1. Table of Contents

1. XML File Format Version 7.0-cs01

1.1. Overview

The Secretary of State's office has adopted the EML v7.0-cs01 standard (approved in October 2011) as an XML file format for providing election night results. The elections XML file set consists of two classes of files:

- The 510 files contain the election voting results and is compliant with the 510 schema in the EML v7.0-cs01 release. We release one large zipped file for all results, and smaller single race files for faster processing.

- The 530 file contains the county reporting statistics and is compliant with the 530 schema in the EML v7.0-cs01 release.

1.2. EML References

Although it is not a requirement, the full EML specification can be found at:

OASIS EML home page: http://www.oasis-open.org/committees/election

Specifications: http://docs.oasis-open.org/election

1.3. File Name and Size

The two XML files are compressed into one file using the zip algorithm. The file name for the compressed file is XyyEE.zip where:

X	Indicates the XML file format
yy	Indicates the election year
EE	Indicates the election type

Value	Description
PP	Presidential Primary
PG	Presidential General
DP	Direct Primary
GP	Gubernatorial Primary
GG	Gubernatorial General
SS	Special Election

The compressed file size is approximately 175K.

The file name is case sensitive. The file names for the XML files within the compressed file have the same file names as the compressed file with _510 or _530 appended to the end of the file name. The file extension for the XML files is xml.

For example, the file names for the 2016 Presidential Primary Election are:

X16PP_510.xml
X16DP_510.xml

X16PP_530.xml
X16DP_530.xml

1.4. Election Reporting Results XML in Detail (510)

The 510 XML document contains the election reporting results. The XML format corresponds to the ASCII 'V' message file.

Sample 510 XML File

A sample 510 XML file is located at www.sos.ca.gov/media/.

1.4.1. Overview of the 510 File.

The XML document structure starts and ends in the <EML> element. The <EML> element includes basic information about the election.

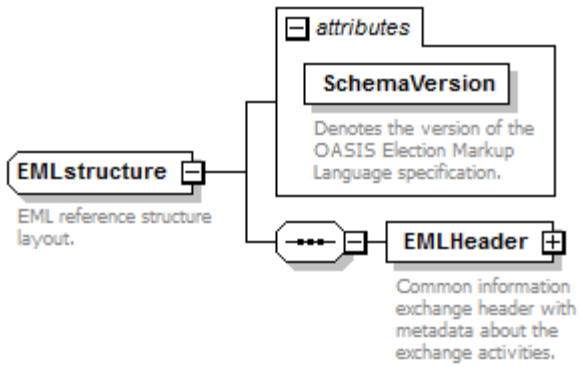
The <EMLHeader> element encapsulates header information about the file and the election, but does not contain information about the election results.

The <Count> element encapsulates the event, election information, and the contest details.

The <Contests> element encapsulates the actual contest and counts for each contest.

1.4.2. <EML> Element

This is the start of the document hierarchy and all other elements are contained within the <EML> element.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
children	**EMLHeader**

attributes

Name	Type	Use	Default	Fixed	Annotation
SchemaVersion	**xs:NMTOKEN**	required		7.0	documentation Denotes the version of the OASIS Election Markup Language specification.

annotation

documentation

EML reference structure layout.

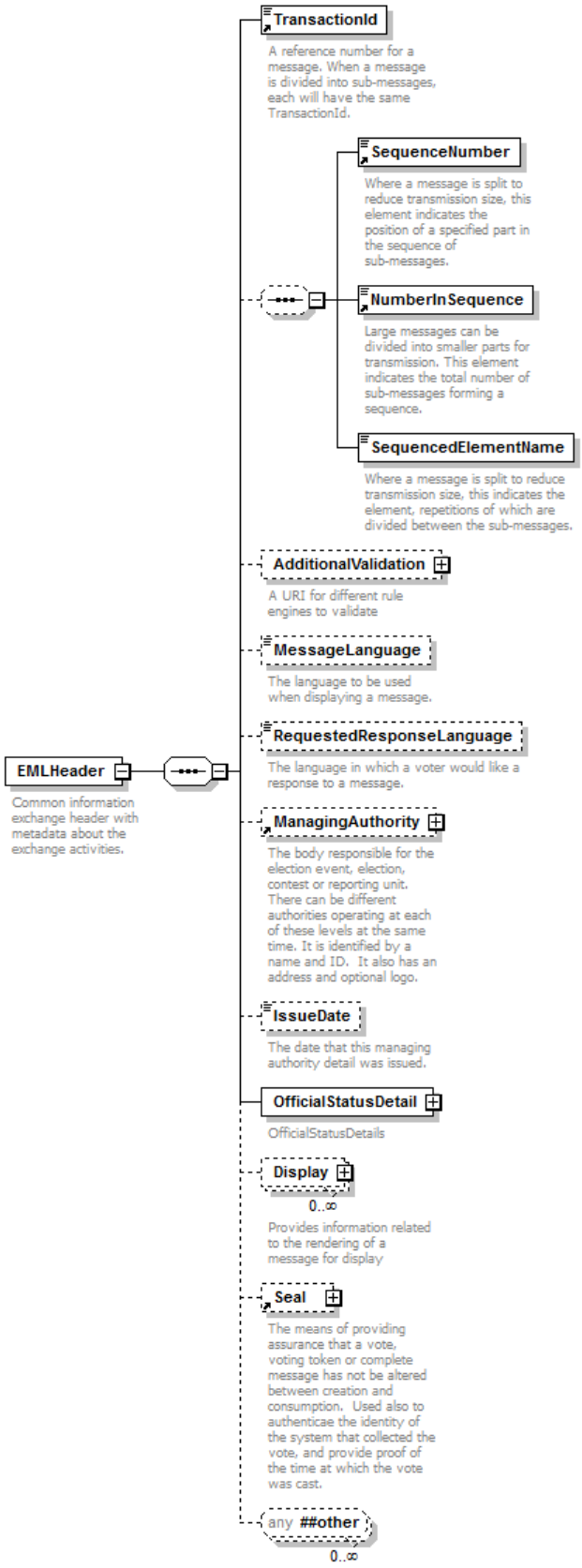
source

```
<xs:complexType name="EMLstructure">
  <xs:annotation>
    <xs:documentation>EML reference structure layout.</xs:documentation>
  </xs:annotation>
  <xs:attribute name="SchemaVersion" type="xs:NMTOKEN" use="required" fixed="7.0">
    <xs:annotation>
      <xs:documentation>Denotes the version of the OASIS Election Markup Language
specification.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
  <!-- xs:attribute name="Id" type="MessageTypeType" use="required"/ -->
</xs:complexType>
```

Relevant Attributes			
Name	**Type**	**Size**	**Description**
Id	Alpha	2	Identifier for the type of count.
SchemaVersion	Numeric	4	Denotes the version of the OASIS Election Markup Language specification.

1.4.3. <EMLHeader> Element

The EMLHeader Element provides metadata information regarding the file, the election and others.

diagram	
name space	urn:oasis:names:tc:evs:schema:eml

properties	content complex
children	TransactionId SequenceNumber NumberInSequence SequencedElementName AdditionalValidation MessageLanguage RequestedResponseLanguage ManagingAuthority IssueDate OfficialStatusDetail Display Seal
annotation	documentation Common information exchange header with metadata about the exchange activities.
source	

```
<xs:element name="EMLHeader">
  <xs:annotation>
    <xs:documentation>Common information exchange header with metadata about the exchange activities.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="TransactionId"/>
      <xs:sequence minOccurs="0">
        <xs:element ref="SequenceNumber"/>
        <xs:element ref="NumberInSequence"/>
        <xs:element name="SequencedElementName" type="xs:NMTOKEN">
          <xs:annotation>
            <xs:documentation>Where a message is split to reduce transmission size, this indicates the element, repetitions of which are divided between the sub-messages.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
      <xs:element name="AdditionalValidation" minOccurs="0">
        <xs:annotation>
          <xs:documentation>A URI for different rule engines to validate</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Location" type="xs:anyURI">
              <xs:annotation>
                <xs:documentation>Location of the URI</xs:documentation>
              </xs:annotation>
            </xs:element>
            <xs:element name="Type" type="xs:token">
              <xs:annotation>
                <xs:documentation>The type of rule engine</xs:documentation>
              </xs:annotation>
            </xs:element>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="MessageLanguage" type="LanguageType" minOccurs="0">
        <xs:annotation>
          <xs:documentation>The language to be used when displaying a message.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="RequestedResponseLanguage" type="LanguageType" minOccurs="0">
        <xs:annotation>
          <xs:documentation>The language in which a voter would like a response to a
```

```
message.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element ref="ManagingAuthority" minOccurs="0"/>
    <xs:element name="IssueDate" type="DateType" minOccurs="0">
     <xs:annotation>
      <xs:documentation>The date that this managing authority detail was
issued.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="OfficialStatusDetail" id="d2e1412" minOccurs="1" maxOccurs="1">
     <xs:annotation>
      <xs:documentation>OfficialStatusDetails</xs:documentation>
     </xs:annotation>
     <xs:complexType>
      <xs:sequence>
       <xs:element name="OfficialStatus" type="OfficialStatusDefinition" id="d2e1425"
minOccurs="1" maxOccurs="1">
        <xs:annotation>
         <xs:documentation>OfficialStatusDefinition</xs:documentation>
        </xs:annotation>
       </xs:element>
       <xs:element name="StatusDate" type="StatusDateDefinition" id="d2e1439" minOccurs="1"
maxOccurs="1">
        <xs:annotation>
         <xs:documentation>StatusDateDefinition</xs:documentation>
        </xs:annotation>
       </xs:element>
      </xs:sequence>
     </xs:complexType>
    </xs:element>
    <xs:element name="Display" minOccurs="0" maxOccurs="unbounded">
     <xs:annotation>
      <xs:documentation>Provides information related to the rendering of a message for
display</xs:documentation>
      </xs:annotation>
      <xs:complexType>
       <xs:sequence>
        <xs:element name="Stylesheet" maxOccurs="unbounded">
         <xs:annotation>
          <xs:documentation>A display stylesheet for rendering displayable content (e.g. xslt or
css) such as to HTML.</xs:documentation>
         </xs:annotation>
         <xs:complexType>
          <xs:simpleContent>
           <xs:extension base="xs:anyURI">
            <xs:attribute name="Type" type="xs:token" use="required">
             <xs:annotation>
              <xs:documentation>URL reference address location of the
stylesheet.</xs:documentation>
             </xs:annotation>
            </xs:attribute>
           </xs:extension>
          </xs:simpleContent>
```

```
            </xs:complexType>
          </xs:element>
        </xs:sequence>
        <xs:attribute name="Format" type="xs:NMTOKEN" use="optional">
          <xs:annotation>
            <xs:documentation>Indicates the format of the stylesheet syntax, e.g. xslt,
css.</xs:documentation>
          </xs:annotation>
        </xs:attribute>
      </xs:complexType>
    </xs:element>
    <xs:element ref="Seal" minOccurs="0">
      <xs:annotation>
        <xs:documentation>The means of providing assurance that a vote, voting token or complete
message has not be altered between creation and consumption.  Used also to authenticae the
identity of the system that collected the vote, and provide proof of the time at which the vote was
cast.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:any namespace="##other" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
 </xs:complexType>
</xs:element>
```

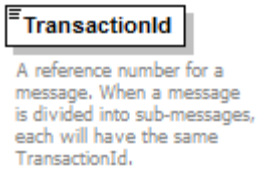
This is a container element composed of elements that store metadata regarding the file.

In the Secretary of State Implementation, only the following elements are used under the <EMLHeader> element:

- TransactionId
- MessageLanguage
- IssueDate
- OfficialStatusDetail

1.4.3.1. <TransactionId> Element

The <TransactionId> element stores an incrementing value uniquely identifying this file.

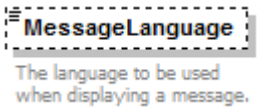
diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**xs:token**

properties	content simple
used by	element **EMLstructure/EMLHeader**
annotation	documentation A reference number for a message. When a message is divided into sub-messages, each will have the same TransactionId.
source	<xs:element name="TransactionId" type="xs:token"> <xs:annotation> <xs:documentation>A reference number for a message. When a message is divided into sub-messages, each will have the same TransactionId.</xs:documentation> </xs:annotation> </xs:element>

Element	<TransactionId>
Example	1
Comments	An incrementing number unique to this instance of the data-feed file.

1.4.3.2. <MessageLanguage> Element

The <MessageLanguage> element denotes which language should be used when parsing the text in the file.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**LanguageType**
properties	minOcc 0 maxOcc 1 content simple
annotation	documentation The language to be used when displaying a message.
source	<xs:element name="MessageLanguage" type="LanguageType" minOccurs="0"> <xs:annotation> <xs:documentation>The language to be used when displaying a message.</xs:documentation> </xs:annotation> </xs:element>

In the Secretary of State Implementation, this will always be “en-US”, as we do not release results in multiple languages.

Element	<MessageLanguage>
Example	en-US
Comment	Denotes the language used in the file.

1.4.3.3. <IssueDate> Element

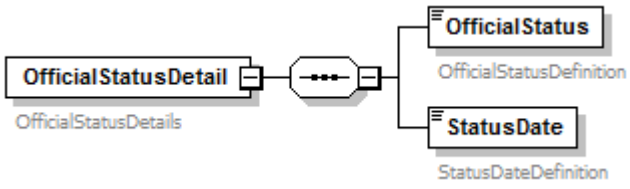
The <IssuedDate> element will store the complete time and date of the results in this file.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	DateType
properties	minOcc 0 maxOcc 1 content simple
annotation	documentation The date that this managing authority detail was issued.
source	<xs:element name="IssueDate" type="DateType" minOccurs="0"> <xs:annotation> <xs:documentation>The date that this managing authority detail was issued.</xs:documentation> </xs:annotation> </xs:element>

Element	<IssueDate>
Example	2016-06-02T11:06:16-07:00
Comments	A complete timestamp representing the time and date.

1.4.3.4. <OfficialStatusDetail>

Provides information regarding the status of the information in the document.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml

properties	content complex id d2e1412
children	**OfficialStatus** **StatusDate**
annotation	documentation OfficialStatusDetails
source	<xs:element name="OfficialStatusDetail" id="d2e1412" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>OfficialStatusDetails</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="OfficialStatus" type="OfficialStatusDefinition" id="d2e1425" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>OfficialStatusDefinition</xs:documentation> </xs:annotation> </xs:element> <xs:element name="StatusDate" type="StatusDateDefinition" id="d2e1439" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>StatusDateDefinition</xs:documentation> </xs:annotation> </xs:element> </xs:sequence> </xs:complexType> </xs:element>

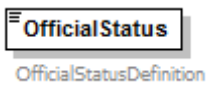
This is an element contains information about the official status of the results contained in the file. It is a container object and stores neither attributes nor values.

In the Secretary of State Implementation, only the following elements are used under the <OfficialStatusDetail> element:

- Official Status
- Status Date

1.4.3.4.1. <OfficialStatus> Element

The <OfficialStatus> element denotes the status of the results contained in this file.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**OfficialStatusDefinition**
properties	content simple id d2e1425

annotation	documentation OfficialStatusDefinition
source	<xs:element name="OfficialStatus" type="OfficialStatusDefinition" id="d2e1425" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>OfficialStatusDefinition</xs:documentation> </xs:annotation> </xs:element>

Element	<OfficialStatus>
Example	UnOfficial
Comments	A textual description of the Official Status of the results

1.4.3.4.2. <StatusDate> Element

The <StatusDate> element denotes the date the status took effect.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	StatusDateDefinition
properties	content simple id d2e1439
annotation	documentation StatusDateDefinition
source	<xs:element name="StatusDate" type="StatusDateDefinition" id="d2e1439" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>StatusDateDefinition</xs:documentation> </xs:annotation> </xs:element>

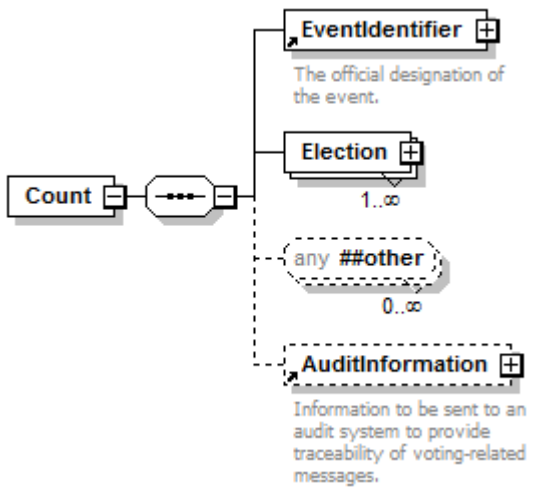
This may be different than the date of the file.

Element	<StatusDate>
Example	2016-06-02
Comments	A date representing the day the status of the results.

1.4.4. <Count> Element

The <Count> element starts breaking down the information into events and elections. It has no attributes and contains the following children:

- EventIdentifier
- Contests

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
properties	content complex
children	**EventIdentifier** **Election** **AuditInformation**
used by	element **EML**

source

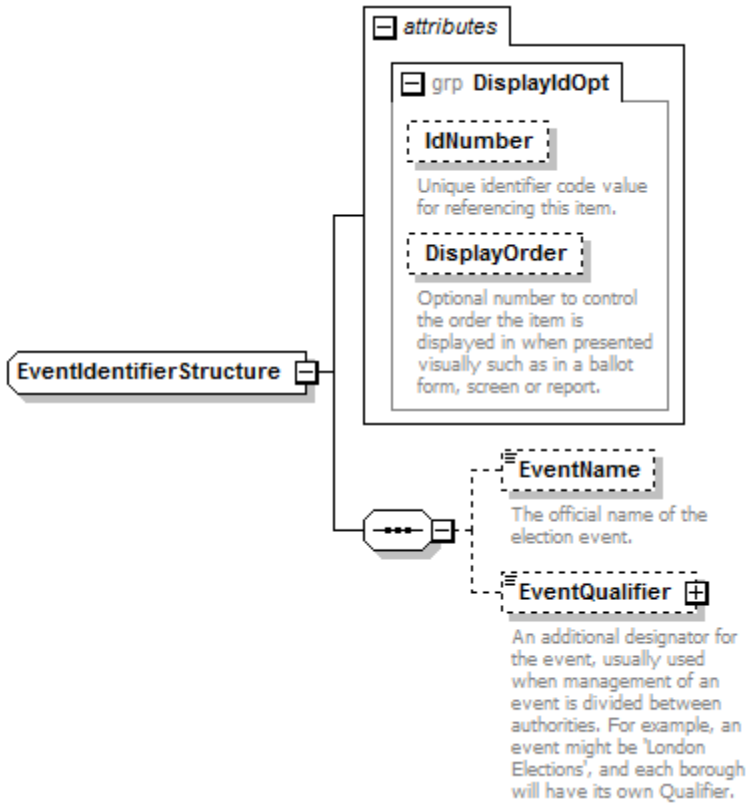
```
<xs:element name="Count">
 <xs:complexType>
  <xs:sequence>
   <xs:element ref="EventIdentifier"/>
   <xs:element name="Election" maxOccurs="unbounded">
    <xs:complexType>
     <xs:sequence>
      <xs:element ref="ElectionIdentifier"/>
      <xs:element name="Contests">
       <xs:complexType>
        <xs:sequence>
         <xs:element name="Contest" maxOccurs="unbounded">
          <xs:complexType>
           <xs:sequence>
            <xs:element ref="ContestIdentifier"/>
            <xs:element ref="CountQualifier" minOccurs="0"/>
            <xs:element ref="CountingAlgorithm" minOccurs="0"/>
            <xs:element ref="NumberOfPositions" minOccurs="0"/>
            <xs:element ref="OfficialStatusDetail" minOccurs="0"/>
            <xs:choice>
             <xs:sequence>
              <xs:element name="TotalVotes">
               <xs:complexType>
                <xs:sequence>
                 <xs:element ref="CountMetric" minOccurs="0"
maxOccurs="unbounded"/>
                 <xs:group ref="VoteGroup"/>
                </xs:sequence>
```

```
                    </xs:complexType>
                  </xs:element>
                  <xs:element ref="ReportingUnitVotes" minOccurs="0"
maxOccurs="unbounded"/>
                </xs:sequence>
                <xs:element ref="ReportingUnitVotes"/>
              </xs:choice>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:any namespace="##other" minOccurs="0" maxOccurs="unbounded"/>
  <xs:element ref="AuditInformation" minOccurs="0"/>
 </xs:sequence>
</xs:complexType>
</xs:element>
```

1.4.4.1. <EventIdentifier> Element

The <EventIdentifier> stores information about this election event. It has no attributes and contains the <EventName> element.

diagram



namespace	urn:oasis:names:tc:evs:schema:eml
children	**EventName** **EventQualifier**
used by	element **EventIdentifier**

attributes

Name	Type	Use	Default	Fixed	Annotation
IdNumber	**xs:NMTOKEN**	optional			documentation Unique identifier code value for referencing this item.
DisplayOrder	**xs:positiveInteger**	optional			documentation Optional number to control the order the item is displayed in when presented visually such as in a ballot form, screen or report.

source

```
<xs:complexType name="EventIdentifierStructure">
  <xs:sequence>
    <xs:element name="EventName" type="xs:token" minOccurs="0">
      <xs:annotation>
        <xs:documentation>The official name of the election event.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="EventQualifier" type="EventQualifierStructure" minOccurs="0">
      <xs:annotation>
        <xs:documentation>An additional designator for the event, usually used when
management of an event is divided between authorities. For example, an event might be
'London Elections', and each borough will have its own Qualifier.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
  <xs:attributeGroup ref="DisplayIdOpt"/>
</xs:complexType>
```

1.4.4.1.1. <EventName> Element

The <EventName> element contains the official name of the election event.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**xs:token**
properties	minOcc 0

	maxOcc 1 content simple
annotation	documentation The official name of the election event.
source	<xs:element name="EventName" type="xs:token" minOccurs="0"> <xs:annotation> <xs:documentation>The official name of the election event.</xs:documentation> </xs:annotation> </xs:element>

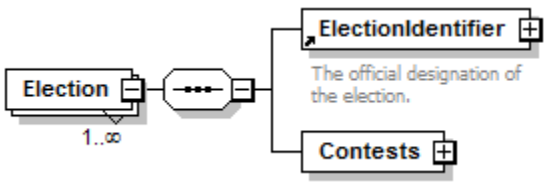
During testing it the Official Name will have “TEST_DATA” appended to the end of the name.

Element	< EventName >
Example	California 2016 Presidential Primary Election
Comments	A textual description of the election event.

1.4.4.2. <Election> Element

The <Election> element further breaks the data down to an election identifier and contests loop. It contains no attributes, and has the following children:

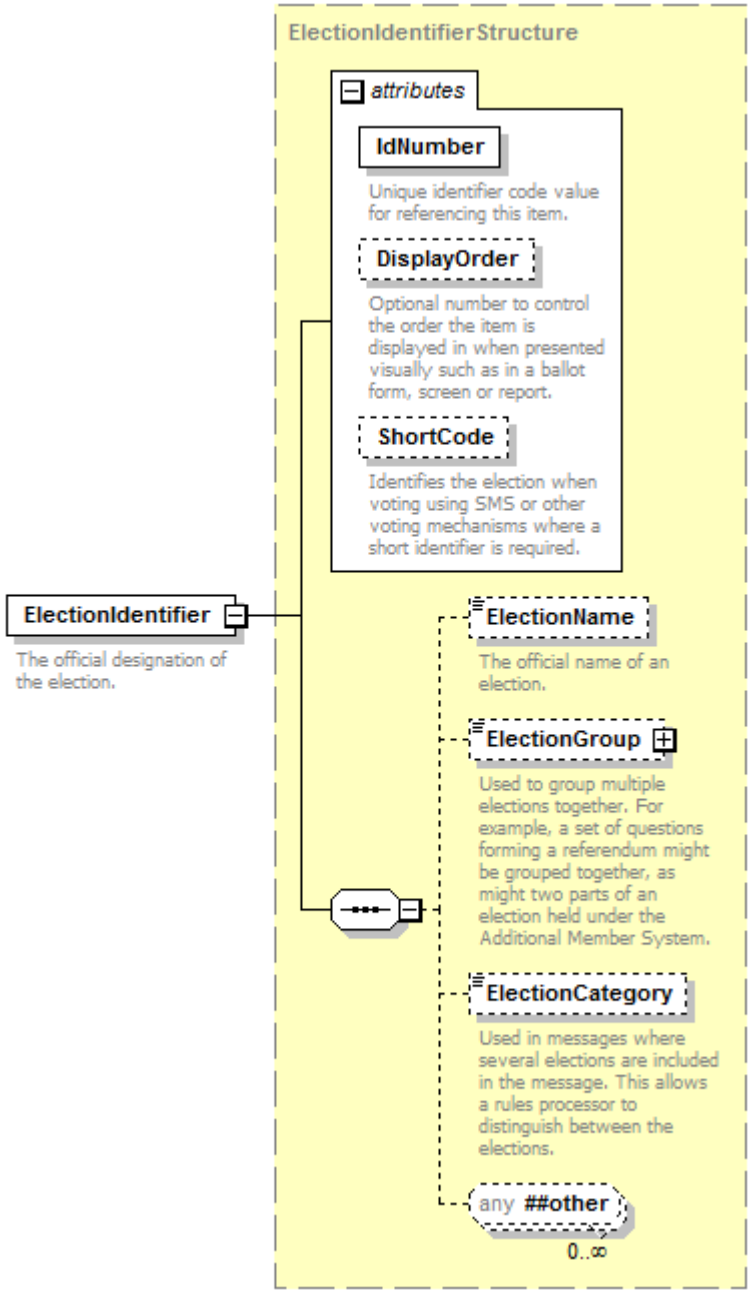
- ElectionIdentifier
- Contests

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
properties	minOcc 1 maxOcc unbounded content complex
children	**ElectionIdentifier** **Contests**
source	<xs:element name="Election" maxOccurs="unbounded"> <xs:complexType> <xs:sequence> <xs:element ref="ElectionIdentifier"/> <xs:element name="Contests">

```
      <xs:complexType>
       <xs:sequence>
        <xs:element name="Contest" maxOccurs="unbounded">
         <xs:complexType>
          <xs:sequence>
           <xs:element ref="ContestIdentifier"/>
           <xs:element ref="CountQualifier" minOccurs="0"/>
           <xs:element ref="CountingAlgorithm" minOccurs="0"/>
           <xs:element ref="NumberOfPositions" minOccurs="0"/>
           <xs:element ref="OfficialStatusDetail" minOccurs="0"/>
           <xs:choice>
            <xs:sequence>
             <xs:element name="TotalVotes">
              <xs:complexType>
               <xs:sequence>
                <xs:element ref="CountMetric" minOccurs="0" maxOccurs="unbounded"/>
                <xs:group ref="VoteGroup"/>
               </xs:sequence>
              </xs:complexType>
             </xs:element>
             <xs:element ref="ReportingUnitVotes" minOccurs="0"
maxOccurs="unbounded"/>
            </xs:sequence>
            <xs:element ref="ReportingUnitVotes"/>
           </xs:choice>
          </xs:sequence>
         </xs:complexType>
        </xs:element>
       </xs:sequence>
      </xs:complexType>
     </xs:element>
    </xs:sequence>
   </xs:complexType>
</xs:element>
```

1.4.4.2.1. <ElectionIdentifier> Element

The <ElectionIdentifier> provides a key for distinguishing between multiple elections in the same election event.

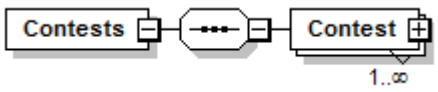
diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	ElectionIdentifierStructure
properties	content complex
children	ElectionName ElectionGroup ElectionCategory
used by	elements Count/Election PeriodStructure/Event complexTypes IncomingGenericCommunicationStructure InternalGenericCommunicationStructure OutgoingGenericCommunicationStructure
attributes	Name Type Use Default Fixed Annotation

	IdNumber	**xs:NMTOKEN**	required	documentation Unique identifier code value for referencing this item.
	DisplayOrder	**xs:positiveInteger**	optional	documentation Optional number to control the order the item is displayed in when presented visually such as in a ballot form, screen or report.
	ShortCode	**ShortCodeType**	optional	documentation Identifies the election when voting using SMS or other voting mechanisms where a short identifier is required.
annotation	documentation The official designation of the election.			
source	<xs:element name="ElectionIdentifier" type="ElectionIdentifierStructure"> <xs:annotation> <xs:documentation>The official designation of the election.</xs:documentation> </xs:annotation> </xs:element>			

Attributes			
Name	**Type**	**Size**	**Description**
IdNumber	Numeric	8	Contains the election date (CCYYMMDD)

1.4.4.3. <Contests> Element

The <Contests> element encapsulates the different contests in the election.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
properties	content complex

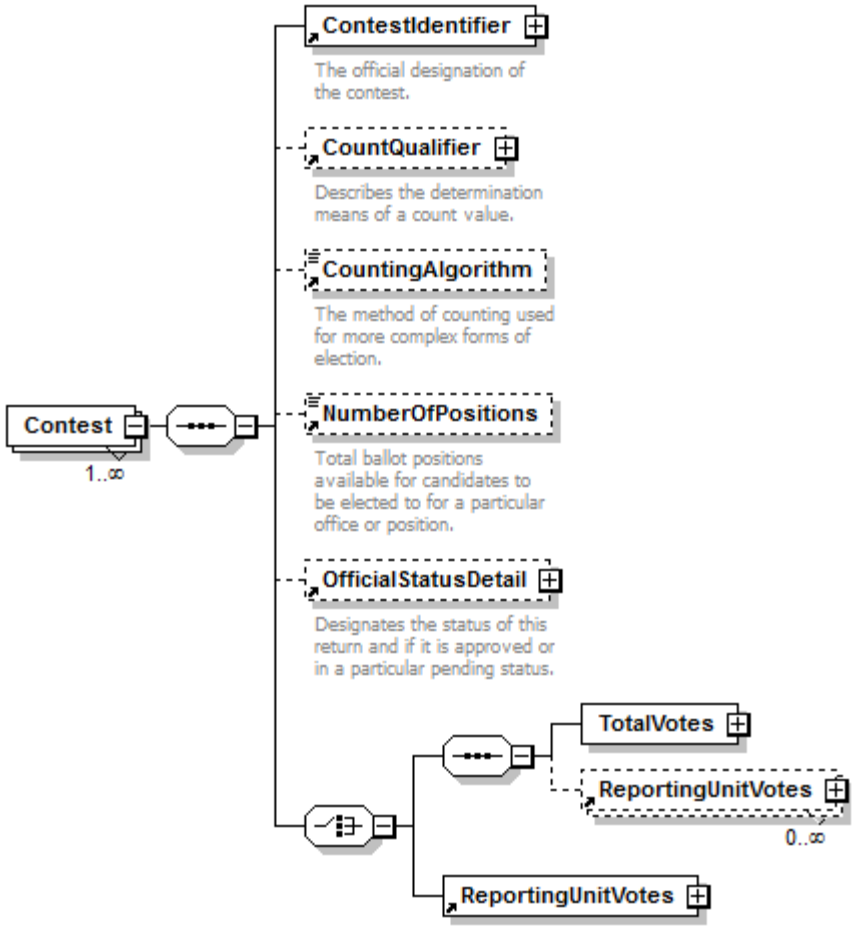
children	**Contest**

source

```
<xs:element name="Contests">
 <xs:complexType>
  <xs:sequence>
   <xs:element name="Contest" maxOccurs="unbounded">
    <xs:complexType>
     <xs:sequence>
      <xs:element ref="ContestIdentifier"/>
      <xs:element ref="CountQualifier" minOccurs="0"/>
      <xs:element ref="CountingAlgorithm" minOccurs="0"/>
      <xs:element ref="NumberOfPositions" minOccurs="0"/>
      <xs:element ref="OfficialStatusDetail" minOccurs="0"/>
      <xs:choice>
       <xs:sequence>
        <xs:element name="TotalVotes">
         <xs:complexType>
          <xs:sequence>
           <xs:element ref="CountMetric" minOccurs="0" maxOccurs="unbounded"/>
           <xs:group ref="VoteGroup"/>
          </xs:sequence>
         </xs:complexType>
        </xs:element>
        <xs:element ref="ReportingUnitVotes" minOccurs="0" maxOccurs="unbounded"/>
       </xs:sequence>
       <xs:element ref="ReportingUnitVotes"/>
      </xs:choice>
     </xs:sequence>
    </xs:complexType>
   </xs:element>
  </xs:sequence>
 </xs:complexType>
</xs:element>
```

1.4.4.3.1. <Contest> Element

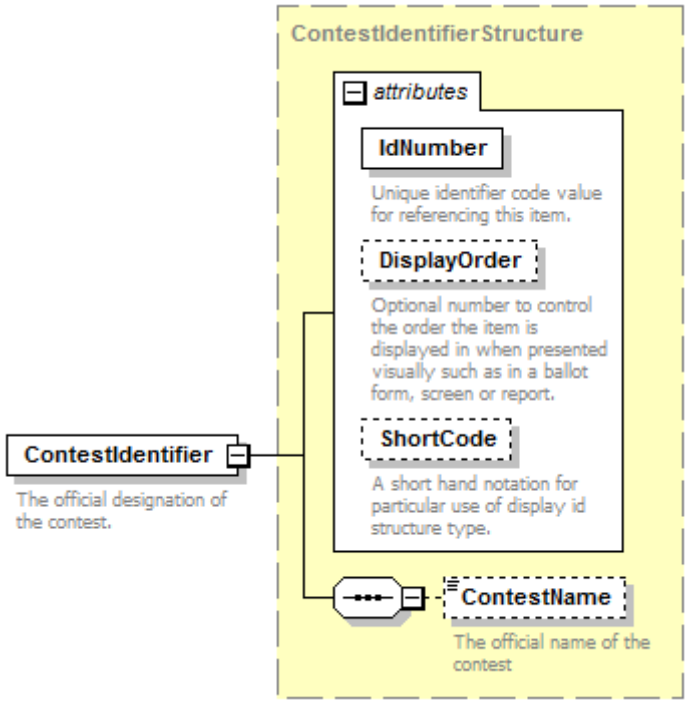
The <Contest> element encapsulates the contest and voting results for each contest. The actual contest is defined in the <ContestIdentifier> element, statewide totals are in the <TotalVotes> element, and individual county voting results are in the <ReportingUnitVotes> element.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
properties	minOcc 1 maxOcc unbounded content complex
children	ContestIdentifier CountQualifier CountingAlgorithm NumberOfPositions OfficialStatusDetail TotalVotes ReportingUnitVotes
source	<xs:element name="Contest" maxOccurs="unbounded"> <xs:complexType> <xs:sequence> <xs:element ref="ContestIdentifier"/> <xs:element ref="CountQualifier" minOccurs="0"/> <xs:element ref="CountingAlgorithm" minOccurs="0"/> <xs:element ref="NumberOfPositions" minOccurs="0"/>

```
      <xs:element ref="OfficialStatusDetail" minOccurs="0"/>
      <xs:choice>
        <xs:sequence>
          <xs:element name="TotalVotes">
            <xs:complexType>
              <xs:sequence>
                <xs:element ref="CountMetric" minOccurs="0" maxOccurs="unbounded"/>
                <xs:group ref="VoteGroup"/>
              </xs:sequence>
            </xs:complexType>
          </xs:element>
          <xs:element ref="ReportingUnitVotes" minOccurs="0" maxOccurs="unbounded"/>
        </xs:sequence>
        <xs:element ref="ReportingUnitVotes"/>
      </xs:choice>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

1.4.4.3.1.1. <ContestIdentifier> Element

The <ContestIdentifier> element defines the Contest Id and contest description.

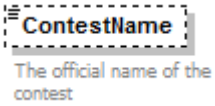
<table>
<tr><td>diagram</td><td> 
</td></tr>
<tr><td>namespace</td><td>urn:oasis:names:tc:evs:schema:eml</td></tr>
<tr><td>type</td><td>ContestIdentifierStructure</td></tr>
<tr><td>properties</td><td>content complex</td></tr>
<tr><td>children</td><td>ContestName</td></tr>
<tr><td>used by</td><td>element Count/Election/Contests/Contest
complexTypes IncomingGenericCommunicationStructure InternalGenericCommunicationStructure OutgoingGenericCommunicationStructure</td></tr>
<tr><td>attributes</td><td>
<table>
<tr><th>Name</th><th>Type</th><th>Use</th><th>Default</th><th>Fixed</th><th>Annotation</th></tr>
<tr><td>IdNumber</td><td>xs:NMTOKEN</td><td>required</td><td></td><td></td><td>documentation
Unique identifier code value for referencing this item.</td></tr>
<tr><td>DisplayOrder</td><td>xs:positiveInteger</td><td>optional</td><td></td><td></td><td>documentation
Optional number to control the order the item is displayed in when presented visually such as in a ballot form, screen</td></tr>
</table>
</td></tr>
</table>

	or report. ShortCode **ShortCodeType** optional documentation A short hand notation for particular use of display id structure type.
annotation	documentation The official designation of the contest.
source	<xs:element name="ContestIdentifier" type="ContestIdentifierStructure"> <xs:annotation> <xs:documentation>The official designation of the contest.</xs:documentation> </xs:annotation> </xs:element>

Attributes			
Name	**Type**	**Size**	**Description**
IdNumber	Numeric	12	Identifies the type of contest Please see section 6.1 for further details

1.4.4.3.1.1.1. <ContestName> Element

The <ContestName> element contains the human readable name of the contest.

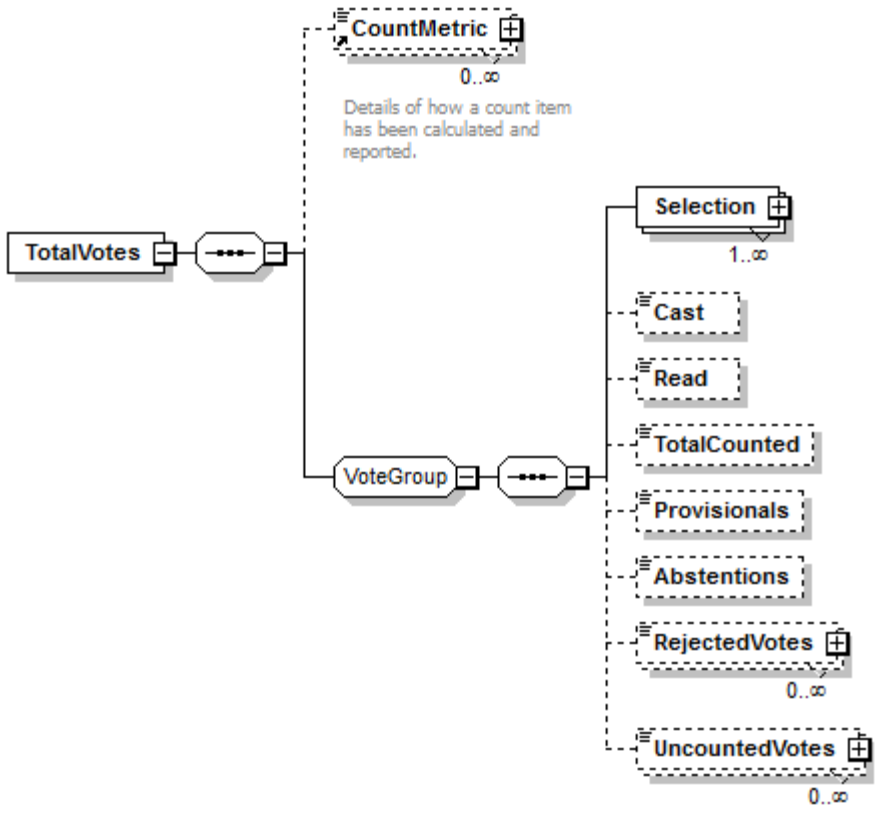
diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**xs:token**
properties	minOcc 0 maxOcc 1 content simple
annotation	documentation The official name of the contest
source	<xs:element name="ContestName" type="xs:token" minOccurs="0"> <xs:annotation> <xs:documentation>The official name of the contest</xs:documentation> </xs:annotation> </xs:element>

For ballot measures, it contains the official long name designation for the measure. For candidate contests, it contains the name of the office.

Element	< ContestName >
Example	Governor Business Bill Proposition
Comments	A textual description of the contest

1.4.4.3.1.2. <TotalVotes> Element

The <TotalVotes> element has no attributes, and stores elements that will provide total result counts for either a statewide or districtwide contest.

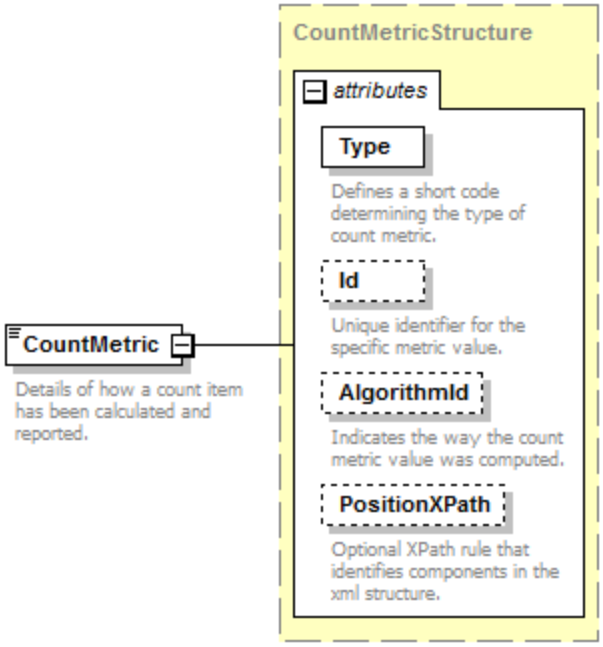
diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
properties	content complex
children	CountMetric Selection Cast Read TotalCounted Provisionals Abstentions RejectedVotes UncountedVotes
source	<xs:element name="TotalVotes"> <xs:complexType> <xs:sequence> <xs:element ref="CountMetric" minOccurs="0" maxOccurs="unbounded"/> <xs:group ref="VoteGroup"/> </xs:sequence> </xs:complexType> </xs:element>

The <Selection> elements within this element will contain the totals for each candidate or ballot measure.

1.4.4.3.1.2.1. <CountMetric> Element

The <CountMetric> Element holds information relating to the results for the contest.

diagram



namespace: urn:oasis:names:tc:evs:schema:eml

type: **CountMetricStructure**

properties: content complex

used by: elements **ReportingUnitVotes** **VoteGroup/Selection** **Count/Election/Contests/Contest/TotalVotes**

attributes

Name	Type	Use	Default	Fixed	Annotation
Type	**xs:string**	required			documentation Defines a short code determining the type of count metric.
Id	**xs:token**	optional			documentation Unique identifier for the specific metric value.
AlgorithmId	**xs:token**	optional			documentation Indicates the way the count metric value was computed.
PositionXPath	**xs:string**	optional			documentation Optional XPath rule that identifies components in the xml structure.

annotation	documentation Details of how a count item has been calculated and reported.
source	<xs:element name="CountMetric" type="CountMetricStructure"> <xs:annotation> <xs:documentation>Details of how a count item has been calculated and reported.</xs:documentation> </xs:annotation> </xs:element>

For a candidate contest, there will be three <CountMetric> elements.

<ReportingUnitVotes>

<ReportingUnitIdentifier Id="19">Los Angeles</ReportingUnitIdentifier>

<CountMetric Id="PR" Type="Precincts Reporting">0</CountMetric>

<CountMetric Id="TP" Type="Total Precincts">0</CountMetric>

<CountMetric Id="RT" Type="Report Type">1</CountMetric>

<Selection>

…

</Selection>

<Selection>

…

</Selection>

</ReportingUnitVotes>

For a ballot measure, there will be five <CountMetric> elements.

<ReportingUnitVotes>

<ReportingUnitIdentifier Id="05">Calaveras</ReportingUnitIdentifier>

<CountMetric Id="PR" Type="Precincts Reporting">633</CountMetric>

<CountMetric Id="TP" Type="Total Precincts">1000</CountMetric>

<CountMetric Id="RT" Type="Report Type">1</CountMetric>

<CountMetric Id="PYV" Type="Percent of Yes Votes">66.0</CountMetric>

<CountMetric Id="PNV" Type="Percent of No Votes">34.0</CountMetric>

<Selection>

```
            …
            </Selection>
            <Selection>
            …
            </Selection>
        </ReportingUnitVotes>
```

For a candidate selection, the attribute values for the <CountMetric> Id are as follows:

Attributes			
Name	**Values**	**Text**	**Description**
ID	RT	Report Type	Type of report submitted • 0 (zero) – No Report No report has been received by the county or all previous reports were removed by the county due to corrective action. • 1 – Regular Report The county submits regular reports during the semi-official canvass until the Final Report. • 2 – Final Report The county has completed the reporting for the semi-official canvass. The precincts reporting will equal the total precincts in the county for statewide contests. • 3 – Update Report The county submits update reports after a Final Report is submitted whenever the number of votes for a candidate or a ballot measure changes. The update reports are considered part of the semi-official canvass. • 4 – County Canvass Complete Returns are updated as county elections officials complete the official canvass and process ballots during the 28-day post-election

			canvass period.
	PR	Precincts Reporting	Number of precincts reporting
	TP	Total Precincts	Total Number of Precints

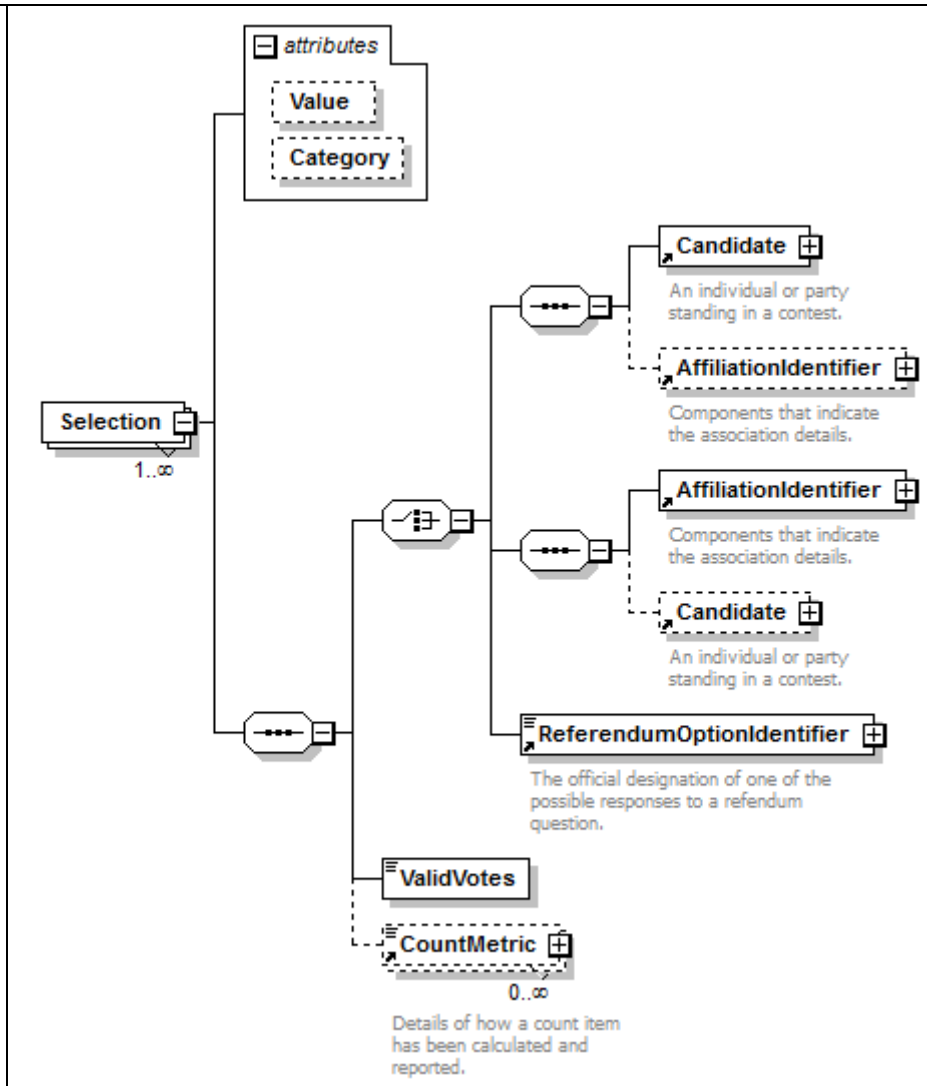
For a ballot measure contest, the attribute values for the <CountMetric> Id are as follows:

Attributes			
Name	**Values**	**Text**	**Description**
ID	RT	Report Type	Type of report submitted • 0 (zero) – No Report No report has been received by the county or all previous reports were removed by the county due to corrective action. • 1 – Regular Report The county submits regular reports during the semi-official canvass until the Final Report. • 2 – Final Report The county has completed the reporting for the semi-official canvass. The precincts reporting will equal the total precincts in the county for statewide contests. • 3 – Update Report The county submits update reports after a Final Report is submitted whenever the number of votes for a candidate or a ballot measure changes. The update reports are considered part of the semi-official canvass. • 4 – County Canvass Complete Returns are updated as county elections officials complete the official canvass and process ballots during the 28-day post-election

			canvass period.
	PR	Precincts Reporting	Number of precincts reporting
	TP	Total Precincts	Total Number of Precints
	PNV	Percent of No Votes	Percentage of no votes • The display is one-tenth of a percent, but the decimal point is present only when the tenth of a percent digit is **not** zero. • Zero percent displays as 0. • Leading zeros are suppressed.
	PYV	Percent of Yes Votes	Percentage of yes votes • The display is one-tenth of a percent, but the decimal point is present only when the tenth of a percent digit is **not** zero. • Zero percent displays as 0. • Leading zeros are suppressed.

1.4.4.3.1.2.2. <Selection> Element

The <Selection> element represents one of the choices voters can make on a contest. For offices it represents a candidate. For ballot measures it represents either a “Yes” vote or a “No” vote.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
properties	minOcc 1 maxOcc unbounded content complex
children	Candidate AffiliationIdentifier ReferendumOptionIdentifier ValidVotes CountMetric

attributes	Name	Type	Use	Default	Fixed	Annotation
	Value	VotingValueType	optional			
	Category	xs:token	optional			

source	<xs:element name="Selection" maxOccurs="unbounded">

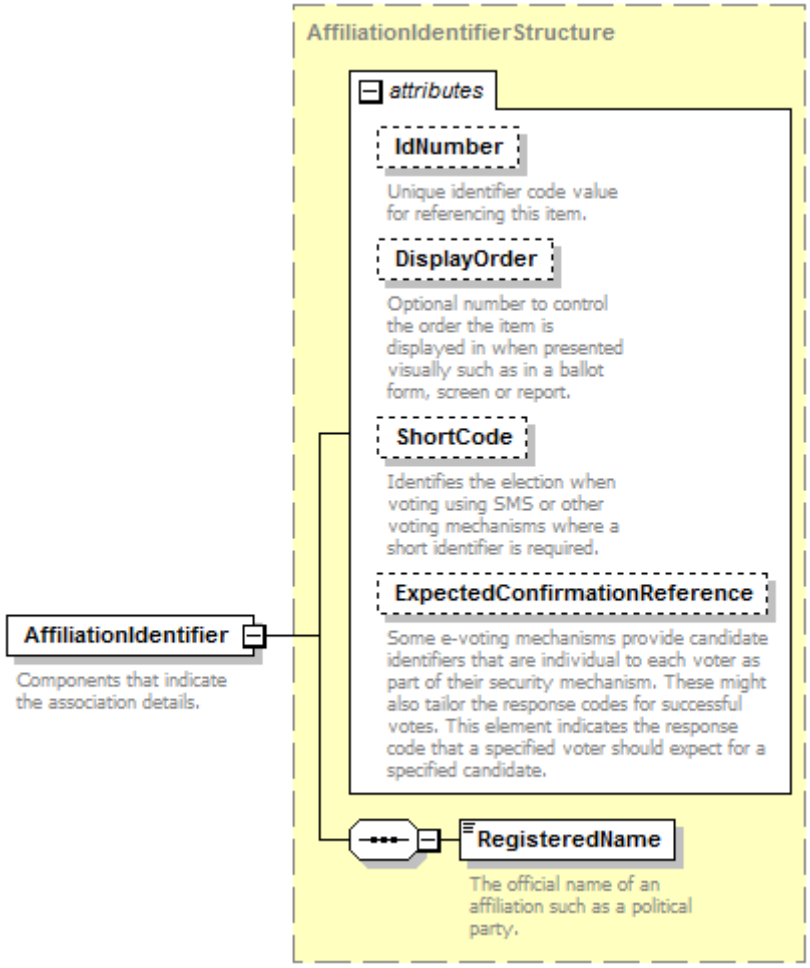
```
  <xs:complexType>
   <xs:sequence>
    <xs:choice>
     <xs:sequence>
      <xs:element ref="Candidate"/>
      <xs:element ref="AffiliationIdentifier" minOccurs="0"/>
     </xs:sequence>
     <xs:sequence>
      <xs:element ref="AffiliationIdentifier"/>
      <xs:element ref="Candidate" minOccurs="0"/>
     </xs:sequence>
     <xs:element ref="ReferendumOptionIdentifier"/>
    </xs:choice>
    <xs:element name="ValidVotes" type="xs:nonNegativeInteger"/>
    <xs:element ref="CountMetric" minOccurs="0" maxOccurs="unbounded"/>
   </xs:sequence>
   <xs:attribute name="Value" type="VotingValueType" use="optional"/>
   <xs:attribute name="Category" type="xs:token" use="optional"/>
  </xs:complexType>
</xs:element>
```

The number of <Selection> elements depends upon the number of candidates or ballot measures applicable for the county.

The usage of the elements varies depending on whether it is a candidate or a ballot measure. For a candidate selection, there is a <Candidate> element with the <CandidateIdentifier> and <Affiliation> sub-elements, a possible <AffiliationIdentifier> element, a <ValidVotes> element, and two <CountMetric> elements. The <AffiliationIdentifier> in the <Selection> element will only be present if the candidate is the current officeholder and the Id of the element will be ‘Incumbent’.

1.4.4.3.1.2.2.1. <AffiliationIdentifier> Element

The <AffiliationIdentifier> element is used as part of the selection object to represents either the party that a candidate is affiliated with, or whether the candidate is an incumbent.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**AffiliationIdentifierStructure**
properties	content complex
children	**RegisteredName**
used by	element **VoteGroup/Selection** complexType **AffiliationStructure**

attributes

Name	Type	Use	Default	Fixed	Annotation
IdNumber	**xs:NMTOKEN**	optional			documentation Unique identifier code value for referencing this item.
DisplayOrder	**xs:positiveInteger**	optional			documentation Optional number to control the

				order the item is displayed in when presented visually such as in a ballot form, screen or report.
	ShortCode	**ShortCodeType**	optional	documentation Identifies the election when voting using SMS or other voting mechanisms where a short identifier is required.
	ExpectedConfirmationReference	**ConfirmationReferenceType**	optional	documentation Some e-voting mechanisms provide candidate identifiers that are individual to each voter as part of their security mechanism. These might also tailor the response codes for successful votes. This element indicates the response code that a specified voter should expect for a specified candidate.
annotation	documentation Components that indicate the association details.			
source	<xs:element name="AffiliationIdentifier" type="AffiliationIdentifierStructure"> <xs:annotation> <xs:documentation>Components that indicate the association details.</xs:documentation> </xs:annotation> </xs:element>			

The <AffiliationIdentifier> element appears in two locations. If it appears as part of the <Selection> element, the Id set is 'Incumbent' indicating the candidate is the current officeholder. If the element appears in the <Candidate> element, the Id is set to 'Party'.

1.4.4.3.1.2.2.1.1. <RegisteredName> Element

The <RegisteredName> element contains the official name of an affiliation such as a political party.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**xs:token**
properties	content simple
annotation	documentation The official name of an affiliation such as a political party.
source	<xs:element name="RegisteredName" type="xs:token"> <xs:annotation> <xs:documentation>The official name of an affiliation such as a political party.</xs:documentation> </xs:annotation> </xs:element>

The value will be one of the following:

Democratic

Republican

American Independent

Green

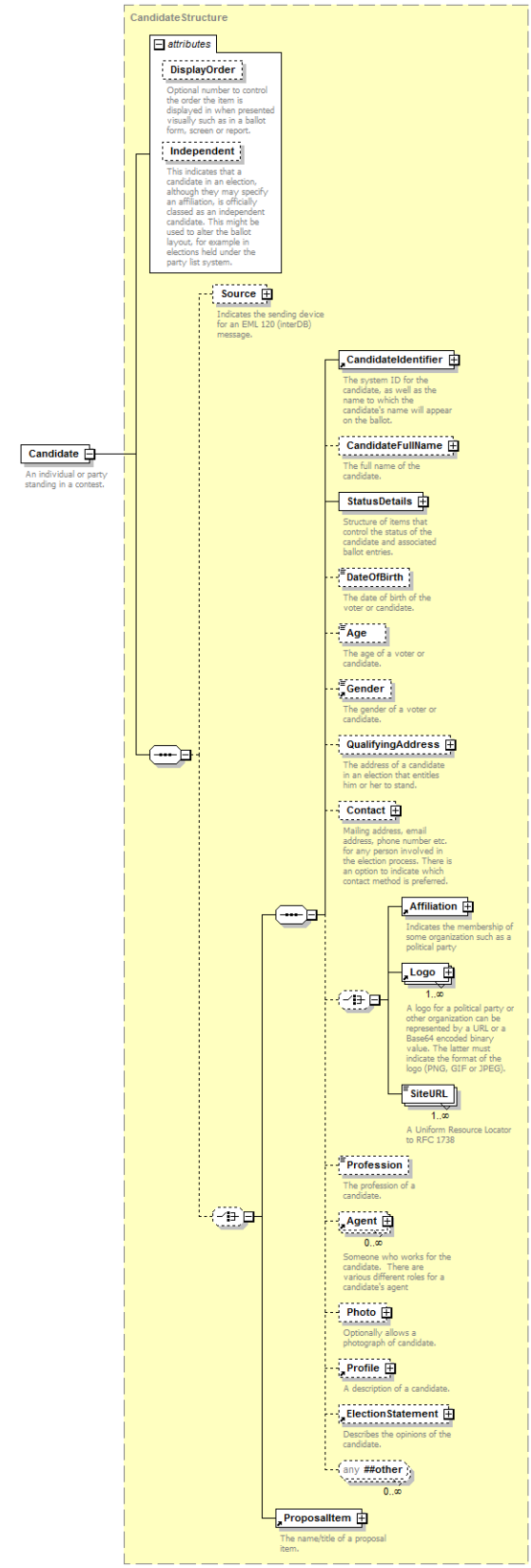
Libertarian

Peace and Freedom

Nonpartisan

No Party Preference

1.4.4.3.1.2.2.2. <Candidate> Element

diagram	
name	urn:oasis:names:tc:evs:schema:eml

space	
type	**CandidateStructure**
properties	content complex
children	**Source CandidateIdentifier CandidateFullName StatusDetails DateOfBirth Age Gender QualifyingAddress Contact Affiliation Logo SiteURL Profession Agent Photo Profile ElectionStatement ProposalItem**
used by	element **VoteGroup/Selection**

attributes

Name	Type	Use	Default	Fixed	Annotation
DisplayOrder	**xs:positiveInteger**	optional			documentation Optional number to control the order the item is displayed in when presented visually such as in a ballot form, screen or report.
Independent	**YesNoType**	optional			documentation This indicates that a candidate in an election, although they may specify an affiliation, is officially classed as an independent candidate. This might be used to alter the ballot layout, for example in elections held under the party list system.

annotation

documentation

An individual or party standing in a contest.

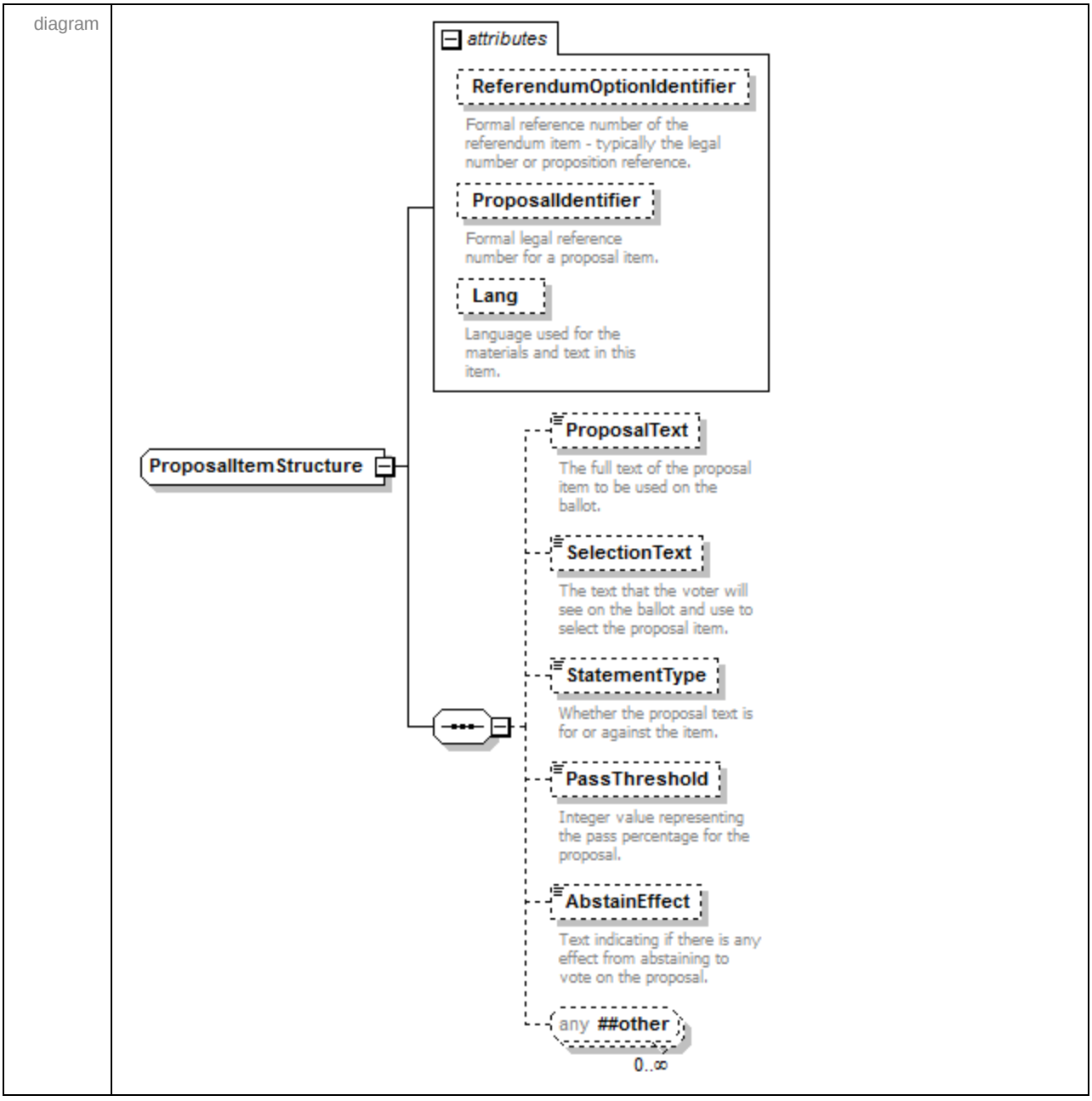
source

```
<xs:element name="Candidate" type="CandidateStructure">
  <xs:annotation>
    <xs:documentation>An individual or party standing in a contest.</xs:documentation>
  </xs:annotation>
</xs:element>
```

The <Candidate> element defines the candidate information for candidate contests or the ballot measure information for ballot measure contests. For a candidate contest, the

<CandidateIdentifier> element and <Affiliation> element are used. For a ballot measure contest, only the <ProposalItem> element is used.

1.4.4.3.1.2.2.2.1. <ProposalItem> Element

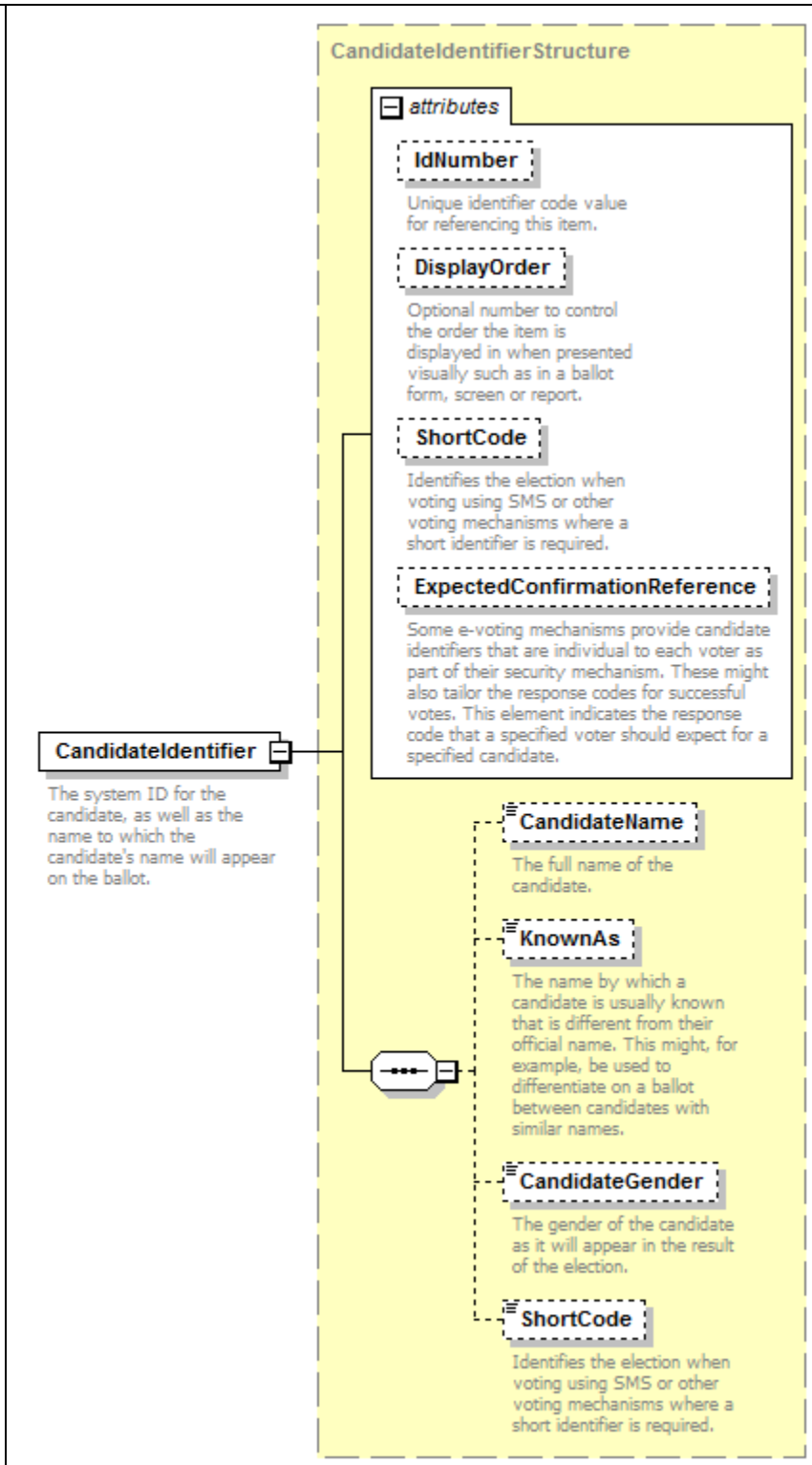


This element only exists for contests that are State Ballot Measures.

Attributes			
Name	**Type**	**Size**	**Description**
ReferendumOptionIdentifier	Alpha	3	Either “Yes” or “No”
ProposalIdentifier			The short name for the ballot measure.

1.4.4.3.1.2.2.2.2. <CandidateIdentifier> Element

The <CandidateIdentifier> element contains the system ID for the candidate, as well as the name to which the candidate's name will appear on the ballot.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml

type	**CandidateIdentifierStructure**
properties	content complex
children	**CandidateName** **KnownAs** **CandidateGender** **ShortCode**
used by	complexType **CandidateStructure**

attributes

Name	Type	Use	Default	Fixed	Annotation
IdNumber	**xs:NMTOKEN**	optional			documentation Unique identifier code value for referencing this item.
DisplayOrder	**xs:positiveInteger**	optional			documentation Optional number to control the order the item is displayed in when presented visually such as in a ballot form, screen or report.
ShortCode	**ShortCodeType**	optional			documentation Identifies the election when voting using SMS or other voting mechanisms where a short identifier is required.
ExpectedConfirmationReference	**ConfirmationReferenceType**	optional			documentation Some e-voting mechanisms provide candidate identifiers that are individual to each voter as part of their security mechanism. These might also tailor the response codes for successful votes. This element indicates the response

	code that a specified voter should expect for a specified candidate.
annotation	documentation The system ID for the candidate, as well as the name to which the candidate's name will appear on the ballot.
source	<xs:element name="CandidateIdentifier" type="CandidateIdentifierStructure"> <xs:annotation> <xs:documentation>The system ID for the candidate, as well as the name to which the candidate's name will appear on the ballot.</xs:documentation> </xs:annotation> </xs:element>

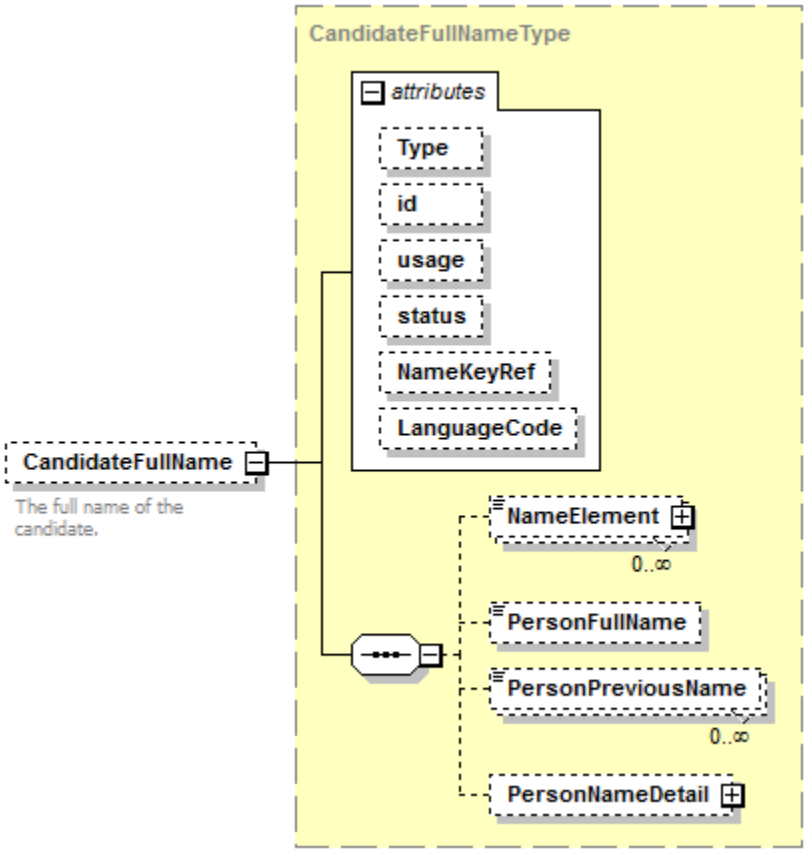
The <CandidateIdentifier> element identifies the candidate in a candidate contest.

Attributes			
Name	**Type**	**Size**	**Description**
DisplayOrder	Numeric	4	The numeric order that the contest is displayed
IdNumber	Numeric		Identifies the candidate • Assigned by the Secretary of State's office. • The number is unique to the candidate and the contest in which the candidate is running

1.4.4.3.1.2.2.2.3. <CandidateFullName> Element

The <CandidateFullName> element contains the name of the candidate.

diagram



namespace	urn:oasis:names:tc:evs:schema:eml
type	**CandidateFullNameType**
properties	minOcc 0 maxOcc 1 content complex
children	**NameElement PersonFullName PersonPreviousName PersonNameDetail**
attributes	Name Type Use Default Fixed Annotation Type **xs:token** id **xs:token** usage **xs:token** status **xs:token** NameKeyRef **xs:token** LanguageCode **xs:language**
annotation	documentation The full name of the candidate.
source	<xs:element name="CandidateFullName" type="CandidateFullNameType" minOccurs="0"> <xs:annotation> <xs:documentation>The full name of the candidate.</xs:documentation> </xs:annotation> </xs:element>

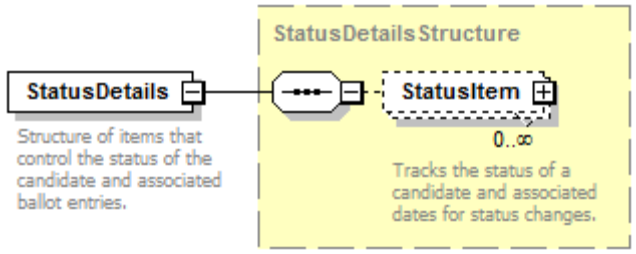
1.4.4.3.1.2.2.2.4. <PersonFullName> Element

The <PersonFullName> element contains information on the name of the candidate.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**xnl:PersonFullName**
properties	minOcc 0 maxOcc 1 content simple id ciq2e4164
source	<xs:element name="PersonFullName" type="xnl:PersonFullName" id="ciq2e4164" minOccurs="0" maxOccurs="1"/>

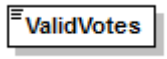
1.4.4.3.1.2.2.5. <StatusDetails /> Element

The <StatusDetails> element holds information on the status for the candidate.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**StatusDetailsStructure**
properties	content complex
children	**StatusItem**
annotation	documentation Structure of items that control the status of the candidate and associated ballot entries.
source	<xs:element name="StatusDetails" type="StatusDetailsStructure" minOccurs="1"> <xs:annotation> <xs:documentation>Structure of items that control the status of the candidate and associated ballot entries.</xs:documentation> </xs:annotation> </xs:element>

1.4.4.3.1.2.2.3. <ValidVotes>

The <ValidVotes> element contains the number of votes cast for this selection.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**xs:nonNegativeInteger**
properties	content simple
source	<xs:element name="ValidVotes" type="xs:nonNegativeInteger"/>

1.4.4.3.1.2.2.4. <CountMetric> Element

For a candidate contest, the attribute values for the <CountMetric> Id are as follows:

Attributes			
Name	**Values**	**Text**	**Description**
ID	RT	Report Type	Type of report submitted

			• 0 (zero) – No Report No report has been received by the county or all previous reports were removed by the county due to corrective action. • 1 – Regular Report The county submits regular reports during the semi-official canvass until the Final Report. • 2 – Final Report The county has completed the reporting for the semi-official canvass. The precincts reporting will equal the total precincts in the county for statewide contests. • 3 – Update Report The county submits update reports after a Final Report is submitted whenever the number of votes for a candidate or a ballot measure changes. The update reports are considered part of the semi-official canvass. • 4 – County Canvass Complete Returns are updated as county elections officials complete the official canvass and process ballots during the 28-day post-election canvass period.
	PR	Precincts Reporting	Number of precincts reporting
	TP	Total Precincts	Total Number of Precints

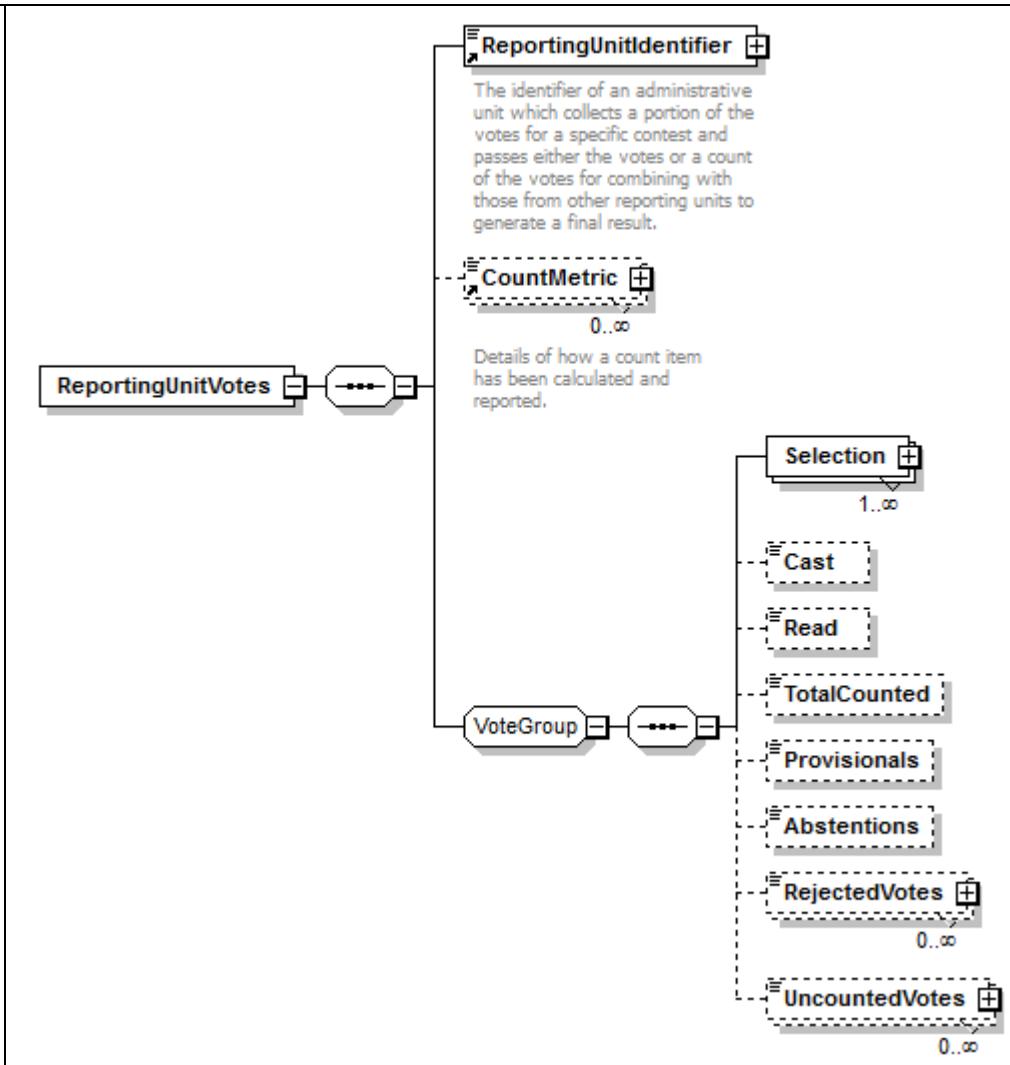
For a ballot measure contest, the attribute values for the <CountMetric> Id are as follows:

Attributes			
Name	**Values**	**Text**	**Description**
ID	RT	Report Type	Type of report submitted • 0 (zero) – No Report No report has been received by the county or all previous reports were removed by the county due to corrective action. • 1 – Regular Report The county submits regular reports during the semi-official canvass until the Final Report. • 2 – Final Report The county has completed the reporting for the semi-official canvass. The precincts reporting will equal the total precincts in the county for statewide contests. • 3 – Update Report The county submits update reports after a Final Report is submitted whenever the number of votes for a candidate or a ballot measure changes. The update reports are considered part of the semi-official canvass. • 4 – County Canvass Complete Returns are updated as county elections officials complete the official canvass and process ballots during the 28-day post-election canvass period.
	PR	Precincts Reporting	Number of precincts reporting
	TP	Total Precincts	Total Number of Precints
	PNV	Percent of No Votes	Percentage of no votes • The display is one-tenth of a percent, but the decimal point is present only when the tenth of

			a percent digit is **not** zero. • Zero percent displays as 0. • Leading zeros are suppressed.
	PYV	Percent of Yes Votes	Percentage of yes votes • The display is one-tenth of a percent, but the decimal point is present only when the tenth of a percent digit is **not** zero. • Zero percent displays as 0. • Leading zeros are suppressed.

1.4.4.3.1.3. <ReportingUnitVotes> Element

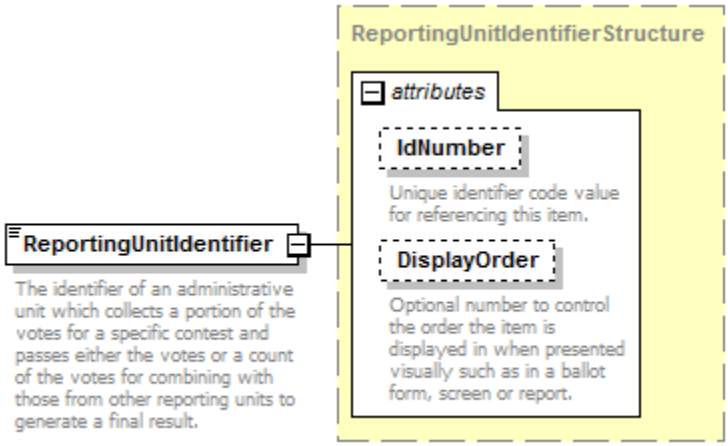
The <ReportingUnitVotes> element mirrors the <TotalVotes> element, and provides results for counties.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
properties	content complex
children	ReportingUnitIdentifier CountMetric Selection Cast Read TotalCounted Provisionals Abstentions RejectedVotes UncountedVotes
used by	element Count/Election/Contests/Contest
source	<xs:element name="ReportingUnitVotes"> <xs:complexType> <xs:sequence> <xs:element ref="ReportingUnitIdentifier"/> <xs:element ref="CountMetric" minOccurs="0" maxOccurs="unbounded"/> <xs:group ref="VoteGroup"/> </xs:sequence> </xs:complexType> </xs:element>

The <ReportingUnitVotes> elements contain the voting results for a specific county. The element will occur 58 times representing all of the counties. The <Selection> elements within each element contain the voting results for each candidate or ballot measure.

1.4.4.3.1.3.1. <ReportingUnitIdentifier> Element

The <ReportingUnitIdentifier> element identifies which county the results are from.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**ReportingUnitIdentifierStructure**
properties	content complex
used by	element **ReportingUnitVotes**

attributes

Name	Type	Use	Default	Fixed	Annotation
IdNumber	**xs:NMTOKEN**	optional			documentation Unique identifier code value for referencing this item.
DisplayOrder	**xs:positiveInteger**	optional			documentation Optional number to control the order the item is displayed in when presented visually such as in a ballot form, screen or report.

annotation	documentation The identifier of an administrative unit which collects a portion of the votes for a specific contest and passes either the votes or a count of the votes for combining with those from other reporting units to generate a final result.
source	<xs:element name="ReportingUnitIdentifier" type="ReportingUnitIdentifierStructure"> <xs:annotation> <xs:documentation>The identifier of an administrative unit which collects a portion of the

	votes for a specific contest and passes either the votes or a count of the votes for combining with those from other reporting units to generate a final result.</xs:documentation> </xs:annotation> </xs:element>

This element identifies the Reporting Unit.

Attributes			
Name	**Type**	**Size**	**Description**
Id	Alpha	2	Identifier for the type of count
Type	Alpha	40	Text description of the count

1.5. County Statistics XML in Detail (530)

The 530 XML document contains the county reporting status for the election.
The XML file contains some identifier information and two specific loop elements <TotalVotes> and <ReportingUnitVotes> that contain the voting results and are nested in the <Contests> element.
The 530 XML format corresponds to the ASCII 'A' message for the county reporting status.

Sample 530 XML Files

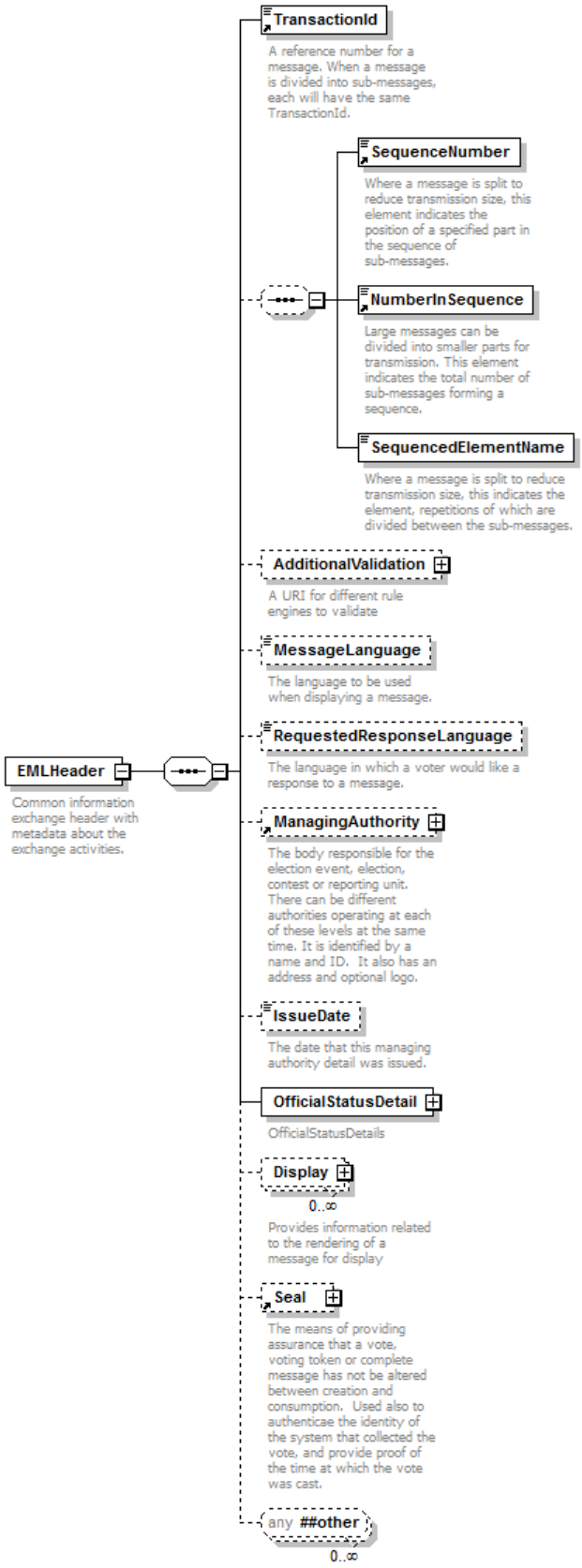
Asample 510 XML file is located at www.sos.ca.gov/media.

1.5.1. Overview of the 530 file.

This file stores information regarding the status of counties filing for an election. This allows data-feed users to track and monitor as counties are submitting information to the Secretary of State.

1.5.2. <EMLHeader> Element

The EMLHeader Element provides metadata information regarding the file, the election and others.

diagram	
name space	urn:oasis:names:tc:evs:schema:eml

properties	content complex
children	TransactionId SequenceNumber NumberInSequence SequencedElementName AdditionalValidation MessageLanguage RequestedResponseLanguage ManagingAuthority IssueDate OfficialStatusDetail Display Seal
annotation	documentation Common information exchange header with metadata about the exchange activities.
source	

```
<xs:element name="EMLHeader">
  <xs:annotation>
    <xs:documentation>Common information exchange header with metadata about the exchange activities.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="TransactionId"/>
      <xs:sequence minOccurs="0">
        <xs:element ref="SequenceNumber"/>
        <xs:element ref="NumberInSequence"/>
        <xs:element name="SequencedElementName" type="xs:NMTOKEN">
          <xs:annotation>
            <xs:documentation>Where a message is split to reduce transmission size, this indicates the element, repetitions of which are divided between the sub-messages.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
      <xs:element name="AdditionalValidation" minOccurs="0">
        <xs:annotation>
          <xs:documentation>A URI for different rule engines to validate</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Location" type="xs:anyURI">
              <xs:annotation>
                <xs:documentation>Location of the URI</xs:documentation>
              </xs:annotation>
            </xs:element>
            <xs:element name="Type" type="xs:token">
              <xs:annotation>
                <xs:documentation>The type of rule engine</xs:documentation>
              </xs:annotation>
            </xs:element>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="MessageLanguage" type="LanguageType" minOccurs="0">
        <xs:annotation>
          <xs:documentation>The language to be used when displaying a message.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="RequestedResponseLanguage" type="LanguageType" minOccurs="0">
        <xs:annotation>
          <xs:documentation>The language in which a voter would like a response to a
```

```
message.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element ref="ManagingAuthority" minOccurs="0"/>
    <xs:element name="IssueDate" type="DateType" minOccurs="0">
     <xs:annotation>
      <xs:documentation>The date that this managing authority detail was
issued.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="OfficialStatusDetail" id="d2e1412" minOccurs="1" maxOccurs="1">
     <xs:annotation>
      <xs:documentation>OfficialStatusDetails</xs:documentation>
     </xs:annotation>
     <xs:complexType>
      <xs:sequence>
       <xs:element name="OfficialStatus" type="OfficialStatusDefinition" id="d2e1425"
minOccurs="1" maxOccurs="1">
        <xs:annotation>
         <xs:documentation>OfficialStatusDefinition</xs:documentation>
        </xs:annotation>
       </xs:element>
       <xs:element name="StatusDate" type="StatusDateDefinition" id="d2e1439" minOccurs="1"
maxOccurs="1">
        <xs:annotation>
         <xs:documentation>StatusDateDefinition</xs:documentation>
        </xs:annotation>
       </xs:element>
      </xs:sequence>
     </xs:complexType>
    </xs:element>
    <xs:element name="Display" minOccurs="0" maxOccurs="unbounded">
     <xs:annotation>
      <xs:documentation>Provides information related to the rendering of a message for
display</xs:documentation>
      </xs:annotation>
      <xs:complexType>
       <xs:sequence>
        <xs:element name="Stylesheet" maxOccurs="unbounded">
         <xs:annotation>
          <xs:documentation>A display stylesheet for rendering displayable content (e.g. xslt or
css) such as to HTML.</xs:documentation>
         </xs:annotation>
         <xs:complexType>
          <xs:simpleContent>
           <xs:extension base="xs:anyURI">
            <xs:attribute name="Type" type="xs:token" use="required">
             <xs:annotation>
              <xs:documentation>URL reference address location of the
stylesheet.</xs:documentation>
             </xs:annotation>
            </xs:attribute>
           </xs:extension>
          </xs:simpleContent>
```

```
            </xs:complexType>
          </xs:element>
        </xs:sequence>
        <xs:attribute name="Format" type="xs:NMTOKEN" use="optional">
          <xs:annotation>
            <xs:documentation>Indicates the format of the stylesheet syntax, e.g. xslt,
css.</xs:documentation>
          </xs:annotation>
        </xs:attribute>
      </xs:complexType>
    </xs:element>
    <xs:element ref="Seal" minOccurs="0">
      <xs:annotation>
        <xs:documentation>The means of providing assurance that a vote, voting token or complete
message has not be altered between creation and consumption.  Used also to authenticae the
identity of the system that collected the vote, and provide proof of the time at which the vote was
cast.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:any namespace="##other" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
 </xs:complexType>
</xs:element>
```

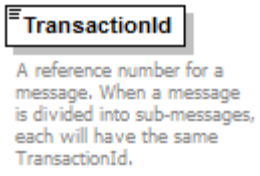
This is a container element composed of elements that store metadata regarding the file.

In the Secretary of State Implementation, only the following elements are used under the <EMLHeader> element:

- TransactionId
- MessageLanguage
- IssueDate
- OfficialStatusDetail

1.5.2.1. <TransactionId> Element

The <TransactionId> element stores an incrementing value uniquely identifying this file.

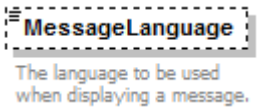
diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**xs:token**

properties	content simple
used by	element **EMLstructure/EMLHeader**
annotation	documentation A reference number for a message. When a message is divided into sub-messages, each will have the same TransactionId.
source	<xs:element name="TransactionId" type="xs:token"> <xs:annotation> <xs:documentation>A reference number for a message. When a message is divided into sub-messages, each will have the same TransactionId.</xs:documentation> </xs:annotation> </xs:element>

Element	<TransactionId>
Example	1
Comments	An incrementing number unique to this instance of the data-feed file.

1.5.2.2. <MessageLanguage> Element

The <MessageLanguage> element denotes which language should be used when parsing the text in the file.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**LanguageType**
properties	minOcc 0 maxOcc 1 content simple
annotation	documentation The language to be used when displaying a message.
source	<xs:element name="MessageLanguage" type="LanguageType" minOccurs="0"> <xs:annotation> <xs:documentation>The language to be used when displaying a message.</xs:documentation> </xs:annotation> </xs:element>

In the Secretary of State Implementation, this will always be “en-US”, as we do not release results in multiple languages.

Element	<MessageLanguage>
Example	en-US
Comment	Denotes the language used in the file.

1.5.2.3. <IssueDate> Element

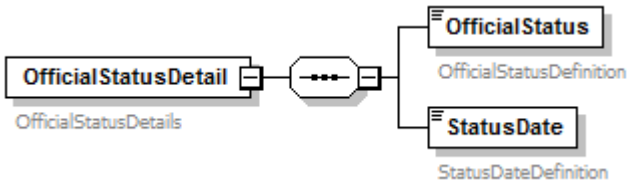
The <IssueDate> element will store the complete time and date of the results in this file.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	DateType
properties	minOcc 0 maxOcc 1 content simple
annotation	documentation The date that this managing authority detail was issued.
source	<xs:element name="IssueDate" type="DateType" minOccurs="0"> <xs:annotation> <xs:documentation>The date that this managing authority detail was issued.</xs:documentation> </xs:annotation> </xs:element>

Element	<IssueDate>
Example	2016-06-02T11:06:16-07:00
Comments	A complete timestamp representing the time and date.

1.5.2.4. <OfficialStatusDetail>

The <OfficialStatusDetail> provides information regarding the status of the information in the document.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml

properties	content complex id d2e1412
children	**OfficialStatus** **StatusDate**
annotation	documentation OfficialStatusDetails
source	<xs:element name="OfficialStatusDetail" id="d2e1412" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>OfficialStatusDetails</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="OfficialStatus" type="OfficialStatusDefinition" id="d2e1425" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>OfficialStatusDefinition</xs:documentation> </xs:annotation> </xs:element> <xs:element name="StatusDate" type="StatusDateDefinition" id="d2e1439" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>StatusDateDefinition</xs:documentation> </xs:annotation> </xs:element> </xs:sequence> </xs:complexType> </xs:element>

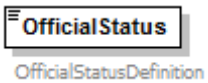
This is an element contains information about the official status of the results contained in the file. It is a container object and stores neither attributes nor values.

In the Secretary of State Implementation, only the following elements are used under the <OfficialStatusDetail> element:

- Official Status
- Status Date

1.5.2.4.1. <OfficialStatus> Element

The <OfficialStatus> element denotes the status of the results contained in this file.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**OfficialStatusDefinition**
properties	content simple id d2e1425

annotation	documentation OfficialStatusDefinition
source	<xs:element name="OfficialStatus" type="OfficialStatusDefinition" id="d2e1425" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>OfficialStatusDefinition</xs:documentation> </xs:annotation> </xs:element>

Element	<OfficialStatus>
Example	UnOfficial
Comments	A textual description of the Official Status of the results

1.5.2.4.2. <StatusDate> Element

The <StatusDate> element denotes the date the status took effect.

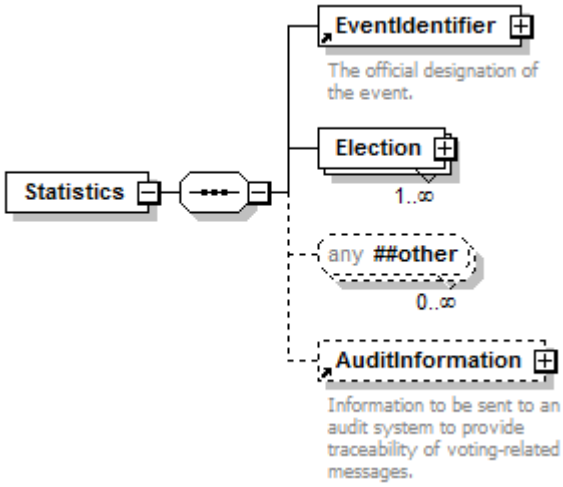
diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	StatusDateDefinition
properties	content simple id d2e1439
annotation	documentation StatusDateDefinition
source	<xs:element name="StatusDate" type="StatusDateDefinition" id="d2e1439" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>StatusDateDefinition</xs:documentation> </xs:annotation> </xs:element>

This may be different than the date of the file.

Element	<StatusDate>
Example	2016-06-02
Comments	A date representing the day of the status of the results.

1.5.3. <Statistics> Element

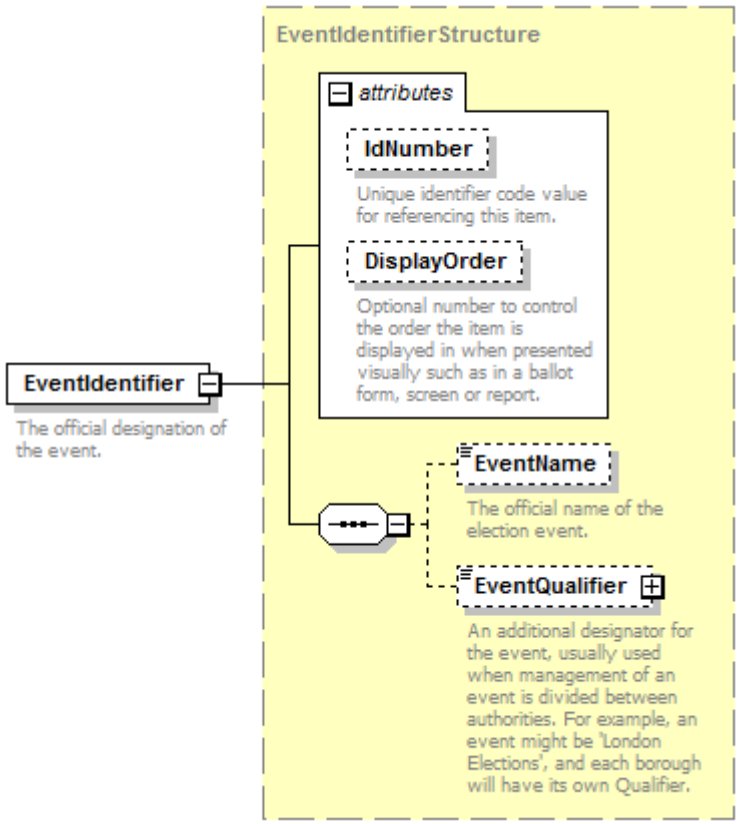
The <Statistics> element is a container element storing status information.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
properties	content complex
children	**EventIdentifier** **Election** **AuditInformation**
used by	element **EML**
source	<xs:element name="Statistics"> <xs:complexType> <xs:sequence> <xs:element ref="EventIdentifier"/> <xs:element name="Election" maxOccurs="unbounded"> <xs:complexType> <xs:sequence> <xs:element ref="ElectionIdentifier"/> <xs:element name="Contests"> <xs:complexType> <xs:sequence> <xs:element name="Contest" maxOccurs="unbounded"> <xs:complexType> <xs:sequence> <xs:element ref="ContestIdentifier"/> <xs:element ref="CountQualifier" minOccurs="0"/> <xs:element ref="CountingAlgorithm" minOccurs="0"/> <xs:element ref="NumberOfPositions" minOccurs="0"/> <xs:choice> <xs:sequence> <xs:element name="TotalVotes"> <xs:complexType> <xs:sequence> <xs:element name="CountMetric" type="CountMetricsStructure" minOccurs="0" maxOccurs="unbounded"/> <xs:group ref="VoteGroup" minOccurs="0"/> </xs:sequence> </xs:complexType> </xs:element> <xs:element ref="ReportingUnitVotes" minOccurs="0"

```
maxOccurs="unbounded"/>
                    </xs:sequence>
                    <xs:element ref="ReportingUnitVotes"/>
                  </xs:choice>
                </xs:sequence>
                <xs:attribute name="ReportType" type="xs:token"/>
              </xs:complexType>
            </xs:element>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:any namespace="##other" minOccurs="0" maxOccurs="unbounded"/>
<xs:element ref="AuditInformation" minOccurs="0"/>
```

1.5.3.1. <EventIdentifier> Element

The <EventIdentifier> element contains information to uniquely identify this event.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**EventIdentifierStructure**

properties	content complex
children	**EventName** **EventQualifier**
used by	elements **PeriodStructure/Event** **Statistics** complexTypes **IncomingGenericCommunicationStructure** **InternalGenericCommunicationStructure** **OutgoingGenericCommunicationStructure**

attributes

Name	Type	Use	Default	Fixed	Annotation
IdNumber	**xs:NMTOKEN**	optional			documentation Unique identifier code value for referencing this item.
DisplayOrder	**xs:positiveInteger**	optional			documentation Optional number to control the order the item is displayed in when presented visually such as in a ballot form, screen or report.

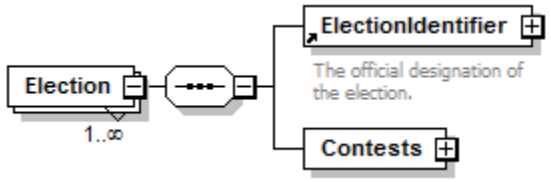
annotation	documentation The official designation of the event.

source

```
<xs:element name="EventIdentifier" type="EventIdentifierStructure">
  <xs:annotation>
    <xs:documentation>The official designation of the event.</xs:documentation>
  </xs:annotation>
</xs:element>
```

1.5.3.2. <Election> Element

The <Election> element contains status information for a specific Election.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
properties	minOcc 1 maxOcc unbounded content complex
children	**ElectionIdentifier** **Contests**

source

```
<xs:element name="Election" maxOccurs="unbounded">
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="ElectionIdentifier"/>
      <xs:element name="Contests">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Contest" maxOccurs="unbounded">
              <xs:complexType>
```

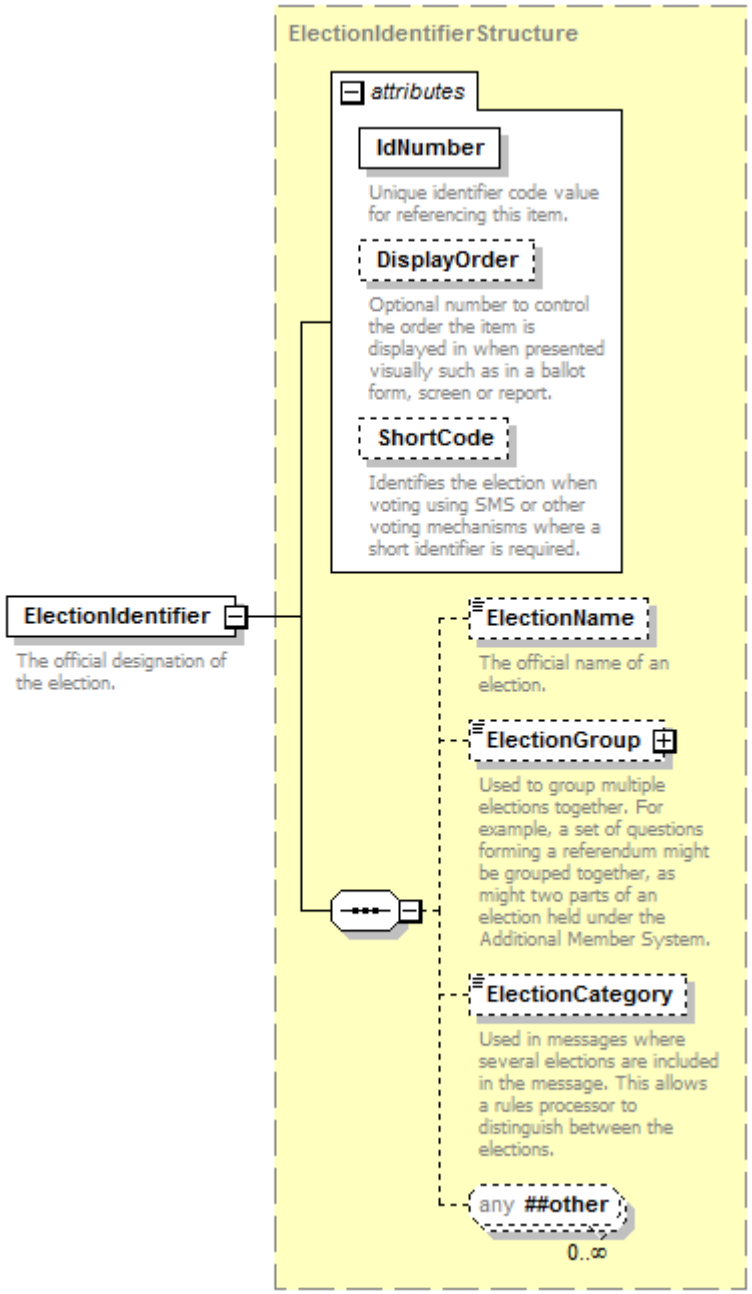
```
            <xs:sequence>
              <xs:element ref="ContestIdentifier"/>
              <xs:element ref="CountQualifier" minOccurs="0"/>
              <xs:element ref="CountingAlgorithm" minOccurs="0"/>
              <xs:element ref="NumberOfPositions" minOccurs="0"/>
              <xs:choice>
                <xs:sequence>
                  <xs:element name="TotalVotes">
                    <xs:complexType>
                      <xs:sequence>
                        <xs:element name="CountMetric" type="CountMetricsStructure"
minOccurs="0" maxOccurs="unbounded"/>
                        <xs:group ref="VoteGroup" minOccurs="0"/>
                      </xs:sequence>
                    </xs:complexType>
                  </xs:element>
                  <xs:element ref="ReportingUnitVotes" minOccurs="0"
maxOccurs="unbounded"/>
                </xs:sequence>
                <xs:element ref="ReportingUnitVotes"/>
              </xs:choice>
            </xs:sequence>
            <xs:attribute name="ReportType" type="xs:token"/>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
 </xs:sequence>
</xs:complexType>
</xs:element>
```

The <Election> element is a container element that defines the election-level elements.

Attributes			
Name	**Type**	**Size**	**Description**
Id	Numeric	8	Text Identifier for the election date

1.5.3.2.1. <ElectionIdentifier> Element

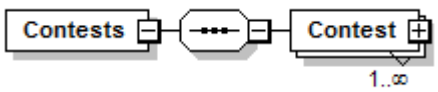
The <ElectionIdentifier> element contains information to uniquely identify this event.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	ElectionIdentifierStructure
properties	content complex
children	ElectionName ElectionGroup ElectionCategory
used by	elements Statistics/Election PeriodStructure/Event complexTypes IncomingGenericCommunicationStructure InternalGenericCommunicationStructure OutgoingGenericCommunicationStructure

attributes	Name	Type	Use	Default	Fixed	Annotation
	IdNumber	**xs:NMTOKEN**	required			documentation Unique identifier code value for referencing this item.
	DisplayOrder	**xs:positiveInteger**	optional			documentation Optional number to control the order the item is displayed in when presented visually such as in a ballot form, screen or report.
	ShortCode	**ShortCodeType**	optional			documentation Identifies the election when voting using SMS or other voting mechanisms where a short identifier is required.
annotation	documentation The official designation of the election.					
source	<xs:element name="ElectionIdentifier" type="ElectionIdentifierStructure"> <xs:annotation> <xs:documentation>The official designation of the election.</xs:documentation> </xs:annotation> </xs:element>					

1.5.3.2.2. <Contests> Element

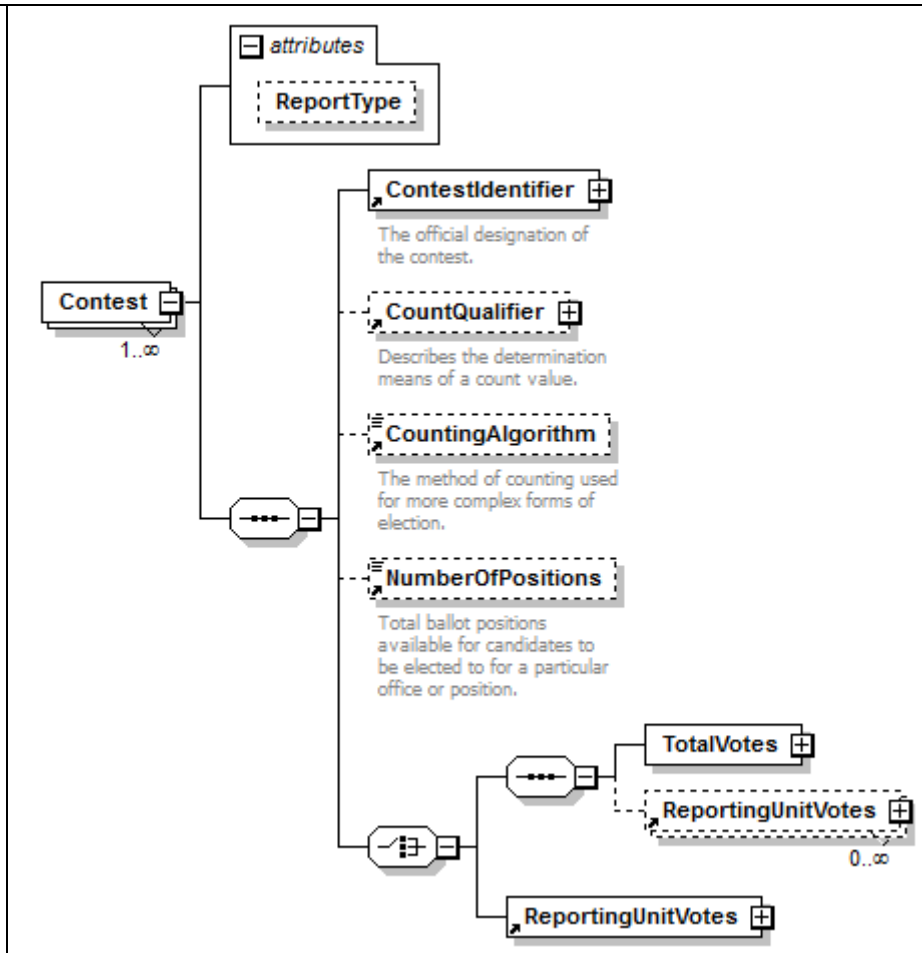
The <Contests> element encapsulates the actual count loops.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
properties	content complex
children	**Contest**
source	<xs:element name="Contests"> <xs:complexType> <xs:sequence> <xs:element name="Contest" maxOccurs="unbounded"> <xs:complexType> <xs:sequence> <xs:element ref="ContestIdentifier"/> <xs:element ref="CountQualifier" minOccurs="0"/> <xs:element ref="CountingAlgorithm" minOccurs="0"/> <xs:element ref="NumberOfPositions" minOccurs="0"/> <xs:choice>

```
            <xs:sequence>
              <xs:element name="TotalVotes">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="CountMetric" type="CountMetricsStructure" minOccurs="0"
maxOccurs="unbounded"/>
                    <xs:group ref="VoteGroup" minOccurs="0"/>
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
              <xs:element ref="ReportingUnitVotes" minOccurs="0" maxOccurs="unbounded"/>
            </xs:sequence>
            <xs:element ref="ReportingUnitVotes"/>
          </xs:choice>
        </xs:sequence>
        <xs:attribute name="ReportType" type="xs:token"/>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
 </xs:complexType>
</xs:element>
```

1.5.3.2.2.1. <Contest> Element

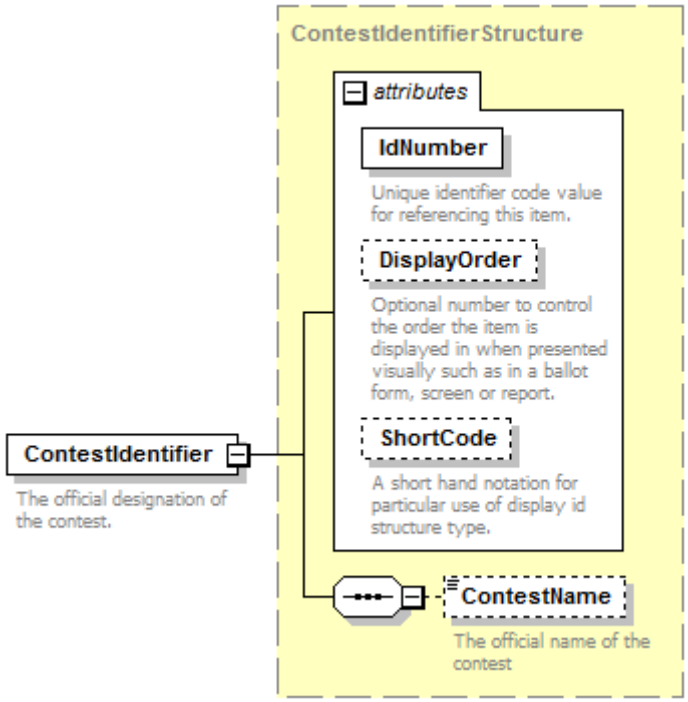
The <Contest> element is a container element for all status information for this Election.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
properties	minOcc 1 maxOcc unbounded content complex
children	ContestIdentifier CountQualifier CountingAlgorithm NumberOfPositions TotalVotes ReportingUnitVotes
attributes	Name: ReportType; Type: xs:token; Use; Default; Fixed; Annotation
source	<xs:element name="Contest" maxOccurs="unbounded"> <xs:complexType> <xs:sequence> <xs:element ref="ContestIdentifier"/> <xs:element ref="CountQualifier" minOccurs="0"/> <xs:element ref="CountingAlgorithm" minOccurs="0"/> <xs:element ref="NumberOfPositions" minOccurs="0"/> <xs:choice> <xs:sequence> <xs:element name="TotalVotes"> <xs:complexType> <xs:sequence> <xs:element name="CountMetric" type="CountMetricsStructure" minOccurs="0" maxOccurs="unbounded"/> <xs:group ref="VoteGroup" minOccurs="0"/> </xs:sequence> </xs:complexType> </xs:element>

	<xs:element ref="ReportingUnitVotes" minOccurs="0" maxOccurs="unbounded"/> </xs:sequence> <xs:element ref="ReportingUnitVotes"/> </xs:choice> </xs:sequence> <xs:attribute name="ReportType" type="xs:token"/> </xs:complexType> </xs:element>

1.5.3.2.2.1.1. <ContestIdentifier> Element

The <Contest> element is a container element for all status information for this Election.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	**ContestIdentifierStructure**
properties	content complex
children	**ContestName**
used by	element **Statistics/Election/Contests/Contest** complexTypes **IncomingGenericCommunicationStructure** **InternalGenericCommunicationStructure** **OutgoingGenericCommunicationStructure**

attributes

Name	Type	Use	Default	Fixed	Annotation
IdNumber	**xs:NMTOKEN**	required			documentation Unique identifier code value for referencing this item.
DisplayOrder	**xs:positiveInteger**	optional			documentation Optional number to control the order the item is displayed in when presented visually such as in a ballot form, screen or report.
ShortCode	**ShortCodeType**	optional			documentation A short hand notation for particular use of display id structure type.

annotation	documentation The official designation of the contest.
source	<xs:element name="ContestIdentifier" type="ContestIdentifierStructure"> <xs:annotation> <xs:documentation>The official designation of the contest.</xs:documentation> </xs:annotation> </xs:element>

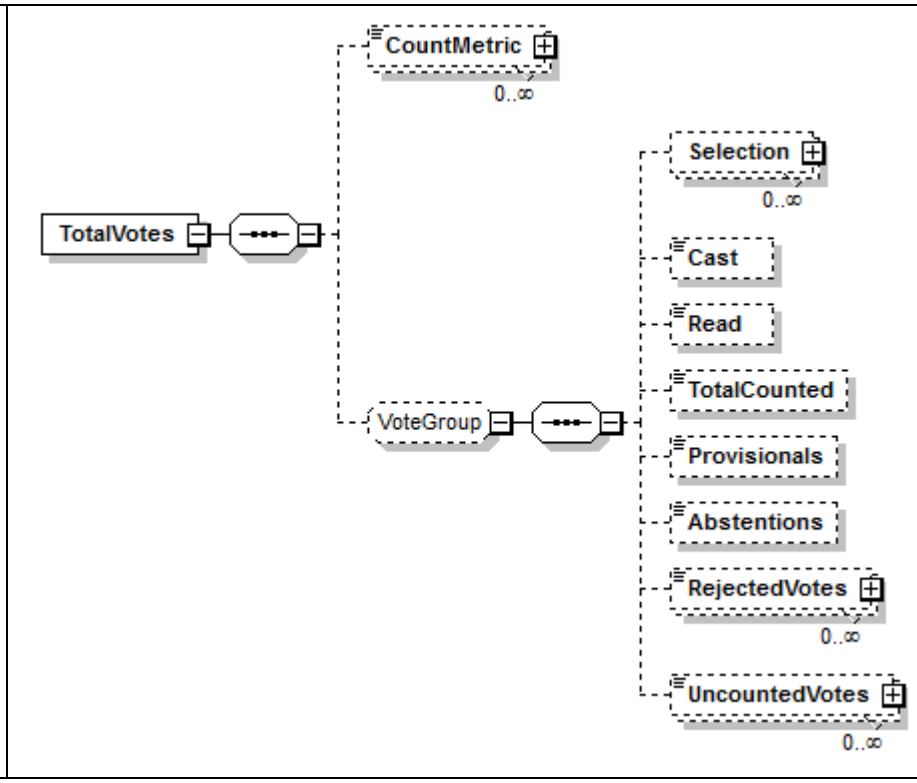
The <ContestIdentifier> element is used to identify or name the contest being reported on. In the 530 definition this will always represent 'County Statistics' contest.

Attributes			
Name	**Type**	**Size**	**Description**
DisplayOrder	Numeric	3	Does not apply for the 530
Id	Numeric	3	Text Identifier for the contest will always be 001

1.5.3.2.2.1.2. <TotalVotes> Element

The <TotalVotes> element is a container element for all status information for this Election.

diagram



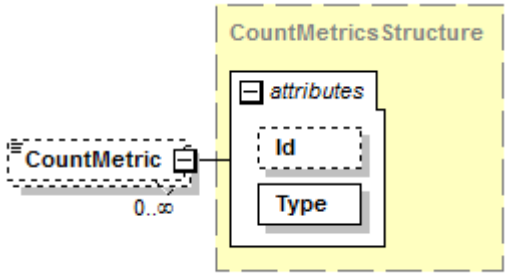
namespace	urn:oasis:names:tc:evs:schema:eml
properties	content complex
children	CountMetric Selection Cast Read TotalCounted Provisionals Abstentions RejectedVotes UncountedVotes
source	<xs:element name="TotalVotes"> <xs:complexType> <xs:sequence> <xs:element name="CountMetric" type="CountMetricsStructure" minOccurs="0" maxOccurs="unbounded"/> <xs:group ref="VoteGroup" minOccurs="0"/> </xs:sequence> </xs:complexType> </xs:element>

The <TotalVotes> element contains the statewide information. There is only one occurrence of this element loop. The loop will contain 11 occurrences of the <CountMetric> element to represent all of the counters.

Attributes			
Name	**Type**	**Size**	**Description**
Id	Alpha	2	Identifier for the type of count
Type	Alpha	40	Text description of the count

1.5.3.2.2.1.2.1. <CountMetric> Element

The <CountMetric> element contains all the status information of this election event.

diagram	
namespace	urn:oasis:names:tc:evs:schema:eml
type	CountMetricsStructure
properties	minOcc 0 maxOcc unbounded content complex

attributes	Name	Type	Use	Default	Fixed	Annotation
	Id	**xs:token**	optional			
	Type	**xs:string**	required			

source	<xs:element name="CountMetric" type="CountMetricsStructure" minOccurs="0" maxOccurs="unbounded"/>

The <CountMetric> attributes are as follows:

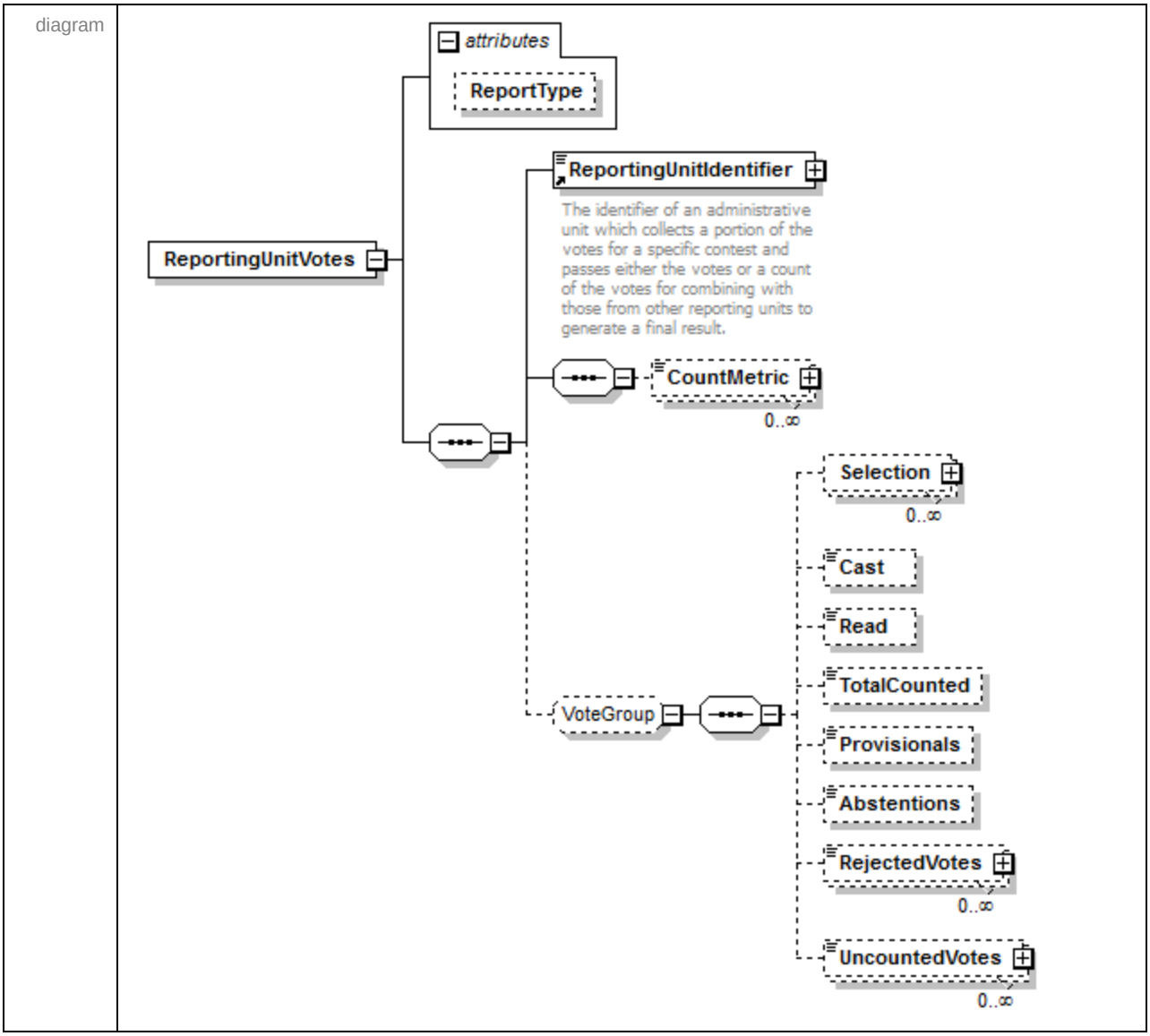
Attribute	Id	Type	Comments
Values	RT	Report Type	Type of report submitted • 0 (zero) – No Report No report has been received by the county or all previous reports were removed by the county due to corrective action. • 1 – Regular Report The county submits regular reports during the semi-official canvass until the Final Report. • 2 – Final Report The county has completed the reporting for the semi-official canvass. The precincts reporting will equal the total precincts in the county for statewide contests. • 3 – Update Report The county submits update reports after a Final Report is submitted whenever the number of votes for a candidate or a ballot measure changes. The update reports are considered part of the semi-official canvass. **New:** • 4 – County Canvass Complete Returns are updated as county elections officials complete the official canvass and process ballots during the 28-day post-election canvass period.

Attribute	Id	Type	Comments
	PR	Precincts Reporting	Number of precincts reporting • If zero, the field is null.
	TP	Total Precincts	Total number of precincts for the contest • The total number of precincts is subject to change if a county needs to adjust the total precinct counts prior to submitting the Final Report.
	PP	Precincts Reporting Percentage	Percentage of precincts reported • If zero, the field is null. • The number will never be 100% until all counties submit their Final Reports.
	VT	Voter Turnout	Number of ballots cast • The field is null until a county submits a report.
	TV	Total Registered Voters	Number of registered voters • The field will contain test data until the 15-day close of voter registration.
Values	VP	Voter Turnout Percentage	Percentage derived by dividing voter turnout by total registered voters • The field is null until a county submits a report. • The display is one-tenth of a percent, but the decimal point is present only when the tenth of a percent digit is not zero.
	FD	First Report Date	Date the county submitted the earliest report. **Note:** This field has changed to include the

Attribute	Id	Type	Comments
			Year and is now eight bytes instead of four. Format is YYYYMMDD where: YYYY = year MM = month DD = day If no report, defaults to 00000000.
	FT	First Report Time	Time the county submitted the earliest report. Format is hh:mm aa where: hh = hour mm = minutes aa = either AM or PM
	LD	Last Report Date	Date the county submitted the latest report. Format is YYYYMMDD where: YYYY = year MM = month DD = day If no report, defaults to 00000000.
	LT	Last Report Time	Time the county submitted the latest report. Format is hh:mm aa where: Hh = hour mm = minutes aa = either AM or PM

1.5.3.2.2.1.3. <ReportingUnitVotes> Element

The <ReportingUnitVotes> element contains information on the status of each county's reporting to the Secretary of State.



The <ReportingUnitVotes> element contains the reporting information for each county in the election. The loop will typically contain 11 occurrences of the <CountMetric> element to represent all of the counters. There are 58 occurrences of this element to represent each county.

Attributes			
Name	**Type**	**Size**	**Description**
Id	Numeric	2	Identifies the county • The counties are numbered in ascending sequential order proceeding alphabetically.

Attributes			
Name	**Type**	**Size**	**Description**
Id	Alpha	2	Identifier for the type of count
Type	Alpha	~	Text description of the count

The <ReportingUnitVotes> Element uses the same <CountMetric> elements as defined in the TotalVotes Element of this guide.