

VERIFY

Schema Change Log of Changes Made for Release 10.0 for Heavy Duty In-Use

Purpose

This document identifies XML schema modifications to the VERIFY Heavy Duty In-Use (HDIU) family of schemas.

LD Modified XML Files

EN_VER_HDIU_HeavyDutyInUseSubmissionRootElement_v0.9.xsd

EN_VER_HDIU_SharedDataElements_v0.9.xsd

Individual XML Schema File Modifications

For new and modified data elements, the annotation following the data element name references the corresponding data element identifiers in the DR spreadsheet. Note that individual data elements may be used in more locations in the schemas than defined in the DR spreadsheet.

EN_VER_HDIU_HeavyDutyInUseSubmissionRootElement_v0.9.xsd

- The following changes were made to PMStandardsDetails[Type]:
 - Data element PMStandardTypeIndicator [N/F (HDIU403)] was added with cardinality (1,1).
- The following changes were made to NotToExceedComplianceDetails[Type]:
 - Data element NOXCorrectionFactorValue [g/bhp-hr, enumeration of 3 values (HDIU80)] was renamed to NOXComplianceMarginValue [g/bhp-hr, enumeration of 3 values (HDIU80)] having cardinality (1,1).
 - Data element PMCorrectionFactorValue [g/bhp-hr, 0.00 to 99.99 (HDIU85)] was renamed to PMComplianceMarginValue [g/bhp-hr, 0.00 to 99.99 (HDIU85)] having cardinality (1,1).
- The following changes were made to NotToExceedEventDetails[Type]:
 - Data element RegenerationMinimumTimeNumber [Seconds, 0.0 to 999.9 (HDIU386,421)] was added with cardinality (0,1).
 - Data element EventAveragePMValue [-1.0000 to 99999.9999 (HDIU250)] was removed (relocated to NotToExceedPMEventDetails).
- The complex data element NotToExceedPMEventDetails[Type] was added as follows:
 - Data element EventSequenceNumber [0 to 9,999 (HDIU239,422)] was added with cardinality (1,1).
 - Data element EventStartTime [HHMMSS.S (HDIU240,404)] was added with cardinality (1,1).
 - Data element EventStopTime [HHMMSS.S (HDIU241,406)] was added with cardinality (1,1).
 - Data element EventMeasuredTimeNumber [Seconds, 1 to 99,999 (HDIU242,405)] was added with cardinality (1,1).

- Data element EventAveragePMValue [-1.0000 to 99999.9999 (HDIU250)] was added with cardinality (1,1).
 - Data element EventUncorrectedAveragePMValue [-1.0000 to 99999.9999 (HDIU419)] was added with cardinality (1,1).
 - Data element RegenerationMinimumTimeNumber [Seconds, 0.0 to 999.9 (HDIU386,421)] was added with cardinality (0,1).
- The following changes were made to NotToExceedSummaryDetails[Type]:
 - Data element PMNotToExceedEventMinimumMeasuredTimeNumber [Seconds, 1 to 99,999 (HDIU413)] was added with cardinality (1,1).
 - Data element PMNotToExceedEventMaximumMeasuredTimeNumber [Seconds, 1 to 99,999 (HDIU414)] was added with cardinality (1,1).
 - Data element RegenerationFractionValue [0.00 to 1.00 (HDIU420)] was added with cardinality (0,1).
- The following changes were made to NotToExceedOtherDetails[Type]:
 - Data element EngineIncapableLimitedTestingRegionDurationTimeNumber [Seconds, 0 to 99,999 (HDIU411)] was added with cardinality (1,1).
 - Data element TimeWeightedCarveOutLimitedTestingRegionDurationTimeNumber [Seconds, 0 to 99,999 (HDIU412)] was added with cardinality (1,1).
 - Data element PMFilterWeightValue [mg, 0.000 to 9999.999 (HDIU415)] was added with cardinality (0,1).
 - Data element PMFilterIdentifierText [1 to 1000 characters (HDIU416)] was added with cardinality (0,1).
 - Data element PMFilterAnalysisLabIdentifierText [1 to 1000 characters (HDIU417)] was added with cardinality (0,1).
 - Data element PMFilterWeightCorrectionFactorValue [0.000 to 9999.999 (HDIU418)] was added with cardinality (0,1).
- The following changes were made to VehicleRecordDetails[Type]:
 - Data element VehicleIdentificationNumber [17 characters, no I,O,Q, last 4 numeric (HDIU30)] was added with cardinality (1,1).
- The following changes were made to TestRecordDetails[Type]:
 - Data element TestIdentificationCode [1 to 10 characters, optional _, ., or - not as 1st or last (HDIU88,153)] was added with cardinality (1,1).
- The following changes were made to TestSummaryDetails[Type]:
 - Complex data element NotToExceedPMEventDetails[Type] was added with cardinality (0,∞).

XML Shared Data Element and Data Type File Modifications

The annotation following the data element name references the corresponding data element identifiers in the DR spreadsheet. Note that some data elements may be used in more locations in the schemas than defined in the DR spreadsheet.

EN_VER_HDIU_SharedDataElements_v0.9.xsd

The following data elements had their data type or enumerations modified. As such, this modification has an impact to each schema that the associated data element is used in. The annotation following the data element name references the corresponding data element identifiers in the DR spreadsheet. Note that some data elements may be used in more locations in the schemas than defined in the DR spreadsheet.

- Data type Decimal-1Point0To9Point999Type [-1.0 to 999.9] was renamed to Decimal-1Point0To999Point9Type [-1.0 to 999.9].
- Data type for EventAveragePMValue [-1.0000 to 99999.9999 (HDIU250)] was changed to Decimal-1Point0000To99999Point9999Type
- Data type for EventAverageCOValue [-1.0 to 999.9 (HDIU248)] was changed to Decimal-1Point0To999Point9Type
- Data type NOXCorrectionFactorValueType [g/bhp-hr, enumeration of 3 values] was renamed to NOXComplianceMarginValueType [g/bhp-hr, enumeration of 3 values].
- Data type for RegenerationMinimumTimeNumber [Seconds, 0.0 to 999.9 (HDIU386,421)] was changed to Decimal4Point1NonNegativeType.
- Data type Decimal-1Point0000To99999Point9999Type [-1.0000 to 99999.9999 decimal type definition] was added.
- Data type Decimal0Point00To1Point00Type [0.00 to 1.00 decimal type definition] was added.
- Data type Decimal4Point1NonNegativeType [0.0 to 999.9 decimal type definition] was added.
- Data type Decimal7Point3NonNegativeType [0.000 to 9,999.999 decimal type definition] was added.
- Data type Integer5DigitNonNegativeType [0 to 99,999 integer type definition] was added.
- Data type PMStandardTypeIndicatorType [N/F type definition] was added.