires being inside a schema
   that implements ISM therefore some element in the implementing schema MUST have
   ism:ISMRootNodeAttributeGroup and ism:ResourceNodeAttributeGroup since both of those
   are required for a valid ISM implementation. In addition the root node of the implementing
   schema must have ntk:NTKRootNodeAttributeGroup specified.</xhtml:p>
```

```xml
            </xsd:documentation>
        </xsd:annotation>
        <xsd:all maxOccurs="1" minOccurs="1">
            <xsd:element ref="ntk:AccessProfileList" minOccurs="1" maxOccurs="1"/>
        </xsd:all>
    </xsd:complexType>

    <xsd:attributeGroup name="CommonAttributesGroup">
        <xsd:attribute ref="ntk:id" use="optional"/>
        <xsd:attribute ref="ntk:IDReference" use="optional"/>
        <xsd:attribute ref="ntk:qualifier" use="optional"/>
    </xsd:attributeGroup>

    <xsd:attribute name="DESVersion">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">The version number of the
  specification. This attribute is intended for processing systems to determine
  the appropriate versions of Schema, Schematron, and CVE values for validation
  and interpretation of an instance document. </xhtml:p>
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">If there are multiple of
  this attribute specified in an instance document, the first one in document
  order is the one that will apply to the entire document. Document order is
  defined in <xhtml:a href="https://www.w3.org/TR/xpath-datamodel/#document-order">https://www.w3.org/TR/xpath-datamodel/#document-order</xhtml:a>
            </xhtml:p>
            </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleType>
            <xsd:restriction base="xsd:string">
                <xsd:pattern value="[0-9]{6}(\.[0-9]{6})?(\-.{1,23})?"/>
            </xsd:restriction>
        </xsd:simpleType>
    </xsd:attribute>

    <xsd:attribute name="id" type="xsd:ID">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">A unique XML identifier used
  to assign an XML unique identifier to an element, such as a paragraph, note or
  table.</xhtml:p>
            </xsd:documentation>
        </xsd:annotation>
    </xsd:attribute>

    <xsd:attribute name="IDReference" type="xsd:IDREFS">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">A cross-reference to a
  unique identifier used to point from one element to one or more other elements.
  The value of the attribute must be one or more XML unique identifiers that are
  the value(s) of id attribute(s) elsewhere in the document. </xhtml:p>
            </xsd:documentation>
        </xsd:annotation>
    </xsd:attribute>
```

```xml
<xsd:element name="ProfileDes" type="ntk:ProfileDesType">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">The value of this element
 references the NTK profile. This value should be represented by an IC-ID,
 however, is not currently restrict to an IC-ID type so that legacy systems do
 not break during the transition to a complete restriction to IC-ID.</xhtml:p>
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>

<xsd:complexType name="ProfileDesType">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">The value of this element
 references the NTK profile. This value should be represented by an IC-ID,
 however, is not currently restrict to an IC-ID type so that legacy systems do
 not break during the transition to a complete restriction to IC-ID.</xhtml:p>
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="ntk:URICommonType"/>
  </xsd:simpleContent>
</xsd:complexType>

<xsd:attribute name="qualifier" type="xsd:string">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">A user-defined property used
 to provide contextual meaning to the <xhtml:a href="#AccessProfileValue">ntk:AccessProfileValue</xhtml:a>
    </xhtml:p>
    </xsd:documentation>
  </xsd:annotation>
</xsd:attribute>

<xsd:element name="RequiresAllOf" type="ntk:RequiresAllType">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">A logical grouping
 indicating that all included access policies are required.</xhtml:p>
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>

<xsd:complexType name="RequiresAllType">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      <xhtml:p ism:ownerProducer="USA" ism:classification="U">A list of logical groupings
 indicating that all included required access policies.</xhtml:p>
    </xsd:documentation>
  </xsd:annotation>
  <xsd:all minOccurs="1" maxOccurs="1">
    <xsd:element ref="ntk:AccessProfileList" minOccurs="1" maxOccurs="1"/>
```

```xml
            <xsd:element ref="ntk:RequiresAnyOf" minOccurs="0" maxOccurs="1"/>
        </xsd:all>
</xsd:complexType>

<xsd:element name="RequiresAnyOf" type="ntk:AccessType">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">A logical grouping
  indicating that one of the included access policies is required.</xhtml:p>
        </xsd:documentation>
    </xsd:annotation>
</xsd:element>

<xsd:complexType name="RequiresType">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">A list of required access
  policies.</xhtml:p>
        </xsd:documentation>
    </xsd:annotation>
    <xsd:choice>
        <xsd:element ref="ntk:RequiresAllOf"/>
        <xsd:element ref="ntk:RequiresAnyOf"/>
    </xsd:choice>
    <xsd:attributeGroup ref="ism:SecurityAttributesOptionGroup"/>
    <xsd:attribute name="externalReference" use="optional">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">Attribute to hold the
        authorization reference of the data object referred to external reference.</xhtml:p>
            </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleType>
            <xsd:restriction base="xsd:boolean"/>
        </xsd:simpleType>
    </xsd:attribute>
</xsd:complexType>

<xsd:complexType name="StringWithSecurityType">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            <xhtml:p ism:ownerProducer="USA" ism:classification="U">A string with security metadata.</xhtml:p>
        </xsd:documentation>
    </xsd:annotation>
    <xsd:simpleContent>
        <xsd:extension base="xsd:string">
            <xsd:attributeGroup ref="ntk:CommonAttributesGroup"/>
        </xsd:extension>
    </xsd:simpleContent>
</xsd:complexType>

<xsd:complexType name="URICommonType">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
```

```xml
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">A common name that provides
   reference to a Uniform Resource Identifier (URI).</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
        <xsd:simpleContent>
            <xsd:extension base="xsd:anyURI">
                <xsd:attributeGroup ref="ntk:CommonAttributesGroup"/>
            </xsd:extension>
        </xsd:simpleContent>
    </xsd:complexType>


    <xsd:complexType name="TokenWithSecurityType">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">A mixture of Name characters
   (i.e., no whitespace) of security metadata.</xhtml:p>
            </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleContent>
            <xsd:extension base="xsd:NMTOKEN">
                <xsd:attributeGroup ref="ism:SecurityAttributesOptionGroup"/>
                <xsd:attributeGroup ref="ntk:CommonAttributesGroup"/>
            </xsd:extension>
        </xsd:simpleContent>
    </xsd:complexType>


    <xsd:element name="VocabularyType" type="ntk:VocabularyTypeType">
        <xsd:annotation>
            <xsd:documentation>
                <xhtml:p ism:ownerProducer="USA" ism:classification="U">identifying string for
   the vocabulary type being defined.</xhtml:p>
            </xsd:documentation>
        </xsd:annotation>
    </xsd:element>


    <xsd:complexType name="VocabularyTypeType">
        <xsd:attribute name="name" type="xsd:anyURI" use="required">
            <xsd:annotation>
                <xsd:documentation>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">Used to give the
       identifying string for the vocabulary type being defined.</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
        </xsd:attribute>
        <xsd:attribute name="source" type="xsd:anyURI" use="optional">
            <xsd:annotation>
                <xsd:documentation>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">Used to identify the
       source to be used by the vocabulary type as the system or list that holds
       the collection/pool of values.</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
        </xsd:attribute>
        <xsd:attribute name="sourceVersion" use="optional">
```

```
            <xsd:annotation>
                <xsd:documentation>
                    <xhtml:p ism:ownerProducer="USA" ism:classification="U">Used to identify the
        version of the source for this vocabulary type being defined.</xhtml:p>
                </xsd:documentation>
            </xsd:annotation>
            <xsd:simpleType>
                <xsd:restriction base="xsd:string">
                    <xsd:maxLength value="30"/>
                </xsd:restriction>
            </xsd:simpleType>
        </xsd:attribute>
    </xsd:complexType>

    <!--******************************************************-->

<!--End All case-insensitive alphabetically-->

<!--******************************************************-->

<xsd:annotation>
            <xsd:documentation>
                <xhtml:h2 ism:ownerProducer="USA" ism:classification="U">Formal Change List</xhtml:h2>
                <xhtml:table ism:ownerProducer="USA" ism:classification="U" id="ChangeHistory">
                    <xhtml:caption>Change History</xhtml:caption>
                    <xhtml:thead>
                        <xhtml:tr>
                            <xhtml:th>Version</xhtml:th>
                            <xhtml:th>Date</xhtml:th>
                            <xhtml:th>By</xhtml:th>
                            <xhtml:th>Description</xhtml:th>
                        </xhtml:tr>
                    </xhtml:thead>
                    <xhtml:tbody>
                        <xhtml:tr>
                            <xhtml:td>2018-APR</xhtml:td>
                            <xhtml:td>2017-02-01</xhtml:td>
                            <xhtml:td>ODNI/IC CIO/IAD</xhtml:td>
                            <xhtml:td>
                                <xhtml:ul>
                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U"> The schema
                            change logs will no longer be maintained as of the 2018-APR
                            release. The existing change logs will only serve as legacy
                            information. For changes to schema as of and after 2018-APR,
                            reference the change history in the DES.</xhtml:li>
                                </xhtml:ul>
                            </xhtml:td>
                        </xhtml:tr>
                        <xhtml:tr>
                            <xhtml:td>2015-AUG</xhtml:td>
                            <xhtml:td>2015-06-05</xhtml:td>
                            <xhtml:td>ODNI/IC CIO/IAD</xhtml:td>
                            <xhtml:td>
                                <xhtml:ul>
```

```
                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Removed
                                ntk:isAbstract attribute.</xhtml:li>
                                </xhtml:ul>
                            </xhtml:td>
                        </xhtml:tr>
                        <xhtml:tr>
                            <xhtml:td>2015-AUG</xhtml:td>
                            <xhtml:td>2015-05-29</xhtml:td>
                            <xhtml:td>ODNI/IC CIO/IAD</xhtml:td>
                            <xhtml:td>
                                <xhtml:ul>
                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">DESVersion
                                restriction regex updated.</xhtml:li>
                                </xhtml:ul>
                            </xhtml:td>
                        </xhtml:tr>
                        <xhtml:tr>
                            <xhtml:td>2015-AUG</xhtml:td>
                            <xhtml:td>2015-3-9</xhtml:td>
                            <xhtml:td>ODNI/IC CIO/IAD</xhtml:td>
                            <xhtml:td>
                                <xhtml:ul>
                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Reduced
                                elements with ISM to only the root and AccessProfile
                                elements.</xhtml:li>
                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Removed
                                Group and Individual constructs from NTK so that only
                                AccessProfile is available.</xhtml:li>
                                </xhtml:ul>
                            </xhtml:td>
                        </xhtml:tr>
                        <xhtml:tr>
                            <xhtml:td>10</xhtml:td>
                            <xhtml:td>2013-7-25</xhtml:td>
                            <xhtml:td>ODNI/OCIO/ME/D&amp;I</xhtml:td>
                            <xhtml:td>
                                <xhtml:ul>
                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added a
                                Profile element.</xhtml:li>
                                </xhtml:ul>
                            </xhtml:td>
                        </xhtml:tr>
                        <xhtml:tr>
                            <xhtml:td>9</xhtml:td>
                            <xhtml:td>2012-2-4</xhtml:td>
                            <xhtml:td>ODNI/OCIO/ME/D&amp;I</xhtml:td>
                            <xhtml:td>
                                <xhtml:ul>
                                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added "AND"
                                logic to NTK Access element and access attribute.</xhtml:li>
                                </xhtml:ul>
                            </xhtml:td>
                        </xhtml:tr>
                        <xhtml:tr>
```

```
            <xhtml:td>7</xhtml:td>
            <xhtml:td>2012-5-28</xhtml:td>
            <xhtml:td>ODNI/OCIO/ME/D&amp;I</xhtml:td>
            <xhtml:td>
                <xhtml:ul>
                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Updated NTK
                    attribute to use a schema restriction regex instead of
                    schematron rule NTK-ID-00005 [artf12287].</xhtml:li>
                </xhtml:ul>
            </xhtml:td>
        </xhtml:tr>
        <xhtml:tr>
            <xhtml:td>7</xhtml:td>
            <xhtml:td>2012-4-06</xhtml:td>
            <xhtml:td>ODNI/OCIO/ME/D&amp;I</xhtml:td>
            <xhtml:td>
                <xhtml:ul>
                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Add NTK
                    attribute for use on portions [artf12287].</xhtml:li>
                </xhtml:ul>
            </xhtml:td>
        </xhtml:tr>
        <xhtml:tr>
            <xhtml:td>7</xhtml:td>
            <xhtml:td>2012-3-19</xhtml:td>
            <xhtml:td>ODNI/OCIO/ME/D&amp;I</xhtml:td>
            <xhtml:td>
                <xhtml:ul>
                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Changed
                    DESVersion attribute from xsd:int to ism:ShortStringType. </xhtml:li>
                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Changed
                    declaration of AccessProfileValueType to be simple content.
                    [artf12153].</xhtml:li>
                </xhtml:ul>
            </xhtml:td>
        </xhtml:tr>
        <xhtml:tr>
            <xhtml:td>6</xhtml:td>
            <xhtml:td>2011-12-13</xhtml:td>
            <xhtml:td>Hodges, ODNI/OCIO/ICEA</xhtml:td>
            <xhtml:td>
                <xhtml:ul>
                    <xhtml:li ism:ownerProducer="USA" ism:classification="U">Extracting
                    out attributes and elements to move towards NIEM
                    compliance</xhtml:li>
                </xhtml:ul>
            </xhtml:td>
        </xhtml:tr>
        <xhtml:tr>
            <xhtml:td>5</xhtml:td>
            <xhtml:td>2011-07-07</xhtml:td>
            <xhtml:td>Colbert, ODNI/OCIO/ICEA</xhtml:td>
            <xhtml:td>
                <xhtml:ul>
```

```
                          <xhtml:li ism:ownerProducer="USA" ism:classification="U">Added
                       version information to header</xhtml:li>
                       </xhtml:ul>
                    </xhtml:td>
                 </xhtml:tr>
                 <xhtml:tr>
                    <xhtml:td>4</xhtml:td>
                    <xhtml:td>2011-04-22</xhtml:td>
                    <xhtml:td>Colbert, ODNI/OCIO/ICEA</xhtml:td>
                    <xhtml:td>
                       <xhtml:ul>
                          <xhtml:li ism:ownerProducer="USA" ism:classification="U">Explicitly
                       declared minOccurs and maxOccurs where appropriate.</xhtml:li>
                       </xhtml:ul>
                    </xhtml:td>
                 </xhtml:tr>
                 <xhtml:tr>
                    <xhtml:td>3</xhtml:td>
                    <xhtml:td>2011-01-31</xhtml:td>
                    <xhtml:td>Sun, ODNI/OCIO/ICEA</xhtml:td>
                    <xhtml:td>
                       <xhtml:ul>
                          <xhtml:li ism:ownerProducer="USA" ism:classification="U">(CR
                       2011-01) Remove unused ddms namespace declaration</xhtml:li>
                       </xhtml:ul>
                    </xhtml:td>
                 </xhtml:tr>
              </xhtml:tbody>
           </xhtml:table>
        </xsd:documentation>
     </xsd:annotation>
  </xsd:schema>
```

2.5 - ISM.rng

```xml
<grammar xmlns="http://relaxng.org/ns/structure/1.0"
                        ns="urn:us:gov:ic:ism"
                        datatypeLibrary="http://www.w3.org/2001/XMLSchema-datatypes"
                        ism:resourceElement="true"
                        ism:compliesWith="USGov"
                        ism:createDate="2011-12-01"
                        ism:DESVersion="202111"
                        ism:classification="U"
                        ism:ownerProducer="USA">


  <!-- ISM CVES -->


  <include href="CVEGenerated/CVEnumISM25X.rng"/>
                <include href="CVEGenerated/CVEnumISMAtomicEnergyMarkings.rng"/>
                <include href="CVEGenerated/CVEnumISMClassificationAll.rng"/>
                <include href="CVEGenerated/CVEnumISMCompliesWith.rng"/>
                <include href="CVEGenerated/CVEnumISMDissem.rng"/>
                <include href="CVEGenerated/CVEnumISMExemptFrom.rng"/>
                <include href="CVEGenerated/CVEnumISMNonIC.rng"/>
                <include href="CVEGenerated/CVEnumISMNonUSControls.rng"/>
                <include href="CVEGenerated/CVEnumISMNotice.rng"/>
                <include href="CVEGenerated/CVEnumISMPocType.rng"/>
                <include href="CVEGenerated/CVEnumISMSAR.rng"/>
                <include href="CVEGenerated/CVEnumISMSCIControls.rng"/>
                <include href="CVEGenerated/CVEnumISMCUIBasic.rng"/>
                <include href="CVEGenerated/CVEnumISMCUISpecified.rng"/>


                <!-- ISMCAT CVES -->


  <include href="../ISMCAT/CVEGenerated/CVEnumISMCATOwnerProducer.rng"/>
                <include href="../ISMCAT/CVEGenerated/CVEnumISMCATRelTo.rng"/>
                <include href="../ISMCAT/CVEGenerated/CVEnumISMCATFGIOpen.rng"/>
                <include href="../ISMCAT/CVEGenerated/CVEnumISMCATFGIProtected.rng"/>


                <define name="atomicEnergyMarkings.att" combine="interleave">
                    <attribute name="atomicEnergyMarkings">
                        <ref name="CVEnumISMatomicEnergyMarkings.cve"/>
                    </attribute>
                </define>


                <define name="cuiControlledBy.att" combine="interleave">
                    <attribute name="ism:cuiControlledBy">
                        <data type="string">
                            <param name="maxLength">1024</param>
                        </data>
                    </attribute>
                </define>

                <define name="cuiControlledByOffice.att" combine="interleave">
                    <attribute name="ism:cuiControlledByOffice">
                        <data type="string">
```

```
                <param name="maxLength">1024</param>
            </data>
        </attribute>
    </define>

    <define name="cuiBasic.att" combine="interleave">
        <attribute name="ism:cuiBasic">
            <ref name="CVEnumISMCUIBasic.cve"/>
        </attribute>
    </define>

    <define name="cuiSpecified.att" combine="interleave">
        <attribute name="ism:cuiSpecified">
            <ref name="CVEnumISMCUISpecified.cve"/>
        </attribute>
    </define>

    <define name="cuiDecontrolDate.att" combine="interleave">
        <attribute name="ism:cuiDecontrolDate">
            <data type="date"/>
        </attribute>
    </define>

    <define name="cuiDecontrolEvent.att" combine="interleave">
        <attribute name="ism:cuiDecontrolEvent">
            <data type="string">
                <param name="maxLength">1024</param>
            </data>
        </attribute>
    </define>

    <define name="cuiPOC.att" combine="interleave">
        <attribute name="ism:cuiPOC">
            <data type="string">
                <param name="maxLength">1024</param>
            </data>
        </attribute>
    </define>

    <define name="secondBannerLine.att" combine="interleave">
        <attribute name="ism:secondBannerLine">
            <data type="string">
                <param name="maxLength">1024</param>
            </data>
        </attribute>
    </define>

    <define name="handleViaChannels.att" combine="interleave">
        <attribute name="ism:handleViaChannels">
            <data type="string">
                <param name="maxLength">1024</param>
            </data>
        </attribute>
    </define>
```

```xml
<define name="classification.att" combine="interleave">
   <attribute name="ism:classification">
      <ref name="CVEnumISMClassificationAll.cve"/>
   </attribute>
</define>

<define name="classificationReason.att" combine="interleave">
   <attribute name="ism:classificationReason">
      <data type="string">
         <param name="maxLength">1024</param>
      </data>
   </attribute>
</define>

<define name="classifiedBy.att" combine="interleave">
   <attribute name="ism:classifiedBy">
      <data type="string">
         <param name="maxLength">1024</param>
      </data>
   </attribute>
</define>

<define name="compilationReason.att" combine="interleave">
   <attribute name="ism:compilationReason">
      <data type="string">
         <param name="maxLength">1024</param>
      </data>
   </attribute>
</define>

<define name="compliesWith.att" combine="interleave">
   <attribute name="ism:compliesWith">
      <ref name="CVEnumISMCompliesWith.cve"/>
   </attribute>
</define>

<define name="createDate.att" combine="interleave">
   <attribute name="ism:createDate">
      <data type="date"/>
   </attribute>
</define>

<define name="declassDate.att" combine="interleave">
   <attribute name="ism:declassDate">
      <data type="date"/>
   </attribute>
</define>

<define name="declassEvent.att" combine="interleave">
   <attribute name="ism:declassEvent">
      <data type="string">
         <param name="maxLength">1024</param>
      </data>
```

```
      </attribute>
   </define>

   <define name="declassException.att" combine="interleave">
      <attribute name="ism:declassException">
         <ref name="CVEnumISM25X.cve"/>
      </attribute>
   </define>

   <define name="derivativelyClassifiedBy.att" combine="interleave">
      <attribute name="ism:derivativelyClassifiedBy">
         <data type="string">
            <param name="maxLength">1024</param>
         </data>
      </attribute>
   </define>

   <define name="derivedFrom.att" combine="interleave">
      <attribute name="ism:derivedFrom">
         <data type="string">
            <param name="maxLength">1024</param>
         </data>
      </attribute>
   </define>

   <define name="DESVersion.att" combine="interleave">
      <attribute name="ism:DESVersion">
         <data type="string">
            <param name="pattern">[0-9]{6}(\.[0-9]{6})?(\-.{1,23})?</param>
         </data>
      </attribute>
   </define>

   <define name="displayOnlyTo.att" combine="interleave">
      <attribute name="ism:displayOnlyTo">
         <ref name="CVEnumISMCATRelTo.cve"/>
      </attribute>
   </define>

   <define name="disseminationControls.att" combine="interleave">
      <attribute name="ism:disseminationControls">
         <ref name="CVEnumISMDissem.cve"/>
      </attribute>
   </define>

   <define name="excludeFromRollup.att" combine="interleave">
      <attribute name="ism:excludeFromRollup">
         <data type="boolean"/>
      </attribute>
   </define>

   <define name="exemptFrom.att" combine="interleave">
      <attribute name="ism:exemptFrom">
         <ref name="CVEnumISMExemptFrom.cve"/>
```

```
        </attribute>
    </define>

    <define name="FGIsourceOpen.att" combine="interleave">
        <attribute name="ism:FGIsourceOpen">
            <ref name="CVEnumISMCATFGIOpen.cve"/>
        </attribute>
    </define>

    <define name="FGIsourceProtected.att" combine="interleave">
        <attribute name="ism:FGIsourceProtected">
            <ref name="CVEnumISMCATFGIProtected.cve"/>
        </attribute>
    </define>

    <define name="hasApproximateMarkings.att" combine="interleave">
        <attribute name="ism:hasApproximateMarkings">
            <data type="boolean"/>
        </attribute>
    </define>

    <define name="ISMCATCESVersion.att" combine="interleave">
        <attribute name="ism:ISMCATCESVersion">
            <data type="string">
                <param name="maxLength">100</param>
            </data>
        </attribute>
    </define>

    <define name="ISMNoticeBaseAttributeGroup.att" combine="interleave">
        <optional>
            <ref name="noticeType.att"/>
        </optional>
        <optional>
            <ref name="noticeReason.att"/>
        </optional>
        <optional>
            <ref name="noticeDate.att"/>
        </optional>
        <optional>
            <ref name="unregisteredNoticeType.att"/>
        </optional>
    </define>

    <define name="ISMNoticeAttributeGroup.att" combine="interleave">
        <ref name="ISMNoticeBaseAttributeGroup.att"/>
        <optional>
            <ref name="externalNotice.att"/>
        </optional>
    </define>

    <define name="ISMNoticeExternalAttributeGroup.att" combine="interleave">
        <ref name="ISMNoticeBaseAttributeGroup.att"/>
        <ref name="externalNotice.att"/>
```

```
    </define>

    <define name="ISMResourceAttributeGroup.att" combine="interleave">
        <ref name="resourceElement.att"/>
        <ref name="compliesWith.att"/>
        <ref name="createDate.att"/>
        <optional>
            <ref name="exemptFrom.att"/>
        </optional>
        <optional>
            <ref name="noAggregation.att"/>
        </optional>
    </define>

    <define name="ISMResourceAttributeOptionGroup.att" combine="interleave">
        <optional>
            <ref name="resourceElement.att"/>
        </optional>
        <optional>
            <ref name="compliesWith.att"/>
        </optional>
        <optional>
            <ref name="createDate.att"/>
        </optional>
        <optional>
            <ref name="exemptFrom.att"/>
        </optional>
        <optional>
            <ref name="noAggregation.att"/>
        </optional>
    </define>

    <define name="ISMRootNodeAttributeGroup.att" combine="interleave">
        <ref name="DESVersion.att"/>
        <ref name="ISMCATCESVersion.att"/>
    </define>

    <define name="ISMRootNodeAttributeOptionGroup.att" combine="interleave">
        <optional>
            <ref name="DESVersion.att"/>
        </optional>
        <optional>
            <ref name="ISMCATCESVersion.att"/>
        </optional>
    </define>

    <define name="LongStringType.class" combine="interleave">
        <data type="string">
            <param name="maxLength">32000</param>
        </data>
    </define>

    <define name="LongStringWithSecurityType.class" combine="interleave">
        <ref name="SecurityAttributesGroup.att"/>
```

```
            <ref name="LongStringType.class"/>
        </define>

        <define name="noAggregation.att" combine="interleave">
            <attribute name="ism:noAggregation">
                <data type="boolean"/>
            </attribute>
        </define>

        <define name="nonICmarkings.att" combine="interleave">
            <attribute name="ism:nonICmarkings">
                <ref name="CVEnumISMNonIC.cve"/>
            </attribute>
        </define>

        <define name="nonUSControls.att" combine="interleave">
            <attribute name="ism:nonUSControls">
                <ref name="CVEnumISMNonUSControls.cve"/>
            </attribute>
        </define>

        <define name="NoticeBaseType.class" combine="interleave">
            <oneOrMore>
                <ref name="NoticeText.ele"/>
            </oneOrMore>
        </define>

        <define name="NoticeType.class" combine="interleave">
            <ref name="NoticeAttributesOptionGroup.att"/>
            <ref name="NoticeBaseType.class"/>
        </define>

        <define name="Notice.ele" combine="interleave">
            <element name="Notice">
                <ref name="NoticeType.class"/>
            </element>
        </define>

        <define name="NoticeExternalType.class" combine="interleave">
            <ref name="NoticeExternalAttributesGroup.att"/>
            <oneOrMore>
                <ref name="NoticeText.ele"/>
            </oneOrMore>
        </define>

        <define name="NoticeExternal.ele" combine="interleave">
            <element name="NoticeExternal">
                <ref name="NoticeExternalType.class"/>
            </element>
        </define>

        <define name="NoticeAttributesGroup.att" combine="interleave">
            <ref name="ISMNoticeAttributeGroup.att"/>
            <ref name="SecurityAttributesGroup.att"/>
```

```xml
            </define>

            <define name="NoticeAttributesOptionGroup.att" combine="interleave">
                <ref name="ISMNoticeAttributeGroup.att"/>
                <ref name="SecurityAttributesOptionGroup.att"/>
            </define>

            <define name="NoticeExternalAttributesGroup.att" combine="interleave">
                <ref name="ISMNoticeExternalAttributeGroup.att"/>
                <ref name="SecurityAttributesGroup.att"/>
            </define>

            <define name="NoticeExternalAttributesOptionGroup" combine="interleave">
                <ref name="ISMNoticeExternalAttributeGroup.att"/>
                <ref name="SecurityAttributesOptionGroup.att"/>
            </define>

            <define name="noticeDate.att" combine="interleave">
                <attribute name="ism:noticeDate">
                    <data type="date"/>
                </attribute>
            </define>

            <define name="NoticeList.ele" combine="interleave">
                <element name="NoticeList">
                    <ref name="NoticeListType.class"/>
                </element>
            </define>

            <define name="NoticeListType.class" combine="interleave">
                <ref name="SecurityAttributesGroup.att"/>
                <oneOrMore>
                    <ref name="Notice.ele"/>
                </oneOrMore>
            </define>

            <define name="NoticeExternalList.ele" combine="interleave">
                <element name="NoticeExternalList">
                    <ref name="NoticeExternalListType.class"/>
                </element>
            </define>

            <define name="NoticeExternalListType.class" combine="interleave">
                <ref name="SecurityAttributesGroup.att"/>
                <oneOrMore>
                    <ref name="NoticeExternal.ele"/>
                </oneOrMore>
            </define>

            <define name="noticeReason.att" combine="interleave">
                <attribute name="ism.noticeReason">
                    <data type="string">
                        <param name="maxLength">1024</param>
                    </data>
```

```
        </attribute>
    </define>

    <define name="NoticeText.ele" combine="interleave">
        <element name="NoticeText">
            <data type="string">
                <param name="maxLength">1024</param>
            </data>
        </element>
    </define>

    <define name="noticeType.att" combine="interleave">
        <attribute name="ism.noticeType">
            <ref name="CVEnumISMNotice.cve"/>
        </attribute>
    </define>

    <define name="externalNotice.att" combine="interleave">
        <attribute name="ism:externalNotice">
            <data type="boolean"/>
        </attribute>
    </define>

    <define name="ownerProducer.att" combine="interleave">
        <attribute name="ism:ownerProducer">
            <ref name="CVEnumISMCATOwnerProducer.cve"/>
        </attribute>
    </define>

    <define name="joint.att" combine="interleave">
        <attribute name="ism:joint">
            <data type="boolean"/>
        </attribute>
    </define>

    <define name="POCAttributeGroup.att" combine="interleave">
        <optional>
            <ref name="pocType.att"/>
        </optional>
    </define>

    <define name="pocType.att" combine="interleave">
        <attribute name="ism:pocType">
            <ref name="CVEnumISMPocType.cve"/>
        </attribute>
    </define>

    <define name="releasableTo.att" combine="interleave">
        <attribute name="ism:releasableTo">
            <ref name="CVEnumISMCATRelTo.cve"/>
        </attribute>
    </define>

    <define name="resourceElement.att" combine="interleave">
```

```
                    <attribute name="ism:resourceElement">
                        <data type="boolean"/>
                    </attribute>
                </define>

                <!-- TEM: duplicate ResourceNodeAttributeGroup.att has another definition in ARH-ISM-NTK.rng which gives
        the duplicate attribute error when validating ARH-ISM-NTK.rng -->

<!--define name="ResourceNodeAttributeGroup.att" combine="interleave">
    <ref name="ISMResourceAttributeGroup.att"/>
    <ref name="SecurityAttributesGroup.att"/>
    <ref name="ISMNoticeAttributeGroup.att"/>
</define-->


<define name="ResourceNodeAttributeOptionGroup.att" combine="interleave">
                    <ref name="ISMResourceAttributeOptionGroup.att"/>
                    <ref name="SecurityAttributesOptionGroup.att"/>
                    <ref name="ISMNoticeAttributeGroup.att"/>
                </define>

                <define name="SARIdentifier.att" combine="interleave">
                    <attribute name="ism:SARIdentifier">
                        <ref name="CVEnumISMSAR.cve"/>
                    </attribute>
                </define>

                <define name="SCIcontrols.att" combine="interleave">
                    <attribute name="ism:SCIcontrols">
                        <ref name="CVEnumISMSCIControls.cve"/>
                    </attribute>
                </define>

                <define name="SecurityAttributesGroup.att" combine="interleave">
                    <ref name="classification.att"/>
                    <ref name="ownerProducer.att"/>
                    <optional>
                        <ref name="cuiBasic.att"/>
                    </optional>
                    <optional>
                        <ref name="cuiSpecified.att"/>
                    </optional>
                    <optional>
                        <ref name="cuiDecontrolDate.att"/>
                    </optional>
                    <optional>
                        <ref name="cuiDecontrolEvent.att"/>
                    </optional>
                    <optional>
                        <ref name="cuiControlledBy.att"/>
                    </optional>
                    <optional>
                        <ref name="cuiControlledByOffice.att"/>
                    </optional>
```

```xml
<optional>
    <ref name="cuiPOC.att"/>
</optional>
<optional>
    <ref name="joint.att"/>
</optional>
<optional>
    <ref name="SCIcontrols.att"/>
</optional>
<optional>
    <ref name="SARIdentifier.att"/>
</optional>
<optional>
    <ref name="atomicEnergyMarkings.att"/>
</optional>
<optional>
    <ref name="disseminationControls.att"/>
</optional>
<optional>
    <ref name="displayOnlyTo.att"/>
</optional>
<optional>
    <ref name="FGIsourceOpen.att"/>
</optional>
<optional>
    <ref name="FGIsourceProtected.att"/>
</optional>
<optional>
    <ref name="releasableTo.att"/>
</optional>
<optional>
    <ref name="nonICmarkings.att"/>
</optional>
<optional>
    <ref name="classifiedBy.att"/>
</optional>
<optional>
    <ref name="compilationReason.att"/>
</optional>
<optional>
    <ref name="derivativelyClassifiedBy.att"/>
</optional>
<optional>
    <ref name="classificationReason.att"/>
</optional>
<optional>
    <ref name="nonUSControls.att"/>
</optional>
<optional>
    <ref name="derivedFrom.att"/>
</optional>
<optional>
    <ref name="declassDate.att"/>
</optional>
```

```
            <optional>
                <ref name="declassEvent.att"/>
            </optional>
            <optional>
                <ref name="declassException.att"/>
            </optional>
            <optional>
                <ref name="hasApproximateMarkings.att"/>
            </optional>
            <optional>
                <ref name="secondBannerLine.att"/>
            </optional>
            <optional>
                <ref name="handleViaChannels.att"/>
            </optional>
        </define>

        <define name="SecurityAttributesOptionGroup.att" combine="interleave">
            <optional>
                <ref name="cuiBasic.att"/>
            </optional>
            <optional>
                <ref name="cuiSpecified.att"/>
            </optional>
            <optional>
                <ref name="cuiDecontrolDate.att"/>
            </optional>
            <optional>
                <ref name="cuiDecontrolEvent.att"/>
            </optional>
            <optional>
                <ref name="cuiControlledBy.att"/>
            </optional>
            <optional>
                <ref name="cuiControlledByOffice.att"/>
            </optional>
            <optional>
                <ref name="cuiPOC.att"/>
            </optional>
            <optional>
                <ref name="classification.att"/>
            </optional>
            <optional>
                <ref name="ownerProducer.att"/>
            </optional>
            <optional>
                <ref name="joint.att"/>
            </optional>
            <optional>
                <ref name="SCIcontrols.att"/>
            </optional>
            <optional>
                <ref name="SARIdentifier.att"/>
            </optional>
```

```
<optional>
    <ref name="atomicEnergyMarkings.att"/>
</optional>
<optional>
    <ref name="disseminationControls.att"/>
</optional>
<optional>
    <ref name="displayOnlyTo.att"/>
</optional>
<optional>
    <ref name="FGIsourceOpen.att"/>
</optional>
<optional>
    <ref name="FGIsourceProtected.att"/>
</optional>
<optional>
    <ref name="releasableTo.att"/>
</optional>
<optional>
    <ref name="nonICmarkings.att"/>
</optional>
<optional>
    <ref name="classifiedBy.att"/>
</optional>
<optional>
    <ref name="compilationReason.att"/>
</optional>
<optional>
    <ref name="derivativelyClassifiedBy.att"/>
</optional>
<optional>
    <ref name="classificationReason.att"/>
</optional>
<optional>
    <ref name="nonUSControls.att"/>
</optional>
<optional>
    <ref name="derivedFrom.att"/>
</optional>
<optional>
    <ref name="declassDate.att"/>
</optional>
<optional>
    <ref name="declassEvent.att"/>
</optional>
<optional>
    <ref name="declassException.att"/>
</optional>
<optional>
    <ref name="hasApproximateMarkings.att"/>
</optional>
<optional>
    <ref name="secondBannerLine.att"/>
</optional>
```

```
        <optional>
            <ref name="handleViaChannels.att"/>
        </optional>
    </define>

    <define name="ShortStringType.class" combine="interleave">
        <data type="string">
            <param name="maxLength">256</param>
        </data>
    </define>

    <define name="ShortStringWithSecurityType.class" combine="interleave">
        <ref name="SecurityAttributesGroup.att"/>
        <ref name="ShortStringType.class"/>
    </define>

    <define name="unregisteredNoticeType.att" combine="interleave">
        <attribute name="ism:unregisteredNoticeType">
            <data type="string">
                <param name="maxLength">2048</param>
            </data>
        </attribute>
    </define>

</grammar>
```

2.6 - NTK.rng

```
<grammar xmlns:ntk="urn:us:gov:ic:ntk"
                        xmlns:ap="urn:us:gov:ic:cvenum:ntk:accesspolicy"
                        xmlns="http://relaxng.org/ns/structure/1.0"
                        ism:resourceElement="true"
                        ism:compliesWith="USGov"
                        ism:createDate="2011-12-01"
                        ism:DESVersion="202111"
                        ism:classification="U"
                        ism:ownerProducer="USA"
                        ns="http://relaxng.org/ns/structure/1.0"
                        datatypeLibrary="http://www.w3.org/2001/XMLSchema-datatypes">
<!-- ************************************************** -->

<!-- Start Import Statements -->

<!-- ************************************************** -->

<include href="./ISM.rng" ns="urn:us:gov:ic:ism"/>
                <!-- ************************************************** -->

<!-- End Import Statements -->

<!-- ************************************************** -->

<!-- ************************************************** -->

<!-- Start All case-insensitive alphabetically -->

<!-- ************************************************** -->

<define name="Access.ele" combine="interleave">
                <element name="ntk:Access">
                    <ref name="RequiresType.class"/>
                </element>
            </define>
            <define name="ExternalAccess.ele">
                <element>
                    <name ns="urn:us:gov:ic:ntk">ExternalAccess</name>
                    <ref name="RequiresType.class"/>
                </element>
            </define>
            <define name="AccessProfile">
                <element name="ntk:AccessProfile">
                    <ref name="AccessProfileType"/>
                </element>
            </define>
            <define name="AccessProfileList">
                <element name="ntk:AccessProfileList">
                    <ref name="AccessProfileListType"/>
                </element>
            </define>
            <define name="AccessProfileListType">
```

```
                    <ref name="AccessProfile"/>
                </define>
                <define name="AccessProfileType">
                    <ref name="AccessPolicy"/>
                    <optional>
                        <ref name="ProfileDes"/>
                    </optional>
                    <zeroOrMore>
                        <ref name="VocabularyType.ele"/>
                    </zeroOrMore>
                    <zeroOrMore>
                        <ref name="AccessProfileValue.ele"/>
                    </zeroOrMore>
                    <!-- ISM's SecurityAttributesGroup -->

<ref name="SecurityAttributesGroup.att"/>
                </define>
                <define name="AccessProfileValue.ele" combine="interleave">
                    <element>
                        <name ns="urn:us:gov:ic:ntk">AccessProfileValue</name>
                        <ref name="AccessProfileValueType.class"/>
                    </element>
                </define>
                <define name="AccessProfileValueType.class" combine="interleave">
                    <attribute name="vocabulary">
                        <data type="anyURI"/>
                    </attribute>
                </define>
                <define name="AccessPolicy" combine="interleave">
                    <element name="ntk:AccessPolicy">
                        <ref name="URICommonType.class"/>
                    </element>
                </define>
                <define name="AccessType.class" combine="interleave">
                    <interleave>
                        <optional>
                            <ref name="AccessProfileList"/>
                        </optional>
                    </interleave>
                </define>
                <define name="CommonAttributesGroup.att" combine="interleave">
                    <ref name="id.att"/>
                    <ref name="IDReference.att"/>
                    <ref name="qualifier.att"/>
                </define>
                <define name="DESVersion.att" combine="interleave">
                    <attribute name="ntk:DESVersion">
                        <data type="string">
                            <param name="pattern">[0-9]{6}(\.[0-9]{6})?(\-.{1,23})?</param>
                        </data>
                    </attribute>
                </define>
                <define name="id.att" combine="interleave">
                    <attribute name="id">
```

```
                    <data type="ID"/>
                </attribute>
            </define>
            <define name="IDReference.att" combine="interleave">
                <attribute name="IDReference.att">
                    <data type="IDREFS"/>
                </attribute>
            </define>
            <define name="ProfileDes" combine="interleave">
                <element>
                    <name ns="urn:us:gov:ic:ntk">ProfileDes</name>
                    <ref name="ProfileDesType.class"/>
                </element>
            </define>
            <define name="ProfileDesType.class" combine="interleave">
                <ref name="URICommonType.class"/>
            </define>
            <define name="qualifier.att" combine="interleave">
                <attribute name="qualifier">
                    <data type="string"/>
                </attribute>
            </define>
            <define name="RequiresAllOf.ele" combine="interleave">
                <element>
                    <name ns="urn:us:gov:ic:ntk">RequiresAllOf</name>
                    <ref name="RequiresAllType.class"/>
                </element>
            </define>
            <define name="RequiresAllType.class" combine="interleave">
                <interleave>
                    <optional>
                        <ref name="AccessProfileList"/>
                    </optional>
                    <optional>
                        <optional>
                            <ref name="RequiresAnyOf.ele"/>
                        </optional>
                    </optional>
                </interleave>
            </define>
            <define name="RequiresAnyOf.ele" combine="interleave">
                <element>
                    <name ns="urn:us:gov:ic:ntk">RequiresAnyOf</name>
                    <ref name="AccessType.class"/>
                </element>
            </define>
            <define name="RequiresType.class" combine="interleave">
                <choice>
                    <ref name="RequiresAllOf.ele"/>
                    <ref name="RequiresAnyOf.ele"/>
                </choice>
                <ref name="SecurityAttributesGroup.att"/>
                <optional>
                    <attribute name="externalReference">
```

```
                                        <data type="boolean"/>
                                    </attribute>
                                </optional>
                            </define>
                            <define name="StringWithSecurityType.class" combine="interleave">
                                <ref name="CommonAttributesGroup.att"/>
                            </define>
                            <define name="URICommonType.class" combine="interleave">
                                <ref name="CommonAttributesGroup.att"/>
                            </define>
                            <define name="TokenWithSecurityType.class" combine="interleave">
                                <ref name="SecurityAttributesGroup.att"/>
                                <ref name="CommonAttributesGroup.att"/>
                            </define>
                            <define name="VocabularyType.ele" combine="interleave">
                                <element>
                                    <name ns="urn:us:gov:ic:ntk">VocabularyType</name>
                                    <ref name="VocabularyTypeType.class"/>
                                </element>
                            </define>
                            <define name="VocabularyTypeType.class" combine="interleave">
                                <attribute name="name">
                                    <data type="anyURI"/>
                                </attribute>
                                <optional>
                                    <attribute name="source">
                                        <data type="anyURI"/>
                                    </attribute>
                                </optional>
                                <optional>
                                    <attribute name="sourceVersion">
                                        <data type="string">
                                            <param name="maxLength">30</param>
                                        </data>
                                    </attribute>
                                </optional>
                            </define>
                            <!-- ************************************************** -->

    <!-- End All case-insensitive alphabetically -->

    <!-- ************************************************** -->

</grammar>
```