

EML v5.0 Changes Log

This is the list of the changes made between v4 and v5 of EML.

Change	Description
Correct fault in the Association Element of the PollingDistrictStructure	When the data type of the <code>Association</code> was changed in moving from v4.0h to v4.0 final, the <code>Type</code> attribute and <code>DisplayIdOpt</code> attribute disappeared.
Referenced filenames xAL and xNL in Externals Directory have wrong case	The filename cases in the import statement should match the actual filenames
Add Link for Additional Validation	Provision of a link to a Schematron file or other validator against which to validate adherence to local rules.
Replace Type Attributes with xsi:type	There are several places in EML where name value pairs are based on a <code>Type</code> attribute. The problem is the data type of the value cannot be validated. The solution is to delete the <code>Type</code> attribute and use <code>xsi:type</code> instead.
Change Data Type of ProcessingUnitStructure/Id	This is currently an <code>xs:NMTOKEN</code> , which does not allow a URI as an identifier. A better solution is to use <code>xs:token</code> .
Names of ActionDateTime and ActionedDateTime changed to ActionTime and ActionedTime and ActionTime made optional.	This element currently has a mandatory child <code>ActionDateTime</code> with an <code>xs:dateTime</code> data type. But this information might not be available, so either the element should be optional, or there should be a choice between <code>xs:date</code> , <code>xs:dateTime</code> or the string "immediate", or (preferably) both.
Allow an Election List with no Voters	Currently, an election list must have at least a single voter. However, the schema is being used for filtered lists (such as a list of postal proxies). These lists are sometimes empty, and it would make implementation simpler if an empty list were allowed.
Add an xs:any to Complex Types	Requirements have been found where complex types do not allow for specifying the actual type. Using <code>xs:any</code> is a more flexible approach.
Add Metadata to Certain Message Types	Some messages need information relating to the issuing of them so it would be useful to make this optional information available in the header.
Add Proxy Date of Birth and Voter Scanned Signature to VoterID	There is a need to accommodate the Date of Birth of the Proxy Voter and the scanned Signature of the Voter to meet new requirements in UK and elsewhere.
Add Gender of Candidate in CandidateIdentifier	The gender of the candidate is compulsory in Belgium in the election results.
Add Simulation element to the Count and Result schemas	There is a requirement in Belgium to provide for simulation of the count and the result.

Add Extrapolation element to the Count and Result schemas	There is a requirement in Belgium to provide for extrapolation of the count and the result.
Add a Final element to the Count and Result schemas	It is necessary in several jurisdictions to show whether the count and result is final or not.
Add a Previous element to the Count and Result schemas	There is a requirement in Belgium to allow for comparisons of the count and the result of previous election(s) with the current election.
Add new element BallotFormIdentifier	An identifier for the ballot form is required in USA.
Add new element VoterSocialSecurityNumber	Include separate element of SSN in VoterIdentification to allow for value validation.
Add new element ElectionType	In some situations it is necessary to specify the type of an election.
Add new element WriteinMax	The maximum number of write-ins is required in USA elections.
Add new element ContestScope	This is required to distinguish between federal and other types of contests in USA.
Add new element ContestRotationMethod	There is a need in USA to define the method used to rotate candidates on the ballot form
Add new element ChoiceType	The type of choice available to the voter is required for USA elections.
Replace current PictureDataStructure with BinaryItemStructure	There are requirements for types of binary data other than pictures. For example additional attributes are required to meet USA requirements. Therefore a more generic approach is required.
Add Proposer's Date of Birth	Norwegian electoral legislation requires the proposer's date of birth to be shown on documentation including the list of all proposers.
Allow for Cumulative voting	There is a need in USA elections to allow for cumulative voting.
Need to identify a straight party contest	There is a need in USA elections to identify a straight party contest.
Need to distinguish between affiliation and endorsement of candidates.	The endorsement of a candidate by a political party is different to affiliation and needs to be identified separately.
Need to allow for partisan contests	There is a need in USA elections to allow for partisan contests.
Add Area to ballots to identify precincts and split precincts	A new Area element is required in USA elections to be able to identify precincts and split precincts.
Allow for regular and provisional reporting of ballot counts	There is a need in USA elections to allow for regular and provisional reporting of counts.