Overview of Semantic Descriptions of EU ETS Reporting Language - EU ETS Request Schema

Element	Description
EUETSRequest	EUETSRequest root element
DocumentProperties	Complex element containing information about the creation and status of the submitted document
Version	Version of the EU ETS Reporting Language taxonomy used
Revision	Revision number of the EU ETS Reporting Language taxonomy used
SubmissionCode	The submission code of the document.This element describes the reason for submitting the document, i.e. specifies whether the document holds e.g. request permit message, update monitoring plan message, etc.
DocumentReference	A unique reference for this document
ParentDocumentReference	To allow a reference to (multiple) pre-existing document, i.e. Permits, i.e. MonitoringPlans
OperatorDetails	Complex element containing details of the operator
OperatorID	A unique ID for the operator (optional when sending an initial request for a permit, but mandatory after the ID has been given)
Organisation = OrganisationContactType	Contact details of the operator
OperatorContact = ContactType	Contact Details of the Primary Contact person for the operator. (Subsequently entered contacts will be Secondary, Tertiairy, etc.)
ParentCompany = OrganisationContactType	Complex data element containing contact details for parent company who owns the operator
Owner = ContactType	Complex data element containing contact details for the natural person who owns the operator
AviationOperatorDetails	The details for an aviation operator
UniqueCommissionListName	The name of the aircraft operator on the list pursuant to Article 18a(3) of the EU ETS Directive.
UniqueCommissionListIdentification	A unique identifier for the aircraft operator as stated in the Commission's list of aircraft operators
ICAODesignatorNotification	A notification whether the aircraft operator has an ICAO Designator or not
UniqueICAODesignator	The unique ICAO designator (used in the call sign for Air Traffic Control purposes)
UniqueDesignatorRegistrationMarking	A unique designator registration markings (used as a call sign for Air Traffic Control) for all operated aircraft
OperatorAdministeringMemberState	A specification of the administering Member State of the aircraft operator
AOCAndOperatingLicenceData	A complex element containing Air Operating Certificate and EU Licence Data
AirOperatorCertificateNumber	The issuing authority for the air operating licence of the aircraft operator
AOCIssuingAuthority	The issuing authority for the air operating licence of the aircraft operator
AOCOrNot	A notification whether the aircraft operator has an Air Operator Certificate or not
AOCIssuingDate	A specification of the issuing date of the Air Operator Certificate
AOCScopeOfOperations	A specification of the scope of operations that is permitted under the Air Operator Certificate
OLOrNot	A notification whether the aircraft operator has an Operating Licence or not
OLIssuingDate	A specification of the issuing date of the Operating Licence
OLScopeOfOperations	A specification of the scope of operations that is permitted under the Operating Licence
OperatingLicenceID	A unique ID of the Operating Licence of the aircraft operator
OLIssuingAuthority	The issuing authority for the Operating Licence of the aircraft operator
OperatorOwnershipStructure	A complex element containing ownership structure data
ParentCompanyICAODesignator	A specification of the unique ICAO Designator (used in the call sign for Air Traffic Control purposes) of the Parent Company
SubsidiaryCompany	A complex element containing data of a possible subsidiary company
SubsidiaryCompanyName	A specification of the name of a subsidiary company
SubsidiaryCompanyICAODesignator	A specification of the unique ICAO Designator (used in the call sign for Air Traffic Control purposes) of a subsidiary company
AdditionalInformation = AdditionalInformationType	Complex element containing any details considered as additional information
PermitDetails	Complex element containing the details of the permit
ETSPermitNumber	Unique reference for this installation in the country's permitting system
PermitHolderName	The Name of the entity that legally holds the permit. Should always be the same as the AccountHolderName in the CITL.
CompetentAuthority = OrganisationContactType	The details of the Competent Authority that granted the permit
CountryCode	The country in which the operator operates
ValidityStart	The start date of the permit for this specific installation site
ValidityEnd	The end date of the permit for this specific installation site
PermitType	Indicates the type of the permit (e.g. environment permit, ETS permit, IPPC permit, etc.)
PermitContact = ContactType	Contact person(s) for the permit
ChangesComment	An open field for any comments on changes that might have occured with regards to previous permits
AdditionalInformation = AdditionalInformationType	
OperationsDetails	Complex element containing details of the installation, individual units and the monitoring plans for each
InstallationOperationDetails	Complex element containing details for the stationary installation operations
InstallationDescription	Information of the installation
InstallationAddress	The street address of the installation site
InstallationContact = ContactType	Contact details of the contact person for the installation
InstallationLocation	A complex element containing location data on the installation
InstallationLatitude	Latitude value for Installation site (decimal degrees)
InstallationLongitude	Longitude value for Installation site (decimal degrees)
InstallationPicture = AttachmentType	A complex element containing an overview (picture) of the entire installation (e.g. including possible source streams, GHG-Units and Emitting sources)
InstallationID	A unique installation ID for this installation, should be the same as the installation ID in the countrys emission trading registry
Annex1ActivityData	A complex element containing Annex 1 Activity data
Annex1ActivityDescription	A description of the Annex 1 activities of the installation
Annex1ActivityClassification	Code or reference number of the installation/operator for this classification system
InstallationClassification	A complex element containing data on installation classifications
SystemCode	NACE, NOSE, EPRTR, CRF/IPPC
Code	Code or reference number of the installation/operator for this classification system. A set of lists - one for each ClassificationSystemCode, i.e. IPCC codes, NACE codes, etc.
InstallationStatus	A complex element containing data on the status of the installation (e.g. closed, continuous operation, etc.)
StartDate	The starting date of the installation
EndDate	The closing date of the installation
Status	Status of the installation, e.g. closed, continuous operation, temporary or test operation, etc.
StatusDescription	Detailed description of the status of the installation
InstallationUnit	Details of the installation unit
InstallationUnitName	A unique name for the installation unit
InstallationUnitIdentification	A serial number or similar identification for the installation unit on the installation site
InstallationUnitType	Describes the type of the installation unit (e.g. furnace, boiler, etc.)
CRFCode	The CRF code of the installation unit
TypeOfUsage	Defines the type of usage of the installation unit (i.e. process or combustion)
InstallationUnitCapacity	The value of the capacity of the installation unit in which emits emissions within installation site
InstallationUnitCapacityMetric	The capacity of the installation unit in which emits emissions within installation site (attribute: CapacityMetrics t/day, t/annum, t/hr, m³/day, etc)
InstallationUnitPower	The value of the power of the installation unit which emits combustion emissions within installation site
InstallationUnitPowerMetric	The power of the installation unit which emits combustion emissions within installation site (attribute: PowerMetrics MWth, MWe, kWth, kWe etc)

Element	Description
EstimatedYearlyHoursInOperation	The estimation for the yearly hours in operation for the installation unit
ETSOrNonETSData	Complex element for defining ETS liability for the pollutants
ETSPollutant	CO2, NOx, or N2O
ETSOrNonETS	A true/false element to distinguish between EU-ETS units and Non-EuETS (DAA) activities (to cross check annual report to ensure it includes all schedule 1 activities)
AdditionalInformation = AdditionalInformationType	
SourceStreamData	A complex element containing data on the specification of source streams
SourceStreamCode	For specifying combustion or process stream or fuel type
GlobalCode	A globally unique identifier for the source stream (category)
NationalCode	An optional, nationally unique identifier for the source stream
Percentage	The number of the percentage of the source stream (e.g. in case of mixed fuels)
SourceStreamName	The name of the fuels or material flow or process causing the emissions
SourceStreamOrigin	An explanation of the origins of the source stream (EU ETS regulations and non-EU ETS regulations)
BioMassFraction	The percentage of biomass of the source stream
TradedStandardCode	A specification whether the Source stream represents a commercially traded / commercial standard fuel: - Commercial Standard Fuel - Commercially Traded Fuel - Commercially Traded Material - Other - None
WasteCatalogNumberCode	A specification of the waste catalog number for this source stream
IEACategoryNumberCode	A specification of the IEA (International Energy Agency) Category number for the source stream
AdditionalInformation = AdditionalInformationType	
CO2TransferPoint	A complex element containing data on the specification of transfer points
CO2TransferPointName	The name of the CO2 transfer point
CO2TransferPointInstallationUnitReference	A reference to a specific installation unit
CO2TransferPointIdentification	A serial number or similar identification for the CO2 transfer point on the installation site
CO2SendingPoint	A boolean element to specify whether transfered CO2 is being sent out or received at this transfer point. TRUE if sent out.
CCSItem	A complex element containing data on the specification of CCS Items (e.g. Emission Sources, Transport Networks, etc.)
CCSItemName	A unique name for the item from which emissions are emitted as a result of CCS activities within an installation site carrying out carbon capture, transport and geological storage.
CCSItemIdentification	A unique identification number for the item from which emissions are emitted as a result of CCS activities within an installation site carrying out carbon capture, transport and geological storage.
CCSItemCode	A code representing the type of CCS item (Emission Source, Potential Emission Source, Transport Network and Geological Storage Site)
CCSCO2Relation	A reference for each emission source to which transferred CO2, captured CO2 or geolocially stored CO2 facility/installation it relates.
ExcludedEmissionSource	Specification that leakage can be excluded as an emission source because emissions or release into water column from that leakage can no longer be detected.
StartingpointTransportnetwork	A specification of the starting point of the transport network
EndingpointTransportnetwork	A specification of the ending point of the transport network
TransportNetworkElement	A specificiation of the elements of which the transport network consists
TransportNetworkPieceOfEquipment	A specification of the equipment of which the transport network consists
EmissionFactorPerPiece	A specification of the emission factor per piece of an equipment in the transport network
AdditionalInformation = AdditionalInformationType	
MeasurementInstrument	The description for a specific measurement instrument
MeasurementInstrumentName	A unique name for this Measurement Instrument in each Source stream into / stack out of GHG-emitting units within an installation site (Under EU ETS regulations and non- EU ETS regulations)
MeasurementInstrumentIdentification	A serial number or similar identification for the measurement instrument on the installation site
TypeOfMeasurementInstrument	Describes the type of the measurement instrument
Location	A specification of the location of this Measurement Instrument in each Source stream into / stack out of GHG-emitting units within an installation site (Under EU ETS regulations and non-EU ETS regulations in so far they relevant for the determination of GHG emissions)
GasAnalyser	A specification whether the measurement device is an online gas-analyser or gas chromatograph. TRUE if gas-analyser.
OnlineGasAnalyser	A complex element describing the online gas analysers that are included in the monitoring plan
MeetsRequirementsEvidence	A specification that operation of the systems is meeting requirements of EN ISO 9001:2000
CalibrationServicesAccreditation	A specification of whether calibration services and suppliers of calibration gases are accredited against EN ISO 17025:2005
ValidationIntercomparisonData	A specification on how validation and intercomparison are carried out according to section 13.5 MRG
Non-accreditedAccreditedLabsDifferences	A specification of all statistically significant differences between end results of non-accredited labs and accredited labs
AdditionalInformation = AdditionalInformationType	
MeasurementPrinciple	Describes the priciple of the measurement of the measurement instrument
MeasurementInstrumentRange	Minimal and maximal value/percentage of measurement device
MeasurementInstrumentSamplingFrequency	Sampling frequency of the measurement instrument
MeasurementInstrumentCalibration	Description of the calibration of the measurement instrument (e.g. periodic, continuous)
MeasurementInstrumentOfficialVerification	Description of the official verification of the measurement instrument
MeasurementInstrumentUncertainty	A complex element describing the uncertainty assessment and evidence for this measurement instrument
UncertaintyAssessment	A specification of uncertainty assessment of measurement instruments and measurement system used for determining the amount of a source stream
UncertaintyAssessmentEvidenceSummary	A specification of the evidence of the uncertainty assessment of measurement instruments and measurement system used for determining the amount of a source stream
UncertaintyAssessmentEvidenceAttachment = AttachmentType	
SamplingAnalysisReference	A reference to a specific sampling analysis element
AdditionalInformation = AdditionalInformationType	
ConnectionPoints	A container for all ConnectionPoint elements
ConnectionPoint	A connection point describes one of the connections between the setup of the points in the installation: source streams, stacks and InstallationUnits and their respective monitoring methodology. A connection point only contains references to these parts, and is a textual representation of a diagram of the installation
ConnectionPointInstallationUnitReference	A reference to the installation unit in which the source stream is used / References to the installation units which the stack emission consists of
ConnectionPointSourceStreamReference	A reference to a specific source stream
ConnectionPointMeasurementInstrumentReference	A reference to a specific standard monitoring data element
ConnectionPointStackEmissionReference	A reference to a stack emission this connection point refers to
StackEmissions	A complex element containing data on the specification of Stack Emissions
StackEmissionsName	A unique name for this stack emission out of GHG-emitting units within an installation site (under EU ETS regulations and Not under EU ETS regulations). This is equivalent to emission point reference.
StackEmissionsInstallationUnitReferences	A reference for each of the installation units this stack includes
StackEmissionsSourceStreamReference	An optional reference to the source stream(s) for this installation unit
AdditionalInformation = AdditionalInformationType	
AdditionalInformation = AdditionalInformationType	
MonitoringPlanDataCO2	Monitoring plan for CO2 emissions
InstallationEmittingCategory	The size of the installation regards to CO2 (A1, A2, A (i.e. A1 or A2), B, or C)
CO2TotalEmissionsEstimate	Estimate of the combined yearly emissions of all CO2-units of the installation for the validity period of the permit
CalculatedCombustion	A complex element describing the Combustion calculations that are included in the monitoring plan
Schedule1Activity	A specification of the Schedule 1 Activity for a specific source stream, according to Table 1 of paragraph 5.2 in Annex 1 of the MRG

Element	Description
RelativeSize	A specification of the relative size of the source stream within the installation (under EU ETS regulation) (Major, Minor, De Minimis)
SourceStreamReference	A reference to a specific source stream
SourceStreamEmissionsEstimate	An estimate of the yearly CO2 emission for a specific source stream
Consumption = FactorsType	The volume of fuel of the source stream(s)
OxidationFactor = FactorsType	
CaloricHeatingValue = FactorsType	
EmissionFactor = FactorsType	
Biomass = FactorsType	
Formula	The formula used to calculate the emission
Explanation	Information on the calculations done
Example	Using the formula and explanation, a worked out approximate (or estimated) calculation of the emission
AdditionalInformation = AdditionalInformationType	
CalculatedCatalyticCracker	A complex element describing the Catalytic Cracker calculations that are included in the monitoring plan
Schedule1Activity	A specification of the Schedule 1 Activity for a specific source stream, according to Table 1 of paragraph 5.2 in Annex 1 of the MRG
RelativeSize	A specification of the relative size of the source stream within the installation (under EU ETS regulation) (Major, Minor, De Minimis)
SourceStreamReference	A reference to a specific source stream
SourceStreamEmissionsEstimate	An estimate of the yearly CO2 emission for a specific source stream
RequiredTier	A specification of the required tier for this specific data element
AppliedTier	A specification of the applied tier for this specific data element
ExplanationForNon-Compliance	An explanation why a certain default tier was not complied with for this specific data element
DerivationMethod	An explanation of the method of determination / derivation for this specific data element
AdditionalInformation = AdditionalInformationType	
CalculatedProcess	A complex element describing the Process calculations that are included in the monitoring plan
Schedule1Activity	A specification of the Schedule 1 Activity for a specific source stream, according to Table 1 of paragraph 5.2 in Annex 1 of the MRG
RelativeSize	A specification of the relative size of the source stream within the installation (under EU ETS regulation) (Major, Minor, De Minimis)
SourceStreamReference	A reference to a specific source stream
SourceStreamEmissionsEstimate	An estimate of the yearly CO2 emission for a specific source stream
Consumption = FactorsType	
ConversionFactor = FactorsType	
EmissionFactor = FactorsType	
Composition = FactorsType	
CaloricHeatingValueProxy = FactorsType	
Biomass = FactorsType	
Formula	The formula used to calculate the emission
Explanation	Information on the calculations done
Example	Using the formula and explanation, a worked out approximate (or estimated) calculation of the emission
AdditionalInformation = AdditionalInformationType	
MassBalance	A complex element describing the mass balance calculations that are included in the monitoring plan
Schedule1Activity	A specification of the Schedule 1 Activity for a specific source stream, according to Table 1 of paragraph 5.2 in Annex 1 of the MRG
RelativeSize	A specification of the relative size of the source stream within the installation (under EU ETS regulation) (Major, Minor, De Minimis)
SourceStreamReference	A reference to a specific source stream
SourceStreamEmissionsEstimate	An estimate of the yearly CO2 emission for a specific source stream
Consumption = FactorsType	
CaloricHeatingValue = FactorsType	
CarbonContent = FactorsType	
TypeOfMassBalanceElement	A specification of the type of mass balance element (Input, Output, Export, Stock Changes)
BiomassInProcessOrCombustion	A specification whether any biomass is used in combustion or in a process. TRUE if used.
Formula	The formula used to calculate the emission
Explanation	Information on the calculations done
Example	Using the formula and explanation, a worked out approximate (or estimated) calculation of the emission
AdditionalInformation = AdditionalInformationType	
CO2CEMS	A complex element describing the continuous emissions measurement systems that are included in the monitoring plan
CO2CEMSName	A unique name for this continuous emission measurement system in a stack emission out of CO2-emitting units within an installation site (under EU ETS regulations)
StackEmissionReference	A reference to a stack emission source
Method	A specification per source of the monitoring measurement method used.
FlowGasDeterminationMethod	A specification of the method for determining flue gas flow
CO2PointsOfMeasurement	Points measured in a stack emission out of CO2-emitting units within an installation site (under EU ETS regulations)
Frequency	A specification of the measuring frequency for this measurement system
DataCollectionStorageProcedures	A specification of the data collection and storage procedures for this measurement system
RequiredTier	A specification of the required tier for this specific data element
AppliedTier	A specification of the applied tier for this specific data element
SamplingRates	A specification of the sampling rates for this measurement system
MissingData	A specification of any missing data during with regards to this measurment system
MissingDataMethod	A specification of how substitution values for each missing hour data is determined for the parameters used to determine emissions with continuous measurement method.
CorroboratingCalculationOfMeasurement	A specification of the corroborating calculation or application of NEN EN 14181
MeasurementInstrumentReference	A reference to a specific standard monitoring data element
AdditionalInformation = AdditionalInformationType	
FallBackMethod	A description of fall back method: fully customized monitoring methodology for whole installation
FallbackMethodSourceStreamReference	A reference to the source streams that do not meet tier 1 because of technical infeasibility or unreasonable costs: Source Stream Reference Number
Non-complianceReason	A specification of the reason why one or more source streams do not meet tier 1 because of technical infeasibility or unreasonable costs.
FallbackMethod	A description of fall back method: fully customized monitoring methodology for whole installation
OverallUncertaintyAnalysis	An analysis of uncertainties of all variables and parameters used for the calculation of annual emission level
AdditionalInformation = AdditionalInformationType	
TransferredCO2	A complex element describing the Transferred CO2 calculations that are included in the monitoring plan
TransferredCO2Name	A unique name for this CO2-transfer stream into and out of an installation site (under EU ETS regulations)
MeasurementInstrumentReference	A reference to a specific standard monitoring data element
Origin	A specification of the origin for this CO2-transfer stream into an installation site (under EU ETS regulations)
Destination	A specification of the destination for this CO2-transfer stream out of an installation site (under EU ETS regulations)
Inherent	A specification whether the CO2 being transferred, according to 5.5 (blast furnace gas, coke oven gas or natural gas), contains inherent CO2 or not. Only if TRUE, the inherent CO2 has to be reported in the emission report

Element	Description
PurposeOfTransfer	A specification of the purpose of transferred CO2 out of an installation
CalculationMethod	A specification of the calculation method used for calculation of any transferred CO2: direct/indirect measurement.
Uncertainty	A specification of the uncertainty involved with the chosen tier used for the mass of the CO2 transfer calculation method. +/- xx% (must be less than 1,5%)
BiomassAttributionmethods	A specification of the conservative attribution methods for subtracting fraction of mass of transferred CO2 which originates from fossil fuels and materials in activities covered by Directive (in case transferred CO2 was generated from biomass)
NonETSPartAttributionmethods	A specification of the conservative attribution methods for subtracting fraction of mass of transferred CO2 which originates from fossil fuels and materials in activities covered by Directive (in case installation was covered partially by EU ETS Directive)
EUETSSystem	True/False element to specify whether the receiving installation is an installation part of the EU ETS System. TRUE if installation is part of the EU ETS System.
DestinationCountry	The country of the receiving installation
DestinationInstallationID	The unique Installation ID of the installation receiving the transferred CO2
AdditionalInformation = AdditionalInformationType	
AdditionalInformation = AdditionalInformationType	
MonitoringPlanDataNOx	Monitoring plan for NOx emissions
XXX	Information to be added
MonitoringPlanDataN2O	Monitoring plan for N2O emissions
N2OTotalEmissionsEstimate	Estimate of the combined yearly emissions of all N2O-units of the installation for the validity period of the permit
ProcessDiagramRelevantEmissionsPoints = AttachmentType	An attachment containing a process diagram with all relevant emissions points during typical operation and during restrictive and transition phases (e.g. breakdown periods or comissioning phases)
N2OEmissionMonitoringData	
N2OStackEmissionsSourceReference	A reference code to a stackemission element to which this data refers
N2OActivity	The type of N2O-activity from which N2O emissions result (nitric acid production, adipic acid production, glyoxal and glyoxylic acid production, caprolactam production)
AbatementUsed	A specification whether abatement is used in the N2O-emission. TRUE if abatement is used.
DeterminationMethod	
DeterminationMethodAnnualN2OEmissions	A specification of the determination method of annual N2O-emissions
DeterminationMethodQuantityOfMaterials	A specification of the method and parameters used to determine the quantity of materials (e.g. ammonia) used in the production process
MaximumQuantityOfMaterialsUsed	A specification of the maximum quantity of material used at full capacity
DeterminationMethodQuantityOfProduct	A specification of the method and parameters used to determine the quantity of product produced as an hourly load, expressed as nitric acid (100%), adipic acid (100%), glyoxal and glyxylic acid and caprolactam per hour respectively
OperationalManagementVariableLoads	A specification of the manner in which or the extent to which the N2O emitting process operates with variable loads
OperationalManagement	A specification of the manner in which the operational management is carried out (Continuous, Standby, other)
DeMimimisData	
SourceStreamReference	A reference to a specific source stream
DeMinimisConfirmation	A confirmation that the specific source stream is a de minimis source streams for N2O emission sources. TRUE if source is de minimis.
DeMinimusEstimationMethod	A specification of the no-tier estimation method used for de minimus source stream of N2O
N2OConcentrationMonitoringMethodData = N2OCEMSType	A complex data type describing the Continuous Monitoring Method of N2O Concentration
N2OFlueGasFlowMonitoringMethodData	
NitricAcidBalanceData	
DeterminationMethodTotalInputAirFlowData	
DeterminationMethodPrimaryInputAirFlow	A specification of the determination method for primary input air flow (in Nm3/h at standard conditions)
DeterminationMethodSecondaryInputAirFlow	A specification of the determination method for secondary input air flow (in Nm3/h at standard conditions)
DeterminationMethodSealInputAirFlow	A specification of the determination method for seal input air flow (in Nm3/h at standard conditions)
DeterminationMethodVolumeFractionO2InFlueGas	A specification of the determination method for the volume fraction of O2 in flue gas (such as paramagnetic alternating pressure, magnetic torsion balance or zirconium dioxide probe)
EvidenceOfMeasurementMethodHomogeneity	A specification of evidence through measurements under normal operation conditions that the flue gas flow measured is sufficiently homogeneous to allow for the proposed measurement method
N2OMassBalanceData	
N2OMassBalanceCalculationMethod	A specification of the calculation method used based on a mass balance approach
MaximumPotentialEmissionRate	A description of the value (in kg/N2O per hour) to be used in case the measurement instrument fails
RequiredTier	A specification of the required tier for this specific data element
AppliedTier	A specification of the applied tier for this specific data element
ExplanationForNon-Compliance	An explanation why a certain default tier was not complied with for this specific data element
ContinuousFlowMeasurementData = N2OCEMSType	
ConfirmationOfCO2EquivalentDeterminationMethod	A confirmation that the calculation of Annual CO2Equivalents is conducted according to the formula as stated in MRG. TRUE if calculation is conducted according to the formula.
DeviatingConditionsData	
DeviatingConditionsSpecification	A specification of process conditions that deviate from normal operations
DeviatingConditionsFrequency	An indication of the potential frequency of deviating conditions for specific process
DeviatingConditionsDuration	An indication of the potential duration of deviating conditions for specific process
DeviatingConditionsN2OEmissionEstimate	An estimate of the N2O emissions during deviating conditions (in tonnes)
AdditionalInformation = AdditionalInformationType	
AdditionalInformation = AdditionalInformationType	
MonitoringPlanDataCCS	
CCSReference	A reference to specific CCSEmissionSource
CCSactivity	A specification of the type of CCS-activity: (Carbon Capture, Transport, Geological Storage)
CCSCaptureCalculation	A complex element describing the monitoring method of CCS capture activities
DeterminationmethodCCSActivity	A specification of the method used to calculate the amount of CO2 captured and transferred to the transportnetwork
InstallationCapturePurpose	A specification of whether the CO2 capture is carried out by the same installation as the one from which the captured CO2 originates or whether the capture installation is a standalone capture installation
TransferToCaptureInstallation = CCSCEMSType	A complex element describing the measurement method for the amount of CO2 that is transferred to a capture installation
TransferToStorageSite = CCSCEMSType	A complex element describing the measurement method for the amount of CO2 that is transferred to a transportnetwork or to a storage site
AdditionalInformation = AdditionalInformationType	
CCSTransportCalculation	A complex element describing the monitoring method of CCS transfer activities
TransportnetworkDeterminationMethod	An indication of whether method A or B is used to determine the emissions from the transport network
JustificationChosenMethodology	A justification that the chosen methodology will lead to more reliable results with lower uncertainty of overall emissions using best available technology and knowledge at the time of application for the greenhouse gas emissions permit without leading to unreasonable costs
CCSTransportMonitoringMethodA	A complex element describing the monitoring method of CCS transfer activities using method A
CCSTransportMonitoringIntoTransportNetwork = CCSCEMSType	A complex element describing the measurement method for the amount of CO2 that goes into the transport network
CCSTransportMonitoringOutOfTransportNetwork = CCSCEMSType	A complex element describing the measurement method for the amount of CO2 that comes out of the transport network
CCSTransportMonitoringMethodB	
TransportnetworkDeterminationCombustionEmissionsMethodB	A specification on how the emissions from transport network are determined using method B.
TransportnetworkDeterminationFugitiveEmissionsMethodB	A specification of how the emissions from fugitive emissions are determined, within method B

Element	Description
TransportnetworkDeterminationEmissionLeakageseventsMethodB	A specification of what monitoring methodology is used to calculate the amount of CO2 leaked, within method B
TransportnetworkPotentialVentedEmissionMethodB	An analysis regarding potential situations of venting emissions
TransportnetworkMethodVentedEmissionsMethodB	A specification of what suitable monitoring methodology is used to calculate the amount of CO2 vented
TransportnetworkOverallUncertainty	Total uncertainty of the overall emissions over the reporting period for whole transportnetwork, reported as ±xx%
EvidenceNetworkIntegrity	A specification of proof of network integrity by using representative temperature and pressure data
BiomassAttributionMethods	A specification of the conservative attribution methods for subtracting fraction of mass of transferred CO2 which originates from fossil fuels and materials in activities covered by Directive (in case transferred CO2 was generated from biomass)
AdditionalInformation = AdditionalInformationType	
CCSGeoStorageCalculation	A complex element describing the monitoring method of CCS Geological Storage activities
CCSGeoStorageVentedEmissionsFromInjection = CCSCEMSType	A complex element describing the measurement method for the amount of CO2-emissions vented from Geological Storage Injection activities
CCSGeoStorageFugitiveEmissionsFromInjection = CCSCEMSType	A complex element describing the measurement method for the amount of fugitive CO2-emissions from Geological Storage Injection activities
CCSGeoStorageVentedEmissionsFromEnhancedOilRecovery = CCSCEMSType	A complex element describing the measurement method for the amount of CO2-emissions vented from Geological Storage Enhanced Oil Recovery activities
CCSGeoStorageFugitiveEmissionsFromEnhancedOilRecovery = CCSCEMSType	A complex element describing the measurement method for the amount of fugitive CO2-emissions from Geological Storage Enhanced Oil Recovery activities
CCSGeoStorageLeakages	A complex element describing monitoring of leakages from Geological Storage complexes
GSLeakagesDeterminationMethod	A specification on how leakages during storage are determined
GSLeakagesTotalUncertainty	Maximum overall uncertainty of the emissions leaked from storage complex over the reporting period for each leakage event, reported as ±xx%
GSLeakagesAdjustment	A specification of the adjustment made in case the overall uncertainty of the monitoring methodology exceeds 7,5%
AdditionalInformation = AdditionalInformationType	
AdditionalInformation = AdditionalInformationType	
AdditionalInformation = AdditionalInformationType	
AviationOperationDetails	Complex element containing details for the Aviation operations
AviationDescriptionData	General Aviation Description data
AircraftOperatorID	A unique identifier for the aircraft operator as stated in the CITL
Annex1Data	
Annex1OperatorStatus	A specification of the Aviation Operator Status Code (Commercial or Non-Commercial)
Annex1AirOperatorCertificate = AttachmentType	An attachment containing a copy of Annex 1 of the Air Operator Certificate as evidence (only for commercial aircraft operators)
SchedulingOfFlights	A specification of whether the aircraft operators conducts scheduled or non-scheduled flights or both (Scheduled Flights, Non-scheduled Flights or Scheduled and Non-scheduled Flights)
ScopeOfOperations	A specification of the Scope of operations of the aircraft operator (Only Intra-EU Flights or Flights inside and outside the EU)
AircraftOperatorFurtherActivityDescription	A further description of the activities of the aircraft operator as necessary
EmissionSourcesData	
AircraftTypesData = AircraftTypesDataType	A complex element describing all aircraft types operated at the time of submission of this monitoring plan
AdditionalInformation = AdditionalInformationType	
TonneKilometreMonitoringPlanData	
TonneKilometreDistanceMonitoringData	
AerodromeLocationDataAIPConfirmation	A confirmation that data sources used (for aerodrome location data) are published in AIP's in compliance with Annex 15 of the Chicago Convention or from a source using such AIP data
GreatCircleDistancesCalculationMethodology	A description of the methodology used to calculate great circle distances + 95km between aerodrome pairs
GreatCircleDistancesDataSources	A description of the data source used to calculate great circle distances + 95km between aerodrome pairs
MonitoringMethodologyAerodromeLocationInformationDetermination = AviationMonitoringType	
MonitoringMethodologyGreatCircleDistancesDetermination = AviationMonitoringType	
TonneKilometrePayloadMonitoringData	
PassengerAndBagageData	
PassengerAndBagageMassTier	A specification of the tier used for calculation of passenger and bagage masses (Tier 1 - Default (100kg/person), Tier 2 - Actual or standard mass from Mass and Balance Documentation)
PassengerAndBagageMassSourceData	A description of the source data used for passenger and bagage mass calculation (as required by EU OPS (Regulation (EC) 3922/91), or other international regulations)
MonitoringMethodologyNumberOfPassengers = AviationMonitoringType	
FreightAndMailData	
MassAndBalanceRequirement	A specification whether there is a requirement to have mass and balance documentation for the relevant flights. TRUE if required.
MassDeterminationAlternativeMethodology	A concise description of the proposed alternative methodology for determining mass of freight and mail
MeasurementDevicesUsed	A description of the measurement devices used for measuring mass of freight and mail
TareWeightExclusionConformation	A confirmation that tare weight of all pallets and containers that are not payload and the service weight are excluded
MonitoringMethodologyMassOfFreightAndMail = AviationMonitoringType	
AdditionalInformation = AdditionalInformationType	
AnnualEmissionsMonitoringPlanData	
AviationTotalEmissionsEstimate	An estimate or prediction of the total annual fossil CO2-emissions for Annex 1 activities (in tonnes of CO2)
SmallNumberOfFlightsNotificationFirstPeriod	A notification whether aircraft operator conducts less than 243 flights in period January to April
SmallNumberOfFlightsNotificationSecondPeriod	A notification whether aircraft operator conducts less than 243 flights in period May to August
SmallNumberOfFlightsNotificationThirdPeriod	A notification whether aircraft operator conducts less than 243 flights in period September to December
SmallEmitterNotification	A notification whether aircraft operator emits less than 10.000 tonnes CO2 per year
ActualUseOfSimplifiedProcedures	A notification that the simplified procedures for estimation of fuel consumption will be used. TRUE if used.
SimplifiedEligibilityDescription	An explanation to support eligibility for the simplified calculation method (annual emissions less than 10000 tonnes or flights per four months less than 243)
EmissionSourcesMonitoringData	
MonitoringMethodologyAdditionalAircraftTypes = AviationMonitoringType	A complex element describing monitoring methodology for monitoring additional aircraft types
MonitoringMethodologyEmissionSourcesCompleteness = AviationMonitoringType	A complex element describing monitoring methodology for monitoring completeness of emission sources
MonitoringMethodologyListOfFlightsCompleteness = AviationMonitoringType	A complex element describing monitoring methodology for monitoring completeness of the list of flights
MonitoringMethodologyAnnex1Flights = AviationMonitoringType	A complex element describing monitoring methodology for monitoring whether flights are covered by Annex 1 of the Directive
ActivityData	
FuelConsumptionMeasurementData	
AircraftTypeIdentificationReference	A reference to a specific type of aircraft
MeasurementMethod	A description of the method used to measure fuel consumption on a flight by flight basis (METHOD A: Fuel consumption in all flights will be measured according to the formula in Annex IV Part B of the legislation, METHOD B: Fuel consumption in all flights will be measured as Fuel on Board at departure gate-Fuel on board at the arrival gate, taking into account fuel consumed by the APU)
DataSource	A description of the data sources used to determine fuel uplift (As measured by fuel supplier or onboard measuring equipment)
DataMethod	A description of the methods for transmitting, storing and retrieving data (Taken from fuel supplier, Recorded in Mass and Balance documentation, Recorded in aircraft technical log or Transmitted electronically from aircraft to operator)
JustificationNoStandardMethodology	A justification why a chosen methodology (Method A or Method B) is not applied for all aircraft types
MonitoringMethodologyFuelConsumption = AviationMonitoringType	
FuelDensityDeterminationMethod	
AircraftTypeIdentification	A unique identifier for this specific type of aircraft
ActualDensityValuesDeterminationMethod	A specification of the method used to determine the density used for fuel uplifts and fuel in tanks for this aircraft type (Actual density in aircraft tanks, Actual density of uplift, Temperature of uplift or Standard value (0.8kg per litre))
StandardValueJustification	A justification for using the standard value if measurement is not feasible
TemperatureDensityCorrelationTableSource	A specification of the source of temperature-density correlation tables

Element	Description
MonitoringMethodologyFuelDensity = AviationMonitoringType	
MonitoringDeviationData	
UniqueICAODesignatorReference	A reference to a specific aerodrome, using the ICAO designator
TypeOfDeviation	A specification of the type of deviation from the general methodologies for determining fuel uplifts / fuel contained in the tank and density for specific aerodromes
DeviationJustification	A justification of special circumstances that lead to the deviation
UncertaintyAssessmentData	
FuelUpliftOrRemainingInTankUncertainty	
AircraftTypeIdentification	
MeasurementUncertainty	A specification of the uncertainty of measurement of fuel remaining in the tank
FuelUpliftDeterminationByInvoice	A specification whether fuel uplifts are determined solely by the invoicde quantity of fuel or other appropriate information provided by the supplier (TRUE if they are, or FALSE if they are not)
OnBoardMeasurementDevicesCalibrationCertification	A specification whether on-board measurement devices for fuel uplift are supported by calibration certificates (TRUE if they are, or FALSE if they are not)
MeasurementEquipmentUncertainty	A specification of the measurement equipment uncertainty (+/-%)
RoutineCheckEvidenceLocation	A specification of the location of evidence of routine checks of the measurement device calibration (of no calibration certificate)
MeasurementDevice	
MeasurementDeviceType	A description of the manufacturer and technical key data of the measurement device
MeasurementDeviceDescription	A general description of the measurement principle of the measurement device
MeasurementDeviceCalibrationCertificateOrNo	A notification whether the aircraft operator has a calibration certificate for the measurement device or not
FuelConsumptionMeasurementUncertainty	
SourceOfUncertainty	A specification of the main sources of uncertainty for fuel consumption measurements
LevelOfUncertainty	A specification of the level of uncertainty for fuel consumption measurements
CommentsOnLevelOfUncertainty	A specification of additional comments on the level of uncertainty for fuel consumption measurements
SourceStreamUncertainty	
AviationSourceStreamName	A specification of the aviation source stream (fuel type) used
FuelTypeDescription	A general description of the source stream, especially for alternative or biofuels
AnnualEmissionsEstimate	An estimate or prediction of the total annual fossil CO2-emissions for a specific source stream (fuel type) (in tonnes of CO2)
SourceStreamClassification	A specification of the classification of a specific source stream (fuel type): major, minor or de minimis
FuelConsumptionUncertainty	A specification of the fuel consumption uncertainty of a specific source stream (fuel type): less than 2,5%, less than 5,0% or N/A
TierNumber	A specification of the tier number for a specific source stream (fuel type)
MonitoringMethodologyFuelMeasurementTotalUncertainty = AviationMonitoringType	A complex element describing monitoring methodology for ensuring that the total uncertainty of fuel measurements will comply with the requirements of the selected tier (The procedure must therefore refer to calibration certificates of measurement systems, national laws, clauses in customer contracts of fuel suppliers' accuracy standards)
MonitoringMethodologyCrossCheckUpliftQuantity = AviationMonitoringType	A complex element describing monitoring methodology for ensuring regular cross-check between uplift quantity as provided by invoices and uplift quantity indicated by on-board measurement
EmissionFactorsData	
ConfirmationStandardEmissionFactors	A confirmation that the standard emission factors for commercial standard aviation fuels (3,15 tonnes of CO2 per tonne of fuel for Jet Kerosine, 3,10 tonnes of CO2 per tonne of fuel for Jet Gasoline and Aviation Gasoline) will be used
MonitoringMethodologyOfAlternativeFuels = AviationMonitoringType	A complex element describing determination method for emission factors, net calorific values and biomass content of alternative fuels
SimplifiedCalculationData	
FuelConsumptionEstimationToolName	A specification of the name of the tool used to estimate fuel consumption, either "Eurocontrol ETS Support Tool" or "Other Tool"
FuelConsumptionEstimationToolOther	A specification of the name of the tool used to estimate fuel consumption, other than the ones mentioned in the list for FuelConsumptionEstimationToolName
CommissionApprovalConfirmation	A confirmation that the European Commission has approved the tool used for fuel consumption estimation
ConfirmationStandardEmissionFactors	A confirmation that the standard emission factors for commercial standard aviation fuels (3,15 tonnes of CO2 per tonne of fuel for Jet Kerosine, 3,10 tonnes of CO2 per tonne of fuel for Jet Gasoline and Aviation Gasoline) will be used
DataGaps	
FuelConsumptionEstimationToolName	A specification of the name of the tool used to estimate fuel consumption, either "Eurocontrol ETS Support Tool" or "Other Tool"
FuelConsumptionEstimationToolOthe	A specification of the name of the tool used to estimate fuel consumption, other than the ones mentioned in the list for FuelConsumptionEstimationToolName
CommissionApprovalConfirmation	A confirmation that the European Commission has approved the tool used for fuel consumption estimation
MethodologyDescription	A short description of the methodology used to treat gaps regarding other parameters than fuel consumption
AdditionalInformation = AdditionalInformationType	
AdditionalInformation = AdditionalInformationType	
QualityManagement	Complex element containing details of quality management roles and activities
Procedures	Details of the quality procedures used
ManagementSystems	
QMSStandardCompliance	A specification of quality management standards to which the installation site complies to: - ISO 9001; ISO 14001; EMAS; Other, namely.
QMSDescription	A detailed description of the QMS system
QMSPartForEUETS	A specification of which part of the QMS system mentioned, covers the EU ETS installation
InternalDataProcedures	A description (data flow) of all operational activities that have to be carried out by the operator with regards to data acquisition and handling for each installation site (from measurement to reporting). For each source stream the three steps should be taken, and it should be specified: a-task name+reference b-description of task (detailed, practical) c-frequency at which task is executed d-who is responsible for the task e-which resources are needed to fulfill the task f-how are these resources validated and controlled (this can be linked to QAAndControlOverview)
GetMeasurementData	Specification of the procedures to gather measurement data
ProcessToDetermineEmission	Specification of the procedures to determine the emissions (calculate, note and register, check and correct, etc.)
ProcessToReportEmission	Specification of the procedures to report the emissions (make report, check, correct, verificate, authorise etc.)
InternalReviewOfReportedDataOverviewSummary	A summary description of internal review of reported data carried out by operator
InternalReviewOfReportedDataOverviewReference	A unique reference number for the complete Internal Review of Reported Data for the installation site
InternalInformationSystemsResources	Description of datastorage systems, calculation systems, data management systems with info about: Description, location, brand, type, regular back-up, back-up during disturbances
DeviationsFromRequirementsOfGeneralStandards	A specification of details of any deviations from the requirements of general standards such as EN14181 and ISO 14956:2002
AdditionalInformation = AdditionalInformationType	
QualityAssurance	Details of the Quality Assurance procedures and processes applied
QAAndControlOverviewSummary	A summary description of the quality assurance and control overview used by the operator for the installation site (validation activities), including the following: - Quality assurance overview of measurement equipment, control activities and continuous measurement systems; - Description of calibration of measurement equipment, maintenance, inspection, corrections and corrective actions; - Description of resources used by operator.
QAAndControlOverviewReference	A unique reference number for the complete Quality Assurance and Control overview for each installation site
SamplingAnalysis	A complex element describing the sampling procedures that are included in the monitoring plan
SamplingProcedure	A specification which sampling practice / procedure has been used for a fuel or material
SamplingStandard	A specification which sampling standard has been used for monitoring calculation
SamplingFrequency	A specification of which sampling frequency has been used for monitoring calculation
ExplanationForSamplingAndAnalysisNon-Compliance	A specification of reasons why sampling and analysis uncertainty levels cannot be met by operator
RepresentativeSamplingAndAnalysisEvidence = AttachmentType	A specification of evidence that sampling and analysis is free of bias and representative
AnalysisProcedure	A specification which analysis practice / procedure has been used for a fuel or material
AnalysisStandard	A specification which analysis standard has been used for monitoring calculation

Element	Description
AnalysisFrequency	A specification of which analysis frequency has been used for monitoring calculation
AdditionalInformation = AdditionalInformationType	
LaboratoryData	A complex element describing the laboratory analyses that are included in the monitoring plan
LaboratoryName	A specification of the laboratory used for monitoring calculation
LaboratoryAccreditation	A specification of laboratory accreditation (EN ISO 17025) for the laboratories used for monitroing calculation
LaboratoryAdditionalQualityInformation	A specification of any additional laboratory quality and technical competence information for those laboratories used that do not have any ISO-17025 accreditation
AnalyticalProcedures	A specification of the analytical procedures for determination of Emission Factor, Conversion Factor, etc.
ValidationIntercomparisonData	A specification on how validation and intercomparison are carried out according to section 13.5 MRG
Non-accreditedAccreditedLabsDifferences	A specification of all statistically significant differences between end results of non-accredited labs and accredited labs
AdditionalInformation = AdditionalInformationType	
AdditionalInformation = AdditionalInformationType	
QualityControl	Details regarding Quality Control of the installation
QAAndControlAnnualPlanSummary	A summary description of an annual plan for the calibration control activities, control, corrective action and other in-house validation activities including frequency, records, dates etc.
QAAndControlAnnualPlanReference	A unique reference number for the complete Quality Assurance and Control Annual Plan for the installation site
DocumentManagementProcedureSummary	A summary description of the document management or records procedure for the installation site
DocumentManagementProcedureReference	A unique reference number to the complete document management or records procedure for the installation site
ProcedureToRegisterRecordsSummary	A summary description of the procedure the operator uses to register records for the installation site
ProcedureToRegisterRecordsReference	A unique reference number to the complete procedure the operator uses to register records for the installation site
ProcedureForOutsourcedActivitiesSummary	A summary description of the QA procedure for outsourced activities for the installation site
ProcedureForOutsourcedActivitiesReference	A unique reference number to the complete QA procedure for outsourced activities for the installation site
QCSystemRiskAssessmentOverviewSummary	A summary description of the evaluation of the quality control (QC) system, internal audits and risk assessment implemented by the operator for the installation site
QCSystemRiskAssessmentOverviewReference	A unique reference number to the complete evaluation of quality control (QC) system, internal audits and risk assessment implemented for the installation site
AdditionalInformation = AdditionalInformationType	
Responsibilities	A graphic chart showing the lines of authority, control responsibility and vertical and horizontal interrelationships among departments and persons in the organisation
MainResponsibilitiesRolesOverviewSummary	A summary overview of the main responsibilities and roles involved in EU ETS Monitoring calculation
MainResponsibilitiesRolesOverviewDescription	A description of the main responsibilities and roles involved in EU ETS Monitoring calculation
Organigram = AttachmentType	A graphic chart showing the directorate, lines of authority, control responsibility and vertical and horizontal interrelationships among departments and persons in an organisation.
AdditionalInformation = AdditionalInformationType	
AdditionalInformation = AdditionalInformationType	

Recurring complex types

Element	Description
AdditionalInformation	Complex element containing any details considered as additional information
AdditionalInformationDescription	Contains the description of the additional information (such as a Member State specific code or reference)
AdditionalInformationDetails	Contains the information (e.g. text, value) of the additional information
OrganisationContactType	
OrganisationName	The name of the organisation
StreetAddress1	Primary street address
StreetAddress2	Additional street address
PostOfficeBox	The Post office box number of the address
PostCode	A code specifying the postcode of the address
City	City of the address
Region	Region of the address
Country	Country of the address
Email	The email address for the person
PhoneNumber1	Primary phone number
PhoneNumber2	Secondary phone number
FaxNumber	Fax number
WebAddress	URL of the Webaddress
ContactType	
FirstName	First name of the person
LastName	Last name of the contact person
Title	(Mr, Mrs, Ms, Dr, PhD, etc.)
JobTitle	The job title of the person (e.g. Plant manager)
Role	The role of the person
StreetAddress1	Primary street address
StreetAddress2	Additional street address
PostOfficeBox	The Post office box number of the address
PostCode	A code specifying the postcode of the address
City	City of the address
Region	Region of the address
Country	Country of the address
Email	The email address for the person
PhoneNumber1	Primary phone number
PhoneNumber2	Secondary phone number
FaxNumber	Fax number
AttachmentType	Format of the attached document
AttachmentName	File name of the document
AttachmentType	Format of the attached document
AttachmentVersion	The version of the document
AttachmentStatus	Document status
AttachmentDescription	General description of the document
FactorsType	
StandardFactor	TRUE when value from MRG or National Standard Factor is provided, FALSE for a custom value
RequiredTier	A specification of the required tier for this specific data element
AppliedTier	A specification of the applied tier for this specific data element

Element	Description
ExplanationForNon-Compliance	An explanation why a certain default tier was not complied with for this specific data element
MeasurementInstrumentReference	A reference to a specific standard monitoring data element
DerivationMethod	An explanation of the method of determination / derivation for this specific data element
N2OCEMSType	
N2OCEMSName	A unique name for this continuous emission measurement system in a stack emission out of N2O-emitting units within an installation site (under EU ETS regulations)
MeasurementInstrumentReference	A reference to a specific standard monitoring data element
MeasuringTechnique	A specification measurement technique used (i.e. IR Spectroscopy)
N2OPointsOfMeasurement	Points measured in a stack emission out of N2O-emitting units within an installation site (under EU ETS regulations)
Range	A specification of the operating range for this continuous measurement system
DeterminationMethodOutOfRange	A specification of the alternative methods applied if measuring falls out of the operating range of the continuous measurement system and the situations when this may occur
Frequency	A specification of the measuring frequency for this measurement system
RequiredTier	A specification of the required tier for this specific data element
AppliedTier	A specification of the applied tier for this specific data element
ExplanationForNon-Compliance	An explanation why a certain default tier was not complied with for this specific data element
N2OUncertaintyAssessment	A specification of the assessment used to show that the tier uncertainty requirements referred in Section 2 of this Annex are complied with and the tier achieved
SamplingRates	A specification of the sampling rates for this measurement system
MissingData	A specification of any missing data during with regards to this measurment system
MissingDataMethod	A specification of how substitution values for each missing hour data is determined for the parameters used to determine emissions with continuous measurement method.
CorroboratingCalculationOfMeasurement	A specification of the corroborating calculation or application of NEN EN 14181
MissingDataValue	A substitution value which has been determined in accordance with Annex I, Section 6.3 a and B in order to be used for each missing hour in case the measuring instrument fails or does not function properly, expressed in kg/N2O per hour
CCSCEMSType	
CCSCEMSName	A unique name for this continuous emission Measurement system for CCS
CCSItemReference	A reference to a specific CCSItem
CCSCEMSMethod	A specification per source of the monitoring measurement method used.
DeterminationMethodConcentration	A specification for the method for determining CO2 concentration
CCSCEMSFlowGasDeterminationMethod	A specification of the method for determining flue gas flow
PointsOfMeasurement	Points of measurement to measure CO2 from a CCS emission source
Frequency	A specification of the measuring frequency for this measurement system
DataCollectionStorageProcedures	A specification of the data collection and storage procedures for this measurement system
RequiredTier	A specification of the required tier for this specific data element
AppliedTier	A specification of the applied tier for this specific data element
CCSCEMSTotalUncertainty	Total uncertainty of the overall emissions over the reporting period for the stack emission source within an installation site (under EU ETS regulation) or CCS measurement point, reported as ±xx%
ExplanationForNon-Compliance	An explanation why a certain default tier was not complied with for this specific data element
SamplingRates	A specification of the sampling rates for this measurement system
MissingData	A specification of any missing data during with regards to this measurment system
MissingDataMethod	A specification of how substitution values for each missing hour data is determined for the parameters used to determine emissions with continuous measurement method.
CCSCEMSCorroboratingCalculationOfMeasurement	A specification of the corroborating calculation / or application of NEN EN 14181 (not applicable to continuous measurement of transferred CO2 in pipeline)
BiomassAttributionmethods	A specification of the conservative attribution methods for subtracting fraction of mass of transferred CO2 which originates from fossil fuels and materials in activities covered by Directive (in case transferred CO2 was generated from biomass)
NonETSPartAttributionMethods	A specification of the conservative attribution methods for subtracting fraction of mass of transferred CO2 which originates from fossil fuels and materials in activities covered by Directive (in case installation was covered partially by EU ETS Directive)
CCSEvidenceForNonCompliance	A specification of evidence that CEMS approach would lead to unreasonable costs
CCSAlternativeDeterminationMethod	A specification of an alternative determination method for vented emissions, based on industry best practices
AircraftTypesDataType	
GenericAircraftType	A specification of the generic Aircraft Type by ICAO aircraft type designator
JetKerosineUsed	A specification whether Jet Kerosine (Jet A1 or Jet A) will be used for specific type of aircraft
JetGasolineUsed	A specification whether Jet Gasoline (Jet B) will be used for specific type of aircraft
AviationGasolineUsed	A specification whether Aviation Gasoline (AvGas) will be used for specific type of aircraft
BioFuelUsed	A specification whether Biofuel will be used for specific type of aircraft
OtherAlternativeFuelUsed	A specification whether other alternative fuel will be used for specific type of aircraft
NumberOfAircraft	A specification of the number of this type of aircraft operated at time of submission of monitoring plan
AircraftTypeOperated	A specification whether the aircraft type is operated at the moment
AviationMonitoringType	
ProcedureName	A unique name or title of the procedure used
ProcedureIdentification	A unique Identification number of the procedure used
ProcedureDescription	A description of the procedure used
DataMaintenanceResponsible	A specification of the post or department responsible for the maintenance of data
RecordsLocation	A specification of the location where records are kept
RecordsKeepingSystem	A specification of the name of the system used

Overview of Semantic Descriptions of EU ETS Reporting Language - EU ETS Report Schema

Element	Description
EUETSReport	EUETSReport root element
DocumentProperties	Complex element containing information about the creation and status of the submitted document
Version	Version of the EU ETS Reporting Language taxonomy used
Revision	Revision number of the EU ETS Reporting Language taxonomy used
SubmissionCode	The submission code of the document.This element describes the reason for submitting the document, i.e. specifies whether the document holds e.g. request permit message, update monitoring plan message, etc.
DocumentReference	A unique reference for this document
ParentDocumentReference	To allow a reference to (multiple) pre-existing document, i.e. Permits, i.e. MonitoringPlans
ReportDetails	A complex type containing details data on the emissions report itself
ReportingYear	The year for which the report is submitted
TotalEmissionsDetails	The details of the total emissions for each pollutant
Pollutant	A code that identifies the pollutant based on a defined list of codes
TotalEmissions	The total emission of the pollutant
EmissionMetric	The metric of the number provided in the TotalEmissions data element
ReportContact = ContactType	Contact Details of the Primary Contact person for the report. (Subsequently entered contacts will be Secondary, Tertiairy, etc.)
VerificationStatus	The current verification status code for the emission report
AdditionalInformation = AdditionalInformationType	
InstallationEmissionsReportDetails	A complex type containing the installation emissions report details
EmissionsReportCO2Details	A complex element containing emissions data for a specific source stream or a stack
SourceStreamReference	A cross reference to the SourceStream to which this part of the emissions report applies
InstallationUnitReference	A cross reference to the installation unit (or list of units grouped for reporting purposes) to which this part of the emissions report applies
SourceStreamStackReference	Reference for a specific source stream stack, in case of CEMS is used
Combustion	A complex element containing emissions calculations input data using a combustion approach for this source stream
Consumption = ValuesType	
OxidationFactor = ValuesType	
CaloricHeatingValue = ValuesType	
EmissionFactor = ValuesType	
Biomass = ValuesType	
VerifierComments	Verifier comments
Process	A complex element containing emissions calculations input data using a process approach for this source stream
Consumption = ValuesType	
ConversionFactor = ValuesType	
EmissionFactor = ValuesType	
Composition = ValuesType	
CaloricHeatingValueProxy = ValuesType	
Biomass = ValuesType	
VerifierComments	Verifier comments
MassBalance	A complex element containing emissions calculations input data using a mass balance approach for this source stream
Consumption = ValuesType	
CaloricHeatingValue = ValuesType	
CarbonContent = ValuesType	
MassBalanceElementReference	A reference to a specific mass balance element within a mass balance calculation
VerifierComments	Verifier comments
CO2CEMS	A complex element containing emissions measurement data using a CEMS approach for this stack
ConcentrationOfFlueGas	A specification of the GHG-concentration in the flue gas measured
VolumeFlowRate	A specification of the total dry flue gas flow measured
BiogenousCO2	The biomass fraction of measured CO2
ExplanationOfDeviationsBetweenMeasurementAndCalculation	An explanation for the deviations between emissions measurement and the corresponding corroborating calculation
VerifierComments	Verifier comments
Emissions	The emission (numerical value) of the pollutant defined above from this source stream, stack or installation
EmissionMetric	The metric of the number provided in the TotalEmissions data element
ParentDocumentReference	To allow a reference to (multiple) pre-existing document, i.e. Permits, i.e. MonitoringPlans
AdditionalInformation = AdditionalInformationType	
VerifierComments	Verifier comments
EmissionsReportTransferredCO2Details	A complex type containing emissions data for transferred CO2
TransferredCO2TotalEmissions	A specification of the total CO2-emissions for this specific CO2-transfer
ReceivedCO2TotalEmissions	A specification of the total CO2-emissions received from this specific CO2-transfer

Element	Description
TransferredCO2IdenticalToOther	A specification whether the total CO2-emission for this specific CO2-transfer is identical in the transferring and the receiving installation (or if the deviation between the measured values is in a range which can be explained by the uncertainty of the measurement systems of both installations)
InstallationIdentificationCodeReference	A reference to the installation to which or from which CO2 is transferred.
TransferredCO2IdenticalToOther	A specification whether the total CO2-emission for this specific CO2-transfer is identical in the transferring and the receiving installation (or if the deviation between the measured values is in a range which can be explained by the uncertainty of the measurement systems of both installations)
TransferredCO2Deviation	A specification of the deviation of transferred CO2 between sending and receiving installations
TransferredCO2ConservativeAdjustment	A specification of the conservative adjustment, necessary when transferred CO2 measurements deviate between transferring and receiving installations
TransferredCO2BiomassPart	A specification which part of the transferred CO2 is generated from Biomass
TransferredCO2NonETSPart	A specification which part of the transferred CO2 is generated from non-ETS covered installations
TotalCO2EmissionsLeakages	A specification of the total CO2-emissions resulting from leakages in CCS-activities
TotalCO2FugitiveEmissions	A specification of the total fugitive CO2-emissions resulting from CCS-activities
ParentDocumentReference	To allow a reference to (multiple) pre-existing document, i.e. Permits, i.e. MonitoringPlans
AdditionalInformation = AdditionalInformationType	
VerifierComments	Verifier comments
EmissionsReportCCSDetails	A complex type containing emissions data for CCS-activities
TotalCO2EmissionsFromCCSCaptureActivities	A specification of the total CO2-emissions from CCS Capture Activities
TotalCO2EmissionsFromCCSTransferActivities	A specification of the total CO2-emissions from CCS Transfer Activities
TotalCO2EmissionsFromCCSGeoStorageActivities	A specification of the total CO2-emissions from CCS Geological Storage Activities
ParentDocumentReference	To allow a reference to (multiple) pre-existing document, i.e. Permits, i.e. MonitoringPlans
AdditionalInformation = AdditionalInformationType	
VerifierComments	Verifier comments
EmissionsReportN2ODetails	A complex type containing emissions data for N2O-activities
TotalPlantOperatingTime	A specification of the annual operating time for the plant as a whole
ProductionRate	A specification of the production rate of N2O (in tonnes per hour)
N2OEmissionData	
StackEmissionsSourceReference	A reference code to a stackemission element to which this data refers
AnnualOperatingTime	A specification of the annual operating time for this specific process unit connected to the stack emission source
AnnualProduction	A specification of the annual production (quantity of product) for this specific process unit connected to the stack emission source
EquipmentMalfunction = EquipmentMalfunctionsOrMissingDataType	A complex type describing a specification of all equipment malfunctions that affected emissions / flue gas flow measurements and calculations
MissingData = EquipmentMalfunctionsOrMissingDataType	A complex type describing a specification of all missing data occurences
FlueGasFlowUncertainty	A specification of the flue gas flow uncertainty (in %)
N2OConcentrationUncertainty	A specification of the N2O concentration uncertainty (in %)
OverallAnnualEmissionsUncertainty	A specification of the N2O overall annual emissions uncertainty (in %)
AnnualAverageHourlyEmissionUncerainty	A specification of the N2O annual average hourly emissions uncertainty (in %)
TotalN2OEmissions	A specification of the total N2O emissions for the installation as a whole (in tonnes / year)
AnnualAverageHourlyEmissions	A specification of the annual average hourly N2O emissions for the installation as a whole (in kg / hour)
TotalCO2EquivalentEmissions	A specification of the total CO2 equivalent emissions for the installation as a whole (in tonnes / year)
ParentDocumentReference	To allow a reference to (multiple) pre-existing document, i.e. Permits, i.e. MonitoringPlans
AdditionalInformation = AdditionalInformationType	
VerifierComments	Verifier comments
EmissionsReportNOxDetails	A complex type containing emissions data for NOx-activities
xxx	Details to be addded
AviationEmissionsReportDetails	A complex type containing aviation emissions data
DeviationsFromApprovedTKMP	An indicator whether there have been any deviations from the approved tonne-kilometre monitoring plan during the reporting year. TRUE if there are deviations.
DeviationTKMPDescription	A description of all relevant changes in the operations and all deviations from the approved tonne-kilometre monitoring plan (providing information about each deviation and the consequences for the calculation of tonne-km data)
AircraftData	A complex type containing information on aircraft types and subtypes that have been operated through the reporting year (including owned aircraft and leased-in aircraft), falling under Annex 1 of the Directive
AircraftTypeReference	A reference to a specific aircraft type (ICAO aircraft type designator)
AircraftRegistrationNumber	A specification of the aircraft registration number
AircraftOwner	A specification of the owner of the aircraft or (in case of leased-in aircraft), the lessor
StartingDate	A specification of the starting date the aircraft belonged to your fleet (in case the aircraft did not belong to the fleet the whole reporting year)
EndDate	A specification of the end date the aircraft belonged to your fleet (in case the aircraft did not belong to the fleet the whole reporting year)
TonneKilometreData	
AerodromeOne	A specification of the first of two aerodromes in the aerodrome pair
AerodromeTwo	A specification of the second of two aerodromes in the aerodrome pair
Distance	The Great circle distance (km) + 95 km per aerodrome pair
TotalNumberOfFlightsPerAerodromePair	The total number of flights per aerodrome pair

Overview of Semantic Descriptions of EU ETS Reporting Language - EU ETS Report Schema

Element	Description
TotalNumberOfPassengers	The total number of passengers per aerodrome pair
TotalMassOfPassengersAndBagage	The total mass of passengers and checked bagage
TotalMassOfFreightAndMail	The total mass of freight and mail
TotalPassengerKilometres	The total number of passenger-kilometres per aerodrome pair
TotalFreightAndMailKilometres	The total number of freight and mail kilometres per aerodrome pair
TotalTonneKilometresPerAerodromePair	The total tonne-kilometre per aerodrome pair (in tkm)
DeviationsFromApprovedAEMP	An indicator whether there have been any deviations from the approved annual emissions monitoring plan during the reporting year. TRUE if there are deviations.
DeviationAEMPDescription	A description of all relevant changes in the operations and all deviations from the approved annual emissions monitoring plan (providing information about each deviation and the consequences for the calculation of tonne-km data)
TotalNumberOfFlights	A specification of the total number of flights in the reporting year covered by the EU ETS
AviationTotalEmissionsData	
FuelsUsedData	
NameOfFuel	A specification of the name of a fuel (Jet Kerosine, Jet Gasoline, Aviation Gasoline, or a specific biofuel or alternative fuel (as specified in approved monitoring plan))
EmissionFactor	A specification of the Emission Factor of the specific fuel
EmissionFactorMetric	
NetCalorificValue	
BiomassContent	
FuelConsumption	A specification of the fuel consumption in reporting year of the specific fuel (in tonnes)
CO2Emissions	A specification of the CO2 emissions of the specific fuel (in t CO2)
FuelUsePerAircraftType	
NameOfFuel	A specification of the name of a fuel (Jet Kerosine, Jet Gasoline, Aviation Gasoline, or a specific biofuel or alternative fuel (as specified in approved monitoring plan))
AircraftTypeReference	A reference to a specific aircraft type (ICAO aircraft type designator)
SimplifiedApproachData	
ConfirmationSimplifiedApproach	A confirmation that the simplified approach allowed for small emitters pursuant to section 4 of Annex XIV of the MRG has been used. TRUE if used.
TotalNumberOfFlightsFirstPeriod	A specification of the total number of flights covered by the EU ETS in the first four-month period during the reporting year (the local time of departure determines in which four-month period that flight shall be taken into account)
TotalNumberOfFlightsSecondPeriod	A specification of the total number of flights covered by the EU ETS in the second four-month period during the reporting year (the local time of departure determines in which four-month period that flight shall be taken into account)
TotalNumberOfFlightsThirdPeriod	A specification of the total number of flights covered by the EU ETS in the third four-month period during the reporting year (the local time of departure determines in which four-month period that flight shall be taken into account)
TotalCO2Emissions	The total CO2 emissions in the reporting year (in tonnes of CO2)
DataGaps	
ConfirmationSimplifiedApproachDataGaps	A confirmation that the simplified approach allowed for data gaps pursuant to section 5 of Annex XIV of the MRG has been used. TRUE if used.
SimplifiedApproachAmountOfEmissions	A specification of the amount of emissions for which the simplified approach was used
ConfirmationUseOfBiomass	A confirmation whether or not biomass was used during the reporting year. TRUE if used.
BiomassData	
NameOfFuel	A specification of the name of a fuel (Jet Kerosine, Jet Gasoline, Aviation Gasoline, or a specific biofuel or alternative fuel (as specified in approved monitoring plan))
BiomassAmount	A specification of the amount of biomass employed for the specific fuel
BiomassUnit	A specification of the unit used for Biomass employed for the specific fuel (1. t or 2. m3)
CO2EmissionsFromBiomass	A specification of the CO2 emissions from the biomass amount of the specific fuel (in t CO2)
AggregatedCO2DomesticFlights	
MSOfDepartureAndArrival	A specification of the member state of departure and arrival
NameOfFuel	A specification of the name of a fuel (Jet Kerosine, Jet Gasoline, Aviation Gasoline, or a specific biofuel or alternative fuel (as specified in approved monitoring plan))
AggregatedCO2Emissions	
AggregatedCO2MSDeparture	
MSOfDeparture	A specification of the member state of departure
CountryOfArrival	A specification of the country of arrival
NameOfFuel	A specification of the name of a fuel (Jet Kerosine, Jet Gasoline, Aviation Gasoline, or a specific biofuel or alternative fuel (as specified in approved monitoring plan))
AggregatedCO2Emissions	
AggregatedCO2MSArrival	
CountryOfDeparture	A specification of the country of departure
MSOfArrival	A specification of the member state of arrival
NameOfFuel	A specification of the name of a fuel (Jet Kerosine, Jet Gasoline, Aviation Gasoline, or a specific biofuel or alternative fuel (as specified in approved monitoring plan))

Element	Description
AggregatedCO2Emissions	
AdditionalEmissionsDataPerAerodromePair	
AerodromeOne	A specification of the first of two aerodromes in the aerodrome pair
AerodromeTwo	A specification of the second of two aerodromes in the aerodrome pair
TotalNumberOfFlightsPerAerodromePair	The total number of flights per aerodrome pair
TotalEmissionsPerAerodromePair	A specification of the total emissions per aerodrome pair
ParentDocumentReference	To allow a reference to (multiple) pre-existing document, i.e. Permits, i.e. MonitoringPlans
AdditionalInformation = AdditionalInformationType	
VerifierComments	Verifier comments
VerificationInformation	A complex type containing data on verification
VerifierInformation	Details of the verifiers (or verification organisations) that participated to the verification of the emissions report for the installation
Verifier = ContactType	Verifier contact details
VerificationOrganisation = OrganisationContactType	Verification organisation contact details
Responsibilities	The responsibilities of the verifier
Qualification	A specification of the qualifications of the verifier
AreaOfQualification	The area of which the verifiier is qualified
AccreditationCertificate	A reference to the certificate for the qualification of the verifier within a specific verification body
QualificationValidityStartDate	The start date for the qualification validity for this particular verifier
QualificationValidityEndDate	The end date for the qualification validity for this particular verifier
NACECode	A specification of the NACE-codes this specific verifiers is qualified to verify
VerificationDetails	Details of the verification
InstallationChecked	A true/false element to indicate whether installation site was visted for verification. TRUE if visited.
NotCheckedReason	A description for why the installation was not visited for the verification
Statement	A description containing the Verification opinion statement for the verified installation site
BasisOfStatement	A description of the verification procedures and verification methodology used by the verifier
ScopeOfVerification	Specification for the scope of the verification
SamplingStrategy	Specification of the sampling strategy
Non-conformatiesAndMisstatements	Specification of the non-conformation and/or misstatements
Recommendations	The recommendations of the verifier for the verified installation
VerificationAttachement = AttachmentType	
AdditionalInformation = AdditionalInformationType	
CADeterminedEmissions	The details of the emissions for the installation determined by the Competent Authority
Reason	A description for the reason why the Competent Authority determined the emissions for the installation
TotalEmissions	The total emission of the pollutant
Pollutant	A code that identifies the pollutant based on a defined list of codes
TotalEmissions	The total emission of the pollutant
EmissionMetric	The metric of the number provided in the TotalEmissions data element
Comment	Any additional comments with regards to each regulator determination
AdditionalInformation = AdditionalInformationType	
AdditionalInformation = AdditionalInformationType	

Recurring complex types

Element	Description
AdditionalInformation	Complex element containing any details considered as additional information
AdditionalInformationDescription	Contains the description of the additional information (such as a Member State specific code or reference)
AdditionalInformationDetails	Contains the information (e.g. text, value) of the additional information
OrganisationContactType	
OrganisationName	The name of the organisation
StreetAddress1	Primary street address
StreetAddress2	Additional street address
PostOfficeBox	The Post office box number of the address
PostCode	A code specifying the postcode of the address
City	City of the address
Country	Country of the address
Email	The email address for the person
PhoneNumber1	Primary phone number
PhoneNumber2	Secondary phone number

Overview of Semantic Descriptions of EU ETS Reporting Language - EU ETS Report Schema

FaxNumber				Fax number
ContactType				
	FirstName			First name of the person
	LastName			Last name of the contact person
	Title			(Mr, Mrs, Ms, Dr, PhD, etc.)
	JobTitle			The job title of the person (e.g. Plant manager)
	Role			The role of the person
	StreetAddress1			Primary street address
	StreetAddress2			Additional street address
	PostOfficeBox			The Post office box number of the address
	PostCode			A code specifying the postcode of the address
	City			City of the address
	Country			Country of the address
	Email			The email address for the person
	PhoneNumber1			Primary phone number
	PhoneNumber2			Secondary phone number
	FaxNumber			Fax number
AttachmentType				Format of the attached document
	AttachmentName			File name of the document
	AttachmentType			Format of the attached document
	AttachmentVersion			The version of the document
	AttachmentStatus			Document status
	AttachmentDescription			General description of the document
ValuesType				
	DataValue			The numerical value of the data input this element describes
	MetricOfMeasure			The metric of the number provided in the DataValue data element