**How To Use the Motor Fuel Excise Tax (MFET) Schema Set**

**General Guidelines**

Some of the schema sets published by E-STANDARDS are known as “master” schemas, because they contain all of the components needed for a particular electronic filing program. The Motor Fuel Excise Tax (MFET) schemas are such a master schema set. The following pages give the rules that a state must follow in utilizing a master schema set, and some guidelines for customizing MFET for your state.

The bottom line is that a state can restrict the master schema by removing sub-schemas, entries in enumerated lists, and even some optional elements that the state does not use and does not want filers to ever be able to send to the state.

However, the state cannot add any elements to the schema or change the structure or order of any of the schemas without formal approval from both Motor Fuel Uniformity and E-Standards.

**E-STANDARDS Rules for Master Schema Sets**

1. Each state must create its own MFET schema set for use by taxpayers and software developers. The state’s schema set is to be published as a zipped folder package, named XXMFET20yyVnn.mm where
   1. XX is the standard state abbreviation, such as NC for North Carolina
   2. yy is the tax year for which the reports will be filed
   3. nn.mm is the version number
      1. Prior to publication, test packages begin with 0.1, 0.2, etc
      2. The first production package will be 1.0
   4. Each time a change is made to any of the schemas in the package, however small, the number must be incremented
      1. If the change is backward compatible, meaning that an XML document created under the old schema will still be valid, increase the minor release indicator mm
      2. If the change is not backward compatible, meaning that an XML document created under the old schema will no longer validate, then increase the major release indicator nn.
2. States may not change any of the schemas in the Common folder, with the exception of Financial Transaction as discussed below. In particular, states may not alter any eFileType, where “eFileType” is the name given to simple and complex types stored in the efiletypes.xsd, StateeFileTypes.xsd, and MotorFuelsefileTypes.xsd schemas. The eFileTypes are standard building blocks for E-STANDARDS schemas.
3. States may delete any element, complex type, or sub-schema when it has no business need for that component, and wants to prevent that component being submitted to the state in error. States must take care to ensure that the schemas are still well-formed and valid XML.
4. States may change an element or complex type from optional to mandatory, if state business rules require that element.
5. States may decrease the length or number of occurrences of elements.
6. States may restrict product or mode codes to those utilized by the state.
7. States may NOT add any elements or complex types to the schema set except through the E-STANDARDS change control process.
8. States may NOT change a mandatory element or complex type to optional except through the E-STANDARDS change control process.
9. States may NOT increase the length or number of occurrences of any element except through the E-STANDARDS change control process.
10. State may NOT change the structure of any schema, including the order of elements, complex types, or sub-schemas, except through the E-STANDARDS change control process.

**Customizing the Schema Set**

The first step is for the state to download the current E-STANDARDS MFET schema package from the E-STANDARDS website, [www.statemef.com](http://www.statemef.com).

Next, the state should look at the schema MotorFuelsFiling.xsd, and determine which reports the state will support in its electronic filing program. For example, if the program only includes Supplier and Terminal Operator reports, then the state should delete the Distributor, Carrier, and Retailer reports from MotorFuelsFiling.xsd, and delete the MFDistributorReport.xsd, MFCarrierReport.xsd, and MFRetailerReport.xsd schemas from the MotorFuelsSchema folder.

The state should then go through all of the remaining schemas in the MotorFuelsSchema folder, and tailor them to the state’s business requirements, following the E-STANDARDS rules given above.

The state should look at FinancialTransaction.xsd, the only schema in the Common folder that states may customize. Note that a state can only delete, or reduce the occurrences of, complete payment or refund options – it cannot modify the eFileTypes defining a specific payment or refund option.

Finally, the state must create its schema package. The state must determine the new state schema version/release identification number, following the rules given above. That value must be set in the schemaVersion attribute in the MotorFuelsFiling.xsd schema. The state then creates the schema folder for review or publication. The name of the package must equal the value of the schemaVersion attribute.

**E-STANDARDS Change Control**

As more states implement the MFET schemas, they may discover changes or additions that are needed to the MFET schema set. States, filers, and software vendors may request changes to the MFET schemas by following the E-STANDARDS Change Control process.

The MFET Change Request form may be found on the MFET page of the E-STANDARDS web site, [www.statemef.com](http://www.statemef.com). The state must provide a description of the change being requested, before and after schema code showing the change, and a business justification for the change. The completed form must be sent by email to E-STANDARDS support at [statemef@rsimail.com](mailto:statemef@rsimail.com), and to the E-STANDARDS state co-chair (currently Steve Thimsen, [steve.thimsen@tax.idaho.gov](mailto:steve.thimsen@tax.idaho.gov) ).

E-STANDARDS will review the Change Request to ensure that the change is technically valid, and the most efficient design to meet the requester’s needs. The change must then be approved by the FTA Motor Fuel Uniformity Committee Electronic Filing Subcommittee for business approval, and by E-STANDARDS for technical approval.

The state will be notified promptly of the approval status. If for any reason the Change Request cannot be approved, E-STANDARDS will work with the state to determine alternate approaches for meeting the state’s business requirement.