



# **XSPECs for ISM-Rollup**

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## **ISM-Rollup-XSPECs**

### **Version 2021-NOV**

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## **Chapter 1 - Introduction**

### **1.1 - Purpose**

This is an informative supplement for ISM-Rollup. This document provides XSPEC files developed for ISM-Rollup.

Chapter 2 - XSPEC Files

2.1 - AEARollup.xspec

```
<!-- Notices - Distribution Notice:
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      --><!-- All classification marks in this example are      --><!-- for illustrative purposes only, there are no      --><!-- actual classified data contained in this example --><x:description
xmlns:x="http://www.jenitennison.com/xslt/xspec"
      xmlns:util="urn:us:gov:ic:ism-rollup:xsl:util"
      xmlns:ism-func="urn:us:gov:ic:ism:functions"
      stylesheet="../../../XSL/ISM-Rollup/ISM-Rollup-forXSpec.xsl"
      version="2">

  <x:scenario label="AEARollup testMultipleSigma+RDPass">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMATCESVersion="202211"
          ism:declassException="AEA"
          ism:ownerProducer="USA"
          ism:classification="TS"
          ism:derivativelyClassifiedBy="Bob"
          ism:derivedFrom="Some guide"
          ism:atomicEnergyMarkings="bad wrong"/>
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
          ism:atomicEnergyMarkings="RD RD-SG-14 RD-SG-15 RD-SG-20">
          <sampleAttributes ism:classification="TS"
            ism:ownerProducer="USA"
            ism:atomicEnergyMarkings="RD"/>
          <sampleAttributes ism:classification="S"
            ism:ownerProducer="USA"
            ism:atomicEnergyMarkings="RD RD-SG-18"/>
        </sampleAttributes>
        <sampleAttributes ism:classification="U" ism:ownerProducer="USA" ism:noticeType="RD"/>
        <sampleAttributes ism:classification="C" ism:ownerProducer="USA"/>
      </wrapper>
    </x:context>

    <x:expect label="resourceElement" test="../../../resourceElement">
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMATCESVersion="202211"
        ism:declassException="AEA"
```

```

        ism:ownerProducer="USA"
        ism:classification="TS"
        ism:derivativelyClassifiedBy="Human who accredited use of rollup tool in production"
        ism:derivedFrom="Portion markings of document sent to rollup Tool"
        ism:atomicEnergyMarkings="RD RD-SG-14 RD-SG-15 RD-SG-18 RD-SG-20">...</resourceElement>
    </x:expect>
    <x:expect label="ism:classification is TS"
        test="count(../resourceElement[@ism:classification='TS'])=1"/>
    <x:expect label="ism:atomicEnergyMarkings is RD RD-SG-14 RD-SG-15 RD-SG-18 RD-SG-20"
        test="count(../resourceElement[@ism:atomicEnergyMarkings='RD RD-SG-14 RD-SG-15 RD-SG-18 RD-SG-20'])=1"/>
    <x:expect label="ism:declassException contains AEA"
        test="count(../resourceElement[@ism:declassException and xs:NMTOKENS(@ism:declassException) = xs:NMTOKENS('AEA')])=1"/>
</x:scenario>

<x:scenario label="AEARollup Ensure AEA U marks drop in classified doc.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMCAICESVersion="202211"
                ism:ownerProducer="USA"
                ism:classification="U"
                ism:atomicEnergyMarkings="RD-BOBOB"/>
            <sampleAttributes ism:classification="U" ism:ownerProducer="USA">
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:atomicEnergyMarkings="DCNI"/>
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:atomicEnergyMarkings="UCNI"/>
            </sampleAttributes>
            <sampleAttributes ism:classification="S" ism:ownerProducer="USA"/>
        </wrapper>
    </x:context>
    <x:expect label="ism:classification is S"
        test="count(../resourceElement[@ism:classification='S'])=1"/>
    <x:expect label="ism:atomicEnergyMarkings is not present"
        test="count(../resourceElement[@ism:atomicEnergyMarkings])=0"/>
    <x:expect label="ism:declassException does not contains AEA"
        test="count(../resourceElement[@ism:declassException and xs:NMTOKENS(@ism:declassException) = xs:NMTOKENS('AEA') ])=0"/>
</x:scenario>

<x:scenario label="AEARollup ensure we don't get multiple AEA Declass exemptions, when source had multiple AEA in a classified doc.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"

```

```

        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMCATCESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:atomicEnergyMarkings="RD-BOBOB"/>
    <sampleAttributes ism:classification="TS"
        ism:ownerProducer="USA"
        ism:atomicEnergyMarkings="RD"
        ism:declassException="AEA"/>
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:atomicEnergyMarkings="RD RD-SG-18"
        ism:declassException="AEA"/>
    <sampleAttributes ism:classification="S" ism:ownerProducer="USA"/>
</wrapper>
</x:context>
<x:expect label="ism:declassException contains AEA"
    test="count(../resourceElement[@ism:declassException and xs:NMTOKENS(@ism:declassException) = xs:NMTOKENS('AEA') ])=1"/>
<x:expect label="ism:declassException distinct count equals count"
    test="count(tokenize(../resourceElement/@ism:declassException[1],' ') = count(distinct-values(tokenize(../resourceElement/@ism:declassException[1],' ')))"/>
</x:scenario>

<x:scenario label="AEARollup Ensure AEA U marks don't drop in a U doc.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMCATCESVersion="202211"
                ism:ownerProducer="USA"
                ism:classification="U"
                ism:atomicEnergyMarkings="RD-BOBOB"/>
            <sampleAttributes ism:classification="U" ism:ownerProducer="USA">
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:atomicEnergyMarkings="DCNI"/>
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:atomicEnergyMarkings="UCNI"/>
            </sampleAttributes>
        </wrapper>
    </x:context>
    <x:expect label="ism:atomicEnergyMarkings is present"
        test="count(../resourceElement[@ism:atomicEnergyMarkings])=1"/>
</x:scenario>

<x:scenario label="AEARollup-Functions sort Function AEA">
    <x:call function="ism-func:sortAtomicenergymarkings">
        <x:param name="values" select="'RD RD-SG-14 RD-SG-15 RD-SG-20 RD-SG-18'"/>
    </x:call>

```

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    <x:expect label="Ordered RD RD-SG-14 RD-SG-15 RD-SG-18 RD-SG-20">RD RD-SG-14 RD-SG-15 RD-SG-18 RD-SG-20</x:expect>
  </x:scenario>

</x:description>

```



## 2.2 - CountryRollup.xspec

```
<!-- Notices - Distribution Notice:
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xmlns:x="http://www.jenitennison.com/xslt/xspec"
      stylesheet="../../../../XSL/ISM-Rollup/ISM-Rollup-forXSpec.xsl"
      version="2">
  <x:import href="CountryRollup-Functions.xspec"/>

  <x:scenario label="CountryRollup Simple REL intersection with an intersection">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMATCESVersion="202211"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:nonICmarkings="SBU-NF"/>
        <sampleAttributes ism:classification="U"
          ism:ownerProducer="USA"
          ism:disseminationControls="REL"
          ism:releasableTo="USA AUS CAN">
          <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"
            ism:releasableTo="USA AUS CAN"/>
        </sampleAttributes>
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
          ism:disseminationControls="REL"
          ism:releasableTo="USA AUS"/>
      </wrapper>
    </x:context>

    <x:expect label="ism:classification is S"
      test="count(../resourceElement[@ism:classification='S']) = 1"/>
    <x:expect label="@ism:disseminationControls REL is present"
      test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 1"/>
    <x:expect label="@ism:releasableTo is USA AUS"
      test="count(../resourceElement[normalize-space(@ism:releasableTo)='USA AUS']) = 1"/>
  </x:scenario>

  <x:scenario label="CountryRollup Simple REL intersection resulting in NF">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
```

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        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMCAICESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICmarkings="SBU-NF" />
    <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS CAN">
        <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"
            ism:releasableTo="USA AUS CAN" />
        </sampleAttributes>
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA GBR" />
</wrapper>
</x:context>

<x:expect label="ism:classification is S"
    test="count(../resourceElement[@ism:classification='S']) = 1"/>
<x:expect label="@ism:disseminationControls REL is NOT present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 0"/>
<x:expect label="@ism:disseminationControls NF is present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 1"/>
</x:scenario>

<x:scenario label="CountryRollup invalid REL missing USA intersection resulting in NF">
<!-- Not a "valid" test since all ism:releasableTo should have USA but easy to account for and plausible mistake that we should not overlook. -->
<x:context>
    <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xsi:schemaLocation="../../../Schema/unitTest.xsd"
            ism:DESVersion="202111.202211"
            ism:compliesWith="USGov"
            ism:resourceElement="true"
            ism:createDate="2018-08-10"
            ism:ISMCAICESVersion="202211"
            ism:ownerProducer="USA"
            ism:classification="U"
            ism:nonICmarkings="SBU-NF" />
        <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"
            ism:releasableTo="USA AUS CAN">
            <sampleAttributes ism:classification="U"
                ism:ownerProducer="USA"
                ism:disseminationControls="REL"
                ism:releasableTo="USA AUS CAN" />
            </sampleAttributes>
        <sampleAttributes ism:classification="S"

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                ism:ownerProducer="USA"
                ism:disseminationControls="REL"
                ism:releasableTo="GBR"/>
        </wrapper>
</x:context>

<x:expect label="ism:classification is S"
        test="count(../resourceElement[@ism:classification='S']) = 1"/>
<x:expect label="@ism:disseminationControls REL is NOT present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 0"/>
<x:expect label="@ism:disseminationControls NF is present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 1"/>
</x:scenario>

<x:scenario label="CountryRollup FVEY REL intersection.">
  <x:context select="/">
    <wrapper>
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMCAICESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICmarkings="SBU-NF"/>
      <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS CAN">
        <sampleAttributes ism:classification="U"
          ism:ownerProducer="USA"
          ism:disseminationControls="REL"
          ism:releasableTo="USA AUS CAN"/>
        </sampleAttributes>
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
          ism:disseminationControls="REL"
          ism:releasableTo="USA FVEY"/>
      </sampleAttributes>
    </wrapper>
  </x:context>

  <x:expect label="ism:classification is S"
    test="count(../resourceElement[@ism:classification='S']) = 1"/>
  <x:expect label="@ism:disseminationControls REL is present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 1"/>
  <x:expect label="@ism:releasableTo is USA AUS count"
    test="count(../resourceElement[normalize-space(@ism:releasableTo)='USA AUS CAN']) = 1"/>
  <x:expect label="@ism:releasableTo is USA AUS"
    test="../resourceElement/@ism:releasableTo='USA AUS CAN'"/>
</x:scenario>

```

```

<x:scenario label="CountryRollup Simple EYES intersection.">
  <x:context>
    <wrapper>
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMCAICESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICmarkings="SBU-NF"/>
      <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:disseminationControls="EYES"
        ism:releasableTo="USA AUS CAN">
        <sampleAttributes ism:classification="U"
          ism:ownerProducer="USA"
          ism:disseminationControls="EYES"
          ism:releasableTo="USA AUS CAN"/>
        </sampleAttributes>
      <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="EYES"
        ism:releasableTo="USA AUS"/>
      </wrapper>
    </x:context>

    <x:expect label="ism:classification is S"
      test="count(../resourceElement[@ism:classification='S']) = 1"/>
    <x:expect label="@ism:disseminationControls EYES is present"
      test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('EYES')]) = 1"/>
    <x:expect label="@ism:releasableTo is USA AUS"
      test="count(../resourceElement[normalize-space(@ism:releasableTo)='USA AUS']) = 1"/>
  </x:scenario>

  <x:scenario label="CountryRollup displayOnly breaks REL list.">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMCAICESVersion="202211"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:nonICmarkings="SBU-NF"/>
        <sampleAttributes ism:classification="U"
          ism:ownerProducer="USA"
          ism:disseminationControls="REL"
          ism:releasableTo="USA AUS CAN">

```

```

        <sampleAttributes ism:classification="U"
                        ism:ownerProducer="USA"
                        ism:disseminationControls="REL"
                        ism:releasableTo="USA AUS CAN"/>
    </sampleAttributes>
    <sampleAttributes ism:classification="S"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="DISPLAYONLY"
                    ism:displayOnlyTo="USA AUS"/>

    </wrapper>
</x:context>

<x:expect label="ism:classification is S"
        test="count(../resourceElement[@ism:classification='S']) = 1"/>
<x:expect label="@ism:disseminationControls DISPLAYONLY is present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('DISPLAYONLY')]) = 1"/>
<x:expect label="@ism:disseminationControls REL is not present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 0"/>
</x:scenario>

<x:scenario label="CountryRollup Unclass no REL with Unclass REL.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                            xsi:schemaLocation="../../../Schema/unitTest.xsd"
                            ism:DESVersion="202111.202211"
                            ism:compliesWith="USGov"
                            ism:resourceElement="true"
                            ism:createDate="2018-08-10"
                            ism:ISMCAICESVersion="202211"
                            ism:ownerProducer="USA"
                            ism:classification="U"
                            ism:nonICmarkings="SBU-NF"/>
            <sampleAttributes ism:classification="U"
                            ism:ownerProducer="USA"
                            ism:disseminationControls="REL"
                            ism:releasableTo="USA AUS CAN">
                <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
            </sampleAttributes>
            <sampleAttributes ism:classification="U"
                            ism:ownerProducer="USA"
                            ism:disseminationControls="REL"
                            ism:releasableTo="USA AUS"/>

        </wrapper>
    </x:context>

    <x:expect label="ism:classification is U"
        test="count(../resourceElement[@ism:classification='U']) = 1"/>
    <x:expect label="@ism:disseminationControls REL is present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 1"/>
    <x:expect label="@ism:releasableTo is USA AUS"
        test="count(../resourceElement[normalize-space(@ism:releasableTo)='USA AUS']) = 1"/>
</x:scenario>

```

</x:description>

2.3 - CountryRollup-Functions.xspec

```
<!-- Notices - Distribution Notice:
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      --><!-- All classification marks in this example are      --><!-- for illustrative purposes only, there are no      --><!-- actual classified data contained in this example --><x:description
xmlns:x="http://www.jenitennison.com/xslt/xspec"
      xmlns:util="urn:us:gov:ic:ism-rollup:xsl:util"
      xmlns:ism-func="urn:us:gov:ic:ism:functions"
      stylesheet="../../../XSL/ISM-Rollup/ISM-Rollup-forXSpec.xsl"
      version="2">

  <x:scenario label="CountryRollup-Functions countFdrPortions Function all REL">
    <x:call function="util:countFdrPortions">
      <x:param name="context">
        <wrapper>
          <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xsi:schemaLocation="../../../Schema/unitTest.xsd"
            ism:DESVersion="202111.202211"
            ism:compliesWith="USGov"
            ism:resourceElement="true"
            ism:createDate="2018-08-10"
            ism:ISMCAICESVersion="202211"
            ism:ownerProducer="USA"
            ism:classification="U"
            ism:nonICmarkings="SBU-NF"/>
          <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"
            ism:releasableTo="USA AUS CAN">
            <sampleAttributes ism:classification="U"
              ism:ownerProducer="USA"
              ism:disseminationControls="REL"
              ism:releasableTo="USA AUS CAN"/>
            </sampleAttributes>
          <sampleAttributes ism:classification="S"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"
            ism:releasableTo="USA AUS"
            ism:excludeFromRollup="true"/>
          </sampleAttributes>
        </wrapper>
      </x:param>
    </x:call>
    <x:expect label="count part tag is 2 ">2</x:expect>
  </x:scenario>

  <x:scenario label="CountryRollup-Functions countFdrPortions Function all but 1 REL">
    <x:call function="util:countFdrPortions">
      <x:param name="context">
        <wrapper>
          <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xsi:schemaLocation="../../../Schema/unitTest.xsd"
            ism:DESVersion="202111.202211"
            ism:compliesWith="USGov"
            ism:resourceElement="true"
```

```

        ism:createDate="2018-08-10"
        ism:ISMCATCESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICmarkings="SBU-NF"/>
    <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS CAN">
        <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"
            ism:releasableTo="USA AUS CAN"/>
        </sampleAttributes>
    <sampleAttributes ism:classification="S" ism:ownerProducer="USA"/>
</wrapper>
</x:param>
</x:call>
<x:expect label="count part tag is 2 ">3</x:expect>
</x:scenario>

<x:scenario label="CountryRollup-Functions Expand FVEY to individual countries using ism-func:expandDecomposableTetras">
    <x:call function="ism-func:expandDecomposableTetras">
        <x:param name="portionCountryStrings">USA FVEY</x:param>
    </x:call>
    <x:expect label="Since USA is excluded expecting AUS CAN GBR NZL "
        select="('AUS', 'CAN', 'NZL', 'GBR')"/>
</x:scenario>

<x:scenario label="CountryRollup-Functions Rel Token Hash with duplicates util:createRelTokenHash">
    <x:call function="util:createRelTokenHash">
        <x:param name="relToStrings"
            select="('AUS CAN NZL NZL', 'FVEY', 'AUS CAN GBR NZL')"/>
    </x:call>
    <x:expect label=" expecting AUS 2 CAN 2 FVEY 1 GBR 1 NZL 2 ">
        <token count="2">AUS</token>
        <token count="2">CAN</token>
        <token count="1">FVEY</token>
        <token count="1">GBR</token>
        <token count="2">NZL</token>
    </x:expect>
</x:scenario>

<x:scenario label="CountryRollup-Functions Rel Token Hash util:createRelTokenHash">
    <x:call function="util:createRelTokenHash">
        <x:param name="relToStrings" select="('AUS CAN NZL', 'FVEY', 'AUS CAN GBR NZL')"/>
    </x:call>
    <x:expect label=" expecting AUS 2 CAN 2 FVEY 1 GBR 1 NZL 2 ">
        <token count="2">AUS</token>
        <token count="2">CAN</token>
        <token count="1">FVEY</token>
        <token count="1">GBR</token>
        <token count="2">NZL</token>

```



```

    </x:expect>
  </x:scenario>

  <x:scenario label="CountryRollup-Functions commonToAllTokens drop 1 util:commonToAllTokens">
    <x:call function="util:commonToAllTokens">
      <x:param name="relToStrings" select="('AUS CAN NZL', 'AUS CAN GBR NZL')"/>
      <x:param name="countFdrPortionsLocal" select="2"/>
    </x:call>
    <x:expect label=" expecting AUS 2 CAN 2 NZL 2 ">
      <token count="2">AUS</token>
      <token count="2">CAN</token>
      <token count="2">NZL</token>
    </x:expect>
  </x:scenario>

  <x:scenario label="CountryRollup-Functions commonToAllTokens use Tetra util:commonToAllTokens">
    <x:call function="util:commonToAllTokens">
      <x:param name="relToStrings"
        select="('AUS CAN NZL FVEY', 'AUS CAN GBR NZL FVEY')"/>
      <x:param name="countFdrPortionsLocal" select="2"/>
    </x:call>
    <x:expect label=" expecting AUS 2 CAN 2 FVEY 2 NZL 2 ">
      <token count="2">AUS</token>
      <token count="2">CAN</token>
      <token count="2">FVEY</token>
      <token count="2">NZL</token>
    </x:expect>
  </x:scenario>

  <x:scenario label="CountryRollup-Functions Rel Strings minus the common Tokens util:RelStringsWithoutCommonTokens">
    <x:call function="util:RelStringsWithoutCommonTokens">
      <x:param name="relToStrings" select="('AUS CAN FVEY', 'AUS CAN GBR NZL')"/>
      <x:param name="countFdrPortionsLocal" select="2"/>
    </x:call>
    <!-- Not sure why this test fails -->
    <x:expect label=" expecting FVEY, GBR NZL $x:result" select="('FVEY', 'GBR NZL')"/>
  <!--
-->
  <x:expect label=" expecting First element to be FVEY" test="$x:result[1]='FVEY'"/>
  <x:expect label=" expecting 2nd element to be GBR NZL"
    test="$x:result[2]='GBR NZL'"/>
  <x:expect label=" count of results to be 2" test="count($x:result)=2"/>
</x:scenario>

  <x:scenario label="CountryRollup-Functions Rel Strings minus the common Tokens lose entire portion util:RelStringsWithoutCommonTokens">
    <x:call function="util:RelStringsWithoutCommonTokens">
      <x:param name="relToStrings"
        select="('AUS CAN FVEY', 'AUS CAN GBR NZL', 'AUS CAN')"/>
      <x:param name="countFdrPortionsLocal" select="3"/>
    </x:call>

    <x:expect label=" expecting First element to be FVEY" test="$x:result[1]='FVEY'"/>
    <x:expect label=" expecting 2nd element to be GBR NZL"
      test="$x:result[2]='GBR NZL'"/>
    <x:expect label=" expecting 3rd element to be empty" test="$x:result[3]=''"/>
    <x:expect label=" count of results to be 3" test="count($x:result)=3"/>
  </x:scenario>

```

```

</x:scenario>

<x:scenario label="CountryRollup-Functions Expand all tetras util:expandAllTetras">
  <x:call function="util:expandAllTetras">
    <x:param name="relToStrings"
      select="('AUS CAN FVEY', 'AUS CAN GBR NZL', 'AUS CAN')"/>
  </x:call>

  <x:expect label=" expecting First element to be AUS CAN NZL GBR"
    test="$x:result[1]=' AUS CAN NZL GBR ' "/>
  <x:expect label=" expecting 2nd element to be AUS CAN GBR NZL"
    test="$x:result[2]=' AUS CAN GBR NZL '"/>
  <x:expect label=" expecting 3rd element to be AUS CAN"
    test="$x:result[3]=' AUS CAN '"/>
  <x:expect label=" count of results to be 3" test="count($x:result)=3"/>
</x:scenario>

<x:scenario label="CountryRollup-Functions unsortedCommonRelTokens use Tetra util:unsortedCommonRelTokens">
  <x:call function="util:unsortedCommonRelTokens">
    <x:param name="relToStrings" select="('AUS CAN NZL FVEY', 'AUS CAN GBR NZL')"/>
    <x:param name="countFdrPortionsLocal" select="2"/>
  </x:call>
  <x:expect label=" expecting AUS 2 CAN 2 FVEY 2 NZL 2 ">
    <token count="2">AUS</token>
    <token count="2">CAN</token>
    <token count="2">NZL</token>
    <token count="2">GBR</token>
  </x:expect>
</x:scenario>

<x:scenario label="CountryRollup-Functions unsortedCommonRelTokens use Tetra util:unsortedCommonRelTokens">
  <x:call function="util:unsortedCommonRelTokens">
    <x:param name="relToStrings"
      select="('AUS CAN NZL FVEY', 'AUS CAN GBR NZL', 'AUS CAN')"/>
    <x:param name="countFdrPortionsLocal" select="3"/>
  </x:call>
  <x:expect label=" expecting AUS 2 CAN 2 FVEY 2 NZL 2 ">
    <token count="3">AUS</token>
    <token count="3">CAN</token>
  </x:expect>
</x:scenario>

<x:scenario label="CountryRollup-Functions unsortedCommonRelTokens add APFS as non decomposable use Tetra util:unsortedCommonRelTokens">
  <x:call function="util:unsortedCommonRelTokens">
    <x:param name="relToStrings"
      select="('AUS CAN NZL FVEY', 'AUS CAN GBR NZL APFS')"/>
    <x:param name="countFdrPortionsLocal" select="2"/>
  </x:call>
  <x:expect label=" expecting AUS 2 CAN 2 FVEY 2 NZL 2 ">
    <token count="2">AUS</token>
    <token count="2">CAN</token>
    <token count="2">NZL</token>

```

```

        <token count="2">GBR</token>
    </x:expect>
</x:scenario>

<x:scenario label="CountryRollup-Functions FVEY and other countries use Tetra util:unsortedCommonRelTokens">
    <x:call function="util:unsortedCommonRelTokens">
        <x:param name="relToStrings"
            select="('DEU JPN FVEY', 'DEU FVEY', 'DEU NZL FVEY')"/>
        <x:param name="countFdrPortionsLocal" select="3"/>
    </x:call>
    <x:expect label=" expecting DEU 3 FVEY 3 ">
        <token count="3">DEU</token>
        <token count="3">FVEY</token>
    </x:expect>
</x:scenario>

<x:scenario label="CountryRollup-Functions countFdrPortions Function all unclass one uncaveated.">
    <x:call function="util:countFdrPortions">
        <x:param name="context">
            <wrapper>
                <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                    xsi:schemaLocation="../../../../Schema/unitTest.xsd"
                    ism:DESVersion="202111.202211"
                    ism:compliesWith="USGov"
                    ism:resourceElement="true"
                    ism:createDate="2018-08-10"
                    ism:ISMCAICESVersion="202211"
                    ism:ownerProducer="USA"
                    ism:classification="U"
                    ism:nonICmarkings="SBU-NF"/>
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="REL"
                    ism:releasableTo="USA AUS CAN">
                    <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
                </sampleAttributes>
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="REL"
                    ism:releasableTo="USA AUS"/>
            </wrapper>
        </x:param>
    </x:call>
    <x:expect label="count part tag is 2 ">2</x:expect>
</x:scenario>

<x:scenario label="CountryRollup-Functions util:PartakesInFDR U with REL">
    <x:call function="util:PartakesInFDR">
        <x:param name="elementNode">
            <sampleAttributes ism:classification="U"
                ism:ownerProducer="USA"
                ism:disseminationControls="REL"
                ism:releasableTo="USA AUS CAN"/>
        </x:param>
    </x:call>
    <x:expect label="util:PartakesInFDR U with REL">
        <token count="1">util:PartakesInFDR U with REL</token>
    </x:expect>
</x:scenario>

```

```

        </x:param>
    </x:call>
    <x:expect label="Does participate in FDR true" select="true()"/>
</x:scenario>

<x:scenario label="CountryRollup-Functions util:PartakesInFDR U alone">
    <x:call function="util:PartakesInFDR">
        <x:param name="elementNode">
            <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
        </x:param>
    </x:call>
    <x:expect label="Does participate in FDR false" select="false()"/>
</x:scenario>

<x:scenario label="CountryRollup-Functions util:PartakesInFDR U//FOUO">
    <x:call function="util:PartakesInFDR">
        <x:param name="elementNode">
            <sampleAttributes ism:classification="U"
                               ism:ownerProducer="USA"
                               ism:disseminationControls="FOUO"/>
        </x:param>
    </x:call>
    <x:expect label="Does participate in FDR true" select="true()"/>
</x:scenario>

</x:description>
```

2.4 - DeclassExceptionRollup.xspec

```
<!-- Notices - Distribution Notice:
      This document has been approved for Public Release and is available for use without restriction.
      --><!-- All classification marks in this example are      --><!-- for illustrative purposes only, there are no      --><!-- actual classified data contained in this example --><x:description
xmlns:x="http://www.jenitennison.com/xslt/xspec"
      xmlns:util="urn:us:gov:ic:ism-rollup:xsl:util"
      xmlns:ntk="urn:us:gov:ic:ntk"
      stylesheet="../../../XSL/ISM-Rollup/ISM-Rollup-forXSpec.xsl"
      version="2">

  <x:scenario label="DeclassException simple single value.">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMCATCESVersion="202211"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:nonICmarkings="SBU-NF"/>
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
          ism:declassException="50X1">
          <sampleAttributes ism:classification="S" ism:ownerProducer="USA"/>
        </sampleAttributes>
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
          ism:disseminationControls="DISPLAYONLY"
          ism:displayOnlyTo="CAN"/>
      </wrapper>
    </x:context>

    <x:expect label="ism:classification is S"
      test="count(../resourceElement[@ism:classification='S']) = 1"/>
    <x:expect label="@ism:declassException 50X1 is present"
      test="count(../resourceElement[normalize-space(@ism:declassException)][xs:NMTOKENS(@ism:declassException) = xs:NMTOKENS('50X1')]) = 1"/>
  </x:scenario>

  <x:scenario label="DeclassException simple multi value.">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMCATCESVersion="202211"
          ism:ownerProducer="USA"
```

```

        ism:classification="U"
        ism:nonICmarkings="SBU-NF" />
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:declassException="50X1">
        <sampleAttributes ism:classification="S"
            ism:ownerProducer="USA"
            ism:declassException="50X2" />
        </sampleAttributes>
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="DISPLAYONLY"
        ism:displayOnlyTo="CAN" />
    </wrapper>
</x:context>

<x:expect label="ism:classification is S"
    test="count(../resourceElement[@ism:classification='S']) = 1"/>
<x:expect label="@ism:declassException 50X1 is present"
    test="count(../resourceElement[normalize-space(@ism:declassException)][xs:NMTOKENS(@ism:declassException) = xs:NMTOKENS('50X1')]) = 1"/>
<x:expect label="@ism:declassException 50X2 is present"
    test="count(../resourceElement[normalize-space(@ism:declassException)][xs:NMTOKENS(@ism:declassException) = xs:NMTOKENS('50X2')]) = 1"/>
</x:scenario>

<x:scenario label="DeclassException simple multi value with duplicates.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMCAICESVersion="202211"
                ism:ownerProducer="USA"
                ism:classification="U"
                ism:nonICmarkings="SBU-NF" />
            <sampleAttributes ism:classification="S"
                ism:ownerProducer="USA"
                ism:declassException="50X1">
                <sampleAttributes ism:classification="S"
                    ism:ownerProducer="USA"
                    ism:declassException="50X2" />
                </sampleAttributes>
            <sampleAttributes ism:classification="S"
                ism:ownerProducer="USA"
                ism:disseminationControls="DISPLAYONLY"
                ism:displayOnlyTo="CAN"
                ism:declassException="50X2" />
            </sampleAttributes>
        </wrapper>
    </x:context>

    <x:expect label="ism:classification is S"
        test="count(../resourceElement[@ism:classification='S']) = 1"/>

```

```
<x:expect label="@ism:declassException 50X1 is present"
          test="count(../resourceElement[normalize-space(@ism:declassException)][xs:NMTOKENS(@ism:declassException) = xs:NMTOKENS('50X1')]) = 1"/>
<x:expect label="@ism:declassException 50X2 is present only 1 time"
          test="count(../resourceElement[normalize-space(@ism:declassException)][xs:NMTOKENS(@ism:declassException) = xs:NMTOKENS('50X2')]) = 1"/>
</x:scenario>
</x:description>
```

## 2.5 - DisplayOnlyRollup.xspec

```
<!-- Notices - Distribution Notice:
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      --><!-- All classification marks in this example are      --><!-- for illustrative purposes only, there are no      --><!-- actual classified data contained in this example --><x:description
xmlns:x="http://www.jenitennison.com/xslt/xspec"
      xmlns:util="urn:us:gov:ic:ism-rollup:xsl:util"
      xmlns:ntk="urn:us:gov:ic:ntk"
      stylesheet="../../../XSL/ISM-Rollup/ISM-Rollup-forXSpec.xsl"
      version="2">

  <x:scenario label="DisplayOnlyRollup simple intersection."
    pending="DisplayOnlyNotWorking">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMATCESVersion="202211"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:nonICmarkings="SBU-NF"/>
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
          ism:disseminationControls="DISPLAYONLY"
          ism:displayOnlyTo="AFG CAN">
          <sampleAttributes ism:classification="S"
            ism:ownerProducer="USA"
            ism:disseminationControls="DISPLAYONLY"
            ism:displayOnlyTo="AFG CAN"/>
          </sampleAttributes>
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
          ism:disseminationControls="DISPLAYONLY"
          ism:displayOnlyTo="CAN"/>
        </wrapper>
      </x:context>

      <x:expect label="ism:classification is S"
        test="count(../resourceElement[@ism:classification='S']) = 1"/>
      <x:expect label="@ism:disseminationControls DISPLAYONLY is present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('DISPLAYONLY')]) = 1"/>
      <x:expect label="@ism:disseminationControls REL is not present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 0"/>
      <x:expect label="@ism:disseminationControls NF is not present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 0"/>
      <x:expect label="@ism:displayOnlyTo is CAN"
        test="//resourceElement[normalize-space(displayOnlyTo)='CAN']"/>
    </x:scenario>
```



```

<x:scenario label="DisplayOnlyRollup use REL to add country to banenr intersection."
  pending="DisplayOnlyNotWorking">
  <x:context>
    <wrapper>
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMATCESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICmarkings="SBU-NF"/>
      <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="DISPLAYONLY"
        ism:displayOnlyTo="AFG CAN">
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
          ism:disseminationControls="DISPLAYONLY"
          ism:displayOnlyTo="AFG CAN"/>
        </sampleAttributes>
      <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="DISPLAYONLY"
        ism:displayOnlyTo="CAN"/>
      </wrapper>
    </x:context>

    <x:expect label="ism:classification is S"
      test="count(../resourceElement[@ism:classification='S']) = 1"/>
    <x:expect label="@ism:disseminationControls DISPLAYONLY is present"
      test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('DISPLAYONLY')]) = 1"/>
    <x:expect label="@ism:disseminationControls REL is not present"
      test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 0"/>
    <x:expect label="@ism:disseminationControls NF is not present"
      test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 0"/>
    <x:expect label="@ism:displayOnlyTo is CAN"
      test="//resourceElement[normalize-space(displayOnlyTo)='CAN']"/>
  </x:scenario>

  <x:scenario label="DisplayOnlyRollup displayOnly breaks REL list."
    pending="DisplayOnlyNotWorking">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMATCESVersion="202211"
          ism:ownerProducer="USA"

```

```

        ism:classification="U"
        ism:nonICmarkings="SBU-NF" />
    <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS CAN">
        <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"
            ism:releasableTo="USA AUS CAN" />
        </sampleAttributes>
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="DISPLAYONLY"
        ism:displayOnlyTo="USA AUS" />

</wrapper>
</x:context>

<x:expect label="ism:classification is S"
    test="count(../resourceElement[@ism:classification='S']) = 1"/>
<x:expect label="@ism:disseminationControls DISPLAYONLY is present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('DISPLAYONLY')]) = 1"/>
<x:expect label="@ism:disseminationControls REL is not present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 0"/>
<x:expect label="@ism:displayOnlyTo is CAN"
    test="count(../resourceElement[normalize-space(displayOnlyTo)='USA AUS']) = 0"/>
</x:scenario>
</x:description>
```

2.6 - DissemRollup.xspec

```
<!-- Notices - Distribution Notice:
      This document has been approved for Public Release and is available for use without restriction.
--><!-- All classification marks in this example are --><!-- for illustrative purposes only, there are no --><!-- actual classified data contained in this example --><x:description
xmlns:x="http://www.jenitennison.com/xslt/xspec"
      xmlns:util="urn:us:gov:ic:ism-rollup:xsl:util"
      stylesheet="../../../XSL/ISM-Rollup/ISM-Rollup-forXSpec.xsl"
      version="2">

  <x:scenario label="DisseminationControls: Ensure OC-USGOV drops if not on all OC portions">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMATCESVersion="202211"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:nonICmarkings="SBU-NF"/>
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
          ism:disseminationControls="OC OC-USGOV"/>
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
          ism:disseminationControls="OC OC-USGOV"/>
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
          ism:disseminationControls="OC"/>
      </wrapper>
    </x:context>

    <x:expect label="@ism:disseminationControls is 'OC'"
      test="count(../resourceElement[@ism:disseminationControls='OC']) = 1"/>
  </x:scenario>

  <x:scenario label="DisseminationControls: Ensure OC-USGOV does not drop when missing OC portion has ism:excludeFromRollup='true'">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMATCESVersion="202211"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:nonICmarkings="SBU-NF"/>
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
```

```

        ism:disseminationControls="OC OC-USGOV"/>
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="OC OC-USGOV"/>
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="OC"
        ism:excludeFromRollup="true"/>
    </wrapper>
</x:context>

    <x:expect label="@ism:disseminationControls is 'OC'"
        test="count(../resourceElement[@ism:disseminationControls='OC OC-USGOV']) = 1"/>
</x:scenario>

<x:scenario label="DisseminationControls: Ensure OC-USGOV stays if on all OC portions">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMCAICESVersion="202211"
                ism:ownerProducer="USA"
                ism:classification="U"
                ism:nonICmarkings="SBU-NF"/>
            <sampleAttributes ism:classification="S"
                ism:ownerProducer="USA"
                ism:disseminationControls="OC OC-USGOV"/>
            <sampleAttributes ism:classification="S"
                ism:ownerProducer="USA"
                ism:disseminationControls="OC OC-USGOV"/>
            <sampleAttributes ism:classification="S"
                ism:ownerProducer="USA"
                ism:disseminationControls="OC OC-USGOV"/>
        </wrapper>
    </x:context>

    <x:expect label="@ism:disseminationControls is 'OC OC-USGOV'"
        test="count(../resourceElement[@ism:disseminationControls='OC OC-USGOV']) = 1"/>
</x:scenario>

<x:scenario label="DisseminationControls: Ensure OC-USGOV stays if on all OC portions but not some non OC portions">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMCAICESVersion="202211"

```

```

        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICMarkings="SBU-NF"/>
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="OC OC-USGOV"/>
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="OC OC-USGOV"/>
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="NF"/>
</wrapper>
</x:context>

<x:expect label="@ism:disseminationControls is 'OC OC-USGOV NF'"
    test="count(../resourceElement[@ism:disseminationControls='OC OC-USGOV NF']) = 1"/>
</x:scenario>

<x:scenario label="Multiple disseminationControls fix order RS before IMC">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMCAICESVersion="202211"
                ism:ownerProducer="USA"
                ism:classification="U"
                ism:nonICMarkings="SBU-NF"/>
            <sampleAttributes ism:classification="S"
                ism:ownerProducer="USA"
                ism:disseminationControls="IMC"
                ism:hasApproximateMarkings="false">
                <sampleAttributes ism:classification="S"
                    ism:ownerProducer="USA"
                    ism:FGISourceProtected="FGI"
                    ism:disseminationControls="RS REL"
                    ism:hasApproximateMarkings="true"
                    ism:releasableTo="USA AUS CAN"/>
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:FGISourceProtected="FGI"
                    ism:disseminationControls="REL"
                    ism:hasApproximateMarkings="true"
                    ism:releasableTo="USA AUS CAN"/>
                </sampleAttributes>
            <sampleAttributes ism:noticeType="IMC"
                ism:classification="S"
                ism:ownerProducer="USA"
                ism:disseminationControls="REL"
                ism:releasableTo="USA AUS">IMC Notice</sampleAttributes>

```

```

        <sampleAttributes ism:noticeType="RSEN"
                        ism:classification="S"
                        ism:ownerProducer="USA"
                        ism:disseminationControls="REL"
                        ism:releasableTo="USA AUS">RSEN Notice</sampleAttributes>

    </wrapper>
</x:context>

<x:expect label="@ism:disseminationControls is 'RS IMC NF'"
        test="count(../resourceElement[@ism:disseminationControls='RS IMC NF']) = 1"/>
</x:scenario>

<x:scenario label="Ensure FOUO mark drop in classified doc.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                            xsi:schemaLocation="../../../../Schema/unitTest.xsd"
                            ism:DESVersion="202111.202211"
                            ism:compliesWith="USGov"
                            ism:resourceElement="true"
                            ism:createDate="2018-08-10"
                            ism:ISMCAICESVersion="202211"
                            ism:ownerProducer="USA"
                            ism:classification="U"
                            ism:disseminationControls="FOUO"/>
            <sampleAttributes ism:classification="U" ism:ownerProducer="USA">
                <sampleAttributes ism:classification="U"
                                ism:ownerProducer="USA"
                                ism:disseminationControls="FOUO"/>
            </sampleAttributes>
            <sampleAttributes ism:classification="S" ism:ownerProducer="USA"/>
        </wrapper>
    </x:context>

    <x:expect label="ism:classification is S"
        test="count(../resourceElement[@ism:classification='S']) = 1"/>
    <x:expect label="ism:FOUO is not present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('FOUO')]) = 0"/>
</x:scenario>

<x:scenario label="Ensure DSEN mark stays in classified doc.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                            xsi:schemaLocation="../../../../Schema/unitTest.xsd"
                            ism:DESVersion="202111.202211"
                            ism:compliesWith="USGov"
                            ism:resourceElement="true"
                            ism:createDate="2018-08-10"
                            ism:ISMCAICESVersion="202211"
                            ism:ownerProducer="USA"
                            ism:classification="U"
                            ism:disseminationControls="FOUO"/>
            <sampleAttributes ism:classification="U" ism:ownerProducer="USA">

```

```

        <sampleAttributes ism:classification="U"
                        ism:ownerProducer="USA"
                        ism:disseminationControls="DSEN"/>
    </sampleAttributes>
    <sampleAttributes ism:classification="S" ism:ownerProducer="USA"/>
</wrapper>
</x:context>

<x:expect label="ism:classification is S"
          test="count(../resourceElement[@ism:classification='S']) = 1"/>
<x:expect label="ism:DSEN is present"
          test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('DSEN')]) = 1"/>
</x:scenario>

<x:scenario label="Ensure FOUO mark stay in Unclassified doc.">
  <x:context>
    <wrapper>
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                      xsi:schemaLocation="../../../Schema/unitTest.xsd"
                      ism:DESVersion="202111.202211"
                      ism:compliesWith="USGov"
                      ism:resourceElement="true"
                      ism:createDate="2018-08-10"
                      ism:ISMCAICESVersion="202211"
                      ism:ownerProducer="USA"
                      ism:classification="U"
                      ism:disseminationControls="FOUO"/>
      <sampleAttributes ism:classification="U" ism:ownerProducer="USA">
        <sampleAttributes ism:classification="U"
                          ism:ownerProducer="USA"
                          ism:disseminationControls="FOUO"/>
      </sampleAttributes>
      <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
    </wrapper>
  </x:context>

  <x:expect label="ism:classification is U"
            test="count(../resourceElement[@ism:classification='U']) = 1"/>
  <x:expect label="ism:FOUO is present"
            test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('FOUO')]) = 1"/>
</x:scenario>

<x:scenario label="Ensure DSEN overrides FOUO mark in Unclassified doc.">
  <x:context>
    <wrapper>
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                      xsi:schemaLocation="../../../Schema/unitTest.xsd"
                      ism:DESVersion="202111.202211"
                      ism:compliesWith="USGov"
                      ism:resourceElement="true"
                      ism:createDate="2018-08-10"
                      ism:ISMCAICESVersion="202211"
                      ism:ownerProducer="USA"
                      ism:classification="U"

```



```

        ism:disseminationControls="FOUO"/>
    <sampleAttributes ism:classification="U" ism:ownerProducer="USA">
        <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="FOUO"/>
        <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="DSEN"/>
    </sampleAttributes>
    <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
</wrapper>
</x:context>

<x:expect label="ism:classification is U"
    test="count(../resourceElement[@ism:classification='U']) = 1"/>
<x:expect label="ism:FOUO is not present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('FOUO')]) = 0"/>
<x:expect label="ism:DSEN is present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('DSEN')]) = 1"/>
</x:scenario>

<x:scenario label="Ensure DSEN overrides FOUO mark in Classified doc.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMCAICESVersion="202211"
                ism:ownerProducer="USA"
                ism:classification="U"
                ism:disseminationControls="FOUO"/>
            <sampleAttributes ism:classification="S" ism:ownerProducer="USA">
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="FOUO"/>
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="DSEN"/>
            </sampleAttributes>
            <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
        </wrapper>
    </x:context>

    <x:expect label="ism:classification is S"
        test="count(../resourceElement[@ism:classification='S']) = 1"/>
    <x:expect label="ism:FOUO is not present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('FOUO')]) = 0"/>
    <x:expect label="ism:DSEN is present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('DSEN')]) = 1"/>
</x:scenario>

```



```

<x:scenario label="FISA Rolls up in Classified doc.">
  <x:context>
    <wrapper>
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMCAICESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:disseminationControls="FOUO"/>
      <sampleAttributes ism:classification="S" ism:ownerProducer="USA">
        <sampleAttributes ism:classification="U"
          ism:ownerProducer="USA"
          ism:disseminationControls="FISA FOUO"/>
        <sampleAttributes ism:classification="U"
          ism:ownerProducer="USA"
          ism:disseminationControls="DSEN"/>
      </sampleAttributes>
      <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
    </wrapper>
  </x:context>

  <x:expect label="ism:classification is S"
    test="count(../resourceElement[@ism:classification='S']) = 1"/>
  <x:expect label="FISA is present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('FISA')]) = 1"/>
</x:scenario>

<x:scenario label="Keep Relido uncaveated Unclassified doc.">
  <x:context>
    <wrapper>
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMCAICESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:disseminationControls="FOUO"/>
      <sampleAttributes ism:classification="U" ism:ownerProducer="USA">
        <sampleAttributes ism:classification="U"
          ism:ownerProducer="USA"
          ism:disseminationControls="RELIDO"/>
      </sampleAttributes>
      <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:disseminationControls="RELIDO"/>
    </wrapper>
  </x:context>

```

```

    <x:expect label="ism:classification is U"
      test="count(../resourceElement[@ism:classification='U']) = 1"/>
    <x:expect label="@ism:disseminationControls is present"
      test="count(../resourceElement[@ism:disseminationControls]) = 1"/>
    <x:expect label="@ism:disseminationControls RELIDO is present"
      test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('RELIDO')]) = 1"/>
  </x:scenario>

  <x:scenario label="Keep Relido Unclassified//FOUO/RELIDO doc.">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMCAICESVersion="202211"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:disseminationControls="FOUO"/>
        <sampleAttributes ism:classification="U"
          ism:ownerProducer="USA"
          ism:disseminationControls="FOUO RELIDO">
          <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="RELIDO"/>
          </sampleAttributes>
          <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="RELIDO"/>
        </sampleAttributes>
      </wrapper>
    </x:context>

    <x:expect label="ism:classification is U"
      test="count(../resourceElement[@ism:classification='U']) = 1"/>
    <x:expect label="@ism:disseminationControls RELIDO is present"
      test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('RELIDO')]) = 1"/>
    <x:expect label="@ism:disseminationControls FOUO is present"
      test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('FOUO')]) = 1"/>
  </x:scenario>

  <x:scenario label="Simple add NF portion">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMCAICESVersion="202211"
          ism:ownerProducer="USA"

```

```
        ism:classification="U"
        ism:disseminationControls="FOUO"/>
    <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:disseminationControls="FOUO RELIDO">
        <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="RELIDO"/>
    </sampleAttributes>
    <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:disseminationControls="NF"/>
</wrapper>
</x:context>

<x:expect label="ism:classification is U"
    test="count(../resourceElement[@ism:classification='U']) = 1"/>
<x:expect label="@ism:disseminationControls RELIDO is not present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('RELIDO')]) = 0"/>
<x:expect label="@ism:disseminationControls FOUO is present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('FOUO')]) = 1"/>
<x:expect label="@ism:disseminationControls NF is present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 1"/>
<x:expect label="@ism:disseminationControls distinct count matches count"
    test="count(../resourceElement/xs:NMTOKENS(@ism:disseminationControls)) = count(../resourceElement/distinct-values(xs:NMTOKENS(@ism:disseminationControls)))/>
</x:scenario>

</x:description>
```

2.7 - FGIRollup.xspec

```
<!-- Notices - Distribution Notice:
      This document has been approved for Public Release and is available for use without restriction.
      --><!-- All classification marks in this example are      --><!-- for illustrative purposes only, there are no      --><!-- actual classified data contained in this example --><x:description
xmlns:x="http://www.jenitennison.com/xslt/xspec"
      xmlns:util="urn:us:gov:ic:ism-rollup:xsl:util"
      stylesheet="../../../XSL/ISM-Rollup/ISM-Rollup-forXSpec.xsl"
      version="2">

  <x:scenario label="FGIRollup FGI Open NATO from NATO FGI">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMCATCESVersion="202211"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:nonICmarkings="SBU-NF"/>
        <sampleAttributes ism:classification="U"
          ism:ownerProducer="USA"
          ism:FGISourceOpen="NATO"
          ism:disseminationControls="REL"
          ism:hasApproximateMarkings="false"
          ism:releasableTo="USA AUS CAN">
          <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"
            ism:hasApproximateMarkings="true"
            ism:releasableTo="USA AUS CAN"/>
          </sampleAttributes>
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
          ism:disseminationControls="REL"
          ism:releasableTo="USA AUS"/>
        </wrapper>
      </x:context>

      <x:expect label="@ism:FGISourceOpen is NATO"
        test="count(../resourceElement[@ism:FGISourceOpen='NATO']) = 1"/>
    </x:scenario>

    <x:scenario label="FGIRollup FGI Open NATO from NATO Portion">
      <x:context>
        <wrapper>
          <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xsi:schemaLocation="../../../Schema/unitTest.xsd"
            ism:DESVersion="202111.202211"
            ism:compliesWith="USGov"
            ism:resourceElement="true"
            ism:createDate="2018-08-10"
            ism:ISMCATCESVersion="202211"
            ism:ownerProducer="USA"
            ism:classification="U"
            ism:nonICmarkings="SBU-NF"/>
          <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:FGISourceOpen="NATO"
            ism:disseminationControls="REL"
            ism:hasApproximateMarkings="false"
            ism:releasableTo="USA AUS CAN">
            <sampleAttributes ism:classification="U"
              ism:ownerProducer="USA"
              ism:disseminationControls="REL"
              ism:hasApproximateMarkings="true"
              ism:releasableTo="USA AUS CAN"/>
            </sampleAttributes>
          <sampleAttributes ism:classification="S"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"
            ism:releasableTo="USA AUS"/>
          </wrapper>
        </x:context>

        <x:expect label="@ism:FGISourceOpen is NATO"
          test="count(../resourceElement[@ism:FGISourceOpen='NATO']) = 1"/>
      </x:scenario>
    </x:context>
  </x:scenario>
```

```

        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMATCESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICmarkings="SBU-NF" />
    <sampleAttributes ism:classification="U"
        ism:ownerProducer="NATO"
        ism:disseminationControls="REL"
        ism:hasApproximateMarkings="false"
        ism:releasableTo="USA AUS CAN">
        <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"
            ism:hasApproximateMarkings="true"
            ism:releasableTo="USA AUS CAN" />
        </sampleAttributes>
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS" />
    </wrapper>
</x:context>

<x:expect label="@ism:FGISourceOpen is NATO"
    test="count(../resourceElement[@ism:FGISourceOpen='NATO']) = 1"/>
</x:scenario>

<x:scenario label="FGIRollup FGI Open NATO, AUS from NATO Portion and JOINT Portion">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMATCESVersion="202211"
                ism:ownerProducer="USA"
                ism:classification="U"
                ism:nonICmarkings="SBU-NF" />
            <sampleAttributes ism:classification="U"
                ism:ownerProducer="NATO"
                ism:disseminationControls="REL"
                ism:hasApproximateMarkings="false"
                ism:releasableTo="USA AUS CAN">
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="AUS USA"
                    ism:joint="true"
                    ism:disseminationControls="REL"
                    ism:hasApproximateMarkings="true"
                    ism:releasableTo="USA AUS CAN" />
                </sampleAttributes>
            <sampleAttributes ism:classification="S"

```

```

        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS"/>
    </wrapper>
</x:context>

<x:expect label="@ism:FGISourceOpen is AUS NATO"
    test="count(../resourceElement[@ism:FGISourceOpen='AUS NATO']) = 1"/>
</x:scenario>

<x:scenario label="FGIRollup FGI Protected trumps NATO from NATO Portion">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMCAICESVersion="202211"
                ism:ownerProducer="USA"
                ism:classification="U"
                ism:nonICmarkings="SBU-NF"/>
            <sampleAttributes ism:classification="U"
                ism:ownerProducer="NATO"
                ism:disseminationControls="REL"
                ism:hasApproximateMarkings="false"
                ism:releasableTo="USA AUS CAN">
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:FGISourceProtected="FGI"
                    ism:disseminationControls="REL"
                    ism:hasApproximateMarkings="true"
                    ism:releasableTo="USA AUS CAN"/>
                </sampleAttributes>
                <sampleAttributes ism:classification="S"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="REL"
                    ism:releasableTo="USA AUS"/>
            </wrapper>
        </x:context>

        <x:expect label="@ism:FGISourceOpen is not present"
            test="count(../resourceElement[@ism:FGISourceOpen]) = 0"/>
        <x:expect label="@ism:FGISourceProtected is present"
            test="count(../resourceElement[@ism:FGISourceProtected]) = 1"/>
        <x:expect label="@ism:FGISourceProtected is 'FGI'"
            test="count(../resourceElement[@ism:FGISourceProtected='FGI']) = 1"/>
    </x:scenario>
</x:description>

```

2.8 - ISM-Rollup.xspec

```
<!-- Notices - Distribution Notice:
      This document has been approved for Public Release and is available for use without restriction.
      --><!-- All classification marks in this example are      --><!-- for illustrative purposes only, there are no      --><!-- actual classified data contained in this example --><x:description
xmlns:x="http://www.jenitennison.com/xslt/xspec"
      xmlns:util="urn:us:gov:ic:ism-rollup:xsl:util"
      xmlns:ntk="urn:us:gov:ic:ntk"
      xmlns:arh="urn:us:gov:ic:arh"
      xmlns:ism-func="urn:us:gov:ic:ism:functions"
      stylesheet="../../XSL/ISM-Rollup/ISM-Rollup-forXSpec.xsl"
      version="2">

  <x:import href="CountryRollup.xspec"/>
  <x:import href="AEARollup.xspec"/>
  <x:import href="FGIRollup.xspec"/>
  <x:import href="NonICRollup.xspec"/>
  <x:import href="ResourceNodeTest.xspec"/>
  <x:import href="NoticeRollup.xspec"/>
  <x:import href="OC-NTKRollup.xspec"/>
  <x:import href="NTK-AnyOf-Rollup.xspec"/>
  <x:import href="NTK-2013-Rollup.xspec"/>
  <x:import href="DissemRollup.xspec"/>
  <x:import href="DisplayOnlyRollup.xspec"/>
  <x:import href="DeclassExceptionRollup.xspec"/>
  <x:import href="ResourceNodeTest.xspec"/>

  <x:scenario label="SimpleUTest">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMATCESVersion="202211"
          ism:declassException="AEA"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:derivativelyClassifiedBy="Bob"
          ism:derivedFrom="Some guide"
          ism:atomicEnergyMarkings="RD-BOBOB"/>
        <sampleAttributes ism:classification="U" ism:ownerProducer="USA">
          <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
          <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
        </sampleAttributes>
        <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
      </wrapper>
    </x:context>
    <x:expect label="resourceElement" test="../../resourceElement">
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../Schema/unitTest.xsd"
```



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        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMATCESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U">...</resourceElement>

</x:expect>
<x:expect label="ism:classification is U"
    test="count(../resourceElement[@ism:classification='U'])=1"/>
</x:scenario>

<x:scenario label="SimpleUTest with S that is exclude from Rollup">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMATCESVersion="202211"
                ism:declassException="AEA"
                ism:ownerProducer="USA"
                ism:classification="U"
                ism:derivativelyClassifiedBy="Bob"
                ism:derivedFrom="Some guide"
                ism:atomicEnergyMarkings="RD-BOBOB"/>
            <sampleAttributes ism:classification="U" ism:ownerProducer="USA">
                <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
                <sampleAttributes ism:classification="S"
                    ism:ownerProducer="USA"
                    ism:excludeFromRollup="true"/>
            </sampleAttributes>
            <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
        </wrapper>
    </x:context>
    <x:expect label="resourceElement" test="../resourceElement">
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xsi:schemaLocation="../../../Schema/unitTest.xsd"
            ism:DESVersion="202111.202211"
            ism:compliesWith="USGov"
            ism:resourceElement="true"
            ism:createDate="2018-08-10"
            ism:ISMATCESVersion="202211"
            ism:ownerProducer="USA"
            ism:classification="U">...</resourceElement>

    </x:expect>
    <x:expect label="ism:classification is U"
        test="count(../resourceElement[@ism:classification='U'])=1"/>
</x:scenario>

<x:scenario label="SimpleUTest with S in starting resourceElement and S as excludeFromRollup portion">

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```

<x:context>
  <wrapper>
    <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="../../../Schema/unitTest.xsd"
      ism:DESVersion="202111.202211"
      ism:compliesWith="USGov"
      ism:resourceElement="true"
      ism:createDate="2018-08-10"
      ism:ISMATCESVersion="202211"
      ism:declassException="AEA"
      ism:ownerProducer="USA"
      ism:classification="S"
      ism:derivativelyClassifiedBy="Bob"
      ism:derivedFrom="Some guide"
      ism:atomicEnergyMarkings="RD-BOBOB"/>
    <sampleAttributes ism:classification="U" ism:ownerProducer="USA">
      <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
      <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:excludeFromRollup="true"/>
    </sampleAttributes>
    <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
  </wrapper>
</x:context>
<x:expect label="resourceElement" test="//resourceElement">
  <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="../../../Schema/unitTest.xsd"
    ism:DESVersion="202111.202211"
    ism:compliesWith="USGov"
    ism:resourceElement="true"
    ism:createDate="2018-08-10"
    ism:ISMATCESVersion="202211"
    ism:ownerProducer="USA"
    ism:classification="U">...</resourceElement>

</x:expect>
<x:expect label="ism:classification is U"
  test="count(//resourceElement[@ism:classification='U'])=1"/>
</x:scenario>

<x:scenario label="Drop REL and Display due to explicit NF classified doc.">
  <x:context>
    <wrapper>
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMATCESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICmarkings="SBU-NF"/>
      <sampleAttributes ism:classification="U"

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        ism:ownerProducer="USA"
        ism:disseminationControls="NF">
    <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"/>
    </sampleAttributes>
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="DISPLAYONLY"/>
    </wrapper>
</x:context>

<x:expect label="ism:classification is S"
    test="count(../resourceElement[@ism:classification='S']) = 1"/>
<x:expect label="@ism:disseminationControls DISPLAYONLY is not present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('DISPLAYONLY')]) = 0"/>
<x:expect label="@ism:disseminationControls REL is not present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 0"/>
<x:expect label="@ism:disseminationControls NF is present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 1"/>
</x:scenario>

<x:scenario label="Drop REL and Display due to explicit NF classified doc with other dissems present.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMATCESVersion="202211"
                ism:ownerProducer="USA"
                ism:classification="U"
                ism:nonICmarkings="SBU-NF"/>
            <sampleAttributes ism:classification="U"
                ism:ownerProducer="USA"
                ism:disseminationControls="NF OC">
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="REL"/>
            </sampleAttributes>
            <sampleAttributes ism:classification="S"
                ism:ownerProducer="USA"
                ism:disseminationControls="DISPLAYONLY"/>
            </wrapper>
        </x:context>

        <x:expect label="ism:classification is S"
            test="count(../resourceElement[@ism:classification='S']) = 1"/>
        <x:expect label="@ism:disseminationControls DISPLAYONLY is not present"
            test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('DISPLAYONLY')]) = 0"/>
        <x:expect label="@ism:disseminationControls REL is not present"
            test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 0"/>
    
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    <x:expect label="@ism:disseminationControls NF is present"
      test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 1"/>
  </x:scenario>

  <x:scenario label="Drop REL due to portion without REL/EYES classified doc.">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMCACTESVersion="202211"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:nonICmarkings="SBU-NF"/>
        <sampleAttributes ism:classification="S" ism:ownerProducer="USA">
          <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"/>
        </sampleAttributes>
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
          ism:disseminationControls="DISPLAYONLY"/>
      </wrapper>
    </x:context>

    <x:expect label="ism:classification is S"
      test="count(../resourceElement[@ism:classification='S']) = 1"/>
    <x:expect label="@ism:disseminationControls REL is not present"
      test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 0"/>
    <x:expect label="@ism:disseminationControls NF is present"
      test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 1"/>
  </x:scenario>

  <x:scenario label="Drop EYES due to portion without REL/EYES classified doc.">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMCACTESVersion="202211"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:nonICmarkings="SBU-NF"/>
        <sampleAttributes ism:classification="S" ism:ownerProducer="USA">
          <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="EYES"/>
        </sampleAttributes>
      </wrapper>
    </x:context>
  </x:scenario>

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        </sampleAttributes>
        <sampleAttributes ism:classification="S"
                        ism:ownerProducer="USA"
                        ism:disseminationControls="DISPLAYONLY"/>

    </wrapper>
</x:context>

<x:expect label="ism:classification is S"
        test="count(../resourceElement[@ism:classification='S']) = 1"/>
<x:expect label="@ism:disseminationControls REL is not present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 0"/>
<x:expect label="@ism:disseminationControls EYES is not present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('EYES')]) = 0"/>
<x:expect label="@ism:disseminationControls NF is present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 1"/>

</x:scenario>

<x:scenario label="Keep EYES classified doc.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                            xsi:schemaLocation="../../../Schema/unitTest.xsd"
                            ism:DESVersion="202111.202211"
                            ism:compliesWith="USGov"
                            ism:resourceElement="true"
                            ism:createDate="2018-08-10"
                            ism:ISMCAICESVersion="202211"
                            ism:ownerProducer="USA"
                            ism:classification="U"
                            ism:nonICmarkings="SBU-NF"/>
            <sampleAttributes ism:classification="S"
                            ism:ownerProducer="USA"
                            ism:disseminationControls="EYES"
                            ism:releasableTo="USA AUS CAN">
                <sampleAttributes ism:classification="U"
                                    ism:ownerProducer="USA"
                                    ism:disseminationControls="EYES"
                                    ism:releasableTo="USA AUS CAN"/>
            </sampleAttributes>
            <sampleAttributes ism:classification="S"
                            ism:ownerProducer="USA"
                            ism:disseminationControls="EYES"
                            ism:releasableTo="USA AUS CAN"/>
        </wrapper>
    </x:context>

    <x:expect label="ism:classification is S"
            test="count(../resourceElement[@ism:classification='S']) = 1"/>
    <x:expect label="@ism:disseminationControls REL is not present"
            test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 0"/>
    <x:expect label="@ism:disseminationControls EYES is present"
            test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('EYES')]) = 1"/>
    <x:expect label="@ism:disseminationControls NF is not present"
            test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 0"/>

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        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 0"/>
    </x:scenario>

    <x:scenario label="Keep REL and drop eyes due to portions with either REL/EYES classified doc.">
        <x:context>
            <wrapper>
                <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                    xsi:schemaLocation="../../../Schema/unitTest.xsd"
                    ism:DESVersion="202111.202211"
                    ism:compliesWith="USGov"
                    ism:resourceElement="true"
                    ism:createDate="2018-08-10"
                    ism:ISMCACTESVersion="202211"
                    ism:ownerProducer="USA"
                    ism:classification="U"
                    ism:nonICmarkings="SBU-NF"/>
                <sampleAttributes ism:classification="S"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="REL"
                    ism:releasableTo="USA AUS CAN">
                    <sampleAttributes ism:classification="U"
                        ism:ownerProducer="USA"
                        ism:disseminationControls="EYES"
                        ism:releasableTo="USA AUS CAN"/>
                </sampleAttributes>
                <sampleAttributes ism:classification="S"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="DISPLAYONLY REL"
                    ism:releasableTo="USA AUS CAN"/>
            </wrapper>
        </x:context>

        <x:expect label="ism:classification is S"
            test="count(../resourceElement[@ism:classification='S']) = 1"/>
        <x:expect label="@ism:disseminationControls REL is present"
            test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 1"/>
        <x:expect label="@ism:disseminationControls EYES is not present"
            test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('EYES')]) = 0"/>
    </x:scenario>

    <x:scenario label="Approx Markings true.">
        <x:context>
            <wrapper>
                <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                    xsi:schemaLocation="../../../Schema/unitTest.xsd"
                    ism:DESVersion="202111.202211"
                    ism:compliesWith="USGov"
                    ism:resourceElement="true"
                    ism:createDate="2018-08-10"
                    ism:ISMCACTESVersion="202211"
                    ism:ownerProducer="USA"
                    ism:classification="U"
                    ism:nonICmarkings="SBU-NF"/>
            </wrapper>
        </x:context>
    </x:scenario>

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        <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"
            ism:hasApproximateMarkings="true"
            ism:releasableTo="USA AUS CAN">
            <sampleAttributes ism:classification="U"
                ism:ownerProducer="USA"
                ism:disseminationControls="REL"
                ism:releasableTo="USA AUS CAN"/>
        </sampleAttributes>
        <sampleAttributes ism:classification="S"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"
            ism:releasableTo="USA AUS"/>
    </wrapper>
</x:context>

    <x:expect label="@ism:hasApproximateMarkings is true"
        test="count(../resourceElement[@ism:hasApproximateMarkings='true']) = 1"/>
</x:scenario>

<x:scenario label="Approx Markings false.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMCAICESVersion="202211"
                ism:ownerProducer="USA"
                ism:classification="U"
                ism:nonICmarkings="SBU-NF"/>
            <sampleAttributes ism:classification="U"
                ism:ownerProducer="USA"
                ism:disseminationControls="REL"
                ism:hasApproximateMarkings="false"
                ism:releasableTo="USA AUS CAN">
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="REL"
                    ism:releasableTo="USA AUS CAN"/>
            </sampleAttributes>
            <sampleAttributes ism:classification="S"
                ism:ownerProducer="USA"
                ism:disseminationControls="REL"
                ism:releasableTo="USA AUS"/>
        </wrapper>
    </x:context>

    <x:expect label="@ism:hasApproximateMarkings is true"
        test="count(../resourceElement[@ism:hasApproximateMarkings='true']) = 0"/>
</x:scenario>

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<x:scenario label="Approx Markings true and false.">
  <x:context>
    <wrapper>
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMCAICESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICMarkings="SBU-NF"/>
      <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:hasApproximateMarkings="false"
        ism:releasableTo="USA AUS CAN">
        <sampleAttributes ism:classification="U"
          ism:ownerProducer="USA"
          ism:disseminationControls="REL"
          ism:hasApproximateMarkings="true"
          ism:releasableTo="USA AUS CAN"/>
        </sampleAttributes>
      <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS"/>
    </wrapper>
  </x:context>

  <x:expect label="@ism:hasApproximateMarkings is true"
    test="count(../resourceElement[@ism:hasApproximateMarkings='true']) = 1"/>
</x:scenario>

<x:scenario label="Declass Date 25 years when unknown">
  <x:context>
    <wrapper>
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMCAICESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICMarkings="SBU-NF"/>
      <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="IMC"
        ism:hasApproximateMarkings="false">
        <sampleAttributes ism:classification="S"

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        ism:ownerProducer="USA"
        ism:FGISourceProtected="FGI"
        ism:disseminationControls="RS REL"
        ism:hasApproximateMarkings="true"
        ism:releasableTo="USA AUS CAN"/>
    <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:FGISourceProtected="FGI"
        ism:disseminationControls="REL"
        ism:hasApproximateMarkings="true"
        ism:releasableTo="USA AUS CAN"/>
</sampleAttributes>
<sampleAttributes ism:noticeType="IMC"
    ism:classification="S"
    ism:ownerProducer="USA"
    ism:disseminationControls="REL"
    ism:releasableTo="USA AUS">IMC Notice</sampleAttributes>
<sampleAttributes ism:noticeType="RSEN"
    ism:classification="S"
    ism:ownerProducer="USA"
    ism:disseminationControls="REL"
    ism:releasableTo="USA AUS">RSEN Notice</sampleAttributes>

</wrapper>
</x:context>

<x:expect label="@ism:declassDate is 25 years out"
    test="count(../resourceElement[@ism:declassDate=(current-date() + xs:yearMonthDuration('P25Y'))]) = 1"/>
</x:scenario>

<x:scenario label="Multiple Declass Date's choose longest">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMATCESVersion="202211"
                ism:ownerProducer="USA"
                ism:classification="U"
                ism:nonICmarkings="SBU-NF"/>
            <sampleAttributes ism:classification="S"
                ism:ownerProducer="USA"
                ism:disseminationControls="IMC"
                ism:hasApproximateMarkings="false"
                ism:declassDate="2019-08-10">
                <sampleAttributes ism:classification="S"
                    ism:ownerProducer="USA"
                    ism:FGISourceProtected="FGI"
                    ism:disseminationControls="RS REL"
                    ism:declassDate="2025-08-10"
                    ism:hasApproximateMarkings="true"

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        ism:releasableTo="USA AUS CAN"/>
    <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:FGISourceProtected="FGI"
        ism:disseminationControls="REL"
        ism:hasApproximateMarkings="true"
        ism:releasableTo="USA AUS CAN"/>
</sampleAttributes>
<sampleAttributes ism:noticeType="IMC"
    ism:classification="S"
    ism:ownerProducer="USA"
    ism:disseminationControls="REL"
    ism:releasableTo="USA AUS">IMC Notice</sampleAttributes>
<sampleAttributes ism:noticeType="RSEN"
    ism:classification="S"
    ism:ownerProducer="USA"
    ism:disseminationControls="REL"
    ism:releasableTo="USA AUS">RSEN Notice</sampleAttributes>

</wrapper>
</x:context>

<x:expect label="@ism:declassDate is 2025-08-10 "
    test="count(../resourceElement[@ism:declassDate='2025-08-10']) = 1"/>
</x:scenario>

<x:scenario label="Multiple SCI sort">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMCAICESVersion="202211"
                ism:ownerProducer="USA"
                ism:classification="U"
                ism:nonICMarkings="SBU-NF"/>
            <sampleAttributes ism:classification="S"
                ism:ownerProducer="USA"
                ism:disseminationControls="IMC"
                ism:SCIcontrols="TK"
                ism:hasApproximateMarkings="false"
                ism:declassDate="2019-08-10">
                <sampleAttributes ism:classification="S"
                    ism:ownerProducer="USA"
                    ism:FGISourceProtected="FGI"
                    ism:SCIcontrols="SI"
                    ism:disseminationControls="RS REL"
                    ism:declassDate="2025-08-10"
                    ism:hasApproximateMarkings="true"
                    ism:releasableTo="USA AUS CAN"/>
                <sampleAttributes ism:classification="S"
                    ism:ownerProducer="USA"

```

```

                ism:FGIsourceProtected="FGI"
                ism:SCIcontrols="SI TK"
                ism:disseminationControls="REL"
                ism:hasApproximateMarkings="true"
                ism:releasableTo="USA AUS CAN"/>
    </sampleAttributes>
    <sampleAttributes ism:noticeType="IMC"
        ism:classification="S"
        ism:ownerProducer="USA"
        ism:SCIcontrols="SI SI-G"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS">IMC Notice</sampleAttributes>
    <sampleAttributes ism:noticeType="RSEN"
        ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS">RSEN Notice</sampleAttributes>

    </wrapper>
</x:context>

    <x:expect label="@ism:SCIcontrols is SI SI-G TK "
        test="count(../resourceElement[@ism:SCIcontrols='SI SI-G TK']) = 1"/>
</x:scenario>

<x:scenario label="PartTags Function simple">
    <x:call function="util:partTags">
        <x:param name="context">
            <wrapper>
                <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                    xsi:schemaLocation="../../../Schema/unitTest.xsd"
                    ism:DESVersion="202111.202211"
                    ism:compliesWith="USGov"
                    ism:resourceElement="true"
                    ism:createDate="2018-08-10"
                    ism:ISMCACTCESVersion="202211"
                    ism:ownerProducer="USA"
                    ism:classification="U"
                    ism:nonICmarkings="SBU-NF"/>
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="REL"
                    ism:releasableTo="USA AUS CAN">
                    <sampleAttributes ism:classification="U"
                        ism:ownerProducer="USA"
                        ism:disseminationControls="REL"
                        ism:releasableTo="USA AUS CAN"/>
                    </sampleAttributes>
                <sampleAttributes ism:classification="S"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="REL"
                    ism:releasableTo="USA AUS"/>
                </sampleAttributes>
            </wrapper>
        </x:param>
    </x:call>

```

```

    <x:expect label="count part tag is 3 " test="count(./*)=3"/>
</x:scenario>

<x:scenario label="PartTags Function with 1 excludeFromRollup portion">
  <x:call function="util:partTags">
    <x:param name="context">
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMATCESVersion="202211"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:nonICmarkings="SBU-NF"/>
        <sampleAttributes ism:classification="U"
          ism:ownerProducer="USA"
          ism:disseminationControls="REL"
          ism:releasableTo="USA AUS CAN">
          <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"
            ism:releasableTo="USA AUS CAN"/>
          </sampleAttributes>
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
          ism:disseminationControls="REL"
          ism:releasableTo="USA AUS"
          ism:excludeFromRollup="true"/>
        </wrapper>
      </x:param>
    </x:call>
    <x:expect label="count part tag is 2 " test="count(./*)=2"/>
  </x:scenario>

<x:scenario label="TwoResourceElementsPeersOnlyChangeOne">
  <x:context>
    <wrapper>
      <Security xmlns="urn:us:gov:ic:arh"
        ism:compliesWith="USGov USIC"
        ism:resourceElement="true"
        ism:createDate="2016-05-12"
        ism:classification="U"
        ism:disseminationControls="FOUO"
        ism:ownerProducer="USA"
        ism:compilationReason="the combination of U elements is FOUO because they reveal audit capabilities."/>
      <Security xmlns="urn:us:gov:ic:arh"
        ism:classification="U"
        ism:ownerProducer="USA"
        ism:resourceElement="true"/>
      <ResourceDescription ism:classification="TS"
        ism:ownerProducer="USA"

```

```

        ism:disseminationControls="NF">Description of modified resource</ResourceDescription>
    </wrapper>
</x:context>
<x:expect label="ism:classification first resource is TS"
    test="count((.//*[ @ism:resourceElement='true' ])[1][ @ism:classification='TS' ])=1"/>
<x:expect label="ism:classification second resource is U"
    test="count((.//*[ @ism:resourceElement='true' ])[2][ @ism:classification='U' ])=1"/>
</x:scenario>

<x:scenario label="TwoResourceElementsOneNestedOnlyChangeOne">
    <x:context>
        <wrapper>
            <Security xmlns="urn:us:gov:ic:arh"
                ism:compliesWith="USGov USIC"
                ism:resourceElement="true"
                ism:createDate="2016-05-12"
                ism:classification="U"
                ism:disseminationControls="FOUO"
                ism:ownerProducer="USA"
                ism:compilationReason="the combination of U elements is FOUO because they reveal audit capabilities."/>

            <test>
                <Security xmlns="urn:us:gov:ic:arh"
                    ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:resourceElement="true"/>
            </test>

            <ResourceDescription ism:classification="TS"
                ism:ownerProducer="USA"
                ism:disseminationControls="NF">Description of modified resource</ResourceDescription>

        </wrapper>
    </x:context>
    <x:expect label="ism:classification first resource is TS"
        test="count((.//*[ @ism:resourceElement='true' ])[1][ @ism:classification='TS' ])=1"/>
    <x:expect label="ism:classification second resource is U"
        test="count((.//*[ @ism:resourceElement='true' ])[2][ @ism:classification='U' ])=1"/>
</x:scenario>

</x:description>
```

2.9 - NonICRollup.xspec

```
<!-- Notices - Distribution Notice:
      This document has been approved for Public Release and is available for use without restriction.
      --><!-- All classification marks in this example are      --><!-- for illustrative purposes only, there are no      --><!-- actual classified data contained in this example --><x:description
xmlns:x="http://www.jenitennison.com/xslt/xspec"
      stylesheet="../../../../XSL/ISM-Rollup/ISM-Rollup-forXSpec.xsl"
      version="2">

  <!-- stylesheet="../../XSL/IC-ISM-GenerateBanner.xsl" -->

  <x:scenario label="NonICRollup Drop SBU-NF classified doc.">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMATCESVersion="202211"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:nonICmarkings="SBU-NF"/>
        <sampleAttributes ism:classification="U"
          ism:ownerProducer="USA"
          ism:nonICmarkings="SBU-NF">
          <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="RELIDO"/>
          </sampleAttributes>
          <sampleAttributes ism:classification="S"
            ism:ownerProducer="USA"
            ism:disseminationControls="RELIDO"/>
        </wrapper>
      </x:context>

      <x:expect label="ism:classification is S"
        test="count(../resourceElement[@ism:classification='S']) = 1"/>
      <x:expect label="@ism:nonICmarkings SBU-NF is not present"
        test="count(../resourceElement[normalize-space(@ism:nonICmarkings)][xs:NMTOKENS(@ism:nonICmarkings) = xs:NMTOKENS('SBU-NF')]) = 0"/>
      <x:expect label="@ism:nonICmarkings SBU is present"
        test="count(../resourceElement[normalize-space(@ism:nonICmarkings)][xs:NMTOKENS(@ism:nonICmarkings) = xs:NMTOKENS('SBU')]) = 1"/>
      <x:expect label="@ism:disseminationControls NF is present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 1"/>
    </x:scenario>

    <x:scenario label="NonICRollup Keep SBU-NF Unclass doc.">
      <x:context>
        <wrapper>
          <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xsi:schemaLocation="../../../../Schema/unitTest.xsd"
            ism:DESVersion="202111.202211"
            ism:compliesWith="USGov"
```

```

        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMATCESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICmarkings="SBU-NF"/>
    <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:nonICmarkings="SBU-NF">
        <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
    </sampleAttributes>
</wrapper>
</x:context>

<x:expect label="ism:classification is U"
    test="count(../resourceElement[@ism:classification='U']) = 1"/>
<x:expect label="@ism:nonICmarkings SBU-NF is present"
    test="count(../resourceElement[normalize-space(@ism:nonICmarkings)][xs:NMTOKENS(@ism:nonICmarkings) = xs:NMTOKENS('SBU-NF')]) = 1"/>
<x:expect label="@ism:nonICmarkings SBU is not present"
    test="count(../resourceElement[normalize-space(@ism:nonICmarkings)][xs:NMTOKENS(@ism:nonICmarkings) = xs:NMTOKENS('SBU')]) = 0"/>
<x:expect label="@ism:disseminationControls NF is not present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 0"/>
</x:scenario>

<x:scenario label="NonICRollup change SBU-NF to SBU and add NF dissem Unclass doc.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMATCESVersion="202211"
                ism:ownerProducer="USA"
                ism:classification="U"
                ism:nonICmarkings="SBU-NF"/>
            <sampleAttributes ism:classification="U"
                ism:ownerProducer="USA"
                ism:nonICmarkings="SBU-NF">
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="NF"/>
            </sampleAttributes>
        </wrapper>
    </x:context>

    <x:expect label="ism:classification is U"
        test="count(../resourceElement[@ism:classification='U']) = 1"/>
    <x:expect label="@ism:nonICmarkings SBU-NF is not present"
        test="count(../resourceElement[normalize-space(@ism:nonICmarkings)][xs:NMTOKENS(@ism:nonICmarkings) = xs:NMTOKENS('SBU-NF')]) = 0"/>
    <x:expect label="@ism:nonICmarkings SBU is present"
        test="count(../resourceElement[normalize-space(@ism:nonICmarkings)][xs:NMTOKENS(@ism:nonICmarkings) = xs:NMTOKENS('SBU')]) = 1"/>
    <x:expect label="@ism:disseminationControls NF is present"

```

```

        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 1"/>
</x:scenario>

<x:scenario label="NonICRollup change SBU-NF to SBU and add NF dissem use REL Unclass doc.">
  <x:context>
    <wrapper>
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMATCESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICmarkings="SBU-NF"/>
      <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:nonICmarkings="SBU-NF">
        <sampleAttributes ism:classification="U"
          ism:ownerProducer="USA"
          ism:disseminationControls="REL"
          ism:releasableTo="USA FVEY"/>
        <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
      </sampleAttributes>
    </wrapper>
  </x:context>

  <x:expect label="ism:classification is U"
    test="count(../resourceElement[@ism:classification='U']) = 1"/>
  <x:expect label="@ism:nonICmarkings SBU-NF is not present"
    test="count(../resourceElement[normalize-space(@ism:nonICmarkings)][xs:NMTOKENS(@ism:nonICmarkings) = xs:NMTOKENS('SBU-NF')]) = 0"/>
  <x:expect label="@ism:nonICmarkings SBU is present"
    test="count(../resourceElement[normalize-space(@ism:nonICmarkings)][xs:NMTOKENS(@ism:nonICmarkings) = xs:NMTOKENS('SBU')]) = 1"/>
  <x:expect label="@ism:disseminationControls NF is present"
    test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 1"/>
</x:scenario>

<x:scenario label="NonICRollup change SBU-NF to SBU and add NF dissem use DISPLAYONLY Unclass doc.">
  <x:context>
    <wrapper>
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMATCESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICmarkings="SBU-NF"/>
      <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:nonICmarkings="SBU-NF">

```



```

        <sampleAttributes ism:classification="U"
                        ism:ownerProducer="USA"
                        ism:disseminationControls="DISPLAYONLY"
                        ism:displayOnlyTo="USA FVEY"/>
        <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
    </sampleAttributes>
</wrapper>
</x:context>

<x:expect label="ism:classification is U"
          test="count(../resourceElement[@ism:classification='U']) = 1"/>
<x:expect label="@ism:nonICmarkings SBU-NF is not present"
          test="count(../resourceElement[normalize-space(@ism:nonICmarkings)][xs:NMTOKENS(@ism:nonICmarkings) = xs:NMTOKENS('SBU-NF')]) = 0"/>
<x:expect label="@ism:nonICmarkings SBU is present"
          test="count(../resourceElement[normalize-space(@ism:nonICmarkings)][xs:NMTOKENS(@ism:nonICmarkings) = xs:NMTOKENS('SBU')]) = 1"/>
<x:expect label="@ism:disseminationControls NF is present"
          test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 1"/>
</x:scenario>

<x:scenario label="NonICRollup Keep SBU-NF and don't add NF dissem use DISPLAYONLY with excludeFromRollup true in Unclass doc.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                            xsi:schemaLocation="../../../Schema/unitTest.xsd"
                            ism:DESVersion="202111.202211"
                            ism:compliesWith="USGov"
                            ism:resourceElement="true"
                            ism:createDate="2018-08-10"
                            ism:ISMCAICESVersion="202211"
                            ism:ownerProducer="USA"
                            ism:classification="U"
                            ism:nonICmarkings="SBU-NF"/>
            <sampleAttributes ism:classification="U"
                            ism:ownerProducer="USA"
                            ism:nonICmarkings="SBU-NF">
                <sampleAttributes ism:classification="U"
                                    ism:ownerProducer="USA"
                                    ism:disseminationControls="DISPLAYONLY"
                                    ism:displayOnlyTo="USA FVEY"
                                    ism:excludeFromRollup="true"/>
                <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
            </sampleAttributes>
        </wrapper>
    </x:context>

    <x:expect label="ism:classification is U"
          test="count(../resourceElement[@ism:classification='U']) = 1"/>
    <x:expect label="@ism:nonICmarkings SBU-NF is present"
          test="count(../resourceElement[normalize-space(@ism:nonICmarkings)][xs:NMTOKENS(@ism:nonICmarkings) = xs:NMTOKENS('SBU-NF')]) = 1"/>
    <x:expect label="@ism:nonICmarkings SBU is not present"
          test="count(../resourceElement[normalize-space(@ism:nonICmarkings)][xs:NMTOKENS(@ism:nonICmarkings) = xs:NMTOKENS('SBU')]) = 0"/>
    <x:expect label="@ism:disseminationControls NF is not present"
          test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 0"/>

```



</x:scenario>  
</x:description>

## 2.10 - NoticeRollup.xspec

```
<!-- Notices - Distribution Notice:
    This document has been approved for Public Release and is available for use without restriction.
    --><!-- All classification marks in this example are    --><!-- for illustrative purposes only, there are no    --><!-- actual classified data contained in this example --><x:description
xmlns:x="http://www.jenitennison.com/xslt/xspec"
    xmlns:util="urn:us:gov:ic:ism-rollup:xsl:util"
    xmlns:ntk="urn:us:gov:ic:ntk"
    stylesheet="../../../XSL/ISM-Rollup/ISM-Rollup-forXSpec.xsl"
    version="2">

    <x:scenario label="FISA Notice 2 different FISA notices">
        <x:context>
            <wrapper>
                <doc>
                    <arh:Security xmlns:arh="urn:us:gov:ic:arh"
                        ism:classification="U"
                        ism:ownerProducer="USA"
                        ism:compliesWith="USGov USIC"
                        ism:resourceElement="true"
                        ism:createDate="9999-11-11"
                        ism:DESVersion="202111.202211"
                        ism:ISMCA TCESVersion="202211">

                        </arh:Security>
                    </doc>
                    <doc>
                        <arh:Security xmlns:arh="urn:us:gov:ic:arh"
                            ism:classification="U"
                            ism:ownerProducer="USA">
                            <ism:NoticeList ism:classification="U" ism:ownerProducer="USA">
                                <ism:Notice ism:classification="U"
                                    ism:ownerProducer="USA"
                                    ism:noticeType="FISA">
                                    <ism:NoticeText ism:classification="U" ism:ownerProducer="USA">FISA Notice 1</ism:NoticeText>
                                </ism:Notice>
                            </ism:NoticeList>
                        </arh:Security>
                        <arh:Security xmlns:arh="urn:us:gov:ic:arh"
                            ism:classification="U"
                            ism:ownerProducer="USA">
                            <ism:NoticeList ism:classification="U" ism:ownerProducer="USA">
                                <ism:Notice ism:classification="U"
                                    ism:ownerProducer="USA"
                                    ism:noticeType="FISA">
                                    <ism:NoticeText ism:classification="U" ism:ownerProducer="USA">FISA Notice 2</ism:NoticeText>
                                </ism:Notice>
                            </ism:NoticeList>
                        </arh:Security>
                    </doc>
                </wrapper>
            </x:context>

            <x:expect label="2 ism:Notice"
```

```

        test="count(../ism:NoticeList)[1]/ism:Notice) = 2"/>
</x:scenario>

<x:scenario label="FISA Notice 2 different FISA notices one S">
  <x:context>
    <wrapper>
      <doc>
        <arh:Security xmlns:arh="urn:us:gov:ic:arh"
          ism:classification="U"
          ism:ownerProducer="USA"
          ism:compliesWith="USGov USIC"
          ism:resourceElement="true"
          ism:createDate="9999-11-11"
          ism:DESVersion="202111.202211"
          ism:ISMCACTESVersion="202211">

</arh:Security>
      </doc>
      <doc>
        <arh:Security xmlns:arh="urn:us:gov:ic:arh"
          ism:classification="U"
          ism:ownerProducer="USA">
          <ism:NoticeList ism:classification="U" ism:ownerProducer="USA">
            <ism:Notice ism:classification="U"
              ism:ownerProducer="USA"
              ism:noticeType="FISA">
              <ism:NoticeText ism:classification="U" ism:ownerProducer="USA">FISA Notice 1</ism:NoticeText>
            </ism:Notice>
          </ism:NoticeList>
        </arh:Security>
        <arh:Security xmlns:arh="urn:us:gov:ic:arh"
          ism:classification="U"
          ism:ownerProducer="USA">
          <ism:NoticeList ism:classification="U" ism:ownerProducer="USA">
            <ism:Notice ism:classification="S"
              ism:ownerProducer="USA"
              ism:noticeType="FISA">
              <ism:NoticeText ism:classification="U" ism:ownerProducer="USA">FISA Notice 2</ism:NoticeText>
            </ism:Notice>
          </ism:NoticeList>
        </arh:Security>
      </doc>
    </wrapper>
  </x:context>

  <x:expect label="ism:classification is S"
    test="count(../ism:NoticeList[1][@ism:classification='S']) = 1"/>
  <x:expect label="2 ism:Notice"
    test="count(../ism:NoticeList)[1]/ism:Notice) = 2"/>
</x:scenario>

<x:scenario label="FISA Notice 2 identical FISA notices">
  <x:context>
    <wrapper>
      <doc>

```

```

    <arh:Security xmlns:arh="urn:us:gov:ic:arh"
      ism:classification="U"
      ism:ownerProducer="USA"
      ism:compliesWith="USGov USIC"
      ism:resourceElement="true"
      ism:createDate="9999-11-11"
      ism:DESVersion="202111.202211"
      ism:ISMCACTCESVersion="202211">
  </arh:Security>
</doc>
<doc>
  <arh:Security xmlns:arh="urn:us:gov:ic:arh"
    ism:classification="U"
    ism:ownerProducer="USA">
    <ism:NoticeList ism:classification="U" ism:ownerProducer="USA">
      <ism:Notice ism:classification="U"
        ism:ownerProducer="USA"
        ism:noticeType="FISA">
        <ism:NoticeText ism:classification="U" ism:ownerProducer="USA">FISA Notice 1</ism:NoticeText>
      </ism:Notice>
    </ism:NoticeList>
  </arh:Security>
  <arh:Security xmlns:arh="urn:us:gov:ic:arh"
    ism:classification="U"
    ism:ownerProducer="USA">
    <ism:NoticeList ism:classification="U" ism:ownerProducer="USA">
      <ism:Notice ism:classification="U"
        ism:ownerProducer="USA"
        ism:noticeType="FISA">
        <ism:NoticeText ism:classification="U" ism:ownerProducer="USA">FISA Notice 1</ism:NoticeText>
      </ism:Notice>
    </ism:NoticeList>
  </arh:Security>
</doc>
</wrapper>
</x:context>

  <x:expect label="1 ism:Notice"
    test="count((.//ism:NoticeList)[1]/ism:Notice) = 1"/>
</x:scenario>

<x:scenario label="FISA Notice 2 identical FISA notices text different classification">
  <x:context>
    <wrapper>
      <doc>
        <arh:Security xmlns:arh="urn:us:gov:ic:arh"
          ism:classification="U"
          ism:ownerProducer="USA"
          ism:compliesWith="USGov USIC"
          ism:resourceElement="true"
          ism:createDate="9999-11-11"
          ism:DESVersion="202111.202211"
          ism:ISMCACTCESVersion="202211">

        </arh:Security>

```

```

    </doc>
  <doc>
    <arh:Security xmlns:arh="urn:us:gov:ic:arh"
      ism:classification="U"
      ism:ownerProducer="USA">
      <ism:NoticeList ism:classification="U" ism:ownerProducer="USA">
        <ism:Notice ism:classification="U"
          ism:ownerProducer="USA"
          ism:noticeType="FISA">
          <ism:NoticeText ism:classification="U" ism:ownerProducer="USA">FISA Notice 1</ism:NoticeText>
        </ism:Notice>
      </ism:NoticeList>
    </arh:Security>
    <arh:Security xmlns:arh="urn:us:gov:ic:arh"
      ism:classification="U"
      ism:ownerProducer="USA">
      <ism:NoticeList ism:classification="U" ism:ownerProducer="USA">
        <ism:Notice ism:classification="U"
          ism:ownerProducer="USA"
          ism:noticeType="FISA">
          <ism:NoticeText ism:classification="S" ism:ownerProducer="USA">FISA Notice 1</ism:NoticeText>
        </ism:Notice>
      </ism:NoticeList>
    </arh:Security>
  </doc>
</wrapper>
</x:context>

  <x:expect label="2 ism:Notice"
    test="count((.//ism:NoticeList)[1]/ism:Notice) = 2"/>
</x:scenario>

<x:scenario label="FISA Notice 2 identical FISA notices text different classification add SCI">
  <x:context>
    <wrapper>
      <doc>
        <arh:Security xmlns:arh="urn:us:gov:ic:arh"
          ism:classification="U"
          ism:ownerProducer="USA"
          ism:compliesWith="USGov USIC"
          ism:resourceElement="true"
          ism:createDate="9999-11-11"
          ism:DESVersion="202111.202211"
          ism:ISMCAICESVersion="202211">
        </arh:Security>
      </doc>
    <doc>
      <arh:Security xmlns:arh="urn:us:gov:ic:arh"
        ism:classification="U"
        ism:ownerProducer="USA">
        <ism:NoticeList ism:classification="U" ism:ownerProducer="USA">
          <ism:Notice ism:classification="U"
            ism:ownerProducer="USA"
            ism:noticeType="FISA">

```

```

        <ism:NoticeText ism:classification="U" ism:ownerProducer="USA">FISA Notice 1</ism:NoticeText>
      </ism:Notice>
    </ism:NoticeList>
  </arh:Security>
  <arh:Security xmlns:arh="urn:us:gov:ic:arh"
    ism:classification="U"
    ism:ownerProducer="USA">
    <ism:NoticeList ism:classification="U" ism:ownerProducer="USA">
      <ism:Notice ism:classification="U"
        ism:ownerProducer="USA"
        ism:noticeType="FISA">
        <ism:NoticeText ism:classification="S" ism:SCIcontrols="SI" ism:ownerProducer="USA">FISA Notice 1</ism:NoticeText>
      </ism:Notice>
    </ism:NoticeList>
  </arh:Security>
</doc>
</wrapper>
</x:context>

<x:expect label="ism:SCIcontrols is SI"
  test="count(../ism:NoticeList[1][@ism:SCIcontrols='SI']) = 1"/>

<x:expect label="2 ism:Notice"
  test="count((../ism:NoticeList)[1]/ism:Notice) = 2"/>
</x:scenario>

<x:scenario label="FISA Notice 2 identical FISA notices text different classification attribute order">
  <x:context>
    <wrapper>
      <doc>
        <arh:Security xmlns:arh="urn:us:gov:ic:arh"
          ism:classification="U"
          ism:ownerProducer="USA"
          ism:compliesWith="USGov USIC"
          ism:resourceElement="true"
          ism:createDate="9999-11-11"
          ism:DESVersion="202111.202211"
          ism:ISMCA TCESVersion="202211">
        </arh:Security>
      </doc>
      <doc>
        <arh:Security xmlns:arh="urn:us:gov:ic:arh"
          ism:classification="U"
          ism:ownerProducer="USA">
          <ism:NoticeList ism:classification="U" ism:ownerProducer="USA">
            <ism:Notice ism:classification="U"
              ism:ownerProducer="USA"
              ism:noticeType="FISA">
              <ism:NoticeText ism:classification="U" ism:ownerProducer="USA">FISA Notice 1</ism:NoticeText>
            </ism:Notice>
          </ism:NoticeList>
        </arh:Security>
        <arh:Security xmlns:arh="urn:us:gov:ic:arh"
          ism:classification="U"

```

```

        ism:ownerProducer="USA">
    <ism:NoticeList ism:classification="U" ism:ownerProducer="USA">
        <ism:Notice ism:classification="U"
            ism:ownerProducer="USA"
            ism:noticeType="FISA">
            <ism:NoticeText ism:ownerProducer="USA" ism:classification="U">FISA Notice 1</ism:NoticeText>
        </ism:Notice>
    </ism:NoticeList>
</arh:Security>
</doc>
</wrapper>
</x:context>

    <x:expect label="1 ism:Notice"
        test="count((../ism:NoticeList)[1]/ism:Notice) = 1"/>
</x:scenario>

</x:description>
```

2.11 - NTK-2013-Rollup.xspec

```
<!-- Notices - Distribution Notice:
    This document has been approved for Public Release and is available for use without restriction.
    --><!-- All classification marks in this example are    --><!-- for illustrative purposes only, there are no    --><!-- actual classified data contained in this example --><x:description
xmlns:x="http://www.jenitennison.com/xslt/xspec"
    xmlns:arh="urn:us:gov:ic:arh"
    xmlns:util="urn:us:gov:ic:ism-rollup:xsl:util"
    xmlns:ntk="urn:us:gov:ic:ntk"
    stylesheet="../../XSL/ISM-Rollup/ISM-Rollup-forXSpec.xsl"
    version="2">

    <!-- So not sure that rollup SHOULD handle data from 2013 but here is seeing if it could at least not break the NTK. -->
    <x:scenario label="NTK-2013-AnyOf simple Single Anyof">
        <x:context>
            <wrapper>
                <doc>
                    <arh:Security ism:classification="U"
                        ism:ownerProducer="USA"
                        ism:compliesWith="USGov USIC"
                        ism:resourceElement="true"
                        ism:createDate="9999-11-11"
                        ism:DESVersion="202111.202211"
                        ism:ISMCATCESVersion="202211">

                        </arh:Security>
                    </doc>
                    <doc>
                        <arh:Security ism:classification="U" ism:ownerProducer="USA">
                            <ntk:Access ism:classification="U" ism:ownerProducer="USA">
                                <ntk:RequiresAnyOf ism:classification="U" ism:ownerProducer="USA">
                                    <!-- Sample file restricting use to the people in SourceForge who
Have are members of the Wheel or SuperUser groups in the Bob LDAP    -->
                                    <ntk:AccessGroupList>
                                        <ntk:AccessGroup ism:classification="U" ism:ownerProducer="USA">
                                            <ntk:AccessPolicy ism:classification="U" ism:ownerProducer="USA">Bob_LDAP</ntk:AccessPolicy>
                                            <ntk:ProfileDes ism:classification="U" ism:ownerProducer="USA">guide://999990/exampleProfileDES</ntk:ProfileDes>
                                            <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">Wheel</ntk:AccessGroupValue>
                                            <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">SuperUser</ntk:AccessGroupValue>
                                        </ntk:AccessGroup>
                                    </ntk:AccessGroupList>
                                </ntk:RequiresAnyOf>
                            </ntk:Access>
                        </arh:Security>
                    </doc>
                    <doc>
                        <arh:Security ism:classification="U"
                            ism:ownerProducer="USA"
                            ism:compliesWith="USGov USIC"
                            ism:resourceElement="true"
                            ism:createDate="9999-11-11"
                            ism:DESVersion="202111.202211"
                            ism:ISMCATCESVersion="202211"/>

                        </doc>
                    </doc>
                </doc>
            </wrapper>
        </x:context>
    </x:scenario>
</x:description>
```



```

    </wrapper>
  </x:context>
  <x:expect label="AnyOf duplicated no changes"
    test="//arh:Security[@ism:resourceElement='true']/ntk:RequiresAnyOf">
    <ntk:RequiresAnyOf ism:classification="U" ism:ownerProducer="USA">
      <!-- Sample file restricting use to the people in SourceForge who
      Have are members of the Wheel or SuperUser groups in the Bob LDAP -->
      <ntk:AccessGroupList>
        <ntk:AccessGroup ism:classification="U" ism:ownerProducer="USA">
          <ntk:AccessPolicy ism:classification="U" ism:ownerProducer="USA">Bob_LDAP</ntk:AccessPolicy>
          <ntk:ProfileDes ism:classification="U" ism:ownerProducer="USA">guide://999990/exampleProfileDES</ntk:ProfileDes>
          <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">Wheel</ntk:AccessGroupValue>
          <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">SuperUser</ntk:AccessGroupValue>
        </ntk:AccessGroup>
      </ntk:AccessGroupList>
    </ntk:RequiresAnyOf>
  </x:expect>
</x:scenario>

<x:scenario label="NTK-2013-AnyOf multiple identical Anyof AccessGroupList actually dedupe">
  <x:context>
    <wrapper>
      <doc>
        <arh:Security ism:classification="U"
          ism:ownerProducer="USA"
          ism:compliesWith="USGov USIC"
          ism:resourceElement="true"
          ism:createDate="9999-11-11"
          ism:DESVersion="202111.202211"
          ism:ISMCATCESVersion="202211">

        </arh:Security>
      </doc>
      <doc>
        <arh:Security ism:classification="U" ism:ownerProducer="USA">
          <ntk:Access ism:classification="U" ism:ownerProducer="USA">
            <ntk:RequiresAnyOf ism:classification="U" ism:ownerProducer="USA">
              <!-- Sample file restricting use to the people in SourceForge who
              Have are members of the Wheel or SuperUser groups in the Bob LDAP -->
              <ntk:AccessGroupList>
                <ntk:AccessGroup ism:classification="U" ism:ownerProducer="USA">
                  <ntk:AccessPolicy ism:classification="U" ism:ownerProducer="USA">Bob_LDAP</ntk:AccessPolicy>
                  <ntk:ProfileDes ism:classification="U" ism:ownerProducer="USA">guide://999990/exampleProfileDES</ntk:ProfileDes>
                  <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">Wheel</ntk:AccessGroupValue>
                  <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">SuperUser</ntk:AccessGroupValue>
                </ntk:AccessGroup>
              </ntk:AccessGroupList>
            </ntk:RequiresAnyOf>
          </ntk:Access>
        </arh:Security>
      </doc>
      <doc>
        <arh:Security ism:classification="U"
          ism:ownerProducer="USA"

```

```

        ism:compliesWith="USGov USIC"
        ism:resourceElement="true"
        ism:createDate="9999-11-11"
        ism:DESVersion="202111.202211"
        ism:ISMATCESVersion="202211">
    <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAnyOf ism:classification="U" ism:ownerProducer="USA">
<!-- Sample file restricting use to the people in SourceForge who
Have are members of the Wheel or SuperUser groups in the Bob LDAP    -->
        <ntk:AccessGroupList>
            <ntk:AccessGroup ism:classification="U" ism:ownerProducer="USA">
                <ntk:AccessPolicy ism:classification="U" ism:ownerProducer="USA">Bob_LDAP</ntk:AccessPolicy>
                <ntk:ProfileDes ism:classification="U" ism:ownerProducer="USA">guide://999990/exampleProfileDES</ntk:ProfileDes>
                <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">Wheel</ntk:AccessGroupValue>
                <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">SuperUser</ntk:AccessGroupValue>
            </ntk:AccessGroup>
        </ntk:AccessGroupList>
    </ntk:RequiresAnyOf>
</ntk:Access>
</arh:Security>
</doc>
</wrapper>
</x:context>
<x:expect label="RequiresAllOf duplicated no changes"
    test="(//arh:Security[@ism:resourceElement='true'])[1]//ntk:RequiresAnyOf">
    <ntk:RequiresAnyOf ism:classification="U" ism:ownerProducer="USA">
        <ntk:AccessGroupList>
            <ntk:AccessGroup ism:classification="U" ism:ownerProducer="USA">
                <ntk:AccessPolicy ism:classification="U" ism:ownerProducer="USA">Bob_LDAP</ntk:AccessPolicy>
                <ntk:ProfileDes ism:classification="U" ism:ownerProducer="USA">guide://999990/exampleProfileDES</ntk:ProfileDes>
                <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">SuperUser</ntk:AccessGroupValue>
                <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">Wheel</ntk:AccessGroupValue>
            </ntk:AccessGroup>
        </ntk:AccessGroupList>
    </ntk:RequiresAnyOf>
    </x:expect>
</x:scenario>

<x:scenario label="NTK-2013-RequiresAllOf simple Single AllOf using accessProfile">
    <x:context>
        <wrapper>
            <doc>
                <arh:Security ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:compliesWith="USGov USIC"
                    ism:resourceElement="true"
                    ism:createDate="9999-11-11"
                    ism:DESVersion="202111.202211"
                    ism:ISMATCESVersion="202211">

</arh:Security>
            </doc>
        </doc>
    </x:context>
</x:scenario>
```

```

    <arh:Security ism:classification="U" ism:ownerProducer="USA">
      <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAllOf ism:classification="U" ism:ownerProducer="USA">
          <ntk:AccessProfileList ism:classification="U" ism:ownerProducer="USA">
            <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessPolicy ism:classification="U" ism:ownerProducer="USA">UnclassSourceForge</ntk:AccessPolicy>
              <ntk:ProfileDes ism:classification="U" ism:ownerProducer="USA">guide://999990/exampleProfileDES</ntk:ProfileDes>
              <ntk:AccessProfileValue ntk:vocabulary="projectName"
                ism:classification="U"
                ism:ownerProducer="USA">Data Standards Coordination Activity</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:vocabulary="role"
                ism:classification="U"
                ism:ownerProducer="USA">SourceView</ntk:AccessProfileValue>
            </ntk:AccessProfile>
          </ntk:AccessProfileList>
        </ntk:RequiresAllOf>
      </ntk:Access>
    </arh:Security>
  </doc>
</doc>
  <arh:Security ism:classification="U"
    ism:ownerProducer="USA"
    ism:compliesWith="USGov USIC"
    ism:resourceElement="true"
    ism:createDate="9999-11-11"
    ism:DESVersion="202111.202211"
    ism:ISMATCESVersion="202211"/>

</doc>
</wrapper>
</x:context>
<x:expect label="RequiresAllOf duplicated no changes"
  test="//arh:Security[@ism:resourceElement='true']/ntk:RequiresAllOf">
  <ntk:RequiresAllOf ism:classification="U" ism:ownerProducer="USA">
    <ntk:AccessProfileList ism:classification="U" ism:ownerProducer="USA">
      <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
        <ntk:AccessPolicy ism:classification="U" ism:ownerProducer="USA">UnclassSourceForge</ntk:AccessPolicy>
        <ntk:ProfileDes ism:classification="U" ism:ownerProducer="USA">guide://999990/exampleProfileDES</ntk:ProfileDes>
        <ntk:AccessProfileValue ntk:vocabulary="projectName"
          ism:classification="U"
          ism:ownerProducer="USA">Data Standards Coordination Activity</ntk:AccessProfileValue>
        <ntk:AccessProfileValue ntk:vocabulary="role"
          ism:classification="U"
          ism:ownerProducer="USA">SourceView</ntk:AccessProfileValue>
      </ntk:AccessProfile>
    </ntk:AccessProfileList>
  </ntk:RequiresAllOf>
</x:expect>
</x:scenario>

<x:scenario label="NTK-2013-RequiresAllOf simple Single AllOf using ntk:AccessGroup">
  <x:context>
    <wrapper>
      <doc>
        <arh:Security ism:classification="U"

```

```

        ism:ownerProducer="USA"
        ism:compliesWith="USGov USIC"
        ism:resourceElement="true"
        ism:createDate="9999-11-11"
        ism:DESVersion="202111.202211"
        ism:ISMCAICESVersion="202211">
    </arh:Security>
</doc>
<doc>
    <arh:Security ism:classification="U" ism:ownerProducer="USA">
        <ntk:Access ism:classification="U" ism:ownerProducer="USA">
            <ntk:RequiresAllOf ism:classification="U" ism:ownerProducer="USA">
                <ntk:AccessGroupList>
                    <ntk:AccessGroup ism:classification="U" ism:ownerProducer="USA">
                        <ntk:AccessPolicy ism:classification="U" ism:ownerProducer="USA">Bob_LDAP</ntk:AccessPolicy>
                        <ntk:ProfileDes ism:classification="U" ism:ownerProducer="USA">guide://999990/exampleProfileDES</ntk:ProfileDes>
                        <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">Wheel</ntk:AccessGroupValue>
                        <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">SuperUser</ntk:AccessGroupValue>
                    </ntk:AccessGroup>
                </ntk:AccessGroupList>
            </ntk:RequiresAllOf>
        </ntk:Access>
    </arh:Security>
</doc>
<doc>
    <arh:Security ism:classification="U"
        ism:ownerProducer="USA"
        ism:compliesWith="USGov USIC"
        ism:resourceElement="true"
        ism:createDate="9999-11-11"
        ism:DESVersion="202111.202211"
        ism:ISMCAICESVersion="202211"/>

    </doc>
</wrapper>
</x:context>
<x:expect label="RequiresAllOf duplicated no changes"
    test="//arh:Security[@ism:resourceElement='true']/ntk:RequiresAllOf">
    <ntk:RequiresAllOf ism:classification="U" ism:ownerProducer="USA">
        <ntk:AccessGroupList>
            <ntk:AccessGroup ism:classification="U" ism:ownerProducer="USA">
                <ntk:AccessPolicy ism:classification="U" ism:ownerProducer="USA">Bob_LDAP</ntk:AccessPolicy>
                <ntk:ProfileDes ism:classification="U" ism:ownerProducer="USA">guide://999990/exampleProfileDES</ntk:ProfileDes>
                <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">Wheel</ntk:AccessGroupValue>
                <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">SuperUser</ntk:AccessGroupValue>
            </ntk:AccessGroup>
        </ntk:AccessGroupList>
    </ntk:RequiresAllOf>
    </x:expect>
</x:scenario>

<x:scenario label="NTK-2013-RequiresAllOf multiple identical AllOf using ntk:AccessGroup"
    pending="de-dupe-2013NTK">
    <x:context>
```

```

<wrapper>
  <doc>
    <arh:Security ism:classification="U"
                  ism:ownerProducer="USA"
                  ism:compliesWith="USGov USIC"
                  ism:resourceElement="true"
                  ism:createDate="9999-11-11"
                  ism:DESVersion="202111.202211"
                  ism:ISMCACTCESVersion="202211">

</arh:Security>
  </doc>
  <doc>
    <arh:Security ism:classification="U" ism:ownerProducer="USA">
      <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAllOf ism:classification="U" ism:ownerProducer="USA">
          <ntk:AccessGroupList>
            <ntk:AccessGroup ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessPolicy ism:classification="U" ism:ownerProducer="USA">Bob_LDAP</ntk:AccessPolicy>
              <ntk:ProfileDes ism:classification="U" ism:ownerProducer="USA">guide://999990/exampleProfileDES</ntk:ProfileDes>
              <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">Wheel</ntk:AccessGroupValue>
              <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">SuperUser</ntk:AccessGroupValue>
            </ntk:AccessGroup>
          </ntk:AccessGroupList>
        </ntk:RequiresAllOf>
      </ntk:Access>
    </arh:Security>
  </doc>
  <doc>
    <arh:Security ism:classification="U"
                  ism:ownerProducer="USA"
                  ism:compliesWith="USGov USIC"
                  ism:resourceElement="true"
                  ism:createDate="9999-11-11"
                  ism:DESVersion="202111.202211"
                  ism:ISMCACTCESVersion="202211">
      <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAllOf ism:classification="U" ism:ownerProducer="USA">
          <ntk:AccessGroupList>
            <ntk:AccessGroup ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessPolicy ism:classification="U" ism:ownerProducer="USA">Bob_LDAP</ntk:AccessPolicy>
              <ntk:ProfileDes ism:classification="U" ism:ownerProducer="USA">guide://999990/exampleProfileDES</ntk:ProfileDes>
              <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">Wheel</ntk:AccessGroupValue>
              <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">SuperUser</ntk:AccessGroupValue>
            </ntk:AccessGroup>
          </ntk:AccessGroupList>
        </ntk:RequiresAllOf>
      </ntk:Access>
    </arh:Security>
  </doc>
</wrapper>
</x:context>
<x:expect label="RequiresAllOf duplicated no changes"
          test="//arh:Security[@ism:resourceElement='true']/ntk:RequiresAllOf">

```

```

    <ntk:RequiresAllOf ism:classification="U" ism:ownerProducer="USA">
      <ntk:AccessGroupList>
        <ntk:AccessGroup ism:classification="U" ism:ownerProducer="USA">
          <ntk:AccessPolicy ism:classification="U" ism:ownerProducer="USA">Bob_LDAP</ntk:AccessPolicy>
          <ntk:ProfileDes ism:classification="U" ism:ownerProducer="USA">guide://999990/exampleProfileDES</ntk:ProfileDes>
          <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">Wheel</ntk:AccessGroupValue>
          <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">SuperUser</ntk:AccessGroupValue>
        </ntk:AccessGroup>
      </ntk:AccessGroupList>
    </ntk:RequiresAllOf>
  </x:expect>
</x:scenario>

<x:scenario label="NTK-2013-RequiresAllOf multiple identical Allof using ntk:AccessGroup generate error">
  <x:context>
    <wrapper>
      <doc>
        <arh:Security ism:classification="U"
          ism:ownerProducer="USA"
          ism:compliesWith="USGov USIC"
          ism:resourceElement="true"
          ism:createDate="9999-11-11"
          ism:DESVersion="202111.202211"
          ism:ISMCAICESVersion="202211">

</arh:Security>
      </doc>
      <doc>
        <arh:Security ism:classification="U" ism:ownerProducer="USA">
          <ntk:Access ism:classification="U" ism:ownerProducer="USA">
            <ntk:RequiresAllOf ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessGroupList>
                <ntk:AccessGroup ism:classification="U" ism:ownerProducer="USA">
                  <ntk:AccessPolicy ism:classification="U" ism:ownerProducer="USA">Bob_LDAP</ntk:AccessPolicy>
                  <ntk:ProfileDes ism:classification="U" ism:ownerProducer="USA">guide://999990/exampleProfileDES</ntk:ProfileDes>
                  <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">Wheel</ntk:AccessGroupValue>
                  <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">SuperUser</ntk:AccessGroupValue>
                </ntk:AccessGroup>
              </ntk:AccessGroupList>
            </ntk:RequiresAllOf>
          </ntk:Access>
        </arh:Security>
      </doc>
      <doc>
        <arh:Security ism:classification="U"
          ism:ownerProducer="USA"
          ism:compliesWith="USGov USIC"
          ism:resourceElement="true"
          ism:createDate="9999-11-11"
          ism:DESVersion="202111.202211"
          ism:ISMCAICESVersion="202211">
          <ntk:Access ism:classification="U" ism:ownerProducer="USA">
            <ntk:RequiresAllOf ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessGroupList>

```



```

        <ntk:AccessGroup ism:classification="U" ism:ownerProducer="USA">
            <ntk:AccessPolicy ism:classification="U" ism:ownerProducer="USA">Bob_LDAP</ntk:AccessPolicy>
            <ntk:ProfileDes ism:classification="U" ism:ownerProducer="USA">guide://999990/exampleProfileDES</ntk:ProfileDes>
            <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">Wheel</ntk:AccessGroupValue>
            <ntk:AccessGroupValue ism:classification="U" ism:ownerProducer="USA">SuperUser</ntk:AccessGroupValue>
        </ntk:AccessGroup>
    </ntk:AccessGroupList>
</ntk:RequiresAllOf>
</ntk:Access>
</arh:Security>
</doc>
</wrapper>
</x:context>
<x:expect label="ntk:NTK-13-unsupported for rollup"
    test="count(../arh:Security[@ism:resourceElement='true']//ntk:NTK-13-unsupported) = 1"/>

</x:scenario>
</x:description>
```

2.12 - NTK-AnyOf-Rollup.xspec

```
<!-- Notices - Distribution Notice:
      This document has been approved for Public Release and is available for use without restriction.
      --><!-- All classification marks in this example are      --><!-- for illustrative purposes only, there are no      --><!-- actual classified data contained in this example --><x:description
xmlns:x="http://www.jenitennison.com/xslt/xspec"
      xmlns:arh="urn:us:gov:ic:arh"
      xmlns:util="urn:us:gov:ic:ism-rollup:xsl:util"
      xmlns:ntk="urn:us:gov:ic:ntk"
      stylesheet="../../../XSL/ISM-Rollup/ISM-Rollup-forXSpec.xsl"
      version="2">

  <x:scenario label="NTK-AnyOf multiple Different Anyof">
    <x:context>
      <wrapper>
        <doc>
          <arh:Security ism:classification="U"
            ism:ownerProducer="USA"
            ism:compliesWith="USGov USIC"
            ism:resourceElement="true"
            ism:createDate="9999-11-11"
            ism:DESVersion="202111.202211"
            ism:ISMCATCESVersion="202211">

            </arh:Security>
          </doc>
          <doc>
            <arh:Security ism:classification="U" ism:ownerProducer="USA">
              <ntk:Access ism:classification="U" ism:ownerProducer="USA">
                <ntk:RequiresAnyOf>
                  <AccessProfileList xmlns="urn:us:gov:ic:ntk">
                    <AccessProfile ism:classification="U" ism:ownerProducer="USA">
                      <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
                      <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
                      <VocabularyType ntk:name="datasphere:rac"
                        ntk:source="urn:us:gov:ic:cvenum:authcat:authcattype"
                        ntk:sourceVersion="201508"/>
                      <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA</AccessProfileValue>
                    </AccessProfile>
                  </AccessProfileList>
                </ntk:RequiresAnyOf>
              </ntk:Access>
            </arh:Security>
          </doc>
          <doc>
            <arh:Security ism:classification="U"
              ism:ownerProducer="USA"
              ism:compliesWith="USGov USIC"
              ism:resourceElement="true"
              ism:createDate="9999-11-11"
              ism:DESVersion="202111.202211"
              ism:ISMCATCESVersion="202211">
              <ntk:Access ism:classification="U" ism:ownerProducer="USA">
                <ntk:RequiresAnyOf>
```



```

        <AccessProfileList xmlns="urn:us:gov:ic:ntk">
          <AccessProfile ism:classification="U" ism:ownerProducer="USA">
            <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
            <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
            <VocabularyType ntk:name="datasphere:rac"
                          ntk:source="urn:us:gov:ic:cvenum:authcat:authcattype"
                          ntk:sourceVersion="201508"/>
            <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA2</AccessProfileValue>
          </AccessProfile>
        </AccessProfileList>
      </ntk:RequiresAnyOf>
    </ntk:Access>
  </arh:Security>
</doc>
</wrapper>
</x:context>
<x:expect label="ntk:TooManyRequiresAnyOf element indicating multiple diferent NTK anyOf"
          test="count(../arh:Security[@ism:resourceElement='true']/ntk:TooManyRequiresAnyOf) = 1"/>
</x:scenario>

<x:scenario label="NTK-AnyOf multiple Different Anyof with an allof in the mix">
  <x:context>
    <wrapper>
      <doc>
        <arh:Security ism:classification="U"
                      ism:ownerProducer="USA"
                      ism:compliesWith="USGov USIC"
                      ism:resourceElement="true"
                      ism:createDate="9999-11-11"
                      ism:DESVersion="202111.202211"
                      ism:ISMCACTCESVersion="202211">

</arh:Security>
      </doc>
    </doc>
    <doc>
      <arh:Security ism:classification="U" ism:ownerProducer="USA">
        <ntk:Access ism:classification="U" ism:ownerProducer="USA">
          <ntk:RequiresAllOf>
            <ntk:AccessProfileList>
              <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
                <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
                <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
                <VocabularyType xmlns="urn:us:gov:ic:ntk"
                              ntk:name="organization:usa-agency"
                              ntk:sourceVersion="201502"/>
                <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
                <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
                <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
              </ntk:AccessProfile>
            </ntk:AccessProfileList>
          </ntk:RequiresAllOf>
          <ntk:RequiresAnyOf>
            <AccessProfileList xmlns="urn:us:gov:ic:ntk">
              <AccessProfile ism:classification="U" ism:ownerProducer="USA">

```

```

        <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
        <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
        <VocabularyType ntk:name="datasphere:rac"
                        ntk:source="urn:us:gov:ic:cvenum:authcat:authcatttype"
                        ntk:sourceVersion="201508"/>
        <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA</AccessProfileValue>
    </AccessProfile>
</AccessProfileList>
</ntk:RequiresAnyOf>
</ntk:Access>
</arh:Security>
</doc>
<doc>
    <arh:Security ism:classification="U"
                  ism:ownerProducer="USA"
                  ism:compliesWith="USGov USIC"
                  ism:resourceElement="true"
                  ism:createDate="9999-11-11"
                  ism:DESVersion="202111.202211"
                  ism:ISMATCESVersion="202211">
        <ntk:Access ism:classification="U" ism:ownerProducer="USA">
            <ntk:RequiresAnyOf>
                <AccessProfileList xmlns="urn:us:gov:ic:ntk">
                    <AccessProfile ism:classification="U" ism:ownerProducer="USA">
                        <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
                        <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
                        <VocabularyType ntk:name="datasphere:rac"
                                        ntk:source="urn:us:gov:ic:cvenum:authcat:authcatttype"
                                        ntk:sourceVersion="201508"/>
                        <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA2</AccessProfileValue>
                    </AccessProfile>
                </AccessProfileList>
            </ntk:RequiresAnyOf>
        </ntk:Access>
    </arh:Security>
</doc>
</wrapper>
</x:context>
<x:expect label="ntk:TooManyRequiresAnyOf element indicating multiple diferent NTK anyOf"
          test="count(../arh:Security[@ism:resourceElement='true']/ntk:TooManyRequiresAnyOf) = 1"/>
</x:scenario>

<x:scenario label="NTK-AnyOf multiple same Anyof one doubled">
    <x:context>
        <wrapper>
            <doc>
                <arh:Security ism:classification="U"
                              ism:ownerProducer="USA"
                              ism:compliesWith="USGov USIC"
                              ism:resourceElement="true"
                              ism:createDate="9999-11-11"
                              ism:DESVersion="202111.202211"
                              ism:ISMATCESVersion="202211">
```

```

</arh:Security>
</doc>
<doc>
  <arh:Security ism:classification="U" ism:ownerProducer="USA">
    <ntk:Access ism:classification="U" ism:ownerProducer="USA">
      <ntk:RequiresAnyOf>
        <AccessProfileList xmlns="urn:us:gov:ic:ntk">
          <AccessProfile ism:classification="U" ism:ownerProducer="USA">
            <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
            <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
            <VocabularyType ntk:name="datasphere:rac"
              ntk:source="urn:us:gov:ic:cenum:authcat:authcatttype"
              ntk:sourceVersion="201508"/>
            <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA</AccessProfileValue>
          </AccessProfile>
          <AccessProfile ism:classification="U" ism:ownerProducer="USA">
            <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
            <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
            <VocabularyType ntk:name="datasphere:rac"
              ntk:source="urn:us:gov:ic:cenum:authcat:authcatttype"
              ntk:sourceVersion="201508"/>
            <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA</AccessProfileValue>
          </AccessProfile>
        </AccessProfileList>
      </ntk:RequiresAnyOf>
    </ntk:Access>
  </arh:Security>
</doc>
<doc>
  <arh:Security ism:classification="U"
    ism:ownerProducer="USA"
    ism:compliesWith="USGov USIC"
    ism:resourceElement="true"
    ism:createDate="9999-11-11"
    ism:DESVersion="202111.202211"
    ism:ISMCAICESVersion="202211">
    <ntk:Access ism:classification="U" ism:ownerProducer="USA">
      <ntk:RequiresAnyOf>
        <AccessProfileList xmlns="urn:us:gov:ic:ntk">
          <AccessProfile ism:classification="U" ism:ownerProducer="USA">
            <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
            <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
            <VocabularyType ntk:name="datasphere:rac"
              ntk:source="urn:us:gov:ic:cenum:authcat:authcatttype"
              ntk:sourceVersion="201508"/>
            <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA</AccessProfileValue>
          </AccessProfile>
        </AccessProfileList>
      </ntk:RequiresAnyOf>
    </ntk:Access>
  </arh:Security>
</doc>
</wrapper>

```

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    </x:context>
    <x:expect label="expect 1 anyOf ntk:AccessProfile"
      test="count(../arh:Security[@ism:resourceElement='true']/ntk:RequiresAnyOf)[1]/ntk:AccessProfileList/ntk:AccessProfile) = 1"/>
    <x:expect label="expect zero allOf ntk:AccessProfile"
      test="count(../arh:Security[@ism:resourceElement='true']/ntk:RequiresAllOf) = 0"/>
  </x:scenario>

  <x:scenario label="NTK-AnyOf multiple same on each" pending="multiple NKT anyOF">
    <x:context>
      <wrapper>
        <doc>
          <arh:Security ism:classification="U"
            ism:ownerProducer="USA"
            ism:compliesWith="USGov USIC"
            ism:resourceElement="true"
            ism:createDate="9999-11-11"
            ism:DESVersion="202111.202211"
            ism:ISMCAICESVersion="202211">

</arh:Security>
        </doc>
        <doc>
          <arh:Security ism:classification="U" ism:ownerProducer="USA">
            <ntk:Access ism:classification="U" ism:ownerProducer="USA">
              <ntk:RequiresAnyOf>
                <AccessProfileList xmlns="urn:us:gov:ic:ntk">
                  <AccessProfile ism:classification="U" ism:ownerProducer="USA">
                    <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
                    <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
                    <VocabularyType ntk:name="datasphere:rac"
                      ntk:source="urn:us:gov:ic:cenum:authcat:authcatttype"
                      ntk:sourceVersion="201508"/>
                    <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA</AccessProfileValue>
                  </AccessProfile>
                  <AccessProfile ism:classification="U" ism:ownerProducer="USA">
                    <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
                    <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
                    <VocabularyType ntk:name="datasphere:rac"
                      ntk:source="urn:us:gov:ic:cenum:authcat:authcatttype"
                      ntk:sourceVersion="201508"/>
                    <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA2</AccessProfileValue>
                  </AccessProfile>
                </AccessProfileList>
              </ntk:RequiresAnyOf>
            </ntk:Access>
          </arh:Security>
        </doc>
        <doc>
          <arh:Security ism:classification="U"
            ism:ownerProducer="USA"
            ism:compliesWith="USGov USIC"
            ism:resourceElement="true"
            ism:createDate="9999-11-11"
            ism:DESVersion="202111.202211"

```

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        ism:ISMCATCESVersion="202211">
    <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAnyOf>
            <AccessProfileList xmlns="urn:us:gov:ic:ntk">
                <AccessProfile ism:classification="U" ism:ownerProducer="USA">
                    <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
                    <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
                    <VocabularyType ntk:name="datasphere:rac"
                        ntk:source="urn:us:gov:ic:cenum:authcat:authcatttype"
                        ntk:sourceVersion="201508"/>
                    <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA</AccessProfileValue>
                </AccessProfile>
                <AccessProfile ism:classification="U" ism:ownerProducer="USA">
                    <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
                    <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
                    <VocabularyType ntk:name="datasphere:rac"
                        ntk:source="urn:us:gov:ic:cenum:authcat:authcatttype"
                        ntk:sourceVersion="201508"/>
                    <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA2</AccessProfileValue>
                </AccessProfile>
            </AccessProfileList>
        </ntk:RequiresAnyOf>
    </ntk:Access>
</arh:Security>
</doc>
</wrapper>
</x:context>
<x:expect label="1 anyOf ntk:AccessProfile"
    test="count((../arh:Security[@ism:resourceElement='true'])[1]//ntk:RequiresAnyOf/ntk:AccessProfileList/ntk:AccessProfile) = 7"/>
</x:scenario>

<x:scenario label="NTK-AnyOf 2 identical ORCON different order for agencies and identical AnyOf on both of them.">
    <x:context>
        <wrapper>
            <doc>
                <arh:Security ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:compliesWith="USGov USIC"
                    ism:resourceElement="true"
                    ism:createDate="9999-11-11"
                    ism:DESVersion="202111.202211"
                    ism:ISMCATCESVersion="202211"/>
            </doc>
            <doc>
                <arh:Security ism:classification="U" ism:ownerProducer="USA">
                    <ntk:Access ism:classification="U" ism:ownerProducer="USA">
                        <ntk:RequiresAllOf>
                            <ntk:AccessProfileList>
                                <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
                                    <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
                                    <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
                                </ntk:AccessProfile>
                            </ntk:AccessProfileList>
                        </ntk:RequiresAllOf>
                    </ntk:Access>
                </arh:Security>
            </doc>
        </wrapper>
    </x:context>
</x:scenario>

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```

        <VocabularyType xmlns="urn:us:gov:ic:ntk"
            ntk:name="organization:usa-agency"
            ntk:sourceVersion="201502"/>
        <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
        <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
        <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
    </ntk:AccessProfile>
</ntk:AccessProfileList>
</ntk:RequiresAllOf>
<ntk:RequiresAnyOf>
    <AccessProfileList xmlns="urn:us:gov:ic:ntk">
        <AccessProfile ism:classification="U" ism:ownerProducer="USA">
            <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
            <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
            <VocabularyType ntk:name="datasphere:rac"
                ntk:source="urn:us:gov:ic:cvenum:authcat:authcatttype"
                ntk:sourceVersion="201508"/>
            <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA</AccessProfileValue>
            <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA2</AccessProfileValue>
        </AccessProfile>
    </AccessProfileList>
</ntk:RequiresAnyOf>
</ntk:Access>
</arh:Security>
</doc>
<doc>
    <arh:Security ism:classification="U"
        ism:ownerProducer="USA"
        ism:compliesWith="USGov USIC"
        ism:resourceElement="true"
        ism:createDate="9999-11-11"
        ism:DESVersion="202111.202211"
        ism:ISMCAICESVersion="202211">
    <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAllOf>
            <ntk:AccessProfileList>
                <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
                    <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
                    <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
                    <VocabularyType xmlns="urn:us:gov:ic:ntk"
                        ntk:name="organization:usa-agency"
                        ntk:sourceVersion="201502"/>

                    <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
                    <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
                    <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
                </ntk:AccessProfile>
            </ntk:AccessProfileList>
        </ntk:RequiresAllOf>
        <ntk:RequiresAnyOf>
            <AccessProfileList xmlns="urn:us:gov:ic:ntk">
                <AccessProfile ism:classification="U" ism:ownerProducer="USA">
                    <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
                    <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
                </AccessProfile>
            </AccessProfileList>
        </ntk:RequiresAnyOf>
    </ntk:Access>
</arh:Security>
</doc>
```



```

        <VocabularyType ntk:name="datasphere:rac"
                        ntk:source="urn:us:gov:ic:cvenum:authcat:authcattype"
                        ntk:sourceVersion="201508"/>
        <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA</AccessProfileValue>
        <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA2</AccessProfileValue>
    </AccessProfile>
</AccessProfileList>
</ntk:RequiresAnyOf>
</ntk:Access>
</arh:Security>
</doc>
</wrapper>
</x:context>

<x:expect label="1 allof ntk:AccessProfile"
          test="count((.//arh:Security[@ism:resourceElement='true']//ntk:RequiresAllOf)[1]/ntk:AccessProfileList/ntk:AccessProfile) = 1"/>
<x:expect label="1 anyOf ntk:AccessProfile"
          test="count((.//arh:Security[@ism:resourceElement='true']//ntk:RequiresAnyOf)[1]/ntk:AccessProfileList/ntk:AccessProfile) = 1"/>
<x:expect label="1 ntk:RequiresAnyOf profile value TEST_DATA"
          test="count((.//arh:Security[@ism:resourceElement='true'])[1]//ntk:RequiresAnyOf/ntk:AccessProfileList/ntk:AccessProfile/ntk:AccessProfileValue[.='TEST_DATA']) =
1"/>
<x:expect label="1 ntk:RequiresAnyOf profile value TEST_DATA2"
          test="count((.//arh:Security[@ism:resourceElement='true'])[1]//ntk:RequiresAnyOf/ntk:AccessProfileList/ntk:AccessProfile/ntk:AccessProfileValue[.='TEST_DATA2'])
= 1"/>
</x:scenario>

<x:scenario label="NTK-AnyOf 2 identical ORCON different order for agencies and different order otherwise identical AnyOf on both of them.">
    <x:context>
        <wrapper>
            <doc>
                <arh:Security ism:classification="U"
                            ism:ownerProducer="USA"
                            ism:compliesWith="USGov USIC"
                            ism:resourceElement="true"
                            ism:createDate="9999-11-11"
                            ism:DESVersion="202111.202211"
                            ism:ISMCACTCESVersion="202211"/>

            </doc>
            <doc>
                <arh:Security ism:classification="U" ism:ownerProducer="USA">
                    <ntk:Access ism:classification="U" ism:ownerProducer="USA">
                        <ntk:RequiresAllOf>
                            <ntk:AccessProfileList>
                                <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
                                    <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
                                    <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
                                    <VocabularyType xmlns="urn:us:gov:ic:ntk"
                                                ntk:name="organization:usa-agency"
                                                ntk:sourceVersion="201502"/>
                                    <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
                                    <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
                                    <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
                                </ntk:AccessProfile>
                            </ntk:AccessProfileList>
                        </ntk:RequiresAllOf>
                    </ntk:Access>
                </arh:Security>
            </doc>
        </wrapper>
    </x:context>

```

```

        </ntk:AccessProfile>
      </ntk:AccessProfileList>
    </ntk:RequiresAllOf>
    <ntk:RequiresAnyOf>
      <AccessProfileList xmlns="urn:us:gov:ic:ntk">
        <AccessProfile ism:classification="U" ism:ownerProducer="USA">
          <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
          <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
          <VocabularyType ntk:name="datasphere:rac"
            ntk:source="urn:us:gov:ic:cvenum:authcat:authcatttype"
            ntk:sourceVersion="201508"/>
          <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA2</AccessProfileValue>
          <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA</AccessProfileValue>
        </AccessProfile>
      </AccessProfileList>
    </ntk:RequiresAnyOf>
  </ntk:Access>
</arh:Security>
</doc>
<doc>
  <arh:Security ism:classification="U"
    ism:ownerProducer="USA"
    ism:compliesWith="USGov USIC"
    ism:resourceElement="true"
    ism:createDate="9999-11-11"
    ism:DESVersion="202111.202211"
    ism:ISMCACTCESVersion="202211">
    <ntk:Access ism:classification="U" ism:ownerProducer="USA">
      <ntk:RequiresAllOf>
        <ntk:AccessProfileList>
          <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
            <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
            <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
            <VocabularyType xmlns="urn:us:gov:ic:ntk"
              ntk:name="organization:usa-agency"
              ntk:sourceVersion="201502"/>
            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
            <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
          </ntk:AccessProfile>
        </ntk:AccessProfileList>
      </ntk:RequiresAllOf>
    </ntk:Access>
  </arh:Security>
  <ntk:RequiresAnyOf>
    <AccessProfileList xmlns="urn:us:gov:ic:ntk">
      <AccessProfile ism:classification="U" ism:ownerProducer="USA">
        <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
        <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
        <VocabularyType ntk:name="datasphere:rac"
          ntk:source="urn:us:gov:ic:cvenum:authcat:authcatttype"
          ntk:sourceVersion="201508"/>
        <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA</AccessProfileValue>
        <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA2</AccessProfileValue>
      </AccessProfile>
    </AccessProfileList>
  </ntk:RequiresAnyOf>
</doc>

```



```

        </AccessProfileList>
      </ntk:RequiresAnyOf>
    </ntk:Access>
  </arh:Security>
</doc>
</wrapper>
</x:context>

<x:expect label="1 allof ntk:AccessProfile"
  test="count((.//arh:Security[@ism:resourceElement='true']/ntk:RequiresAllOf)[1]/ntk:AccessProfileList/ntk:AccessProfile) = 1"/>
<x:expect label="1 anyOf ntk:AccessProfile"
  test="count((.//arh:Security[@ism:resourceElement='true']/ntk:RequiresAnyOf)[1]/ntk:AccessProfileList/ntk:AccessProfile) = 1"/>
<x:expect label="1 ntk:RequiresAnyOf profile value TEST_DATA"
  test="count((.//arh:Security[@ism:resourceElement='true'])[1]/ntk:RequiresAnyOf/ntk:AccessProfileList/ntk:AccessProfile/ntk:AccessProfileValue[.='TEST_DATA']) =
1"/>

<x:expect label="1 ntk:RequiresAnyOf profile value TEST_DATA2"
  test="count((.//arh:Security[@ism:resourceElement='true'])[1]/ntk:RequiresAnyOf/ntk:AccessProfileList/ntk:AccessProfile/ntk:AccessProfileValue[.='TEST_DATA2'])
= 1"/>

</x:scenario>

<x:scenario label="NTK-AnyOf intersection one has A or B the other has B or C"
  pending="multiple NKT anyOF">
  <x:context>
    <wrapper>
      <doc>
        <arh:Security ism:classification="U"
          ism:ownerProducer="USA"
          ism:compliesWith="USGov USIC"
          ism:resourceElement="true"
          ism:createDate="9999-11-11"
          ism:DESVersion="202111.202211"
          ism:ISMCAICESVersion="202211">

</arh:Security>
      </doc>
      <doc>
        <arh:Security ism:classification="U" ism:ownerProducer="USA">
          <ntk:Access ism:classification="U" ism:ownerProducer="USA">
            <ntk:RequiresAnyOf>
              <AccessProfileList xmlns="urn:us:gov:ic:ntk">
                <AccessProfile ism:classification="U" ism:ownerProducer="USA">
                  <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
                  <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
                  <VocabularyType ntk:name="datasphere:rac"
                    ntk:source="urn:us:gov:ic:cvenum:authcat:authcatttype"
                    ntk:sourceVersion="201508"/>
                  <AccessProfileValue ntk:vocabulary="datasphere:rac">A</AccessProfileValue>
                </AccessProfile>
                <AccessProfile ism:classification="U" ism:ownerProducer="USA">
                  <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
                  <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
                  <VocabularyType ntk:name="datasphere:rac"

```

```

            ntk:source="urn:us:gov:ic:cenum:authcat:authcattype"
            ntk:sourceVersion="201508"/>
        <AccessProfileValue ntk:vocabulary="datasphere:rac">B</AccessProfileValue>
    </AccessProfile>
</AccessProfileList>
</ntk:RequiresAnyOf>
</ntk:Access>
</arh:Security>
</doc>
<doc>
    <arh:Security ism:classification="U"
        ism:ownerProducer="USA"
        ism:compliesWith="USGov USIC"
        ism:resourceElement="true"
        ism:createDate="9999-11-11"
        ism:DESVersion="202111.202211"
        ism:ISMATCESVersion="202211">
        <ntk:Access ism:classification="U" ism:ownerProducer="USA">
            <ntk:RequiresAnyOf>
                <AccessProfileList xmlns="urn:us:gov:ic:ntk">
                    <AccessProfile ism:classification="U" ism:ownerProducer="USA">
                        <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
                        <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
                        <VocabularyType ntk:name="datasphere:rac"
                            ntk:source="urn:us:gov:ic:cenum:authcat:authcattype"
                            ntk:sourceVersion="201508"/>
                        <AccessProfileValue ntk:vocabulary="datasphere:rac">B</AccessProfileValue>
                    </AccessProfile>
                    <AccessProfile ism:classification="U" ism:ownerProducer="USA">
                        <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
                        <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
                        <VocabularyType ntk:name="datasphere:rac"
                            ntk:source="urn:us:gov:ic:cenum:authcat:authcattype"
                            ntk:sourceVersion="201508"/>
                        <AccessProfileValue ntk:vocabulary="datasphere:rac">C</AccessProfileValue>
                    </AccessProfile>
                </AccessProfileList>
            </ntk:RequiresAnyOf>
        </ntk:Access>
    </arh:Security>
</doc>
</wrapper>
</x:context>
<x:expect label="1 ntk:RequiresAnyOf ntk:AccessProfile"
    test="count((../arh:Security[@ism:resourceElement='true'])[1]//ntk:RequiresAnyOf/ntk:AccessProfileList/ntk:AccessProfile) = 1"/>
<x:expect label="1 ntk:RequiresAnyOf profile value of B"
    test="count((../arh:Security[@ism:resourceElement='true'])[1]//ntk:RequiresAnyOf/ntk:AccessProfileList/ntk:AccessProfile/ntk:AccessProfileValue[.='B']) = 1"/>
</x:scenario>
</x:description>

```

## 2.13 - NTK-Single-OC.xml

```
<wrapper xmlns:ntk="urn:us:gov:ic:ntk">
  <doc>
    <arh:Security xmlns:arh="urn:us:gov:ic:arh"
      ism:classification="U"
      ism:ownerProducer="USA"
      ism:compliesWith="USGov USIC"
      ism:resourceElement="true"
      ism:createDate="9999-11-11"
      ism:DESVersion="202111.202211"
      ism:ISMCATCESVersion="202211"/>
  </doc>
  <doc>
    <arh:Security xmlns:arh="urn:us:gov:ic:arh"
      ism:classification="U"
      ism:ownerProducer="USA">
      <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAllOf>
          <ntk:AccessProfileList>
            <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
              <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
              <VocabularyType xmlns="urn:us:gov:ic:ntk"
                ntk:name="organization:usa-agency"
                ntk:sourceVersion="201502"/>
              <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
            </ntk:AccessProfile>
          </ntk:AccessProfileList>
        </ntk:RequiresAllOf>
      </ntk:Access>
    </arh:Security>
  </doc>
</wrapper>
```

2.14 - NTK-Two-OC.xml

```
<wrapper xmlns:ntk="urn:us:gov:ic:ntk">
  <doc>
    <arh:Security xmlns:arh="urn:us:gov:ic:arh"
      ism:classification="U"
      ism:ownerProducer="USA"
      ism:compliesWith="USGov USIC"
      ism:resourceElement="true"
      ism:createDate="9999-11-11"
      ism:DESVersion="202111.202211"
      ism:ISMCAICESVersion="202211">
      <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAllOf>
          <ntk:AccessProfileList>
            <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
              <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
              <VocabularyType xmlns="urn:us:gov:ic:ntk"
                ntk:name="organization:usa-agency"
                ntk:sourceVersion="201502"/>
              <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
            </ntk:AccessProfile>
          </ntk:AccessProfileList>
        </ntk:RequiresAllOf>
      </ntk:Access>
    </arh:Security>
  </doc>
  <doc>
    <arh:Security xmlns:arh="urn:us:gov:ic:arh"
      ism:classification="U"
      ism:ownerProducer="USA">
      <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAllOf>
          <ntk:AccessProfileList>
            <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
              <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
              <VocabularyType xmlns="urn:us:gov:ic:ntk"
                ntk:name="organization:usa-agency"
                ntk:sourceVersion="201502"/>
              <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
            </ntk:AccessProfile>
          </ntk:AccessProfileList>
        </ntk:RequiresAllOf>
      </ntk:Access>
    </arh:Security>
  </doc>
</wrapper>
```

2.15 - OC-NTKRollup.xspec

```
<!-- Notices - Distribution Notice:
      This document has been approved for Public Release and is available for use without restriction.
      --><!-- All classification marks in this example are      --><!-- for illustrative purposes only, there are no      --><!-- actual classified data contained in this example --><x:description
xmlns:x="http://www.jenitennison.com/xslt/xspec"
      xmlns:util="urn:us:gov:ic:ism-rollup:xsl:util"
      xmlns:arh="urn:us:gov:ic:arh"
      xmlns:ntk="urn:us:gov:ic:ntk"
      stylesheet="../../XSL/ISM-Rollup/ISM-Rollup-forXSpec.xsl"
      version="2">

  <x:scenario label="OC-NTKRollup single ORCON">
    <x:context href="NTK-DataFiles/Single-OC.xml"/>
    <x:expect label="1 ntk:AccessProfile"
      test="count((../ntk:RequiresAllOf)[1]/ntk:AccessProfileList/ntk:AccessProfile) = 1"/>
    <x:expect label="1 ntk:AccessProfile"
      test="(../ntk:RequiresAllOf)[1]/ntk:AccessProfileList/ntk:AccessProfile/ntk:AccessProfileValue[@ntk:qualifier='originator'] = 'CIA'"/>
  </x:scenario>

  <x:scenario label="OC-NTKRollup ORCON in excludeFrom rollup section is omitted">
    <x:context>
      <wrapper>
        <doc>
          <arh:Security ism:classification="U"
            ism:ownerProducer="USA"
            ism:compliesWith="USGov USIC"
            ism:resourceElement="true"
            ism:createDate="9999-11-11"
            ism:DESVersion="202111.202211"
            ism:ISMCATCESVersion="202211"/>

        </doc>
        <doc>
          <arh:ExternalSecurity ism:classification="U"
            ism:ownerProducer="USA"
            ism:excludeFromRollup="true">
            <ntk:ExternalAccess ism:classification="U"
              ism:ownerProducer="USA"
              ntk:externalReference="true">
              <ntk:RequiresAllOf>
                <ntk:AccessProfileList>
                  <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
                    <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
                    <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
                    <VocabularyType xmlns="urn:us:gov:ic:ntk"
                      ntk:name="organization:usa-agency"
                      ntk:sourceVersion="201502"/>
                    <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
                    <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
                    <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
                  </ntk:AccessProfile>
                </ntk:AccessProfileList>
              </ntk:RequiresAllOf>
            </ntk:ExternalAccess>
          </arh:ExternalSecurity>
        </doc>
      </wrapper>
    </x:context>
  </x:scenario>
</x:description>
```

```

        </ntk:RequiresAllOf>
      </ntk:ExternalAccess>
    </arh:ExternalSecurity>
  </doc>
</wrapper>
</x:context>

  <x:expect label="no NTK since the NTK was in an exclude from Rollup"
    test="/count(../arh:Security[@ism:resourceElement='true']/ntk:AccessProfileList/ntk:AccessProfile) = 0"/>
</x:scenario>
<x:scenario label="OC-NTKRollup 2 identical ORCON different classification">
  <x:context>
    <wrapper>
      <doc>
        <arh:Security ism:classification="U"
          ism:ownerProducer="USA"
          ism:compliesWith="USGov USIC"
          ism:resourceElement="true"
          ism:createDate="9999-11-11"
          ism:DESVersion="202111.202211"
          ism:ISMCACTCESVersion="202211"/>

        </doc>
        <doc>
          <arh:Security ism:classification="U" ism:ownerProducer="USA">
            <ntk:Access ism:classification="U" ism:ownerProducer="USA">
              <ntk:RequiresAllOf>
                <ntk:AccessProfileList>
                  <ntk:AccessProfile ism:classification="S" ism:ownerProducer="USA">
                    <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
                    <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
                    <VocabularyType xmlns="urn:us:gov:ic:ntk"
                      ntk:name="organization:usa-agency"
                      ntk:sourceVersion="201502"/>
                    <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
                    <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
                    <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
                  </ntk:AccessProfile>
                </ntk:AccessProfileList>
              </ntk:RequiresAllOf>
            </ntk:Access>
          </arh:Security>
        </doc>
        <doc>
          <arh:Security ism:classification="U"
            ism:ownerProducer="USA"
            ism:compliesWith="USGov USIC"
            ism:resourceElement="true"
            ism:createDate="9999-11-11"
            ism:DESVersion="202111.202211"
            ism:ISMCACTCESVersion="202211">
            <ntk:Access ism:classification="U" ism:ownerProducer="USA">
              <ntk:RequiresAllOf>

```

```

    <ntk:AccessProfileList>
      <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
        <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
        <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
        <VocabularyType xmlns="urn:us:gov:ic:ntk"
          ntk:name="organization:usa-agency"
          ntk:sourceVersion="201502"/>
        <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
        <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
        <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
      </ntk:AccessProfile>
    </ntk:AccessProfileList>
  </ntk:RequiresAllOf>
</ntk:Access>
</arh:Security>
</doc>
</wrapper>
</x:context>

<x:expect label="2 ntk:AccessProfile"
  test="count((.//ntk:RequiresAllOf)[1]/ntk:AccessProfileList/ntk:AccessProfile) = 2"/>
  <!-- Since one of the NTKs was S the rollup needs to happen on the NTK Access element. -->
<x:expect label="Check classification of ntk:Access"
  test="//arh:Security[@ism:resourceElement='true']/ntk:Access/@ism:classification = 'S'"/>
  <!-- Coded added a resourceElement for doing rollup but it should be gone when the final output is done. -->
<x:expect label="Check resourceElement of ntk:Access"
  test="count(//arh:Security[@ism:resourceElement='true']/ntk:Access/@ism:resourceElement) = 0 "/>
  <!-- Rollup added a ism:derivativelyClassifiedBy but it should be gone when the final output is done. -->
<x:expect label="Check derivativelyClassifiedBy of ntk:Access"
  test="count(//arh:Security[@ism:resourceElement='true']/ntk:Access/@ism:derivativelyClassifiedBy) = 0 "/>
  <!-- Rollup added a ism:derivedFrom but it should be gone when the final output is done. -->
<x:expect label="Check derivedFrom of ntk:Access"
  test="count(//arh:Security[@ism:resourceElement='true']/ntk:Access/@ism:derivedFrom) = 0 "/>
  <!-- Rollup added a ism:declassDate but it should be gone when the final output is done. -->
<x:expect label="Check declassDate of ntk:Access"
  test="count(//arh:Security[@ism:resourceElement='true']/ntk:Access/@ism:declassDate) = 0 "/>

</x:scenario>

<x:scenario label="OC-NTKRollup 2 identical ORCON">
  <x:context>
    <wrapper>
      <doc>
        <arh:Security ism:classification="U"
          ism:ownerProducer="USA"
          ism:compliesWith="USGov USIC"
          ism:resourceElement="true"
          ism:createDate="9999-11-11"
          ism:DESVersion="202111.202211"
          ism:ISMCAICESVersion="202211"/>

        </doc>
      </doc>
    </wrapper>
  </x:context>
</x:scenario>
</doc>
```



```

    <arh:Security ism:classification="U" ism:ownerProducer="USA">
      <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAllOf>
          <ntk:AccessProfileList>
            <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
              <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
              <VocabularyType xmlns="urn:us:gov:ic:ntk"
                ntk:name="organization:usa-agency"
                ntk:sourceVersion="201502"/>
              <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
            </ntk:AccessProfile>
          </ntk:AccessProfileList>
        </ntk:RequiresAllOf>
      </ntk:Access>
    </arh:Security>
  </doc>
<doc>
  <arh:Security ism:classification="U"
    ism:ownerProducer="USA"
    ism:compliesWith="USGov USIC"
    ism:resourceElement="true"
    ism:createDate="9999-11-11"
    ism:DESVersion="202111.202211"
    ism:ISMCACTCESVersion="202211">
    <ntk:Access ism:classification="U" ism:ownerProducer="USA">
      <ntk:RequiresAllOf>
        <ntk:AccessProfileList>
          <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
            <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
            <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
            <VocabularyType xmlns="urn:us:gov:ic:ntk"
              ntk:name="organization:usa-agency"
              ntk:sourceVersion="201502"/>
            <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
          </ntk:AccessProfile>
        </ntk:AccessProfileList>
      </ntk:RequiresAllOf>
    </ntk:Access>
  </arh:Security>
</doc>
</wrapper>
</x:context>

  <x:expect label="1 ntk:AccessProfile"
    test="count((../ntk:RequiresAllOf)[1]/ntk:AccessProfileList/ntk:AccessProfile) = 1"/>
</x:scenario>

<x:scenario label="OC-NTKRollup 2 identical ORCON additional white space">
  <x:context>

```



```

<wrapper>
  <doc>
    <arh:Security ism:classification="U"
                  ism:ownerProducer="USA"
                  ism:compliesWith="USGov USIC"
                  ism:resourceElement="true"
                  ism:createDate="9999-11-11"
                  ism:DESVersion="202111.202211"
                  ism:ISMATCESVersion="202211"/>

  </doc>
  <doc>
    <arh:Security ism:classification="U" ism:ownerProducer="USA">
      <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAllOf>
          <ntk:AccessProfileList>
            <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
              <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
              <VocabularyType xmlns="urn:us:gov:ic:ntk"
                             ntk:name="organization:usa-agency"
                             ntk:sourceVersion="201502"/>
              <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
            </ntk:AccessProfile>
          </ntk:AccessProfileList>
        </ntk:RequiresAllOf>
      </ntk:Access>
    </arh:Security>
  </doc>
  <doc>
    <arh:Security ism:classification="U"
                  ism:ownerProducer="USA"
                  ism:compliesWith="USGov USIC"
                  ism:resourceElement="true"
                  ism:createDate="9999-11-11"
                  ism:DESVersion="202111.202211"
                  ism:ISMATCESVersion="202211">
      <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAllOf>
          <ntk:AccessProfileList>
            <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
              <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
              <VocabularyType xmlns="urn:us:gov:ic:ntk"
                             ntk:name="organization:usa-agency"
                             ntk:sourceVersion="201502"/>
              <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
            </ntk:AccessProfile>
          </ntk:AccessProfileList>
        </ntk:RequiresAllOf>
      </ntk:Access>
    </arh:Security>
  </doc>

```

```

        </ntk:AccessProfileList>
      </ntk:RequiresAllOf>
    </ntk:Access>
  </arh:Security>
</doc>
</wrapper>
</x:context>

<x:expect label="1 ntk:AccessProfile"
  test="count((../ntk:RequiresAllOf)[1]/ntk:AccessProfileList/ntk:AccessProfile) = 1"/>
</x:scenario>

<x:scenario label="OC-NTKRollup 2 identical ORCON additional comment">
  <x:context>
    <wrapper>
      <doc>
        <arh:Security ism:classification="U"
          ism:ownerProducer="USA"
          ism:compliesWith="USGov USIC"
          ism:resourceElement="true"
          ism:createDate="9999-11-11"
          ism:DESVersion="202111.202211"
          ism:ISMATCESVersion="202211"/>

        </doc>
        <doc>
          <arh:Security ism:classification="U" ism:ownerProducer="USA">
            <ntk:Access ism:classification="U" ism:ownerProducer="USA">
              <ntk:RequiresAllOf>
                <ntk:AccessProfileList>
                  <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
                    <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
                    <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
                    <VocabularyType xmlns="urn:us:gov:ic:ntk"
                      ntk:name="organization:usa-agency"
                      ntk:sourceVersion="201502"/>
                    <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
                    <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
                    <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
                  </ntk:AccessProfile>
                </ntk:AccessProfileList>
              </ntk:RequiresAllOf>
            </ntk:Access>
          </arh:Security>
        </doc>
        <doc>
          <arh:Security ism:classification="U"
            ism:ownerProducer="USA"
            ism:compliesWith="USGov USIC"
            ism:resourceElement="true"
            ism:createDate="9999-11-11"
            ism:DESVersion="202111.202211"
            ism:ISMATCESVersion="202211">

```

```

        <ntk:Access ism:classification="U" ism:ownerProducer="USA">
          <ntk:RequiresAllOf>
            <ntk:AccessProfileList>
              <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
                <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
                <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
                <VocabularyType xmlns="urn:us:gov:ic:ntk"
                  ntk:name="organization:usa-agency"
                  ntk:sourceVersion="201502"/>
                <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
                <!-- Comment -->
                <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
                <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
              </ntk:AccessProfile>
            </ntk:AccessProfileList>
          </ntk:RequiresAllOf>
        </ntk:Access>
      </arh:Security>
    </doc>
  </wrapper>
</x:context>

  <x:expect label="1 ntk:AccessProfile"
    test="count((../ntk:RequiresAllOf)[1]/ntk:AccessProfileList/ntk:AccessProfile) = 1"/>
</x:scenario>

<x:scenario label="OC-NTKRollup 2 identical ORCON different order for agencies">
  <x:context>
    <wrapper>
      <doc>
        <arh:Security ism:classification="U"
          ism:ownerProducer="USA"
          ism:compliesWith="USGov USIC"
          ism:resourceElement="true"
          ism:createDate="9999-11-11"
          ism:DESVersion="202111.202211"
          ism:ISMCAICESVersion="202211"/>

      </doc>
    </doc>
    <arh:Security ism:classification="U" ism:ownerProducer="USA">
      <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAllOf>
          <ntk:AccessProfileList>
            <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
              <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
              <VocabularyType xmlns="urn:us:gov:ic:ntk"
                ntk:name="organization:usa-agency"
                ntk:sourceVersion="201502"/>
              <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
            </ntk:AccessProfile>
          </ntk:AccessProfileList>
        </ntk:RequiresAllOf>
      </ntk:Access>
    </arh:Security>
  </x:context>
</x:scenario>

```

```

        </ntk:AccessProfile>
      </ntk:AccessProfileList>
    </ntk:RequiresAllOf>
  </ntk:Access>
</arh:Security>
</doc>
<doc>
  <arh:Security ism:classification="U"
    ism:ownerProducer="USA"
    ism:compliesWith="USGov USIC"
    ism:resourceElement="true"
    ism:createDate="9999-11-11"
    ism:DESVersion="202111.202211"
    ism:ISMCAICESVersion="202211">
    <ntk:Access ism:classification="U" ism:ownerProducer="USA">
      <ntk:RequiresAllOf>
        <ntk:AccessProfileList>
          <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
            <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
            <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
            <VocabularyType xmlns="urn:us:gov:ic:ntk"
              ntk:name="organization:usa-agency"
              ntk:sourceVersion="201502"/>

            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
            <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
          </ntk:AccessProfile>
        </ntk:AccessProfileList>
      </ntk:RequiresAllOf>
    </ntk:Access>
  </arh:Security>
</doc>
</wrapper>
</x:context>

  <x:expect label="1 ntk:AccessProfile"
    test="count((.//ntk:RequiresAllOf)[1]/ntk:AccessProfileList/ntk:AccessProfile) = 1"/>
</x:scenario>

<x:scenario label="OC-NTKRollup 2 identical ORCON different order for dissem agencies">
  <x:context>
    <wrapper>
      <doc>
        <arh:Security ism:classification="U"
          ism:ownerProducer="USA"
          ism:compliesWith="USGov USIC"
          ism:resourceElement="true"
          ism:createDate="9999-11-11"
          ism:DESVersion="202111.202211"
          ism:ISMCAICESVersion="202211"/>

        </doc>
      </wrapper>
    </x:context>
  </x:scenario>
</x:context>
</doc>
```

```

<doc>
  <arh:Security ism:classification="U" ism:ownerProducer="USA">
    <ntk:Access ism:classification="U" ism:ownerProducer="USA">
      <ntk:RequiresAllOf>
        <ntk:AccessProfileList>
          <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
            <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
            <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
            <VocabularyType xmlns="urn:us:gov:ic:ntk"
              ntk:name="organization:usa-agency"
              ntk:sourceVersion="201502"/>
            <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
          </ntk:AccessProfile>
        </ntk:AccessProfileList>
      </ntk:RequiresAllOf>
    </ntk:Access>
  </arh:Security>
</doc>
<doc>
  <arh:Security ism:classification="U"
    ism:ownerProducer="USA"
    ism:compliesWith="USGov USIC"
    ism:resourceElement="true"
    ism:createDate="9999-11-11"
    ism:DESVersion="202111.202211"
    ism:ISMCAICESVersion="202211">
    <ntk:Access ism:classification="U" ism:ownerProducer="USA">
      <ntk:RequiresAllOf>
        <ntk:AccessProfileList>
          <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
            <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
            <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
            <VocabularyType xmlns="urn:us:gov:ic:ntk"
              ntk:name="organization:usa-agency"
              ntk:sourceVersion="201502"/>
            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>

            <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
          </ntk:AccessProfile>
        </ntk:AccessProfileList>
      </ntk:RequiresAllOf>
    </ntk:Access>
  </arh:Security>
</doc>
</wrapper>
</x:context>

<x:expect label="1 ntk:AccessProfile"
  test="count((./ntk:RequiresAllOf)[1]/ntk:AccessProfileList/ntk:AccessProfile) = 1"/>
</x:scenario>

```

```
<x:scenario label="OC-NTKRollup 2 identical ORCON different order for agencies and an AnyOf on one of them.">
  <x:context>
    <wrapper>
      <doc>
        <arh:Security ism:classification="U"
          ism:ownerProducer="USA"
          ism:compliesWith="USGov USIC"
          ism:resourceElement="true"
          ism:createDate="9999-11-11"
          ism:DESVersion="202111.202211"
          ism:ISMCAICESVersion="202211"/>

        </doc>
        <doc>
          <arh:Security ism:classification="U" ism:ownerProducer="USA">
            <ntk:Access ism:classification="U" ism:ownerProducer="USA">
              <ntk:RequiresAllOf>
                <ntk:AccessProfileList>
                  <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
                    <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
                    <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
                    <VocabularyType xmlns="urn:us:gov:ic:ntk"
                      ntk:name="organization:usa-agency"
                      ntk:sourceVersion="201502"/>
                    <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
                    <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
                    <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
                  </ntk:AccessProfile>
                </ntk:AccessProfileList>
              </ntk:RequiresAllOf>
              <ntk:RequiresAnyOf>
                <AccessProfileList xmlns="urn:us:gov:ic:ntk">
                  <AccessProfile ism:classification="U" ism:ownerProducer="USA">
                    <AccessPolicy>urn:us:gov:ic:aces:ntk:rac</AccessPolicy>
                    <ProfileDes>urn:us:gov:ic:ntk:profile:datasphere</ProfileDes>
                    <VocabularyType ntk:name="datasphere:rac"
                      ntk:source="urn:us:gov:ic:cenum:authcat:authcatttype"
                      ntk:sourceVersion="201508"/>
                    <AccessProfileValue ntk:vocabulary="datasphere:rac">TEST_DATA</AccessProfileValue>
                  </AccessProfile>
                </AccessProfileList>
              </ntk:RequiresAnyOf>
            </ntk:Access>
          </arh:Security>
        </doc>
        <doc>
          <arh:Security ism:classification="U"
            ism:ownerProducer="USA"
            ism:compliesWith="USGov USIC"
            ism:resourceElement="true"
            ism:createDate="9999-11-11"
            ism:DESVersion="202111.202211"
            ism:ISMCAICESVersion="202211">
```

```

    <ntk:Access ism:classification="U" ism:ownerProducer="USA">
      <ntk:RequiresAllOf>
        <ntk:AccessProfileList>
          <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
            <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
            <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
            <VocabularyType xmlns="urn:us:gov:ic:ntk"
              ntk:name="organization:usa-agency"
              ntk:sourceVersion="201502"/>

            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
            <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
          </ntk:AccessProfile>
        </ntk:AccessProfileList>
      </ntk:RequiresAllOf>
    </ntk:Access>
  </arh:Security>
</doc>
</wrapper>
</x:context>

<x:expect label="1 allof ntk:AccessProfile"
  test="count( (./ntk:RequiresAllOf)[1]/ntk:AccessProfileList/ntk:AccessProfile) = 1"/>
<x:expect label="1 anyOf ntk:AccessProfile"
  test="count( (./ntk:RequiresAnyOf)[1]/ntk:AccessProfileList/ntk:AccessProfile) = 1"/>
</x:scenario>
</x:description>
```



2.16 - ResourceNodeTest.xspec

```
<!-- Notices - Distribution Notice:
      This document has been approved for Public Release and is available for use without restriction.
      --><!-- All classification marks in this example are      --><!-- for illustrative purposes only, there are no      --><!-- actual classified data contained in this example --><x:description
xmlns:x="http://www.jenitennison.com/xslt/xspec"
      xmlns:util="urn:us:gov:ic:ism-rollup:xsl:util"
      stylesheet="../../../XSL/ISM-Rollup/ISM-Rollup-forXSpec.xsl"
      version="2">

  <x:import href="CountryRollup.xspec"/>
  <x:import href="AEARollup.xspec"/>
  <x:import href="FGIRollup.xspec"/>
  <x:import href="NonICRollup.xspec"/>

  <x:scenario label="SimpleUTest">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMCAICESVersion="202211"
          ism:declassException="AEA"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:derivativelyClassifiedBy="Bob"
          ism:derivedFrom="Some guide"
          ism:atomicEnergyMarkings="RD-BOBOB"/>
        <sampleAttributes ism:classification="U" ism:ownerProducer="USA">
          <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
          <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
        </sampleAttributes>
        <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
      </wrapper>
    </x:context>
    <x:expect label="resourceElement" test="../../../resourceElement">
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMCAICESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U">...</resourceElement>

    </x:expect>
    <x:expect label="ism:classification is U"
      test="count(../resourceElement[@ism:classification='U'])=1"/>
  </x:scenario>

  <x:scenario label="SimpleUTest with S that is exclude from Rollup">
```



```

<x:context>
  <wrapper>
    <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="../../../Schema/unitTest.xsd"
      ism:DESVersion="202111.202211"
      ism:compliesWith="USGov"
      ism:resourceElement="true"
      ism:createDate="2018-08-10"
      ism:ISMATCESVersion="202211"
      ism:declassException="AEA"
      ism:ownerProducer="USA"
      ism:classification="U"
      ism:derivativelyClassifiedBy="Bob"
      ism:derivedFrom="Some guide"
      ism:atomicEnergyMarkings="RD-BOBOB"/>
    <sampleAttributes ism:classification="U" ism:ownerProducer="USA">
      <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
      <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:excludeFromRollup="true"/>
    </sampleAttributes>
    <sampleAttributes ism:classification="U" ism:ownerProducer="USA"/>
  </wrapper>
</x:context>
<x:expect label="resourceElement" test="//resourceElement">
  <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="../../../Schema/unitTest.xsd"
    ism:DESVersion="202111.202211"
    ism:compliesWith="USGov"
    ism:resourceElement="true"
    ism:createDate="2018-08-10"
    ism:ISMATCESVersion="202211"
    ism:ownerProducer="USA"
    ism:classification="U">...</resourceElement>

</x:expect>
<x:expect label="ism:classification is U"
  test="count(//resourceElement[@ism:classification='U'])=1"/>
</x:scenario>

<x:scenario label="Drop REL and Display due to explicit NF classified doc.">
  <x:context>
    <wrapper>
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMATCESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICmarkings="SBU-NF"/>
      <sampleAttributes ism:classification="U"

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                ism:ownerProducer="USA"
                ism:disseminationControls="NF">
        <sampleAttributes ism:classification="U"
                ism:ownerProducer="USA"
                ism:disseminationControls="REL"/>
    </sampleAttributes>
    <sampleAttributes ism:classification="S"
                ism:ownerProducer="USA"
                ism:disseminationControls="DISPLAYONLY"/>
</wrapper>
</x:context>

<x:expect label="ism:classification is S"
        test="count(../resourceElement[@ism:classification='S']) = 1"/>
<x:expect label="@ism:disseminationControls DISPLAYONLY is not present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('DISPLAYONLY')]) = 0"/>
<x:expect label="@ism:disseminationControls REL is not present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 0"/>
<x:expect label="@ism:disseminationControls NF is present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 1"/>
</x:scenario>

<x:scenario label="Drop REL and Display due to explicit NF classified doc with other dissems present.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                    xsi:schemaLocation="../../../Schema/unitTest.xsd"
                    ism:DESVersion="202111.202211"
                    ism:compliesWith="USGov"
                    ism:resourceElement="true"
                    ism:createDate="2018-08-10"
                    ism:ISMATCESVersion="202211"
                    ism:ownerProducer="USA"
                    ism:classification="U"
                    ism:nonICmarkings="SBU-NF"/>
            <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="NF OC">
                <sampleAttributes ism:classification="U"
                        ism:ownerProducer="USA"
                        ism:disseminationControls="REL"/>
            </sampleAttributes>
            <sampleAttributes ism:classification="S"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="DISPLAYONLY"/>
        </wrapper>
    </x:context>

    <x:expect label="ism:classification is S"
            test="count(../resourceElement[@ism:classification='S']) = 1"/>
    <x:expect label="@ism:disseminationControls DISPLAYONLY is not present"
            test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('DISPLAYONLY')]) = 0"/>
    <x:expect label="@ism:disseminationControls REL is not present"
            test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 0"/>

```

```

    <x:expect label="@ism:disseminationControls NF is present"
      test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 1"/>
  </x:scenario>

  <x:scenario label="Drop REL due to portion without REL/EYES classified doc.">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMCACTESVersion="202211"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:nonICmarkings="SBU-NF"/>
        <sampleAttributes ism:classification="S" ism:ownerProducer="USA">
          <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"/>
        </sampleAttributes>
        <sampleAttributes ism:classification="S"
          ism:ownerProducer="USA"
          ism:disseminationControls="DISPLAYONLY"/>
      </wrapper>
    </x:context>

    <x:expect label="ism:classification is S"
      test="count(../resourceElement[@ism:classification='S']) = 1"/>
    <x:expect label="@ism:disseminationControls REL is not present"
      test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 0"/>
    <x:expect label="@ism:disseminationControls NF is present"
      test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 1"/>
  </x:scenario>

  <x:scenario label="Drop EYES due to portion without REL/EYES classified doc.">
    <x:context>
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xsi:schemaLocation="../../../Schema/unitTest.xsd"
          ism:DESVersion="202111.202211"
          ism:compliesWith="USGov"
          ism:resourceElement="true"
          ism:createDate="2018-08-10"
          ism:ISMCACTESVersion="202211"
          ism:ownerProducer="USA"
          ism:classification="U"
          ism:nonICmarkings="SBU-NF"/>
        <sampleAttributes ism:classification="S" ism:ownerProducer="USA">
          <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="EYES"/>

```

```

        </sampleAttributes>
        <sampleAttributes ism:classification="S"
                        ism:ownerProducer="USA"
                        ism:disseminationControls="DISPLAYONLY"/>

    </wrapper>
</x:context>

<x:expect label="ism:classification is S"
        test="count(../resourceElement[@ism:classification='S']) = 1"/>
<x:expect label="@ism:disseminationControls REL is not present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 0"/>
<x:expect label="@ism:disseminationControls EYES is not present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('EYES')]) = 0"/>
<x:expect label="@ism:disseminationControls NF is present"
        test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('NF')]) = 1"/>

</x:scenario>

<x:scenario label="Keep REL and drop eyes due to portions with either REL/EYES classified doc.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                            xsi:schemaLocation="../../../Schema/unitTest.xsd"
                            ism:DESVersion="202111.202211"
                            ism:compliesWith="USGov"
                            ism:resourceElement="true"
                            ism:createDate="2018-08-10"
                            ism:ISMCAICESVersion="202211"
                            ism:ownerProducer="USA"
                            ism:classification="U"
                            ism:nonICmarkings="SBU-NF"/>
            <sampleAttributes ism:classification="S"
                            ism:ownerProducer="USA"
                            ism:disseminationControls="REL"
                            ism:releasableTo="USA AUS CAN">
                <sampleAttributes ism:classification="U"
                                    ism:ownerProducer="USA"
                                    ism:disseminationControls="EYES"
                                    ism:releasableTo="USA AUS CAN"/>
            </sampleAttributes>
            <sampleAttributes ism:classification="S"
                            ism:ownerProducer="USA"
                            ism:disseminationControls="DISPLAYONLY REL"
                            ism:releasableTo="USA AUS CAN"/>
        </wrapper>
    </x:context>

    <x:expect label="ism:classification is S"
            test="count(../resourceElement[@ism:classification='S']) = 1"/>
    <x:expect label="@ism:disseminationControls REL is present"
            test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('REL')]) = 1"/>
    <x:expect label="@ism:disseminationControls EYES is not present"
            test="count(../resourceElement[normalize-space(@ism:disseminationControls)][xs:NMTOKENS(@ism:disseminationControls) = xs:NMTOKENS('EYES')]) = 0"/>

</x:scenario>

```

```

<x:scenario label="Approx Markings true.">
  <x:context>
    <wrapper>
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMCAICESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICmarkings="SBU-NF"/>
      <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:hasApproximateMarkings="true"
        ism:releasableTo="USA AUS CAN">
        <sampleAttributes ism:classification="U"
          ism:ownerProducer="USA"
          ism:disseminationControls="REL"
          ism:releasableTo="USA AUS CAN"/>
        </sampleAttributes>
      <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS"/>
    </wrapper>
  </x:context>

  <x:expect label="@ism:hasApproximateMarkings is true"
    test="count(../resourceElement[@ism:hasApproximateMarkings='true']) = 1"/>
</x:scenario>

<x:scenario label="Approx Markings false.">
  <x:context>
    <wrapper>
      <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="../../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMCAICESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICmarkings="SBU-NF"/>
      <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:hasApproximateMarkings="false"
        ism:releasableTo="USA AUS CAN">
        <sampleAttributes ism:classification="U"

```

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                ism:ownerProducer="USA"
                ism:disseminationControls="REL"
                ism:releasableTo="USA AUS CAN"/>
        </sampleAttributes>
        <sampleAttributes ism:classification="S"
                ism:ownerProducer="USA"
                ism:disseminationControls="REL"
                ism:releasableTo="USA AUS"/>

    </wrapper>
</x:context>

    <x:expect label="@ism:hasApproximateMarkings is true"
            test="count(../resourceElement[@ism:hasApproximateMarkings='true']) = 0"/>
</x:scenario>

<x:scenario label="Approx Markings true and false.">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                    xsi:schemaLocation="../../../Schema/unitTest.xsd"
                    ism:DESVersion="202111.202211"
                    ism:compliesWith="USGov"
                    ism:resourceElement="true"
                    ism:createDate="2018-08-10"
                    ism:ISMCACTCESVersion="202211"
                    ism:ownerProducer="USA"
                    ism:classification="U"
                    ism:nonICmarkings="SBU-NF"/>
            <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="REL"
                    ism:hasApproximateMarkings="false"
                    ism:releasableTo="USA AUS CAN">
                <sampleAttributes ism:classification="U"
                        ism:ownerProducer="USA"
                        ism:disseminationControls="REL"
                        ism:hasApproximateMarkings="true"
                        ism:releasableTo="USA AUS CAN"/>
            </sampleAttributes>
            <sampleAttributes ism:classification="S"
                    ism:ownerProducer="USA"
                    ism:disseminationControls="REL"
                    ism:releasableTo="USA AUS"/>

        </wrapper>
    </x:context>

    <x:expect label="@ism:hasApproximateMarkings is true"
            test="count(../resourceElement[@ism:hasApproximateMarkings='true']) = 1"/>
</x:scenario>

<x:scenario label="Declass Date 25 years when unknown">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

```

```

        xsi:schemaLocation="../../../Schema/unitTest.xsd"
        ism:DESVersion="202111.202211"
        ism:compliesWith="USGov"
        ism:resourceElement="true"
        ism:createDate="2018-08-10"
        ism:ISMATCESVersion="202211"
        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICmarkings="SBU-NF"/>
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="IMC"
        ism:hasApproximateMarkings="false">
        <sampleAttributes ism:classification="S"
            ism:ownerProducer="USA"
            ism:FGIsourceProtected="FGI"
            ism:disseminationControls="RS REL"
            ism:hasApproximateMarkings="true"
            ism:releasableTo="USA AUS CAN"/>
        <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:FGIsourceProtected="FGI"
            ism:disseminationControls="REL"
            ism:hasApproximateMarkings="true"
            ism:releasableTo="USA AUS CAN"/>
        </sampleAttributes>
    <sampleAttributes ism:noticeType="IMC"
        ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS">IMC Notice</sampleAttributes>
    <sampleAttributes ism:noticeType="RSEN"
        ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS">RSEN Notice</sampleAttributes>

    </wrapper>
</x:context>

    <x:expect label="@ism:declassDate is 25 years out"
        test="count(../resourceElement[@ism:declassDate=(current-date() + xs:yearMonthDuration('P25Y'))]) = 1"/>
</x:scenario>

<x:scenario label="Multiple Declass Date's choose longest">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMATCESVersion="202211"

```



```

        ism:ownerProducer="USA"
        ism:classification="U"
        ism:nonICmarkings="SBU-NF" />
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="IMC"
        ism:hasApproximateMarkings="false"
        ism:declassDate="2019-08-10">
        <sampleAttributes ism:classification="S"
            ism:ownerProducer="USA"
            ism:FGISourceProtected="FGI"
            ism:disseminationControls="RS REL"
            ism:declassDate="2025-08-10"
            ism:hasApproximateMarkings="true"
            ism:releasableTo="USA AUS CAN" />
        <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:FGISourceProtected="FGI"
            ism:disseminationControls="REL"
            ism:hasApproximateMarkings="true"
            ism:releasableTo="USA AUS CAN" />
    </sampleAttributes>
    <sampleAttributes ism:noticeType="IMC"
        ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS">IMC Notice</sampleAttributes>
    <sampleAttributes ism:noticeType="RSEN"
        ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS">RSEN Notice</sampleAttributes>

    </wrapper>
</x:context>

    <x:expect label="@ism:declassDate is 2025-08-10 "
        test="count(../resourceElement[@ism:declassDate='2025-08-10']) = 1"/>
</x:scenario>

<x:scenario label="Multiple SCI sort">
    <x:context>
        <wrapper>
            <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="../../../../Schema/unitTest.xsd"
                ism:DESVersion="202111.202211"
                ism:compliesWith="USGov"
                ism:resourceElement="true"
                ism:createDate="2018-08-10"
                ism:ISMCAICESVersion="202211"
                ism:ownerProducer="USA"
                ism:classification="U"
                ism:nonICmarkings="SBU-NF" />
            <sampleAttributes ism:classification="S"
                ism:ownerProducer="USA"

```



```

        ism:disseminationControls="IMC"
        ism:SCIcontrols="TK"
        ism:hasApproximateMarkings="false"
        ism:declassDate="2019-08-10">
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:FGIsourceProtected="FGI"
        ism:SCIcontrols="SI"
        ism:disseminationControls="RS REL"
        ism:declassDate="2025-08-10"
        ism:hasApproximateMarkings="true"
        ism:releasableTo="USA AUS CAN"/>
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:FGIsourceProtected="FGI"
        ism:SCIcontrols="SI TK"
        ism:disseminationControls="REL"
        ism:hasApproximateMarkings="true"
        ism:releasableTo="USA AUS CAN"/>
</sampleAttributes>
<sampleAttributes ism:noticeType="IMC"
    ism:classification="S"
    ism:ownerProducer="USA"
    ism:SCIcontrols="SI SI-G"
    ism:disseminationControls="REL"
    ism:releasableTo="USA AUS">IMC Notice</sampleAttributes>
<sampleAttributes ism:noticeType="RSEN"
    ism:classification="S"
    ism:ownerProducer="USA"
    ism:disseminationControls="REL"
    ism:releasableTo="USA AUS">RSEN Notice</sampleAttributes>

</wrapper>
</x:context>

<x:expect label="@ism:SCIcontrols is SI SI-G TK "
    test="count(../resourceElement[@ism:SCIcontrols='SI SI-G TK']) = 1"/>
</x:scenario>

<x:scenario label="PartTags Function simple">
    <x:call function="util:partTags">
        <x:param name="context">
            <wrapper>
                <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                    xsi:schemaLocation="../../../../Schema/unitTest.xsd"
                    ism:DESVersion="202111.202211"
                    ism:compliesWith="USGov"
                    ism:resourceElement="true"
                    ism:createDate="2018-08-10"
                    ism:ISMCAICESVersion="202211"
                    ism:ownerProducer="USA"
                    ism:classification="U"
                    ism:nonICmarkings="SBU-NF"/>
                <sampleAttributes ism:classification="U"
                    ism:ownerProducer="USA"

```

```

        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS CAN">
    <sampleAttributes ism:classification="U"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS CAN"/>
    </sampleAttributes>
    <sampleAttributes ism:classification="S"
        ism:ownerProducer="USA"
        ism:disseminationControls="REL"
        ism:releasableTo="USA AUS"/>
    </wrapper>
  </x:param>
</x:call>
<x:expect label="count part tag is 3 " test="count(./*)=3"/>
</x:scenario>

<x:scenario label="PartTags Function with 1 excludeFromRollup portion">
  <x:call function="util:partTags">
    <x:param name="context">
      <wrapper>
        <resourceElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xsi:schemaLocation="../../Schema/unitTest.xsd"
            ism:DESVersion="202111.202211"
            ism:compliesWith="USGov"
            ism:resourceElement="true"
            ism:createDate="2018-08-10"
            ism:ISMCATCESVersion="202211"
            ism:ownerProducer="USA"
            ism:classification="U"
            ism:nonICmarkings="SBU-NF"/>
        <sampleAttributes ism:classification="U"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"
            ism:releasableTo="USA AUS CAN">
          <sampleAttributes ism:classification="U"
              ism:ownerProducer="USA"
              ism:disseminationControls="REL"
              ism:releasableTo="USA AUS CAN"/>
        </sampleAttributes>
        <sampleAttributes ism:classification="S"
            ism:ownerProducer="USA"
            ism:disseminationControls="REL"
            ism:releasableTo="USA AUS"
            ism:excludeFromRollup="true"/>
      </wrapper>
    </x:param>
  </x:call>
  <x:expect label="count part tag is 2 " test="count(./*)=2"/>
</x:scenario>

</x:description>
```

## 2.17 - Rollup-Single-OC.xml

```
<!-- Notices - distEditionBlockReplace--><!-- All classification marks in this example are --><!-- for illustrative purposes only, there are no --><!-- actual classified data contained in this example --><wrapper xmlns:ntk="urn:us:gov:ic:ntk">
  <doc>
    <arh:Security xmlns:arh="urn:us:gov:ic:arh"
      ism:classification="U"
      ism:ownerProducer="USA"
      ism:compliesWith="USGov USIC"
      ism:resourceElement="true"
      ism:createDate="9999-11-11"
      ism:DESVersion="202111.202211"
      ism:ISMCA TCESVersion="202211">

</arh:Security>
</doc>
<doc>
  <arh:Security xmlns:arh="urn:us:gov:ic:arh"
    ism:classification="U"
    ism:ownerProducer="USA">
    <ntk:Access ism:classification="U" ism:ownerProducer="USA">
      <ntk:RequiresAllOf>
        <ntk:AccessProfileList>
          <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
            <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
            <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
            <VocabularyType xmlns="urn:us:gov:ic:ntk"
              ntk:name="organization:usa-agency"
              ntk:sourceVersion="201502"/>
            <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
          </ntk:AccessProfile>
        </ntk:AccessProfileList>
      </ntk:RequiresAllOf>
    </ntk:Access>
  </arh:Security>
  <portion ism:classification="S"
    ism:disseminationControls="OC NF"
    ism:ownerProducer="USA"/>

</doc>
</wrapper>
```

2.18 - Rollup-Two-OC.xml

```
<!-- Notices - distEditionBlockReplace--><!-- All classification marks in this example are --><!-- for illustrative purposes only, there are no --><!-- actual classified data contained in this example --><wrapper xmlns:ntk="urn:us:gov:ic:ntk">
  <doc>
    <arh:Security xmlns:arh="urn:us:gov:ic:arh"
      ism:classification="U"
      ism:ownerProducer="USA"
      ism:compliesWith="USGov USIC"
      ism:resourceElement="true"
      ism:createDate="9999-11-11"
      ism:DESVersion="202111.202211"
      ism:ISMCAICESVersion="202211">
      <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAllOf>
          <ntk:AccessProfileList>
            <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
              <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
              <VocabularyType xmlns="urn:us:gov:ic:ntk"
                ntk:name="organization:usa-agency"
                ntk:sourceVersion="201502"/>
              <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
            </ntk:AccessProfile>
          </ntk:AccessProfileList>
        </ntk:RequiresAllOf>
      </ntk:Access>
    </arh:Security>
  </doc>
  <doc>
    <arh:Security xmlns:arh="urn:us:gov:ic:arh"
      ism:classification="U"
      ism:ownerProducer="USA">
      <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAllOf>
          <ntk:AccessProfileList>
            <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
              <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
              <VocabularyType xmlns="urn:us:gov:ic:ntk"
                ntk:name="organization:usa-agency"
                ntk:sourceVersion="201502"/>
              <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
            </ntk:AccessProfile>
          </ntk:AccessProfileList>
        </ntk:RequiresAllOf>
      </ntk:Access>
    </arh:Security>
    <portion ism:classification="S"
      ism:disseminationControls="OC NF">
```

```
        ism:ownerProducer="USA"/>

    </doc>
</wrapper>
```

2.19 - Single-OC.xml

```
<wrapper xmlns:ntk="urn:us:gov:ic:ntk">
    <doc>
        <arh:Security xmlns:arh="urn:us:gov:ic:arh"
            ism:classification="U"
            ism:ownerProducer="USA"
            ism:compliesWith="USGov USIC"
            ism:resourceElement="true"
            ism:createDate="9999-11-11"
            ism:DESVersion="202111.202211"
            ism:ISMCAICESVersion="202211">

        </arh:Security>
    </doc>
    <doc>
        <arh:Security xmlns:arh="urn:us:gov:ic:arh"
            ism:classification="U"
            ism:ownerProducer="USA">
            <ntk:Access ism:classification="U" ism:ownerProducer="USA">
                <ntk:RequiresAllOf>
                    <ntk:AccessProfileList>
                        <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
                            <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
                            <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
                            <VocabularyType xmlns="urn:us:gov:ic:ntk"
                                ntk:name="organization:usa-agency"
                                ntk:sourceVersion="201502"/>
                            <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
                            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
                            <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
                        </ntk:AccessProfile>
                    </ntk:AccessProfileList>
                </ntk:RequiresAllOf>
            </ntk:Access>
        </arh:Security>
    </doc>
</wrapper>
```

## 2.20 - Two-OC.xml

```
<wrapper xmlns:ntk="urn:us:gov:ic:ntk">
  <doc>
    <arh:Security xmlns:arh="urn:us:gov:ic:arh"
      ism:classification="U"
      ism:ownerProducer="USA"
      ism:compliesWith="USGov USIC"
      ism:resourceElement="true"
      ism:createDate="9999-11-11"
      ism:DESVersion="202111.202211"
      ism:ISMCACTESVersion="202211">
      <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAllOf>
          <ntk:AccessProfileList>
            <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
              <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
              <VocabularyType xmlns="urn:us:gov:ic:ntk"
                ntk:name="organization:usa-agency"
                ntk:sourceVersion="201502"/>
              <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
            </ntk:AccessProfile>
          </ntk:AccessProfileList>
        </ntk:RequiresAllOf>
      </ntk:Access>
    </arh:Security>
  </doc>
  <doc>
    <arh:Security xmlns:arh="urn:us:gov:ic:arh"
      ism:classification="U"
      ism:ownerProducer="USA">
      <ntk:Access ism:classification="U" ism:ownerProducer="USA">
        <ntk:RequiresAllOf>
          <ntk:AccessProfileList>
            <ntk:AccessProfile ism:classification="U" ism:ownerProducer="USA">
              <ntk:AccessPolicy>urn:us:gov:ic:aces:ntk:oc</ntk:AccessPolicy>
              <ntk:ProfileDes>urn:us:gov:ic:ntk:profile:agencydissem</ntk:ProfileDes>
              <VocabularyType xmlns="urn:us:gov:ic:ntk"
                ntk:name="organization:usa-agency"
                ntk:sourceVersion="201502"/>
              <ntk:AccessProfileValue ntk:qualifier="originator" ntk:vocabulary="organization:usa-agency">CIA</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">DNI</ntk:AccessProfileValue>
              <ntk:AccessProfileValue ntk:qualifier="dissemto" ntk:vocabulary="organization:usa-agency">NSA</ntk:AccessProfileValue>
            </ntk:AccessProfile>
          </ntk:AccessProfileList>
        </ntk:RequiresAllOf>
      </ntk:Access>
    </arh:Security>
  </doc>
</wrapper>
```