



Author Andreas Fischer
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SIX Regulatory Platform (SIX RegHub)

RegHub API for Manufacturers Documentation

Table of revision

| Version | Status | Name | Date | Description |
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| 1.0 | Draft | Stephan Schaub, Atila Erdogan & Tobias Deeg | 27.10.2017 | - Initial version, based on the former valid documentation "SIX PRIIP - 3rd Party Supplier API". |
| 1.1 | Approved | Stephan Schaub | 01.12.2017 | <ul style="list-style-type: none"> - Overall: Small grammar changes. - C 2: Model Update attribute condition and new attributes. - C 2: New attributes and types: contractSideType, eTDProductType and SIXModelComplianceType. - C 2: It is no longer allowed to use "DUNS" and "OeNB" as institutionScheme. - C 2.2: Description of attribute conditions. - C 2.6: New chapter: Utility Objects. - C 3.2.5: Better description escape character for CSV files. - C 3.3.2: Small corrections in the environment information's. - C 3.3.3: Using better sample. - C 3.3.4: New chapter: Response format of the REST services. - C 3.3.5: New chapter: Overview of all REST API Calls. - C 3.4: DMD Model Adaption in all formats. - C 3.4.3.1: New chapter: Overview of all REST API Calls for DMD. - C 3.5: CD Model Adaption in all formats. - C 3.5.1.4: Add missed attribute sourcingStrategyType (Record: 1130) on 8th place, move the followed attributes by 1 place. - C 3.5.3.1: New chapter: Overview of all REST API Calls for CD. - C 3.6.1.1: New chapter: Overview of all REST API Calls for SR. - C 3.7: New chapters: API: Services. |
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1.5.0 Approved Serhat Kerpeten

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|-------|----------|-----------------|------------|--|
| | | | | <p>MiFID2SalesReportHeader</p> <p>C 2.6 Added attribute reportingAggregatedValue in MiFID2SalesReportHeader</p> <p>C 2.6 Deleted attribute marketIdentifierCodes in MiFID2SalesReportHeader</p> <p>C 2.6 Deleted attribute additionalFeedbackReport in MiFID2SalesReportHeader</p> <p>C 2.6 Deleted attribute indicationOfComplaint in MiFID2SalesReportHeader</p> <p>C 2.6 Deleted attribute otherInstrumentIdentifier in MiFID2SalesReportHeader</p> <p>C 2.6 Deleted attribute reportingCurrency in SalesReportDetail</p> <p>C 2.6 Added attribute instrumentCcy in SalesReportDetail</p> <p>C 2.6 Added attribute numberOfInvestors in SalesReportDetail</p> <p>C 2.6 Added attribute transactionRefecenceCode in SalesReportDetail</p> <p>C 2.6 Added attribute trasactionStatus in SalesReportDetail</p> <p>C 2.6 Changed DataType of additionalFeedBackReport from string(750) to string(2000) in SalesReportDetail</p> <p>C 2.6 Deleted attribute volumeCurrencyType in SalesReportDetail</p> <p>C 2.12.2 Added additional ClientType Enum values (Semi-professional and Institutional)</p> <p>C 2.12.3 Added additional Product Area Enum values (Client Type, Distribution Strategy, Not within NTM)</p> <p>C 2.12.4 Added additional Complaint Type Enum value (Not defined)</p> <p>C 2.12.7 Added additional Distribution Type Enum values (Execution Only – Appropriateness test failed, Execution with Appropriateness,Not NDC)</p> <p>C 2.12.8 Deleted Report Granularity Type Enum description</p> <p>C 2.12.8 ReportStatusType deleted four Enums</p> <p>C 2.12.10 Deleted Reporting Date Type Enum descripton</p> <p>C 2.12.20 Deleted Reporting Date Type Enum descripton</p> <p>C 2.12.23 Added ReportingFormat Enum values</p> <p>C 2.12.24 Added Reporting Aggregated Type Enum values</p> <p>C 2.12.25 Added Transaction Status Enum values</p> |
| | | | | <p>-C 3.3 Reference to Swagger UI added</p> <p>-C 3.3.2 Base URL changed for all environments</p> <p>-C 3.3.5 Resource URL changed to apply to base URL</p> <p>-C 3.3.5 exPostCost and File Service API added</p> <p>-C 3.3.4 Base URL changed for all environments</p> <p>-C 3.4.3.1 Optional request parameter "strategy" for PUT</p> |
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| | | | intrumentdmds |
| | | | -C 3.5.3.1 Optional request parameter "strategy" for PUT intruments |
| | | | -C 3.5.3 Base URL changed for all environments |
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| | | | -C 3.7.1 Base URL changed for all environments |
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| | | | -C 3.6 Sales report table for filter attributes added |

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Open Items

| Topic | Description | Status |
|--------------|--|--------------|
| Sales Report | The detailed business information about the Business Object Sales Report will be provided in a separate document ("Overview Sales Report business functionality.docx"). Later it will be included to this document. | Done Open |
| MIFID ExPost | Ex-Post costs are versioned (data series). This is currently in implementation and interface specification will get updated with corresponding samples in the next version of the document. | Done |

1. Overview

1.1. Introduction SIX Regulatory Platform (SIX RegHub)

The most recent Investor Protection regulations (including MiFID 2 and PRIIP) require a new approach as to how Manufacturers and Distributors interact with each other. Several new regulations (i.e. MiFID 2, PRIIP and IRS 871m) expect Manufacturers ^[1] and Distributors to exchange information regarding KI(I)Ds, target market, costs, and sales report (if sold outside target market).

The SIX Regulatory Hub (**SIX RegHub**) offers a system that supports the entire ecosystem, and connects the buy-side and the sell-side. The SIX RegHub is a distribution platform for Investor Protection documents and data, which:

- Facilitates the connection between the buy and sell-side, eliminating the need for Distributors and Manufacturers to build up hundreds of individual interfaces with each other (including mapping capability and supporting the common standards).
- Retrieves data from the supplier when needed, avoiding superfluous data traffic between Manufacturers and Distributors.
- Supports the distribution of data and document generation on the fly and supports versioning for certain data types (e.g. itemized cost breakdown data).
- Allows for bi-directional interaction, which is necessary to fulfil the mandatory reporting by a Distributor to Manufacturers of the sales amounts made outside of a defined target market (MIFID 2 requirement).
- And additional services to support business processes e.g. OTC ISIN assignment.

The **SIX RegHub** bundles the existing **SIX DocHub** (document distribution capability) and the new **SIX DataHub** (data distribution capability).

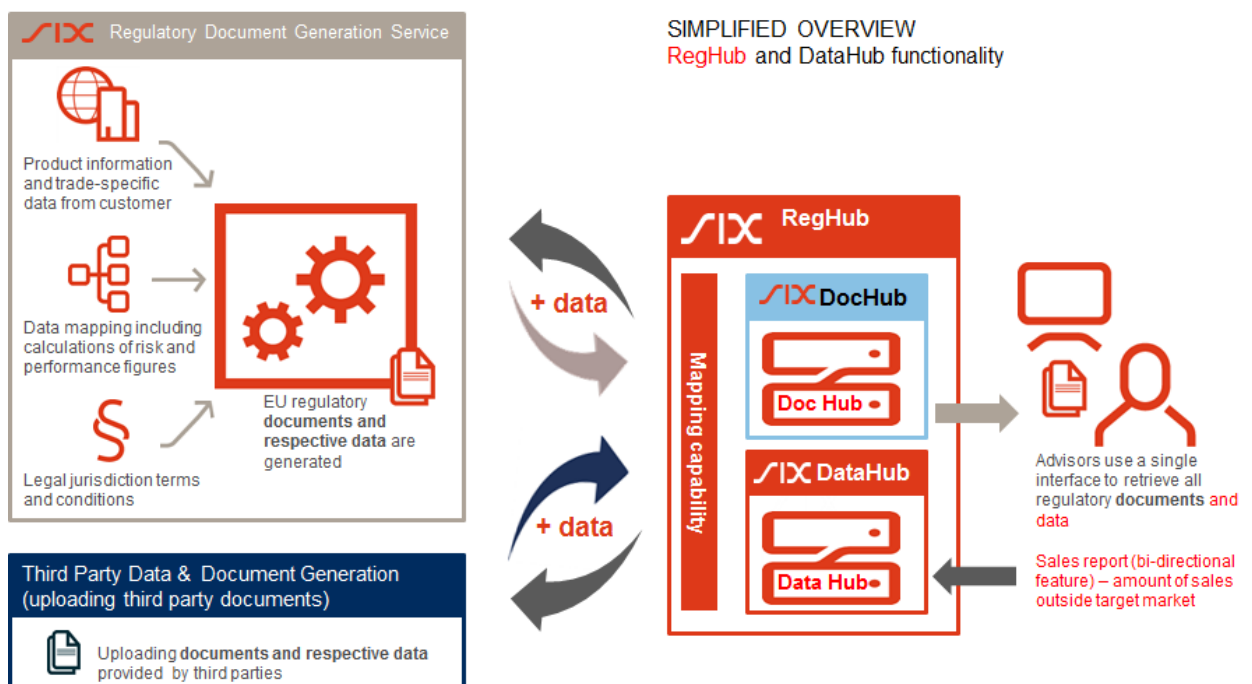


Figure 1: SIX Regulatory Hub Services

^[1] The regulator uses the term Manufacturer to describe the role which is responsible to produce certain artefacts like PRIIP KIDs or MIFID 2 data. The Manufacturer is liable for this data and documents. In the world of structured products this is the issuer.

The **SIX DocHub** is a platform to distribute any kind of documents (mainly regulatory documents) to the retail banking advisory and sales organizations as well as Distributors. The SIX DocHub sources documents from the **SIX DocGen** service (a service some Manufacturer uses to produce PRIIP KIDs) as well as from other 3rd party suppliers and provides them to the Distributors. Whenever possible the documents are loaded directly from the source to guarantee their up-to-datedness and support on-the-fly generation.

The **SIX DataHub** is generalizing the need for regulatory data as part of the advisory process. In that sense, the **SIX RegHub** is able to handle different views of regulatory Content data and the interdependencies between the different Views (i.e. mapping of attributes). Every Content data view defines a logical set of instrument attributes. The logical grouping of attributes is based on the regulatory definitions and needs.

1.2. Architecture overview of the SIX Regulatory Platform (SIX RegHub)

The following picture provides the architecture overview of the SIX RegHub.

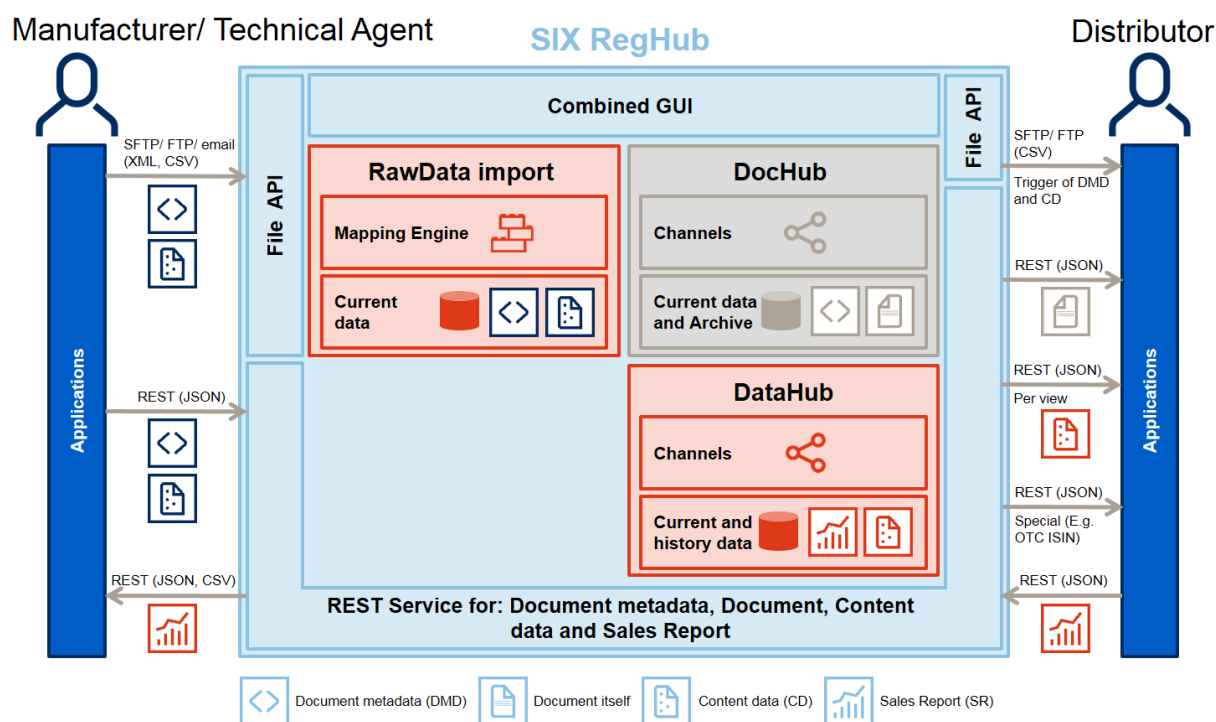


Figure 2: Architecture of the SIX RegHub

| Topic | Description |
|-----------------|---|
| Input File API | The SIX RegHub provides a file API where the Manufacturer or a Technical Agent (Earlier known as 3rd Party Supplier) can provide all his file based input (for more details see chapter " File: Overview "). |
| Output File API | The SIX RegHub provides a file API (push) for all Distributors. The files "Summary of Document metadata" and "Summary of Content data views" can be provided from there. TBD: Please be aware that we are currently refining this process for letting a Distributor also pulling his file via SFTP/FTP or calling a special REST Service. |
| REST Service | The basic service technology for the SIX RegHub is REST. For the existing Distributors, we will offer also for all SOAP services which exists in SIX DocHub today, a SOAP Service on the SIX RegHub. All new services will only be provided in REST technology. |

| | |
|----------------|---|
| Combined GUI | To make regulatory data and available documents accessible in an easy way, a Combined GUI is offered to navigate seamless between the data and the documents. |
| RawData import | <p>The component "RawData import" supports our own file structures. It also supports, for a fast and easy onboarding of clients, other industry standards (like: EFAMA (EPT/ CEPT/ EMT), OpenFunds, FundXML and DDV (WM)) as file input.</p> <p>In the SIX RegHub currently two file formats are supported: XML and CSV. If one of those file formats are provided, the "Raw Data import" component will automatically process the given files. The original input will be stored in raw data form into the database.</p> |
| Mapping Engine | <p>The "Mapping Engine" maps all the different supported file formats into the SIX RegHub internal model. The mapped business objects will be passed to the followed components SIX DataHub and SIX DocHub.</p> <p>Attention the mapping capability applies only for submitted files, there is no mapping capability on the REST Services.</p> |
| SIX DocHub | The "SIX DocHub" provides the document distribution capability to the Distributors. |
| Channels | All the Document metadata and each different main class of Content data (Tax871m, MiFID 2 or PRIIP) and as well all the cost classes and PRIIP (CEPT) shall be entitled separately. Only entitled Distributors are able to access the data. |
| SIX DataHub | The "SIX DataHub" provides the Content data distribution capability to the Distributors. It also provides the reporting capability, so that the Distributors can provide the reporting of sales outside target market (MiFID 2 Sales Report) to the Manufacturer. |

Table 1: Description of the SIX RegHub architecture

1.3. Actors (SIX RegHub)

1.3.1. Actors, who provides Document metadata or Content data

Every record provided into SIX Regulatory Hub has to be assigned to in minimum to two actors descriptive Institution attributes. These are the **Manufacturer** and the **Technical Agent**. This allows to identify the exact constellation who has sent data for which covering which parties.

| Actor | Description |
|-------------------|---|
| Manufacturer | The Manufacturer is the Manufacturer of the instrument. |
| Technical Agent | As a Technical Agent is seen the legal entity which technically submits the data into the SIX Regulatory Hub. This party can either be the Manufacturer or Main Manufacturer itself or a 3rd Party Supplier (Technical Agent) which is mandated to submit its data into the SIX Regulatory Hub. |
| Main Manufacturer | The Main Manufacturer holds a direct legal to the Manufacturer. This can either be the parent company of the Manufacturer or the Manufacturer itself. If there is no reason for grouping Manufacturers the Main Manufacturer actor can be ignored. |

Table 2: Actors, who provides Document metadata or Content data

While the **Main Manufacturer** is used for grouping child companies (e.g. International Bank which has their child branches grouped within certain main branches), the Manufacturer is seen as the effective Issuer of the financial instrument. Below some examples to illustrate the logic.

- **Example 1:**

An investment firm A (Main Manufacturer) is submitting data only covering this legal entity (Manufacturer). This investment firm has implemented the interface towards SIX himself (Technical Agent). Results in:

- **Manufacturer** (Mandatory): Investment firm A
- **Technical Agent** (Mandatory): Investment firm A
- **Main Manufacturer** (Optional): Investment firm A

- **Example 2:**

An investment firm A (Main Manufacturer) is submitting data covering several branches of separate Manufacturers. This investment firm does not submit the data directly but is using a Technical Agent who is maintaining the technical interface towards SIX. All actors are separate legal entities. Results in:

- **Manufacturer** (Mandatory): B, C and D

- **Technical Agent** (Mandatory): E
- **Main Manufacturer** (Optional): Investment firm A
- **Example 3:**

If there is no constellation with child branches and external Technical Agent, the attributes Technical Agent can be set with the same values as the Manufacturer. Results in:

 - **Manufacturer** (Mandatory): Investment firm A
 - **Technical Agent** (Mandatory): Investment firm A
 - **Main Manufacturer** (Optional): -

1.3.2. Actor, who receive Document metadata or Content data

| Actor | Description |
|-------------|---|
| Distributor | Member of the SIX Regulatory Hub who is able to receive the Documents or Content data from all the different manufacturers. |

Note: In SIX Regulatory Hub, a Manufacturer can also be a Distributor at the same time.

Table 3: Actor, who receive Document metadata or Content data

2. SIX RegHub Business Objects for Manufacturers

2.1. Overview

This chapter describes the available business objects (BO) including their attributes and substructures within SIX RegHub. The following business objects are explained below:

- **Document metadata (DMD)**
 As a representation of a document, this business object holds all information about the file including for example file size, language, a link where SIX RegHub has to download the actual document (before handing over to Distributor) and identifier of the related supplier (Manufacturer or Technical Agent).
- **Content data (CD)**
 As a representation of regulatory data, this business object holds all information about an instrument related to a specific regulation or tax as provided by a Manufacturer or Technical Agent.
- **Sales Report (SR)**
 As a representation of a Distributor Sales Report, this business object model holds all information about a sales report by a Distributor back to a specific Manufacturer. This includes information like sales outside of the target market, deviation reasons or even complaints.

Important to know is that the BOs are completely isolated from each other (every BO is stored in different database tables with no relation to each other). This means, that the same instrument for Documents and for Content data must be inserted twice in the database.

2.2. Overview of the attribute conditions

Each attribute in the SIX RegHub universe has an attribute condition. This condition describes if an attribute is for example mandatory or optional. The following table shows an overview of all of used conditions:

| Attribute condition | Description |
|-----------------------------------|---|
| Mandatory (Key) | Describes the mandatory key attributes. All key attributes must be provided to the SIX RegHub via the file (possibility to set constant values in the "Mapping Engine") or via the REST Service API. |
| Mandatory | Describes the mandatory attributes. All mandatory attributes must be provided to the SIX RegHub via the file (possibility to set constant values in the "Mapping Engine") or via the REST Service API. |
| Mandatory (SIX RegHub produced) | Describes the mandatory attributes produced by SIX. All these attributes are set by the SIX RegHub itself and has not to be provided. |
| Recommended (general description) | Describes a special type of attributes. All recommended attributes can be filled or not. It is highly recommended that these fields are provided by the source. Also, most of these fields are defined by other market templates as mandatory (e.g. EFAMA: EPT/ EMT). However, due to the readiness of the market this status is introduced, as some sources may struggle to submit 100% of the attributes at day one and therefore the processing of the whole record would be prevented. By introducing the attribute condition "recommended" it allows a source to distribute the data he can provide immediately and improve data completeness in parallel. SIX will monitor market readiness and overtime most of the attributes currently flagged as recommended will become mandatory again. By insert or update an instrument the SIX RegHub will check all recommended attributes if they were filled or not. The result of this check is show in the SIX RegHub produced attribute sIXModelComplianceType (" SIX Model Compliance Type "). This type gives an indication to the Distributor if all recommended data is available for a specific Content data (like MiFID2, PRIIP or CEPT) or not. |
| Recommended (MiFID2) | Based on the general description of recommended. All the recommended (MiFID2) marked attributes will be checked and the result will be provided in the MiFID2 class in the attribute sIXModelComplianceType . The following attributes are marked as recommended (MiFID2): <ul style="list-style-type: none"> • Class MiFID2: <ul style="list-style-type: none"> ○ costCcy ○ incidentalCosts ○ incidentalCostsUnitType ○ ongoingOtherCosts |

| | |
|---------------------|--|
| | <ul style="list-style-type: none">○ ongoingOtherCostsUnitType○ ongoingTransactionCosts○ ongoingTransactionCostsUnitType <ul style="list-style-type: none">● Class TargetMarketMiFID2:<ul style="list-style-type: none">○ advanced○ basic○ eligibleCounterparty○ informed○ professional○ retailClient |
| Recommended (PRIIP) | <p>Based on the general description of recommended. All the recommended (PRIIP) marked attributes will be checked and the result will be provided in the PRIIP class in the attribute SIXModelComplianceType. The following attributes are marked as recommended (PRIIP):</p> <ul style="list-style-type: none">● Class CostGroupPRIIP.<ul style="list-style-type: none">○ hasIncidentalCostsCarriedInterests○ hasIncidentalCostsPerformanceFee○ hasOneOffSlidingExitCostIndicator○ oneOffEntryCosts○ oneOffEntryCostsUnitType○ oneOffExitCostsRHP○ oneOffExitCostsRHPUnitType○ ongoingOtherCosts○ ongoingOtherCostsUnitType○ ongoingTransactionCosts○ ongoingTransactionCostsUnitType● Class NarrativeInformation:<ul style="list-style-type: none">○ hasCapitalGuarantee○ hasComprehensionAlert○ narIntendedTargetMarketRetailInvestor○ narInvestmentObjective○ narPerformanceFee○ narTypeUnderlyingInvestmentOption● Class PIA:<ul style="list-style-type: none">○ bondsWeight○ hasExistingCapitalPreservation○ hasPortfolioInsurance● Class PRIIP:<ul style="list-style-type: none">○ costCcy○ hasExistingCreditRisk○ isFlexible○ priipCategoryType● Class UCITS:<ul style="list-style-type: none">○ ongoingOtherCosts○ ongoingOtherCostsUnitType○ ongoingTransactionCosts○ ongoingTransactionCostsUnitType○ srriType |
| Recommended (CEPT) | <p>Based on the general description of recommended. All the recommended (CEPT) marked attributes will be checked and the result will be provided in the CEPT class in the attribute SIXModelComplianceType. The following attributes are marked as recommended (CEPT):</p> <ul style="list-style-type: none">● CEPT:<ul style="list-style-type: none">○ costCcy○ recomHoldingPeriodYears● CEPTPerformanceScenario:<ul style="list-style-type: none">○ absoluteReturn○ percentageReturn● Price:<ul style="list-style-type: none">○ historicalStartDate○ shareClassCcy |

| | |
|----------|---|
| | <ul style="list-style-type: none">○ sharePrice○ sharePriceDate |
| See Rule | Describes that it depends which is the concrete condition of an attributes. In the following attribute description are the rules of the condition described (for example: Filled with a default value, attribute A or B is mandatory, etc). |
| Optional | Describes the optional attributes. An optional attribute can be filled or not. |

Table 4: Attribute condition

2.3. Special behavior

In very rare occasions SIX needs to complement data not provided by the supplier / technical agent.

| | |
|-----------------------|--|
| Manufacturer ID (LEI) | A manufacturer ID, either GK or LEI, is mandatory for every instrument. In very rare occasions a supplier / technical agent does not provide a manufacturer id. In these cases the manufacturer id is added as LEI with the value "unknown" Manufacturer ID scheme: LEI Manufacturer ID: unknown |
|-----------------------|--|

Table 5: Attribute complemented by SIX

2.4. Business Object: Document metadata (DMD)

The business object model and the listed attributes below provide an overview of the Document metadata (DMD). The explicit representation for the file format or for the services format is shown in a later chapter.

Description of the classes:

- **InstrumentDMD:** This class is containing meta data information to explicitly one single instrument. Instrument identifiers, timestamps and Manufacturer details will support the handling and identification of the financial instrument within the internal data base.
- **DistributableObjectDMD:** This class provides all the needed information to provide the DMD to the defined Distributors. It also provides information about which Manufacturer issues the document and where it can be downloaded.
- **DocumentMetadata:** This class contains all the document metadata for one document like language, region, relevant URL, file size, checksum or mime type.

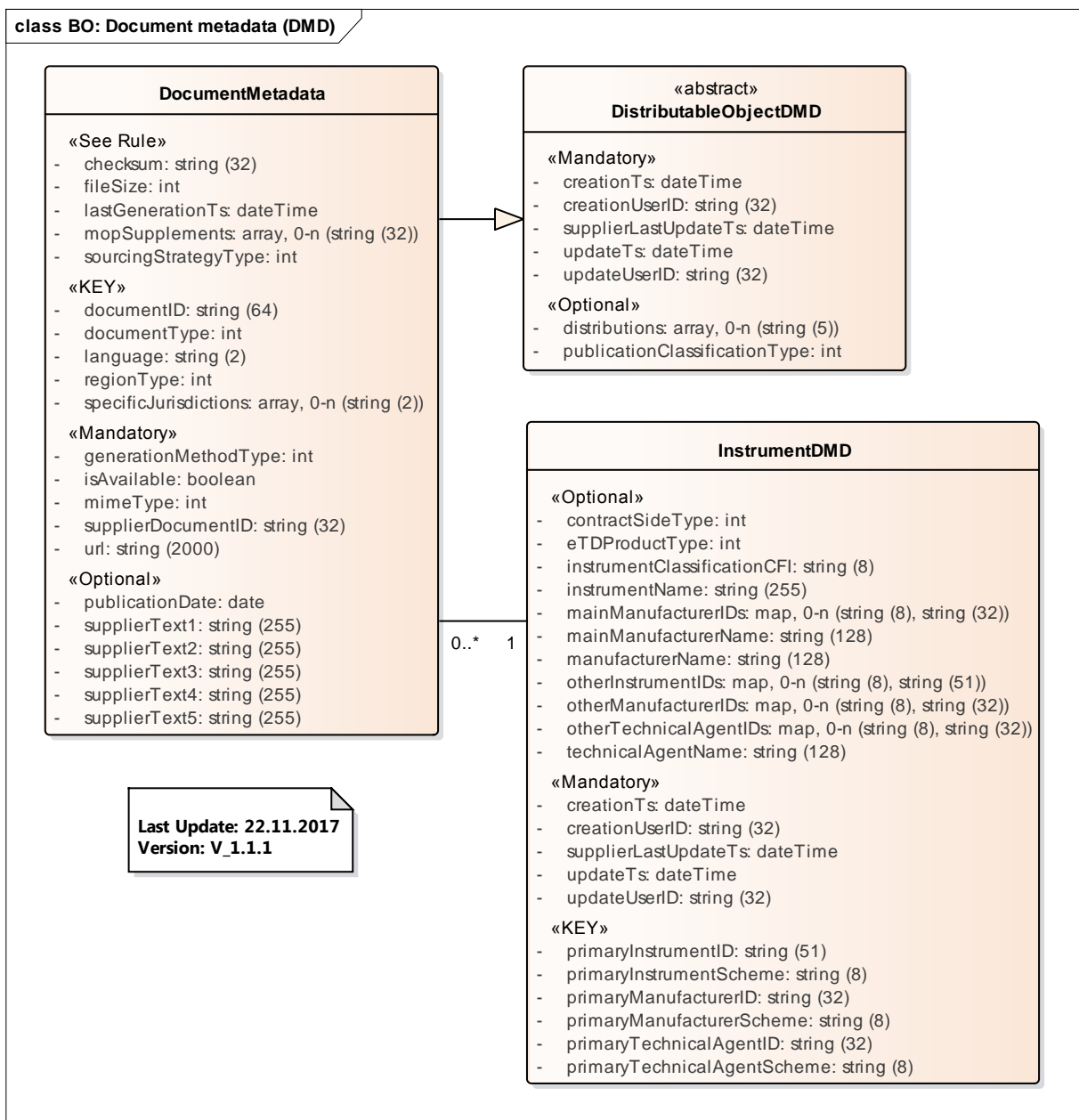


Figure 3: Business Object: Document metadata (DMD)

| Attribute Name | Data Type | Condition | Description and Rule |
|-----------------------------|-------------|-----------------|--|
| InstrumentDMD: | | | |
| primaryInstrumentScheme | string (8) | Mandatory (KEY) | <p>This attribute contains the primary used "Instrument Scheme".</p> <p>Rule: Only the following "Instrument Scheme" are allowed: - "I", "CH", "DE", "FR", "R1", "R2", "R3", "OTC", "ETD-I" and "ETD-CH"</p> |
| primaryInstrumentID | string (51) | Mandatory (KEY) | <p>This attribute contains the primary used "Instrument Identifier" related to the chosen primary used "Instrument Scheme".</p> <p>In the case the "Primary Instrument Scheme" is filled with "OTC", the following formatting rules apply.</p> <ul style="list-style-type: none"> Concatenated String: OTC ISIN, Bank Internal Identifier and UPI (Unique Product Identifier) Attribute separator: "-" <p>The following three examples are possible scenarios for filling this field. The separator has always to be provided even if one of the attributes is missing/ empty.</p> <ul style="list-style-type: none"> Example 1 (Bank Internal Identifier): Value: -123456- Example 2 (OTC ISIN and UPI): Value: CH0012345678--123456789 Example 3 (OTC ISIN and Bank Internal Identifier): Value: CH0012345678-123456- <p>In the case the "Primary Instrument Scheme" is filled with "ETD-CH", the "Instrument Identifier" has to be enriched with the attribute separator "-" and the attribute "Contract Side Type".</p> <ul style="list-style-type: none"> Example 1 (CH and contract side long): Value: 94647315-1 Example 2 (CH and contract side short): Value: 94647315-2 |
| primaryManufacturerScheme | string (8) | Mandatory (KEY) | <p>This attribute contains the primary used "Institution Scheme" for the "Manufacturer".</p> <p>Rule: Only the following "Institution Scheme" are allowed: - "BIC", "CIF", "CVR", "GK", "LEI", "RCS", "UIC", "UKCN" and "VP"</p> |
| primaryManufacturerID | string (32) | Mandatory (KEY) | <p>This attribute contains the primary used "Institution Identifiers" for the "Manufacturer" related to the chosen primary used "Institution Scheme".</p> |
| primaryTechnicalAgentScheme | string (8) | Mandatory (KEY) | <p>This attribute contains the primary used "Institution Scheme" for the "Technical Agent".</p> <p>Rule: Only the following "Institution Scheme" are allowed: - "GK" and "LEI"</p> |
| primaryTechnicalAgentID | string (32) | Mandatory (KEY) | <p>This attribute contains the primary used "Institution Identifiers" for the "Technical Agent" related to the chosen primary used "Institution Scheme".</p> |
| creationTs | dateTime | Mandatory | <p>SIX RegHub produced attribute: This attribute provides the information when the data record was initially created.</p> |
| creationUserID | string (32) | Mandatory | <p>SIX RegHub produced attribute: This attribute contains the Identifier of the SIX RegHub User who initially created the data record.</p> |
| supplierLastUpdateTs | dateTime | Mandatory | <p>This attribute provides the information when the "Instrument" required an update and is provided by the manufacturer.</p> |
| updateTs | dateTime | Mandatory | <p>SIX RegHub produced attribute: This attribute provides the information when the data record was last updated. In case of creating a data record, this attribute has</p> |

| | | | |
|--------------------------------|------------------------------------|-----------|---|
| | | | to be filled with the same value as "creationTs". |
| updateUserID | string (32) | Mandatory | SIX RegHub produced attribute: This attribute contains the Identifier of the SIX RegHub User who last updated of the data record. In case of creating a data record, this attribute has to be filled with the same value as "creationUserID". |
| contractSideType | int | Optional | The attribute " Contract Side Type " describes the type of the contract. |
| eTDProductType | int | Optional | The attribute " ETD Product Type " describes the type of the ETD. |
| instrumentClassificationCFI | string (8) | Optional | This attribute contains the classifications value of CFI. It defines and describes codes for an internationally valid system to classify financial instruments (CFI: ISO 10962). |
| instrumentName | string (255) | Optional | This attribute contains the "Instrument Name". |
| mainManufacturerIDs | map, 0-n (string (8), string (32)) | Optional | A map of " Institution Scheme " and "Institution Identifiers" for the "Main Manufacturer". |
| mainManufacturerName | string (128) | Optional | Name of the "Main Manufacturer" of the instrument (If possible VDF institution long name). |
| manufacturerName | string (128) | Optional | Name of the "Manufacturer" of the instrument (If possible VDF institution long name). |
| otherInstrumentIDs | map, 0-n (string (8), string (51)) | Optional | A map of Other " Instrument Scheme " and "Instrument Identifiers". |
| otherManufacturerIDs | map, 0-n (string (8), string (32)) | Optional | A map of " Institution Scheme " and "Institution Identifiers" for all the "Other Manufacturer Identifiers". |
| otherTechnicalAgentIDs | map, 0-n (string (8), string (32)) | Optional | A map of " Institution Scheme " and "Institution Identifiers" for all the "Other Technical Agent Identifiers". |
| technicalAgentName | string (128) | Optional | Name of the "Technical Agent" of the instrument (If possible VDF institution long name). |
| DistributableObjectDMD: | | | |
| creationTs | dateTime | Mandatory | SIX RegHub produced attribute: This attribute provides the information when the data record was initially created. |
| creationUserID | string (32) | Mandatory | SIX RegHub produced attribute: This attribute contains the Identifier of the SIX RegHub User who initially created the data record. |
| supplierLastUpdateTs | dateTime | Mandatory | This attribute provides the information when the "Instrument" required an update and is provided by the manufacturer. |
| updateTs | dateTime | Mandatory | SIX RegHub produced attribute: This attribute provides the information when the data record was last updated. In case of creating a data record, this attribute has to be filled with the same value as "creationTs". |
| updateUserID | string (32) | Mandatory | SIX RegHub produced attribute: This attribute contains the Identifier of the SIX RegHub User who last updated of the data record. In case of creating a data record, this attribute has to be filled with the same value as "creationUserID". |
| distributions | array, 0-n (string (5)) | See Rule | Possibility to define which Distributor(s) should be able to receive a document. For example, define that a document for a certain instrument (e.g. a private placement or an OTC instrument) should only be sent to a Distributor. This distribution limitation can be achieved via this attribute. If no information is provided the document will be distributed to all SIX RegHub members (via the public channel). The manufacturer can choose from various options: <ul style="list-style-type: none"> One or more members of the SIX RegHub direct, over their published "RegHub Member Identifier" (five-digit number, e.g. "12345"). The list of all available Distributors and their identifiers will be published in the SIX RegHub GUI or API. One or more predefined channels of the supplier by using the appropriate channel identifiers (Letter "C" and four-digit number, e.g. "C0002"). Each supplier can define his own channels via the SIX RegHub GUI. Or a combination of one or more client and channel identifiers. |

| | | | |
|-------------------------------|-------------------------|-----------------|---|
| | | | <p>Rule: If “distributions” is empty then → The data will be available over the “public channel” Else → Transmitted value(s) is(are) used</p> |
| publicationClassificationType | int | See Rule | <p>The attribute “Publication Classification Type” describes the intended accessibility of a document on the Distributor side (SIX RegHub members). Inform the Distributor if he can/ should make the document of a certain instrument publicly available (e.g. on his website in a public area where no password is needed). This approval is only for displaying the document and the needed metadata (for more details see the SIX RegHub API for Distributors, Summary of Document metadata).</p> <p>Rule: If “publicationClassificationType” is empty then → Default value “1” (public) is used Else → Transmitted value is used</p> <p>Please be aware, that SIX is not in a position, to verify this. Adherence to this rule will be included in the contracts. This information will be forwarded to the Distributors via SIX RegHub API (Summary of Document metadata).</p> |
| DocumentMetadata: | | | |
| documentID | string (64) | Mandatory (KEY) | SIX RegHub produced attribute: Delivers the unique “Document Identifier” (SIX RegHub wide) which is needed for downloading the document. |
| documentType | int | Mandatory (KEY) | The attribute “ Document Type ” describes the business type of a document. |
| language | string (2) | Mandatory (KEY) | Describes the language of the document. The values have to be according to ISO 639-1 (two letter code) . |
| regionType | int | See Rule | <p>The attribute “Region Type” describes the region for which the Document metadata is valid.</p> <p>Rule: The attribute “regionType” or “specificJurisdictions” is Mandatory (KEY).</p> <p>Rule: If “specificJurisdictions” contains data → The attribute “specificJurisdictions” has the higher priority as the attribute “regionType” Else → The attribute “regionType” has the higher priority</p> |
| specificJurisdictions | array, 0-n (string (2)) | See Rule | <p>This attribute contains an array of specific jurisdictions in which the Document metadata is valid. The values have to be according to ISO 3166-1 (two letter code).</p> <p>Rule: The attribute “regionType” or “specificJurisdictions” is Mandatory (KEY).</p> <p>Rule: If “specificJurisdictions” contains data → The attribute “specificJurisdictions” has the higher priority as the attribute “regionType” Else → The attribute “regionType” has the higher priority</p> |
| generationMethodType | int | Mandatory | The attribute “ Generation Method Type ” describes the method of the document generation (on the fly or produced in advance). |
| isAvailable | boolean | Mandatory | <p>SIX RegHub produced attribute: Describe if a document is available at the current time:</p> <ul style="list-style-type: none"> 0 = not available 1 = available <p>Not available means that the document was recalled/ deleted and can no longer be requested. Archived copies of earlier requested documents can still be loaded from the archive.</p> |
| mimeType | int | Mandatory | The attribute “ MIME Type ” describes the type of the document. In the first stage only for PDF (application/pdf) documents are supported. |
| supplierDocumentID | string (32) | See Rule | Unique identification of the document from the view of the supplier. The standard case will be, that a supplier will provide an URL for downloading a document. For the case that a supplier will |

| | | | |
|----------------------|-----------------------------|----------|--|
| | | | provide a complex service call, the SIX RegHub needs the specific key for downloading the document. This attribute stores this key. Rule: The attribute "url" or "supplierDocumentID" is Mandatory . |
| url | string (2000) | See Rule | Describes the URL from where the document could be retrieved from. Rule: The attribute "url" or "supplierDocumentID" is Mandatory . |
| checksum | string (32) | See Rule | Supplier generated checksum of the pre-generated document. The checksum is generated with the MD5. The result is a 32 - digit hexadecimal number. Rule: If "generationMethodType" equals "3" then → Needed Else → Optional |
| fileSize | int | See Rule | Size of the document in bytes. Rule: If "generationMethodType" equals "3" then → Needed Else → Optional |
| lastGenerationTs | dateTime | See Rule | Timestamp of the last generation of the pre-generated document. Rule: If "generationMethodType" equals "3" then → Needed Else → Optional |
| mopSupplements | array, 0-n (string (32)) | See Rule | ISINs of supplement Instruments within a "Multi Option Product" (MOP). Rule: If "documentType" equals "8" then → Needed Else → Optional |
| sourcingStrategyType | int | See Rule | The attribute " Sourcing Strategy Type " indicates how the data for this record was sourced by the party who delivered this data into the SIX Regulatory Hub. Rule: If "sourcingStrategyType" is empty then → Default value "99" (Sourcing strategy not defined) is used Else → Transmitted value is used |
| publicationDate | date | Optional | Date when the document was published (mainly relevant for document types like UCITS). |
| supplierText1 | string (255) | Optional | Additional supplier specific text number 1. |
| supplierText2 | string (255) | Optional | Additional supplier specific text number 2. |
| supplierText3 | string (255) | Optional | Additional supplier specific text number 3. |
| supplierText4 | string (255) | Optional | Additional supplier specific text number 4. |
| supplierText5 | string (255) | Optional | Additional supplier specific text number 5. |

Table 6: Document metadata (DMD) attributes

2.5. Business Object: Content data (CD)

2.5.1. Overview Content data (CD)

The business object model and the listed attributes below provide an overview of the Content data (CD). The explicit representation in the file format or in the services format is shown in a later chapter.

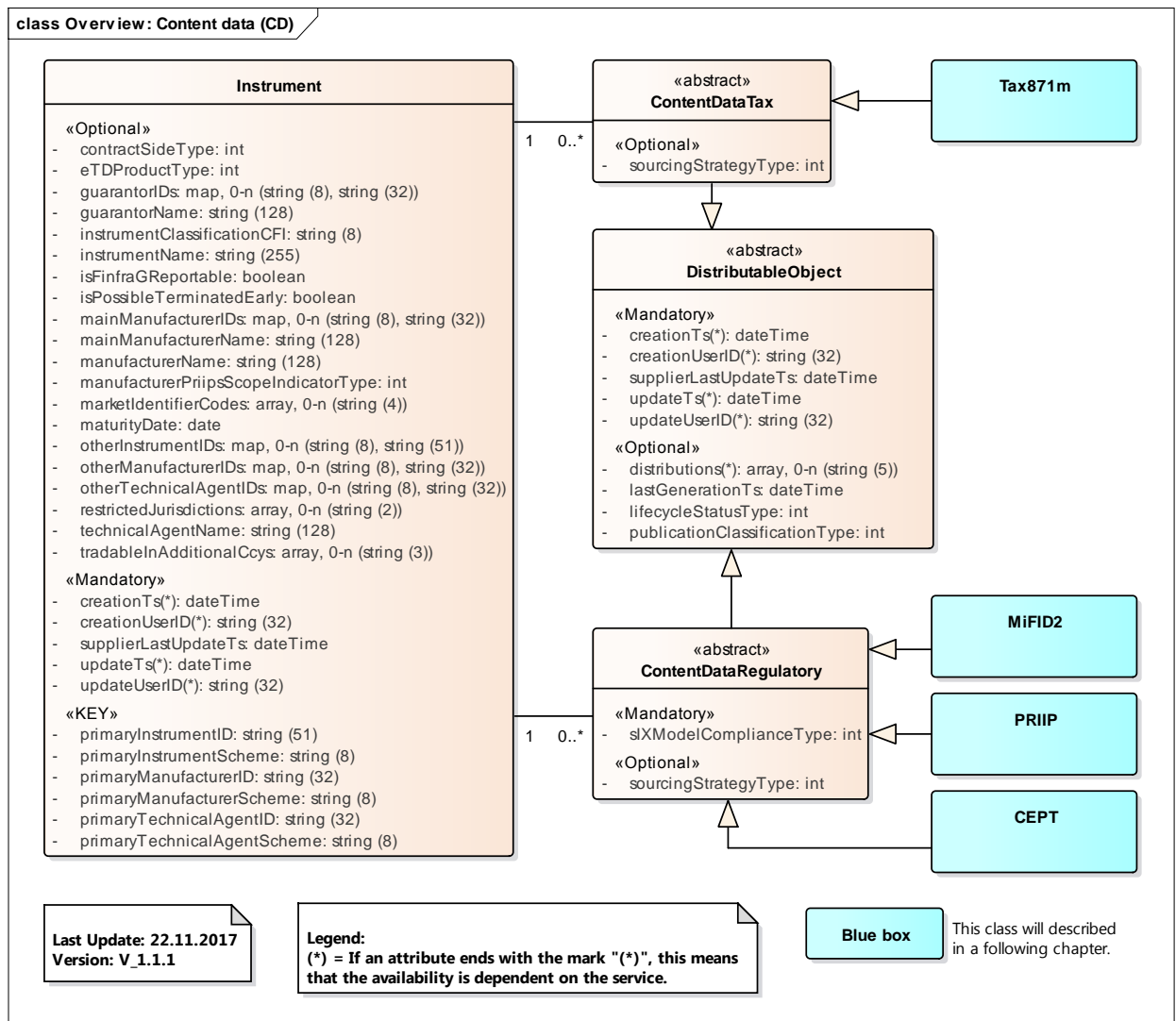


Figure 4: Overview: Content data (CD) and main classes

Description of the classes:

- **Instrument:** This class is required to store all basic information of a financial instrument. This includes instrument or market identification codes, Manufacturer information, maturity details and possibly the CFI code.
- **DistributableObject:** This class provides all the needed information to provide the CD to the defined Distributors. It also provides information which Manufacturer issued the instrument and all the other relevant administrative data.
- **ContentDataRegulatory:** This abstract class is a container for all the regulatory relevant Content data. Currently the class provide only one attribute which describes the sourcing strategy from the Technical Agent.
- **ContentDataTax:** This abstract class is a container for all the tax relevant Content data. Currently the class provide only one attribute which describes the sourcing strategy from the Technical Agent.

| Attribute Name | Data Type | Condition | Description and Rule |
|-----------------------------|-------------|-----------------|--|
| Instrument: | | | |
| primaryInstrumentScheme | string (8) | Mandatory (KEY) | <p>This attribute contains the primary used "Instrument Scheme".</p> <p>Rule: Only the following "Instrument Scheme" are allowed: - "I", "CH", "DE", "FR", "R1", "R2", "R3", "OTC", "ETD-I" and "ETD-CH"</p> |
| primaryInstrumentID | string (51) | Mandatory (KEY) | <p>This attribute contains the primary used "Instrument Identifier" related to the chosen primary used "Instrument Scheme".</p> <p>In the case the "Primary Instrument Scheme" is filled with "OTC", the following formatting rules apply.</p> <ul style="list-style-type: none"> Concatenated String: OTC ISIN, Bank Internal Identifier and UPI (Unique Product Identifier) Attribute separator: "-" <p>The following three examples are possible scenarios for filling this field. The separator has always to be provided even if one of the attributes is missing/ empty.</p> <ul style="list-style-type: none"> Example 1 (Bank Internal Identifier): Value: -123456- Example 2 (OTC ISIN and UPI): Value: CH0012345678--123456789 Example 3 (OTC ISIN and Bank Internal Identifier): Value: CH0012345678-123456- <p>In the case the "Primary Instrument Scheme" is filled with "ETD-CH", the "Instrument Identifier" has to be enriched with the attribute separator "-" and the attribute "Contract Side Type".</p> <ul style="list-style-type: none"> Example 1 (CH and contract side long): Value: 94647315-1 Example 2 (CH and contract side short): Value: 94647315-2 |
| primaryManufacturerScheme | string (8) | Mandatory (KEY) | <p>This attribute contains the primary used "Institution Scheme" for the "Manufacturer".</p> <p>Rule: Only the following "Institution Scheme" are allowed: - "BIC", "CIF", "CVR", "GK", "LEI", "RCS", "UIC", "UKCN" and "VP"</p> |
| primaryManufacturerID | string (32) | Mandatory (KEY) | This attribute contains the primary used "Institution Identifiers" for the "Manufacturer" related to the chosen primary used "Institution Scheme". |
| primaryTechnicalAgentScheme | string (8) | Mandatory (KEY) | <p>This attribute contains the primary used "Institution Scheme" for the "Technical Agent".</p> <p>Rule: Only the following "Institution Scheme" are allowed: - "GK" and "LEI"</p> |
| primaryTechnicalAgentID | string (32) | Mandatory (KEY) | This attribute contains the primary used "Institution Identifiers" for the "Technical Agent" related to the chosen primary used "Institution Scheme". |
| creationTs | dateTime | Mandatory | SIX RegHub produced attribute: This attribute provides the information when the data record was initially created. |
| creationUserID | string (32) | Mandatory | SIX RegHub produced attribute: This attribute contains the Identifier of the SIX RegHub User who initially created the data record. |
| supplierLastUpdateTs | dateTime | Mandatory | This attribute provides the information when the "Instrument" required an update and is provided by the manufacturer. |
| updateTs | dateTime | Mandatory | SIX RegHub produced attribute: This attribute provides the information when the data record was last updated. In case of creating a data record, this attribute has to be filled with the same value as "creationTs". |

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| updateUserID | string (32) | Mandatory | SIX RegHub produced attribute: This attribute contains the Identifier of the SIX RegHub User who last updated of the data record. In case of creating a data record, this attribute has to be filled with the same value as "creationUserID". |
| manufacturerLEI | string (20) | Optional | Legal Entity Identifier, LEI of the issuer of the financial instrument |
| manufacturerEmail | string (254) | Optional | Contact entry point for communication with the manufacturer to either provide feedback reporting or to retrieve details on how to provide feedback reporting |
| productGovernanceProcess | int | Optional | The attribute "Manufacturer Product Governance Process" defines the product governance process |
| contractSideType | int | Optional | The attribute " Contract Side Type " describes the type of the contract. |
| eTDProductType | int | Optional | The attribute " ETD Product Type " describes the type of the ETD. |
| guarantorIDs | map, 0-n (string (8), string (32)) | Optional | A map of " Institution Scheme " and "Institution Identifiers" for the "Guarantor". |
| guarantorName | string (128) | Optional | Name of the "Guarantor" of the instrument (If possible VDF institution long name). |
| instrumentClassificationCFI | string (8) | Optional | This attribute contains the classifications value of CFI. It defines and describes codes for an internationally valid system to classify financial instruments (CFI: ISO 10962). |
| instrumentName | string (255) | Optional | This attribute contains the "Instrument Name". |
| isFinfraGReportable | boolean | Optional | The "FinfraG reportable" flag indicates whether according to the issuer the product is reportable under the Financial Market Infrastructure Act. Derivative products that have at least one underlying FinfraG reportable security with a weighting of more than 25% are relevant for reporting. |
| isPossibleTerminatedEarly | boolean | Optional | Indication of instrument may be terminated early. This can be used for structured products. Please be aware that all content data share this information (e.g. PRIIP and MiFID 2 uses this attribute together as source for the attribute "isPossibleTerminatedEarly"). |
| mainManufacturerIDs | map, 0-n (string (8), string (32)) | Optional | A map of " Institution Scheme " and "Institution Identifiers" for the "Main Manufacturer". |
| mainManufacturerName | string (128) | Optional | Name of the "Main Manufacturer" of the instrument (If possible VDF institution long name). |
| manufacturerName | string (128) | Optional | Name of the Manufacturer of the instrument (If possible VDF institution long name). |
| manufacturerPriipsScopeIndicatorType | int | Optional | The attribute " Manufacturer PRIIPs Scope Indicator Type " defines the opinion of manufacturer whether the instrument is affected by the PRIIP Regulation. |
| marketIdentifierCodes | array, 0-n (string (4)) | Optional | An array of "Market Identifier Codes" (ISO 10383). |
| maturityDate | date | Optional | "Maturity Date" of the Instrument. This is a general instrument information. Please be aware that all Content Data share this information (e.g. PRIIP and MiFID 2 uses this attribute together as source for the attribute "maturityDate"). |
| otherInstrumentIDs | map, 0-n (string (8), string (51)) | Optional | A map of Other " Instrument Scheme " and "Instrument Identifiers". |
| otherManufacturerIDs | map, 0-n (string (8), string (32)) | Optional | A map of "Institution Scheme" and " Institution Scheme " and "Institution Identifiers" for all the "Other Manufacturer Identifiers". |
| otherTechnicalAgentIDs | map, 0-n (string (8), string (32)) | Optional | A map of " Institution Scheme " and "Institution Identifiers" for all the "Other Technical Agent Identifiers". |
| restrictedJurisdictions | array, 0-n (string (2)) | Optional | This attribute contains a list of "Restricted Jurisdictions" in which the instrument is restricted. The values have to be according to ISO 3166-1 (two letter code) . |
| technicalAgentName | string (128) | Optional | Name of the "Technical Agent" of the instrument (If possible VDF institution long name). |
| tradableInAdditionalCcys | array, 0-n (string (3)) | Optional | An array of Currency code (ISO 4217) can be defined in case where a share class or sub-fund is established and can be traded in different currencies. |
| DistributableObject: | | | |
| creationTs | dateTime | Mandatory | SIX RegHub produced attribute: This attribute provides the information when the data record was |

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| | | | initially created. |
| creationUserID | string (32) | Mandatory | SIX RegHub produced attribute: This attribute contains the Identifier of the SIX RegHub User who initially created the data record. |
| supplierLastUpdateTs | dateTime | Mandatory | This attribute provides the information when the "Instrument" required an update and is provided by the manufacturer. |
| updateTs | dateTime | Mandatory | SIX RegHub produced attribute: This attribute provides the information when the data record was last updated. In case of creating a data record, this attribute has to be filled with the same value as "creationTs". |
| updateUserID | string (32) | Mandatory | SIX RegHub produced attribute: This attribute contains the Identifier of the SIX RegHub User who last updated of the data record. In case of creating a data record, this attribute has to be filled with the same value as "creationUserID". |
| distributions | array, 0-n (string (5)) | See Rule | <p>Possibility to define which Distributor(s) should be able to receive a document.</p> <p>For example, define that a document for a certain instrument (e.g. a private placement or an OTC instrument) should only be sent to a Distributor. This distribution limitation can be achieved via this attribute. If no information is provided the document will be distributed to all SIX RegHub members (via the public channel).</p> <p>The manufacturer can choose from various options:</p> <ul style="list-style-type: none"> • One or more members of the SIX RegHub direct, over their published "RegHub Member Identifier" (five-digit number, e.g. "12345"). The list of all available Distributors and their identifiers will be published in the SIX RegHub GUI or API. • One or more predefined channels of the supplier by using the appropriate channel identifiers (Letter "C" and four-digit number, e.g. "C0002"). Each supplier can define his own channels via the SIX RegHub GUI. • Or a combination of one or more client and channel identifiers. <p>Rule: If "distributions" is empty then → The data will be available over the "public channel" Else → Transmitted value(s) is(are) used</p> |
| lastGenerationTs | dateTime | Optional | Timestamp of the business actuality regarding the data record. |
| lifecycleStatusType | int | Optional | <p>The attribute "Lifecycle Status Type" describes the "Lifecycle Status" of a data record.</p> <p>Rule: If "lifecycleStatusType" is empty then → Default value "2" (Active) is used Else → Transmitted value is used</p> |
| publicationClassificationType | int | See Rule | <p>The attribute "Publication Classification Type" describes the intended accessibility of a document on the Distributor side (SIX RegHub members). Inform the Distributor if he can/ should make the document of a certain instrument publicly available (e.g. on his website in a public area where no password is needed). This approval is only for displaying the document and the needed metadata (for more details see the SIX RegHub API for Distributors, Summary of Document metadata).</p> <p>Rule: If "publicationClassificationType" is empty then → Default value "1" (public) is used Else → Transmitted value is used</p> <p>Please be aware, that SIX is not in a position, to verify this. Adherence to this rule will be included in the contracts. This information will be forwarded to the Distributors via SIX RegHub API (Summary of Document metadata).</p> |
| ContentDataRegulatory: | | | |
| sixModelComplianceType | int | Mandatory | SIX RegHub produced attribute: The attribute " SIX Model Compliance Type " contains the information, whether the provided data fulfill the SIX data model |

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| | | | requirements. |
| sourcingStrategyType | int | See Rule | <p>The attribute "Sourcing Strategy Type" indicates how the data for this record was sourced by the party who delivered this data into the SIX Regulatory Hub.</p> <p>Rule: If "sourcingStrategyType" is empty then → Default value "99" (Sourcing strategy not defined) is used Else → Transmitted value is used</p> |
| ContentDataTax: | | | |
| sourcingStrategyType | int | See Rule | <p>The attribute "Sourcing Strategy Type" indicates how the data for this record was sourced by the party who delivered this data into the SIX Regulatory Hub.</p> <p>Rule: If "sourcingStrategyType" is empty then → Default value "99" (Sourcing strategy not defined) is used Else → Transmitted value is used</p> |

Table 7: Overview: Content data (CD) and main classes

2.5.2. Business Object: MiFID 2 (part of CD)

The business object model and the listed attributes below provide an overview of MiFID 2 (part of CD). The explicit representation in the file format or in the services format is shown in a later chapter.

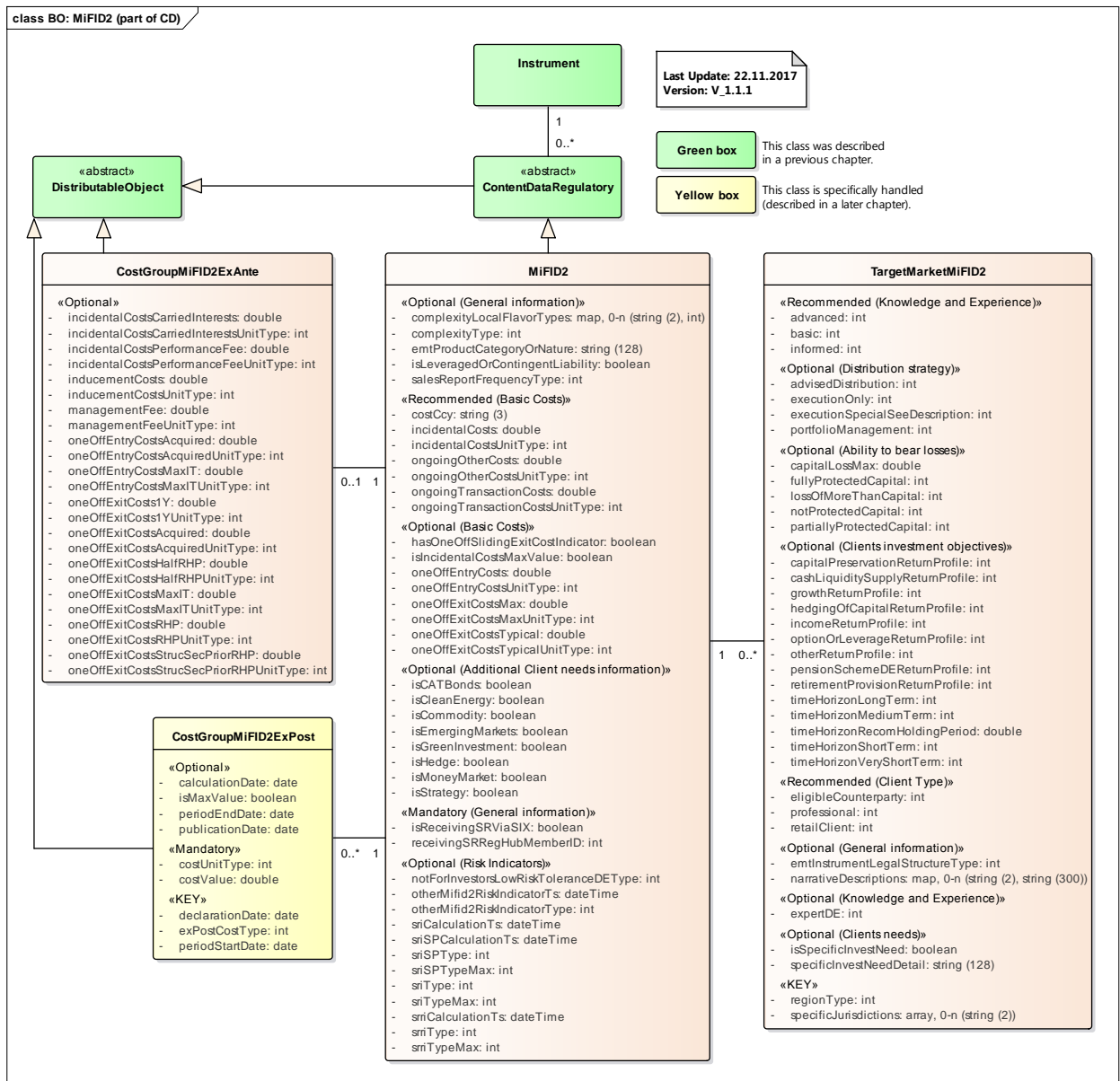


Figure 5: Business Object: MiFID 2 (part of CD)

Description of the classes:

- **MiFID2:** This data class contains MiFID 2 related information required to be answered by business entities involved in the distribution and trading of financial instruments in the EU. A closer look will reveal the availability of data attributes regarding additional client investment needs, general information, risk indicators like SRI or SRRI and financial instrument related cost details.
- **TargetMarketMiFID2:** Under MiFID 2, the target market for end clients must be identified for each financial instrument. Manufacturers must ensure that all risks relevant to the identified target market are assessed and the distribution strategy must be consistent with the target market identified.
- **CostGroupMiFID2ExAnte:** This cost group is based on a moderate performance scenario, using the same holding periods as defined in the performance scenarios, namely 1 year, half RHP and

RHP. This cost group includes one-off, recurring and incidental costs, performance, inducement, and management fees.

- **CostGroupMiFID2ExPost:** It is important to note that ex-ante cost figures are based on the past and thus may change in the future. Therefore, the CostGroupMiFID2ExPost provides information on cost attributes which have been already finalized. The ex-post cost reflection is only available for MiFID 2 relevant data attributes. This class contains the full last 36 months of ex post costs.

| Attribute Name | Data Type | Condition | Description and Rule |
|--|----------------------------|-------------|--|
| MiFID2: | | | |
| Group: Additional Client Needs information (Optional) | | | |
| isCATBonds | boolean | Optional | Product fulfils characteristics of a Catastrophe Bond. |
| isCleanEnergy | boolean | Optional | Product fulfils characteristics of Clean Energy Market. |
| isCommodity | boolean | Optional | Product fulfils characteristics of Commodity Market. |
| isEmergingMarkets | boolean | Optional | Product fulfils characteristics of Emerging Market. |
| isGreenInvestment | boolean | Optional | Product fulfils characteristics of Green Investment. |
| isHedge | boolean | Optional | Product fulfils characteristics of a Hedge Fund. |
| isMoneyMarket | boolean | Optional | Product fulfils characteristics of Money Market. |
| isStrategy | boolean | Optional | Product fulfils characteristics of a Strategy Fund. |
| Group: General information (Mandatory) | | | |
| isReceivingSRViaSIX | boolean | Mandatory | This attribute defines if there is a designated "MiFID 2 Sales Report" receiver for this instrument. |
| recordInputFormatVersion | string (32) | Recommended | Used version of the EMT: V1 (3rd August 2017), V2 for version 2 ... Vn for version n |
| inputFileGenerationDate | dateTime | Recommended | Date and time of the creation of the EMT file |
| receivingSRRegHubMemberID | int | See Rule | This attribute defines the receiving SIX RegHub member (five-digit number, e.g. "12345") for the "MiFID 2 Sales Report" for this instrument. The receiver is identified by using the "RegHub Member Identifier". The available SIX RegHub Members and their corresponding IDs can be retrieved via the SIX RegHub GUI or API. Rule: If "isReceivingSRViaSIX" equals "true" then → Mandatory Else → Optional |
| Group: General information (Optional) | | | |
| complexityLocalFlavorTypes | map, 0-n (string (2), int) | Optional | A map of "Jurisdictions", the values have to be according to ISO 3166-1 (two letter code) , and " Complexity Local Flavor Type ". This attribute is filled the case if the complexity view within a specific "Jurisdiction" does not match with the general defined value in the attribute "Complexity Type". |
| complexityType | int | Optional | The attribute " Complexity Type " describes the complexity classification of the instrument. |
| emtProductCategoryOrNature | string (128) | Optional | Designation of the respective product category or nature as defined in the European MiFID Template (EMT). Free of copyright (CIC or German categorization). The manufacturer makes a sufficiently granular classification of the product. |
| isLeveragedOrContingentLiability | boolean | Optional | To enable reporting on the depreciation of leveraged financial instruments or contingent liability transactions in accordance with Art. 62 of the MiFID 2. |
| structuredSecuritiesProductCategoryOrNature | string (128) | Optional | Designation of the respective product category or nature. EUSIPA Map/Codes for structured securities (https://eusipa.org/governance/#EusipaDMap) |
| structuredSecuritiesQuotation | int | Optional | "Structured Securities Quotation" defines if the quotation type in the ex-ante and ex-post section of the EMT file is in UNITS or in PERCENTAGE related to the specific reference value as presented in field 07150 (structured securities reference value ex-ante) and 08110 (structured securities reference value ex-post) respectively |

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| salesReportFrequencyType | int | Optional | “Sales Report Frequency Type” defines the expected reporting frequency to provide Sales Reports for this instrument. |
| Group: Risk Indicators (Optional) | | | |
| otherMifid2RiskIndicatorTs | dateTime | Optional | Timestamp of generation of the “Other MIFID II Risk Indicator Type”. |
| otherMifid2RiskIndicatorType | int | Optional | Other Risk Indicator (for non-UCITS and non-PRIP instruments) which is MiFID II compliant (“Other MiFID 2 Risk Indicator Type”). To simplify to Low/ Medium/ High, we reduce the typical value range (1-7) to 2, 4 and 6. |
| notForInvestorsLowRiskToleranceDEType | int | Optional | This attribute (“General Boolean Type”) is especially for the German market. Defines if the product shall not be sold to investors with the lowest risk tolerance. In case this field is set to "Yes", it means that the product shall not be used for investors with the lowest risk tolerance. |
| sriSPCalculationTs | dateTime | Optional | Timestamp of generation of the “Spanish Summary Risk Indicator (SRI) Type”. |
| sriSPTYPE | int | Optional | “Spanish Summary Risk Indicator (SRI) Type” measures the aggregated risk of a product as defined as the combination of market risk and credit risk. Only for Spanish local NON PRIIPS and NON UCITS. |
| sriSPTYPEMax | int | Optional | “Spanish Summary Risk Indicator (SRI) Type (Maximum)” measures the maximum aggregated risk of a product as defined as the combination of market risk and credit risk. In regards of “Multi Option Products (MOP)” this value defines the upper end of the “Multi Option Product SRI Range”. |
| sriCalculationTs | dateTime | Optional | Timestamp of generation of the “Summary Risk Indicator (SRI) Type”. |
| sriType | int | Optional | “Summary Risk Indicator (SRI) Type” measures the aggregated risk of a product as defined as the combination of market risk and credit risk. |
| sriTypeMax | int | Optional | “Summary Risk Indicator (SRI) Type Maximum” measures the maximum aggregated risk of a product as defined as the combination of market risk and credit risk. In regards of “Multi Option Products (MOP)” this value defines the upper end of the “Multi Option Product SRI Range”. |
| srrCalculationTs | dateTime | Optional | Timestamp of generation of the “Synthetic Risk and Reward Indicator (SRR) Type”. |
| srrType | int | Optional | “Synthetic Risk and Reward Indicator (SRR) Type” measures the aggregated risk of a product as defined in the UCITS regulation. |
| srrTypeMax | int | Optional | “Synthetic Risk and Reward Indicator (SRR) Type (Maximum)” measures the maximum aggregated risk of a product as defined as the as defined in the UCITS regulation. In regards of “Multi Option Products (MOP)” this value defines the upper end of the “Multi Option Product SRR Range”. |
| Group: Basic Costs (Recommended) | | | |
| hasPerformanceFee | boolean | Recommended (MiFID2) | “Performance Fee” indicates whether a product has a performance fee feature |
| hasDistributionOfCash | boolean | Recommended (MiFID2) | “Distribution of Cash” indicates whether a product has a distribution feature |
| costCcy | string (3) | Recommended (MiFID2) | Currency code related to provided costs (High level / Ex-Ante / Ex-Post) (ISO 4217), |
| incidentalCosts | double | Recommended (MiFID2) | This figure includes all recurring and incidental costs. Mainly performance fees and carried interest expenses. Also, direct & indirect transaction costs and if relevant exit penalties. |
| incidentalCostsUnitType | int | Recommended (MiFID2) | This attribute defines the used “Unit Type” to the associated cost attribute. |
| ongoingOtherCosts | double | Recommended (MiFID2) | All on-going costs and charges related to the management of the financial product that are deducted from the value of the financial instrument during the investment in the financial instrument. |
| ongoingOtherCostsUnitType | int | Recommended (MiFID2) | This attribute defines the used “Unit Type” to the associated cost attribute. |
| ongoingTransactionCosts | double | Recommended (MiFID2) | All costs and charges that are incurred as a result of the acquisition and disposal of investments for the product. |
| ongoingTransactionCostsUnitType | int | Recommended | This attribute defines the used “Unit Type” to the associated cost |

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| nitType | | ed (MiFID2) | attribute. |
| Group: Basic Costs (Optional) | | | |
| hasOneOffSlidingExitCostIndicator | boolean | Optional | A type of cost that may change according to one or several specific associated factors. |
| isIncidentalCostsMaxValue | boolean | Optional | Indicates if the incidental costs value (Ex-ante) is "real" value or maximum value. |
| oneOffEntryCosts | double | Optional | The impact of the cost paid when entering an investment or the impact of the cost already included in the price. |
| oneOffEntryCostsUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| oneOffExitCostsMax | double | Optional | Maximum amount of costs and charges (included in the price or in addition to the price of the financial instrument) paid to product suppliers when exiting the investment upon maturity. |
| oneOffExitCostsMaxUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| oneOffExitCostsTypical | double | Optional | All costs and charges (included in the price or in addition to the price of the financial instrument) paid to product suppliers at the beginning or at the end of the investment in the financial instrument. |
| oneOffExitCostsTypicalUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| TargetMarketMiFID2: | | | |
| Group: General Information (Mandatory) | | | |
| regionType | int | See Rule | The attribute " Region Type " describes the region for which the instrument data is valid. Rule: The attribute "regionType" or "specificJurisdictions" is Mandatory (KEY) . Rule: If "specificJurisdictions" contains data → The attribute "specificJurisdictions" has the higher priority as the attribute "regionType" Else → The attribute "regionType" has the higher priority |
| specificJurisdictions | array, 0-n (string (2)) | See Rule | This attribute contains an array of specific jurisdictions in which the instrument data is valid. The values have to be according to ISO 3166-1 (two letter code) . Rule: The attribute "regionType" or "specificJurisdictions" is Mandatory (KEY) . Rule: If "specificJurisdictions" contains data → The attribute "specificJurisdictions" has the higher priority as the attribute "regionType" Else → The attribute "regionType" has the higher priority |
| Group: General Information (Optional) | | | |
| emtInstrumentLegalStructureType | int | Optional | The attribute " EMT Instrument Legal Structure Type " defines the instrument legal structure as defined in the European MiFID Template (EMT). |
| narrativeDescriptions | map, 0-n (string (2), string (300)) | Optional | Narrative description of the target market. In case of problems providing the full set of target market attributes, this attribute can be used for further description. |
| Group: Ability to bear losses (Optional) | | | |
| capitalLossMax | double | Optional | Capital loss up to the defined percentage value. |
| fullyProtectedCapital | int | Optional | The attribute "Fully protected capital (100%), no loss" defines which target market is applicable for the criteria (" Target Market Type "). |
| lossOfMoreThanCapital | int | Optional | The attribute "Loss of more than capital (<0%), potentially additional payments required" defines which target market is applicable for the criteria (" Target Market Type "). |
| notProtectedCapital | int | Optional | The attribute "Not protected capital (0%), total loss" defines which target market is applicable for the criteria (" Target Market Type "). |
| partiallyProtectedCapital | int | Optional | The attribute "Partially protected capital (>0%, <100%), partial |

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| | | | loss" defines which target market is applicable for the criteria (" Target Market Type "). |
| Group: Client Type (Recommended) | | | |
| eligibleCounterparty | int | Recommended (MiFID2) | The attribute "Eligible Counterparty" defines which target market is applicable for the criteria (" Target Market Type "). |
| professional | int | Recommended (MiFID2) | The attribute "Professional" defines which target market is applicable for the criteria (" Professional Target Market Type "). |
| retailClient | int | Recommended (MiFID2) | The attribute "Retail Client" defines which target market is applicable for the criteria (" Target Market Type "). |
| Group: Clients investment objectives (Optional) | | | |
| capitalPreservationReturnProfile | int | Optional | The attribute "Capital preservation" defines which target market is applicable for the (" Target Market Type "). |
| cashLiquiditySupplyReturnProfile | int | Optional | The attribute "Cash liquidity supply" defines which target market is applicable for the criteria (" Target Market Type "). |
| growthReturnProfile | int | Optional | The attribute "Growth" defines which target market is applicable for the criteria (" Target Market Type "). |
| hedgingOfCapitalReturnProfile | int | Optional | The attribute "Hedging of capital" defines which target market is applicable for the criteria (" Target Market Type "). |
| incomeReturnProfile | int | Optional | The attribute "Income" defines which target market is applicable for the criteria (" Target Market Type "). |
| optionOrLeverageReturnProfile | int | Optional | The attribute "Option or Leverage" defines which target market is applicable for the criteria (" Target Market Type "). |
| otherReturnProfile | int | Optional | The attribute "Other Return Profile" defines which target market is applicable for the criteria (" Target Market Type "). |
| pensionSchemeDEReturnProfile | int | Optional | The attribute "Pension Scheme Germany" defines which target market is applicable for the criteria (" Target Market Type "). |
| retirementProvisionReturnProfile | int | Optional | The attribute "Retirement provision" defines which target market is applicable for the criteria (" Target Market Type "). |
| timeHorizonLongTerm | int | Optional | The attribute "Long term (>5Y, calc for products with maturity only)" defines which target market is applicable for the criteria (" Target Market Type "). |
| timeHorizonMediumTerm | int | Optional | The attribute "Medium term (3Y-5Y, calc for products with maturity only)" defines which target market is applicable for the criteria (" Target Market Type "). |
| timeHorizonRecomHoldingPeriod | int | Optional | The attribute "Time Horizon Recommended Holding Period (RHP)" defines the RHP in years. Rule: If "timeHorizonLongTerm" and "timeHorizonMediumTerm" and "timeHorizonShortTerm" and "timeHorizonVeryShortTerm" empty then → Field fillable Else → Not fillable |
| timeHorizonShortTerm | int | Optional | The attribute "Short term (<3Y)" defines which target market is applicable for the criteria (" Target Market Type "). |
| timeHorizonVeryShortTerm | int | Optional | The attribute "Very Short term (<1Y)" defines which target market is applicable for the criteria (" Target Market Type "). |
| timeHorizonHoldToMaturity | int | Optional | The attribute "Hold to Maturity" defines which target market is applicable for the criteria (" Target Market Type "). |
| Group: Client's needs (Optional) | | | |
| isSpecificInvestNeed | boolean | Optional | The attribute "Specific Investment Need" defines if a special investment need applies. |
| specificInvestNeedDetail | string (128) | Optional | Designed to meet specific investor requirements, for example, green investments, shariah, ethical, etc. |
| Group: Distribution strategy (Optional) | | | |
| advisedDistribution | int | Optional | The attribute "Advised distribution" defines which distribution strategy is applicable for the criteria (" Distribution Strategy Type "). |
| executionOnly | int | Optional | The attribute "Execution only" defines which target market is applicable for the criteria (" Distribution Strategy Type "). |
| executionSpecialSeeDescr | int | Optional | The attribute "Execution with appropriateness test or non-advised |

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| ption | | | services" defines which distribution strategy is applicable for the criteria (" Distribution Strategy Type "). |
| portfolioManagement | int | Optional | The attribute "Portfolio management (discretionary)" defines which target market is applicable for the criteria (" Distribution Strategy Type "). |
| Group: Knowledge and Experience (Recommended) | | | |
| advanced | int | Recommended (MiFID2) | The attribute "Advanced" defines which target market is applicable for the criteria (" Target Market Type "). |
| basic | int | Recommended (MiFID2) | The attribute "Basic" defines which target market is applicable for the criteria (" Target Market Type "). |
| informed | int | Recommended (MiFID2) | The attribute "Informed" defines which target market is applicable for the criteria (" Target Market Type "). |
| Group: Knowledge and Experience (Optional) | | | |
| expertDE | int | Optional | The attribute "Expert Germany" defines which target market is applicable for the criteria (" Target Market Type "). |
| CostGroupMiFID2ExAnte: | | | |
| referenceDateExAnte | dateTime | Recommended | The reference date to which all ex-ante cost disclosures refer (i.e. not to be mistaken for general reference date (field 00050) or Generation date and time (field 00005)) |
| incidentalCostsCarriedInterests | double | Optional | Carried interest costs represent the distributions to the private equity fund, when the asset manager generates an annualized return in excess of the preferred return. |
| incidentalCostsCarriedInterestsUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| incidentalCostsPerformanceFee | double | Optional | Performance fees represent the economic benefit that accrues to the investment firm. These fees are generally only paid out when the NAV of the fund is above the level at which the performance fee was last paid. |
| incidentalCostsPerformanceFeeUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| inducementCosts | double | Optional | Inducement costs are represented by commissions, fees or other cash benefits which are made to or by an investment firm in the context of the provision of investment services. |
| inducementCostsUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| managementFee | double | Optional | As part of the ongoing costs, management fees include cost attributes related to the administration of the financial instrument. |
| managementFeeUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| oneOffEntryCostsAcquired | double | Optional | Subscription fees charged to any subscriber when entering into an investment or portfolio mandate which are attributable directly to the fund. |
| oneOffEntryCostsAcquiredUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| oneOffEntryCostsMaxIT | double | Optional | The impact of the cost paid per subscription and defined by the manufacturer. Used only for the Italian market and must be adapted to the relationship between manufacturer and distributor. This cost element is not taken into account in the ordinary entry costs. |
| oneOffEntryCostsMaxITUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| oneOffExitCosts1Y | double | Optional | The impact of costs (Ex-ante) when exiting the investment after 1 year. |
| oneOffExitCosts1YUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| oneOffExitCostsAcquired | double | Optional | Redemption fees charged to any subscriber when entering into an investment or portfolio mandate which are attributable directly to the fund. |
| oneOffExitCostsAcquiredUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| oneOffExitCostsHalfRHP | double | Optional | The impact of costs (Ex-ante) when exiting the investment after Half RHP. |
| oneOffExitCostsHalfRHPUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost |

| | | | |
|---|---------|-----------------|---|
| itType | | | attribute. |
| oneOffExitCostsMaxIT | double | Optional | The impact of the cost paid per redemption and defined by the manufacturer. Used only for the Italian market and must be adapted to the relationship between manufacturer and distributor. This cost element is not taken into account in the ordinary exit costs. |
| oneOffExitCostsMaxITUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| oneOffExitCostsRHP | double | Optional | The impact of costs (Ex-ante) when exiting the investment after RHP. |
| oneOffExitCostsRHPUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| oneOffExitCostsStrucSecPriorRHP | double | Optional | The impact of all costs and charges when exiting a non-exchange traded structured product prior the end of the RHP. |
| oneOffExitCostsStrucSecPriorRHPUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| gearingCosts | double | Optional | Financing costs related to borrowing for the purposes of gearing expressed as a percentage of net asset value |
| gearingCostsUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| netOneOffEntryCosts | double | Optional | Net one-off entry cost = Gross one-off entry costs less upfront distribution fee embedded in the gross one-off entry costs. In practice net one-off entry costs will be the portion of the gross one-off entry costs retained by the manufacturer. |
| netOneOffEntryCostsUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| referenceValueExAnte | double | Optional | The reference value to which a unit disclosed ex-ante cost is based and to which a percentage disclosed cost should be multiplied in order to retrieve the unit cost |
| CostGroupMIFIDExPost: | | | |
| declarationDate | date | Mandatory (KEY) | This attribute defines the date on which the cost value was declared to be used. This may not be the same date as the actual publication date in case the publication was done on a later point of time. This date has to be used if overlapped ex-post costs have to be identified. |
| exPostCostType | int | Mandatory (KEY) | The attribute " Costs Type " defines the costs type of the Ex-post entry. |
| periodStartDate | date | Mandatory (KEY) | Defines the start date (Period Start) of the Ex-post entry. |
| costValue | double | Mandatory | The impact of cost (Ex-post) of the Ex-post entry. |
| costUnitType | int | Mandatory | This attribute defines the used " Unit Type " to the associated cost attribute. |
| referenceDateExPost | date | Recommended | The reference date to which all ex-post cost disclosures refer (i.e. not to be mistaken for General Reporting Date (field 00050) or Generation Date and Time (field 00055)) |
| periodEndDate | date | Optional | Defines the end date (Period End) of the Ex-post entry. |
| calculationDate | date | Optional | Date on which the cost value was calculated. |
| isMaxValue | boolean | Optional | Indication if the "Cost value" is a real value or a maximum value. Rule: If "exPostCostType" equals "1" then → Field fillable Else → Not fillable |
| publicationDate | date | Optional | Date on which the cost value was publicized. |
| referenceValueExPost | double | Optional | The reference value to which a unit disclosed ex-post is based and to which a percentage disclosed cost should be multiplied in order to retrieve the unit cost. |

Table 8: Business Object: MiFID 2 (part of CD)

2.5.3. Business Object: PRIIP (part of CD)

The business object model and the listed attributes below provide an overview of PRIIP (part of CD). The explicit representation in the file format or in the services format is shown in a later chapter.

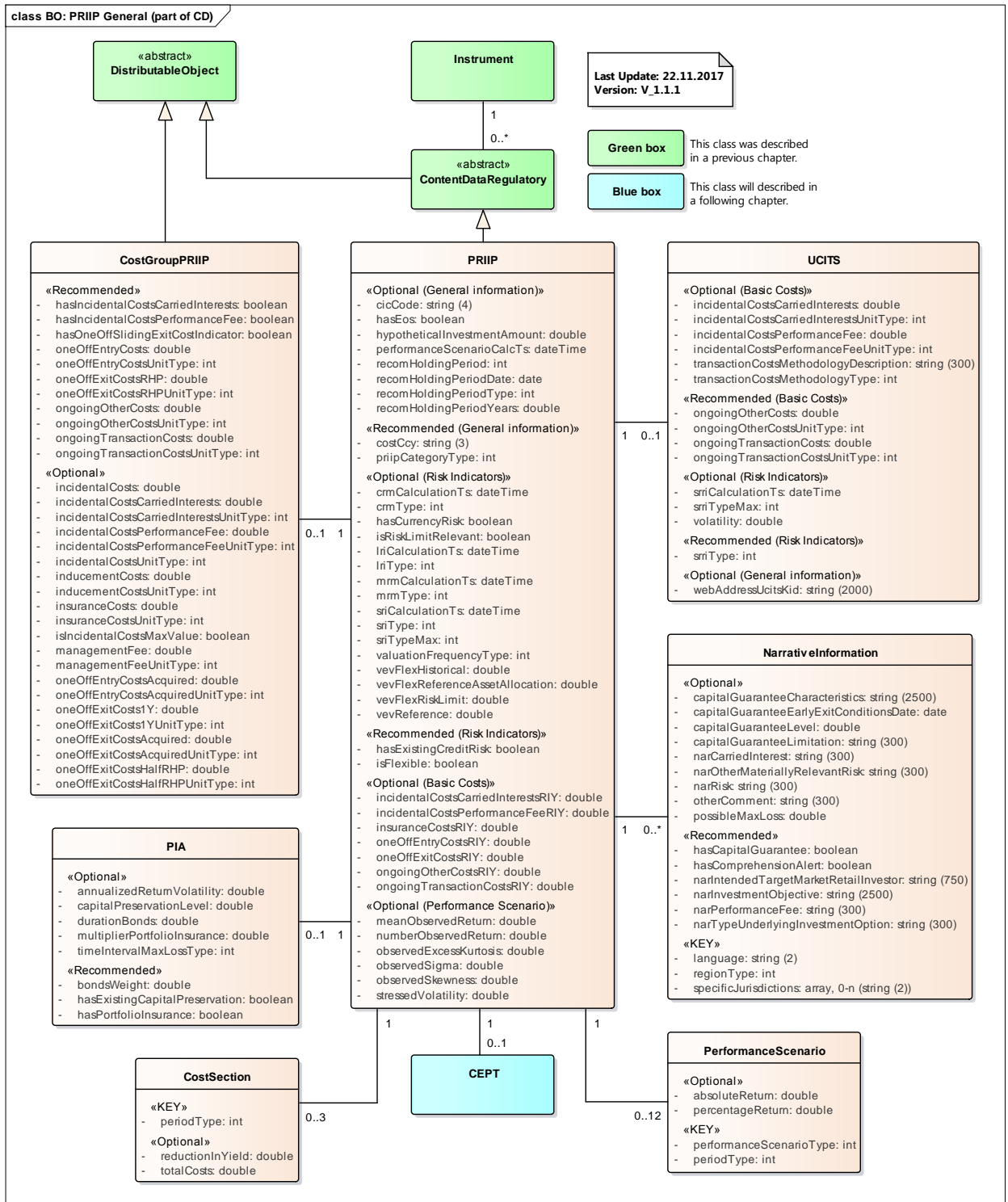


Figure 6: Business Object: PRIIP (part of CD)

Description of the classes:

- **PRIIP:** Base class for all PRIIP information. The European PRIIPs template (EPT), which includes the minimum data necessary for manufacturers to produce a Key Information Document (KID) according to the provisions of the PRIIPs Regulation.
- **UCITS:** UCITS (Undertakings for Collective Investments in Transferable Securities) is a consolidated EU Directive, that allows collective investment schemes to operate freely throughout the EU based on a single authorization from one-member state. UCITS KIIDs are planned to run parallel with the PRIIP KIIDs till 2019. After which time UCITS KIIDs may fall under the obligations of PRIIP KIIDs and be replaced by PRIIPs. Certain UCITS (or AIFs) get packaged and become part of a PRIIP relevant instrument. Therefore, in certain cases UCITS (or AIFs) attributes are also distributed as part of PRIIP data.
- **NarrativeInformations:** Fund managers are expected to provide narrative information that fulfils the PRIIPs KID requirements. The narrative information is used to describe in more detail the PRIIP KID elements like “target market”, “portfolio risk” and “other materially relevant risk factors” in plain language.
- **PerformanceScenario:** Performance scenario strives to provide an encompassing performance assessment of the relevant financial instrument. It considers the absolute and percentage changes to the investment amount during different holding periods reflecting various positive, negative and very negative investment scenarios.
- **CostSection:** CostSection is based on a moderate performance scenario, using the same holding periods as in the performance scenarios. It includes in one single figure “RIY” one-off, recurring and incidental costs, direct and indirect transaction costs and if relevant exit penalties.
- **PIA:** The German Category IV PRIIPs segment of the PRIIP KID is used to measure and quantify the sensitivity of a bond portfolio to changes in its constituent parts. This is done based on variables describing the characteristics of a portfolio and the degree of capital preservation.
- **CostGroupPRIIP:** CostGroupPRIIP are cost classes in RegHub, which can be entitled separately. Cost classes, which can be entitled separately. CostGroupPRIIP provides a full breakdown of direct, indirect, one-off, recurring, insurance and incidental costs. It is important to note that ex-ante cost figures are based on the past and thus may change in the future.

| Attribute Name | Data Type | Condition | Description and Rule |
|--|------------|---------------------|--|
| PRIIP: | | | |
| Group: General information (Recommended) | | | |
| costCcy | string (3) | Recommended (PRIIP) | Currency code related to provided costs and to the “Hypothetical Investment Amount” (ISO 4217). |
| priipCategoryType | int | Recommended (PRIIP) | The attribute “ PRIIPS Category Type ” describes the “PRIIPS Category” of the instrument. |
| Group: Additional Client Needs information (Optional) | | | |
| cicCode | string (4) | Optional | Complementary Identification Code (CIC). |
| hasEos | boolean | Optional | Indicator whether the portfolio targets specific environmental or social objectives. |
| hypotheticalInvestmentAmount | double | Optional | “Hypothetical Investment Amount” used to calculate performance scenarios and disclose costs over time. |
| performanceScenarioCalculations | dateTime | Optional | This attribute contains the timestamp on which the performance scenarios were calculated. |
| recomHoldingPeriod | int | Optional | In case the “Recommended Holding Period” is not a fixed date, but rather a time period (e.g. for open end products). This field expresses the number of time units (in units as provided in field “recomHoldingPeriodType”). |
| recomHoldingPeriodDate | date | Optional | “Recommended Holding Period Date” for a product. |
| recomHoldingPeriodType | int | Optional | The attribute “Recommended Holding Period Type” describes the unit (“ Time Period Type ”) which together with the number of time units expresses the time period. |
| recomHoldingPeriodYears | double | Optional | In case the “Recommended Holding Period in Years” is not a fixed date, but rather a time period (e.g. for open end products). This field expresses the Recommended Holding Period in Years and can be expressed as a floating-point value. |

| Group: Risk Indicators (Recommended) | | | |
|---|----------|---------------------|--|
| hasExistingCreditRisk | boolean | Recommended (PRIIP) | “Existing Credit Risk” indicates whether a product has a credit risk or not. |
| isFlexible | boolean | Recommended (PRIIP) | “Flexible” indicates whether a product is flexible or not. |
| Group: Risk Indicators (Optional) | | | |
| crmCalculationTs | dateTime | Optional | Timestamp of generation of the “Credit Risk Measure (CRM) Class Type”. |
| crmType | int | Optional | “ Credit Risk Measure (CRM) Class Type ” measures the credit risk of a product based on the rules published in the PRIIP-KID regulation. |
| hasCurrencyRisk | boolean | Optional | “Currency Risk Flag” indicates whether a product is considered having a currency risk. |
| isRiskLimitRelevant | boolean | Optional | “Risk Limit Relevant” indicates whether a product is risk limit relevant or not. |
| lriCalculationTs | dateTime | Optional | Timestamp of generation of the “Liquidity Risk Indicator (LRI) Type”. |
| lriType | int | Optional | “ Liquidity Risk Indicator (LRI) Type ” indicates whether a product is considered liquid, illiquid or has a materially relevant liquidity risk. |
| mrmCalculationTs | dateTime | Optional | Timestamp of generation of the “Market Risk Measure (MRM) Class Type”. |
| mrmType | int | Optional | “ Market Risk Measure (MRM) Class Type ” measures the market risk of a product based on the rules published in the PRIIP-KID regulation. |
| sriCalculationTs | dateTime | Optional | Timestamp of generation of the “Summary Risk Indicator (SRI) Type”. |
| sriType | int | Optional | “ Summary Risk Indicator (SRI) Type ” measures the aggregated risk of a product as defined as the combination of market risk and credit risk. |
| sriTypeMax | int | Optional | “ Summary Risk Indicator (SRI) Type Maximum” measures the maximum aggregated risk of a product as defined as the combination of market risk and credit risk. In regards of “Multi Option Products (MOP)” this value defines the upper end of the “Multi Option Product SRI Range”. |
| valuationFrequencyType | int | Optional | The attribute “Valuation Frequency Type” is used for MRM and “Performance Scenario” calculation. This corresponds to the number of valuation days of the fund, share class or portfolio, per year (“ Periodicity Type ”). |
| vevFlexHistorical | double | Optional | This attribute represents the “VaR Equivalent Volatility (VEV)” (VaR = Value at Risk) in case of flexible behavior. This value is in percentage (100% = 100). Rule: If “isFlexible” equals “true” then → Recommended Else → Optional |
| vevFlexReferenceAssetAllocation | double | Optional | This attribute represents the “VaR Equivalent Volatility (VEV)” (VaR = Value at Risk) of the reference asset allocation. This value is in percentage (100% = 100). Rule: If “isFlexible” equals “true” then → Recommended Else → Optional |
| vevFlexRiskLimit | double | Optional | This attribute represents the “VaR Equivalent Volatility (VEV)” (VaR = Value at Risk) of the risk limit. This value is in percentage (100% = 100). Rule: If “isRiskLimitRelevant” equals “true” then → Recommended Else → Optional |
| vevReference | double | Optional | This attribute represents the “VaR Equivalent Volatility (VEV)” (VaR = Value at Risk). This value is in percentage (100% = 100). |
| Group: Basic Costs (Optional) | | | |
| incidentalCostsCarriedInter | double | Optional | This cost attribute covers the percentage value of Reduction in |

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| estsRIY | | | Yield (RIY) per year, as requested by the PRIIP KID in the "Composition of costs" table. (100% = 100). |
| incidentalCostsPerformanceFeeRIY | double | Optional | This cost attribute covers the percentage value of Reduction in Yield (RIY) per year, as requested by the PRIIP KID in the "Composition of costs" table. (100% = 100). |
| insuranceCostsRIY | double | Optional | This cost attribute covers the percentage value of Reduction in Yield (RIY) per year, as requested by the PRIIP KID in the "Composition of costs" table. (100% = 100). |
| oneOffEntryCostsRIY | double | Optional | This cost attribute covers the percentage value of Reduction in Yield (RIY) per year, as requested by the PRIIP KID in the "Composition of costs" table. (100% = 100). |
| oneOffExitCostsRIY | double | Optional | This cost attribute covers the percentage value of Reduction in Yield (RIY) per year, as requested by the PRIIP KID in the "Composition of costs" table. (100% = 100). |
| ongoingOtherCostsRIY | double | Optional | This cost attribute covers the percentage value of Reduction in Yield (RIY) per year, as requested by the PRIIP KID in the "Composition of costs" table. (100% = 100). |
| ongoingTransactionCostsRIY | double | Optional | This cost attribute covers the percentage value of Reduction in Yield (RIY) per year, as requested by the PRIIP KID in the "Composition of costs" table. (100% = 100). |
| Group: Performance Scenario (Optional) | | | |
| meanObservedReturn | double | Optional | The expected value or mean of all likely returns is also called the first-person moment. |
| numberObservedReturn | double | Optional | The count of number of observations in a given period is also called the zero-person moment. |
| observedExcessKurtosis | double | Optional | Kurtosis is a measure of the tailedness of the probability distribution of the relevant financial instrument. The kurtosis is also called the fourth standardized person moment. |
| observedSigma | double | Optional | Sigma as the second person moment is a measure that is used to quantify the amount of variation of a set of data values around the mean. A low sigma values indicates that the values of the relevant instrument tend to be close to the mean. |
| observedSkewness | double | Optional | Skewness is the measure of the asymmetry of the probability distribution of an instrument around the mean. The skewness is also called the third standardized person moment. |
| stressedVolatility | double | Optional | The value of the deviation of the instruments expected values around the mean under a very unfavorable scenario of stress. This scenario implies high sigma values. |
| UCITS: | | | |
| ongoingOtherCosts | double | Recommended (PRIIP) | All on-going costs and charges related to the management of the financial product that are deducted from the value of the financial instrument during the investment in the financial instrument. |
| ongoingOtherCostsUnitType | int | Recommended (PRIIP) | This attribute defines the used " Unit Type " to the associated cost attribute. |
| ongoingTransactionCosts | double | Recommended (PRIIP) | All costs and charges that are incurred as a result of the acquisition and disposal of investments for the product. |
| ongoingTransactionCostsUnitType | int | Recommended (PRIIP) | This attribute defines the used " Unit Type " to the associated cost attribute. |
| srriType | int | Recommended (PRIIP) | " Synthetic Risk and Reward Indicator (SRRI) Type " measures the aggregated risk of a product as defined in the UCITS regulation. |
| incidentalCostsCarriedInterests | double | Optional | Carried interest costs represent the distributions to the private equity fund, when the asset manager generates an annualized return in excess of the preferred return. |
| incidentalCostsCarriedInterestsUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| incidentalCostsPerformanceFee | double | Optional | Performance fees represent the economic benefit that accrues to the investment firm. These fees are generally only paid out when the NAV of the fund is above the level at which the performance fee was last paid. |
| incidentalCostsPerformanceFeeUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| srriCalculationTs | dateTime | Optional | Timestamp of generation of the "Synthetic Risk and Reward Indicator (SRRI)". |

| | | | |
|--|-------------------------|---------------------|---|
| srrimeTypeMax | int | Optional | “ Synthetic Risk and Reward Indicator (SRR) Type (Maximum)” measures the maximum aggregated risk of a product as defined as the as defined in the UCITS regulation. In regards of “Multi Option Products (MOP)” this value defines the upper end of the “Multi Option Product SRR Range”. |
| transactionCostsMethodologyDescription | string (300) | Optional | Textual description of the Transaction costs methodology, if textual representation is used. Rule: If “transactionCostsMethodologyType” equals “5” then → Field fillable Else → Not fillable |
| transactionCostsMethodologyType | int | Optional | The attribute “UCITS Transaction Costs Methodology Type” describes the chosen calculation methodology used to calculate the “Ongoing Transaction Costs”. |
| volatility | Double | Optional | Historical volatility corresponding to the SRR of the Valid UCITS KIID. |
| webAddressUcitsKid | string (2000) | Optional | Direct link to the UCITS KID. |
| Narrative Information: | | | |
| language | string (2) | Mandatory (Key) | This attribute describes the language of the document to which the content data is related. The values have to be according to ISO 639-1 (two letter code) . |
| regionType | int | See Rule | The attribute “ Region Type ” describes the region for which the instrument data is valid. Rule: The attribute “regionType” or “specificJurisdictions” is Mandatory (KEY) . Rule: If “specificJurisdictions” contains data → The attribute “specificJurisdictions” has the higher priority as the attribute “regionType” Else → The attribute “regionType” has the higher priority |
| specificJurisdictions | array, 0-n (string (2)) | See Rule | This attribute contains an array of specific jurisdictions in which the instrument data is valid. The values have to be according to ISO 3166-1 (two letter code) . Rule: The attribute “regionType” or “specificJurisdictions” is Mandatory (KEY) . Rule: If “specificJurisdictions” contains data → The attribute “specificJurisdictions” has the higher priority as the attribute “regionType” Else → The attribute “regionType” has the higher priority |
| hasCapitalGuarantee | boolean | Recommended (PRIIP) | “Capital Guarantee” indicates whether the instrument has a general capital guarantee or not. |
| hasComprehensionAlert | boolean | Recommended (PRIIP) | “Comprehension Alert” indicates whether a product is considered complex under PRIIP regulation. |
| narIntendedTargetMarketRetailInvestor | string (750) | Recommended (PRIIP) | This attribute provides information about the type of retail investor to whom the PRIIP is intended to be marketed. This information is meant to be used directly as narrative when producing a PRIIP KID in the section ‘What is this product?’. |
| narInvestmentObjective | string (2500) | Recommended (PRIIP) | This attribute provides information about the objectives of the PRIIP and the means for achieving those objectives. This information is meant to be used directly as narrative when producing a PRIIP KID in the section ‘What is this product?’. |
| narPerformanceFee | string (300) | Recommended (PRIIP) | This attribute defines the outperformance of the product. |
| narTypeUnderlyingInvestmentOption | string (300) | Recommended (PRIIP) | This attribute provides information about the legal form of the investment (e.g.: SICAV, OEIC, Investment Trust, FCP). |
| capitalGuaranteeCharacteristics | string (2500) | Optional | This attribute describes the characteristics of the guarantee. Rule: If “hasCapitalGuarantee” equals “true” then → Recommended |

| | | | |
|---|--------------|---------------------|--|
| | | | Else → Optional |
| capitalGuaranteeEarlyExitConditionsDate | date | Optional | This attribute defines the date before which the early exit conditions apply. Rule: If "hasCapitalGuarantee" equals "true" then → Recommended Else → Optional |
| capitalGuaranteeLevel | double | Optional | Guarantee level in percent representation (100% = 100). Rule: If "hasCapitalGuarantee" equals "true" then → Recommended Else → Optional |
| capitalGuaranteeLimitation | string (300) | Optional | This attribute describes the limitation of the guarantee. Rule: If "hasCapitalGuarantee" equals "true" then → Recommended Else → Optional |
| narCarriedInterest | string (300) | Optional | This attribute defines the narrative description of the carried interest. |
| narOtherMateriallyRelevantRisk | string (300) | Optional | This attribute provides other risks materially relevant to the PRIIP not included in the SRI. |
| narRisk | string (300) | Optional | This attribute provides an explanation of the classification of the product. |
| otherComment | string (300) | Optional | This attribute defines other comments. It shall be used only under exceptional circumstances and requires a manual review and might block automatic processing. This field is usually empty. |
| possibleMaxLoss | double | Optional | This attribute defines the possible maximum loss in percent representation (100% = 100). Rule: If "hasCapitalGuarantee" equals "true" then → Recommended Else → Optional |
| PerformanceScenario: | | | |
| performanceScenarioType | int | Mandatory (KEY) | The attribute " Performance Scenario Type " expresses the type of scenario covered with the respective Performance Scenario element. |
| periodType | int | Mandatory (KEY) | The attribute " Period Type " expresses the corresponding period for the data point in the performance scenario table. |
| absoluteReturn | double | Optional | Absolute return for the financial instrument indicated in the "costCcy" of the "Hypothetical Investment Amount". |
| percentageReturn | double | Optional | Expresses the figure of the percentage return for the financial instrument. |
| CostSection: | | | |
| periodType | int | Mandatory (KEY) | The attribute " Period Type " expresses the corresponding period for the data point in the "cost over time" table. |
| reductionInYield | double | Optional | The "Reduction in Yield" expressed in percentage (percentage per year). |
| totalCosts | double | Optional | The "Total Costs" expressed in the currency of the "costCcy". |
| PIA: | | | |
| bondsWeight | double | Recommended (PRIIP) | This attribute defines the proportion (weight) of bonds within the product measured in percentage of market value (100% = 100). |
| hasExistingCapitalPreservation | boolean | Recommended (PRIIP) | This attribute indicates whether a capital preservation method is used or not. |
| hasPortfolioInsurance | boolean | Recommended (PRIIP) | In case of capital preservation, this attribute indicates whether PI (Portfolio Insurance including CPPI Constant Proportion Portfolio Insurance) is used or not. |
| annualizedReturnVolatility | double | Optional | This attribute defines the annualized daily volatility of the product based on the last 250 trading days or, if valuation frequency is lower than daily, the volatility is based on the valuation frequency and annualized (100% = 100). Rule: |

| | | | |
|---|---------|---------------------|---|
| | | | If "bondsWeight" not equals "100" then → Recommended Else → Optional |
| capitalPreservationLevel | double | Optional | This attribute defines the capital preservation level. This is 100% minus the maximum possible loss in percentage of its market value (100% = 100). Rule: If "hasExistingCapitalPreservation" equals "true" then → Recommended Else → Optional |
| durationBonds | double | Optional | This attribute defines the asset prices weighted "Macaulay-Duration" in years of the product (100% = 100). Rule: If "bondsWeight" not equals "0" then → Recommended Else → Optional |
| multiplierPortfolioInsurance | double | Optional | This attribute defines the maximum multiplier value if PI (Portfolio Insurance including CPPI Constant Proportion Portfolio Insurance) algorithm is used (100% = 100). Rule: If "hasPortfolioInsurance" equals "true" then → Recommended Else → Optional |
| timeIntervalMaxLossType | int | Optional | This attribute defines the periodicity in which a possible loss of a capital preservation product is measured (" Periodicity Type "). Rule: If "hasExistingCapitalPreservation" equals "true" then → Recommended Else → Optional |
| CostGroupPRIIP: | | | |
| hasIncidentalCostsCarriedInterests | boolean | Recommended (PRIIP) | Indicates the availability of incidental carried interest costs. |
| hasIncidentalCostsPerformanceFee | boolean | Recommended (PRIIP) | Indicates the availability of incidental performance fees. |
| hasOneOffSlidingExitCostIndicator | boolean | Recommended (PRIIP) | A type of cost that may change according to one or several specific associated factors. |
| oneOffEntryCosts | double | Recommended (PRIIP) | The impact of the cost paid when entering an investment or the impact of the cost already included in the price. |
| oneOffEntryCostsUnitType | int | Recommended (PRIIP) | This attribute defines the used " Unit Type " to the associated cost attribute. |
| oneOffExitCostsRHP | double | Recommended (PRIIP) | All costs and charges (included in the price or in addition to the price of the financial instrument) paid to the product suppliers at the beginning or at the end of the investment in the financial instrument. |
| oneOffExitCostsRHPUnitType | int | Recommended (PRIIP) | This attribute defines the used " Unit Type " to the associated cost attribute. |
| ongoingOtherCosts | double | Recommended (PRIIP) | All on-going costs and charges related to the management of the financial product that are deducted from the value of the financial instrument during the investment in the financial instrument. |
| ongoingOtherCostsUnitType | int | Recommended (PRIIP) | This attribute defines the used " Unit Type " to the associated cost attribute. |
| ongoingTransactionCosts | double | Recommended (PRIIP) | All costs and charges that are incurred as a result of the acquisition and disposal of investments for the product. |
| ongoingTransactionCostsUnitType | int | Recommended (PRIIP) | This attribute defines the used " Unit Type " to the associated cost attribute. |
| incidentalCosts | double | Optional | Impact of average performance and carried interest fees. |
| incidentalCostsUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| incidentalCostsCarriedInterests | double | Optional | Carried interest costs represent the distributions to the private equity fund, when the asset manager generates an annualized return in excess of the preferred return. |
| incidentalCostsCarriedInterestsUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |

| | | | |
|---------------------------------------|---------|----------|---|
| incidentalCostsPerformanceFee | double | Optional | Performance fees represent the economic benefit that accrues to the investment firm. These fees are generally only paid out when the NAV of the fund is above the level at which the performance fee was last paid. |
| incidentalCostsPerformanceFeeUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| inducementCosts | double | Optional | Commissions, fees or other cash benefits as well as non-monetary benefits which are made to an investment firm or provided by such investment firm in the context of the provision of investment services or ancillary investment services. |
| inducementCostsUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| insuranceCosts | double | Optional | The impact of insurance costs. |
| insuranceCostsUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| isIncidentalCostsMaxValue | boolean | Optional | Indicates if the incidental costs value (Ex-ante) is "real" value or maximum value. |
| managementFee | double | Optional | As part of the ongoing costs, management fees include cost attributes related to the administration of the financial instrument. |
| managementFeeUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| oneOffEntryCostsAcquired | double | Optional | Subscription fees charged to any subscriber when entering into an investment or portfolio mandate which are attributable directly to the fund. |
| oneOffEntryCostsAcquiredUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| oneOffExitCosts1Y | double | Optional | All costs and charges (included in the price or in addition to the price of the financial instrument) paid to the product suppliers after 1 year. |
| oneOffExitCosts1YUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| oneOffExitCostsAcquired | double | Optional | Redemption fees charged to any subscriber when entering into an investment or portfolio mandate which are attributable directly to the fund. |
| oneOffExitCostsAcquiredUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |
| oneOffExitCostsHalfRHP | double | Optional | All costs and charges (included in the price or in addition to the price of the financial instrument) paid to the product suppliers after half RHP year. |
| oneOffExitCostsHalfRHPUnitType | int | Optional | This attribute defines the used " Unit Type " to the associated cost attribute. |

Table 9: Business Object: PRIIP (part of CD)

2.5.4. Business Object: PRIIP CEPT (part of CD)

The business object model and the listed attributes below provide an overview of PRIIP CEPT (part of CD). The explicit representation in the file format or in the services format is shown in a later chapter.

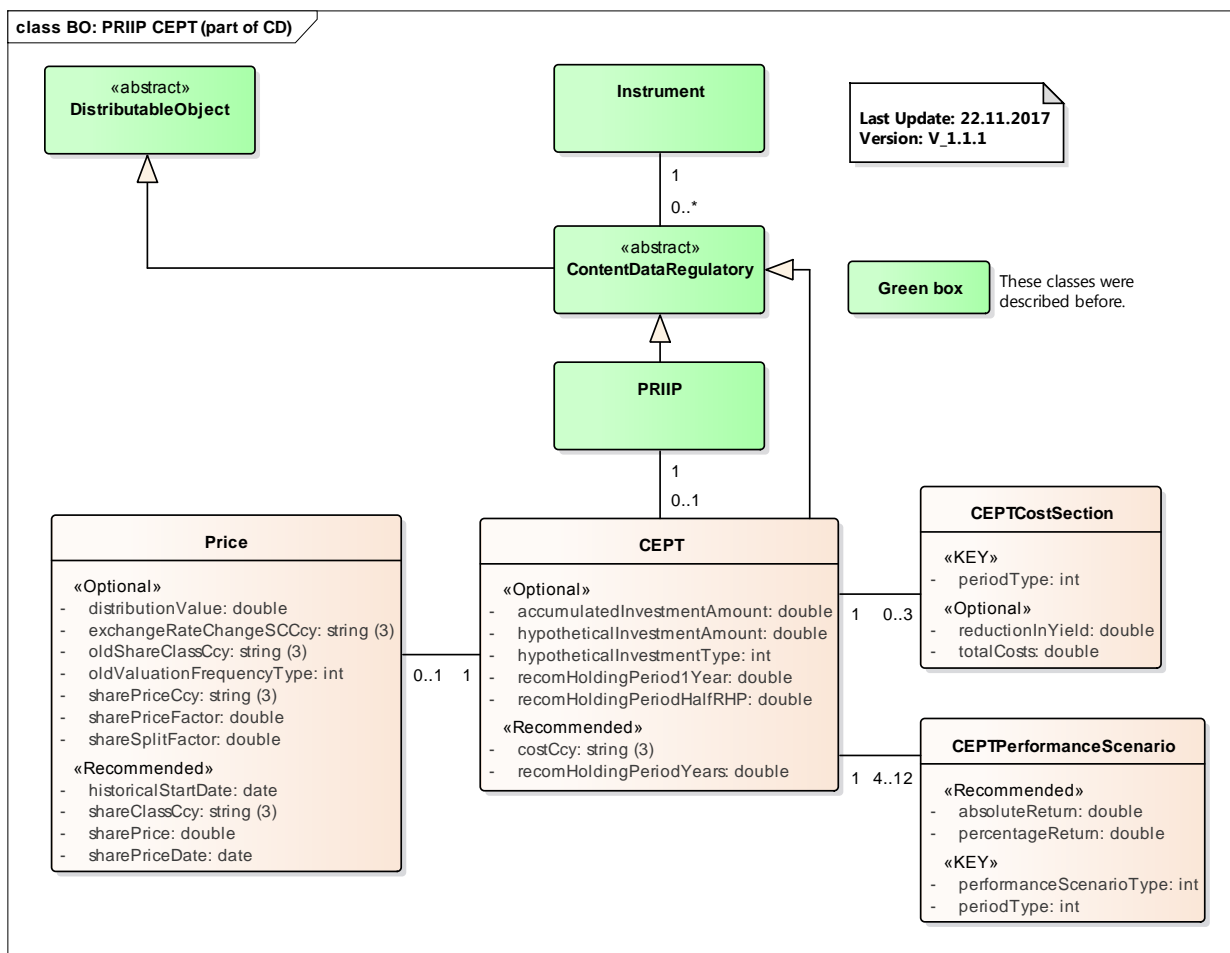


Figure 7: Business Object: PRIIP CEPT(part of CD)

Description of the classes:

- **CEPT:** The CEPT class structure can be entitled separately. The European PRIIPs template (EPT), which includes the minimum data necessary for manufacturers to produce a Key Information Document (KID) according to the provisions of the PRIIPs Regulation. Asset managers will deliver these files for free. The “Comfort” EPT (CEPT), which includes more data, so its delivery depends on ad hoc bilateral agreements between insurers and asset managers.
- **CEPTCostSection:** CostSection is based on a moderate performance scenario, using the same holding periods as in the performance scenarios. It includes in one single figure “RIY” one-off, recurring and incidental costs, direct and indirect transaction costs and if relevant exit penalties.
- **CEPTPerformanceScenario:** The CEPT performance scenario strives to provide an encompassing performance assessment of the relevant financial instrument. It considers the absolute and percentage changes to the investment amount during different holding periods reflecting various positive, negative and very negative investment scenarios.
- **Price:** The CEPT price section provides the price history of the relevant financial instrument in detail as a time series, which enables the receiver of this data to calculate the performance scenario and risk figures on its own.

| Attribute Name | Data Type | Condition | Description and Rule |
|----------------------------------|------------|--------------------|--|
| CEPT: | | | |
| costCcy | string (3) | Recommended (CEPT) | Currency code related to provided costs and to the "Hypothetical Investment Amount" (ISO 4217). |
| recomHoldingPeriodYears | double | Recommended (CEPT) | In case the "Recommended Holding Period in Years" is not a fixed date, but rather a time period (e.g. for open end products). This field expresses the Recommended Holding Period in Years and can be expressed as a floating-point value. |
| accumulatedInvestmentAmount | double | Optional | This attribute defines the accumulated investment amount. |
| hypotheticalInvestmentAmount | double | Optional | "Hypothetical Investment Amount" used to calculate performance scenarios and disclose costs over time. |
| hypotheticalInvestmentType | int | Optional | The attribute " Hypothetical Investment Type " defines the chosen investment type for the hypothetical investment amount. This indicates if recurring payments are used or a lump sum. |
| recomHoldingPeriod1Year | double | Optional | This attribute has to be set as default value 1 and only to be filled when "Recommended Holding Period in Years" of the product is ≥ 3 years. |
| recomHoldingPeriodHalfRH P | double | Optional | This attribute defines the half recommended Holding Period. The value has to be rounded up to the nearest year and has to be filled when the "Recommended Holding Period in Years" is > 3 years. |
| CEPT CostSection: | | | |
| periodType | int | Mandatory (KEY) | The attribute " Period Type " expresses the corresponding period for the data point in the "cost over time" table. |
| reductionInYield | double | Optional | The "Reduction in Yield" expressed in percentage (percentage per year). |
| totalCosts | double | Optional | The "Total Costs" expressed in the currency of the "costCcy". |
| CEPT PerformanceScenario: | | | |
| performanceScenarioType | int | Mandatory (KEY) | The attribute " Performance Scenario Type " expresses the type of scenario covered with the respective Performance Scenario element. |
| periodType | int | Mandatory (KEY) | The attribute " Period Type " expresses the corresponding period for the data point in the performance scenario table. |
| absoluteReturn | double | Recommended (CEPT) | Absolute return for the financial instrument indicated in the "costCcy" of the "Hypothetical Investment Amount". |
| percentageReturn | double | Recommended (CEPT) | Expresses the figure of the percentage return for the financial instrument. |
| Price: | | | |
| historicalStartDate | date | Recommended (CEPT) | This attribute defines the date of launch or of the last relevant revision with material investment strategy changes to the product. |
| shareClassCcy | string (3) | Recommended (CEPT) | This attribute defines the share class currency in CEPT-Prices (ISO 4217). |
| sharePrice | double | Recommended (CEPT) | This attribute defines the share price of the product. |
| sharePriceDate | date | Recommended (CEPT) | This attribute defines the date of the given share price. |
| distributionValue | double | Optional | This attribute defines the distribution value in "Share Price Currency". |
| exchangeRateChangeSCC cy | string (3) | Optional | This attribute defines the exchange rate in the occasion of a share class currency change. (Old "Share Class Currency" to current "Share Class Currency") (ISO 4217). |
| oldShareClassCcy | string (3) | Optional | This attribute defines the old share class currency in the occasion of a share class currency change (ISO 4217). |
| oldValuationFrequencyType | int | Optional | This attribute defines the old valuation frequency in the occasion of a change of the valuation frequency on the PRIIP Data (" Periodicity Type "). |
| sharePriceCcy | string (3) | Optional | This attribute defines the share price currency in the case if the share price is not delivered in the "Share Class Currency". |
| sharePriceFactor | double | Optional | This attribute defines the share price factor as combination of distribution value and share split factor in percentage (100% = 100). |
| shareSplitFactor | double | Optional | This attribute defines the share split factor in the occasion of a |

share split in percentage (100% = 100).

Table 10: Business Object: PRIIP CEPT (part of CD)

2.5.5. Business Object: Tax871m (part of CD)

The business object model and the listed attributes below provide an overview of Tax871m (part of CD). The explicit representation in the file format or in the services format is shown in a later chapter.

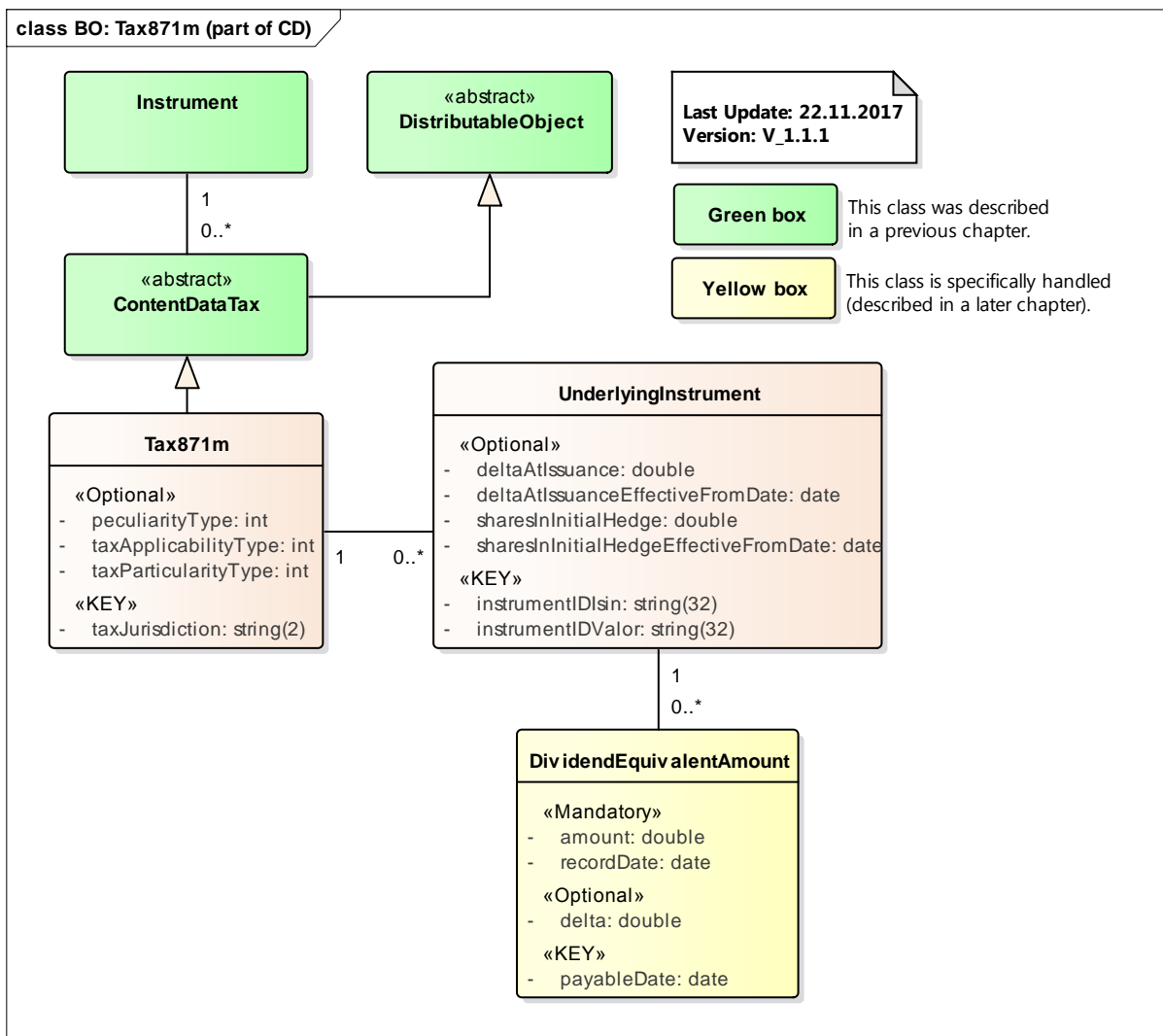


Figure 8: Business Object: Tax871m (part of CD)

Description of the classes:

- **Tax871m:** This base class covers all relevant US Section 871(m) information. The US Internal Revenue Service regulation 871(m) intends to collect tax on dividends related to instruments that are linked to US equities. The objective of IRS section 871(m) is to ensure that non-US Persons investing in equity derivatives with US-sourced Equities will be liable for 30% tax on dividend equivalent payments.
- **UnderlyingInstrument:** This class provides all the needed information of a financial instrument on which a derivative's price is based. Important data attributes are alternative instrument identifiers and for example deltas at issuance.
- **DividendEquivalentAmount:** This data class provides information regarding the dividend equivalent amounts defined in Section 871(m) of the Internal Revenue Code, which provide rules for the application of withholding tax on derivatives that reference U.S. equity securities. This class contains the full last 36 months of dividend equivalent amounts.

| Attribute Name | Data Type | Condition | Description and Rule |
|---------------------------------------|-------------|---------------------|---|
| Tax871m: | | | |
| taxJurisdiction | string (2) | Mandatory (KEY) | This attribute contains the tax related jurisdiction. The values have to be according to ISO 3166-1 (two letter code) . For Tax871m the field has to be filled always with the jurisdiction "US" . |
| peculiarityType | int | Optional | The attribute "Peculiarity Type" describes if the product is either a simple or complex contract. |
| taxApplicabilityType | int | Optional | The attribute "Tax Applicability Type" describes the 871(m)-eligibility information. |
| taxParticularityType | int | Optional | The attribute "Tax Particularity Type" describes if the issuer of the product intends to apply withholding tax at own risk. |
| UnderlyingInstrument: | | | |
| instrumentIDIsin | string (32) | See Rule | This attribute contains the "ISIN Instrument Identifier" for the underlying instrument. Rule: - "instrumentIDIsin" or "instrumentIDValor" is Mandatory (KEY) |
| instrumentIDValor | string (32) | See Rule | This attribute contains the "Swiss Valorennumber" for the underlying instrument. Rule: - "instrumentIDIsin" or "instrumentIDValor" is Mandatory (KEY) |
| deltaAtIssuance | double | Optional (See Rule) | Delta at Issuance for simple contracts. Rule: If "peculiarityType" equals "1" then → Field fillable Else → Not fillable |
| deltaAtIssuanceEffectiveFromDate | date | Optional (See Rule) | Effective Date for the value of "Delta at Issuance". Rule: If "peculiarityType" equals "1" then → Field fillable Else → Not fillable |
| sharesInInitialHedge | double | Optional (See Rule) | Number of shares in initial hedge for complex contracts. Rule: If "peculiarityType" equals "2" then → Field fillable Else → Not fillable |
| sharesInInitialHedgeEffectiveFromDate | date | Optional (See Rule) | Effective Date for the value of "Shares in Initial Hedge". Rule: If "peculiarityType" equals "2" then → Field fillable Else → Not fillable |
| DividendEquivalentAmount: | | | |
| payableDate | date | Mandatory (KEY) | Dividend Equivalent "Payable Date". |
| amount | double | Mandatory | Dividend Equivalent "Amount" in currency "USD". |
| delta | double | Optional | Information field that allows the issuer to specify the delta used for the DEA calculation at the "Dividend Equivalent Payment" event. |
| recordDate | date | Mandatory | Dividend Equivalent "Record Date". |

Table 11: Business Object: Tax871m (part of CD)

2.6. Business Object: Sales Report (SR)

The business object model and the listed attributes below provide an overview of the Sales Report (SR). The explicit representation in the file format or in the services format is shown in a later chapter.

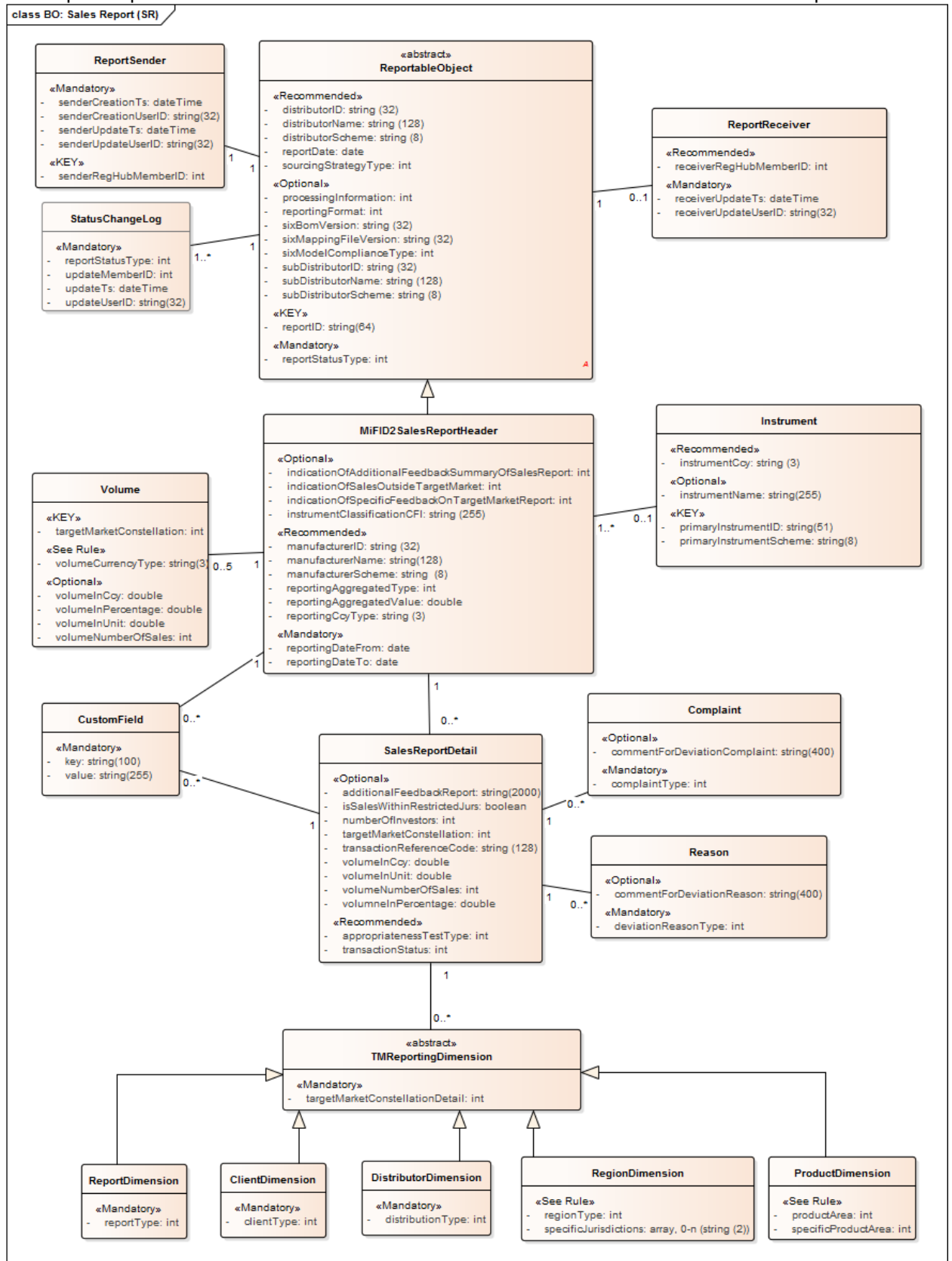


Figure 9: Business Object: Sales report (SR)

Description of the classes:

- **ReportableObject:** This class provides all the needed information to provide the Report for a defined Manufacturer. It also provides a common set of attributes which all of SR classes supports.
- **ReportSender:** The Sender of a Sales Report can be the Distributor or a Sub-Distributor. This class incorporates all the necessary information required to clearly identify the respective entity holding the role of the Sales Report Sender (Providing the data).
- **ReportReceiver:** Represents the Receiver of a Sales Report, which is the Manufacturer of a financial instrument or it can be the Main Manufacturer who collects all the reports for several branches. Sometimes manufacturers prefer to receive the sales reports via a defined Technical Agent that would hold the role of the Sales Report Receiver (Receiving the data).
- **StatusChangeLog:** Historization of each status change of the Sales Report. This object is managed by RegHub and is automatically append, when the object status is changed.
- **MiFID2SalesReportHeader:** Provides all header specific information which describes an MiFID2 Sales Report. It also describes the reporting level based on the CFI code or on financial instrument.
- **Volume: (This class is in sales report model as placeholder but it is not used currently)** Holds the relevant Volume information covered by the MiFID2 SalesReport. The volume in this class is neither aggregated nor verified with the volume provided with the SalesReportDetail.
- **Instrument:** Holds all attributes to identify the instrument of the MiFID2 Sales Report. In case of an CFI is delivered, the Sales Report can have multiple instruments, in case of regular instrument a single instrument is provided.
- **CustomField:** A dedicated object to store reporter specific annotations.
- **SalesReportDetail:** The Distributor periodically generates MiFID2 Sales Report to provide an overview of the Target Market specific generated sales volumes. The Manufacturer can provide multiple Target Market constellation.
- **Complaint:** A dedidacted object to hold the complaint types addressing performance or cost related deviations from the information disclosed in the pre-sales documents. Each complaint is stored in a dedicated complaint object.
- **Reason:** A dedicated object to hold the deviation reasons from the Manufacturer defined TargetMarket. Each deviation reason is stored in a dedicated Reason object.
- **TMReportingDimension:** The “Target Market Constellation” defines the type of the constellation of the specific dimensions (can only be used in combination of a specific dimension).
- **ReportDimension:** A dedicated Object to hold the report dimension, e.g. “outside positive TM”.
- **ClientDimension:** A dedicated Object to hold the client dimension, e.g. “retailClient”.
- **DistributionDimension:** A dedicated Object to hold the distribution dimension, e.g. “EEA”.
- **ProductDimension:** A dedicated Object to hold the product dimension, e.g. “KnowledgeAndExperience”.

| Attribute Name | Data Type | Condition | Description and Rule |
|--------------------------|------------|-----------------|---|
| ReportableObject: | | | |
| reportID | string(64) | Mandatory (KEY) | Delivers the unique “Report Identifier”, within the distributor universe (represents the business key with the ReportSender.senderRegHubMemberID). The ID is either provided by the report initiator or can be generated by the SIX RegHub. Be aware that in case the ID is generated by RegHub the ID must be used by the client consistently. |
| reportStatusType | int | Mandatory | The attribute “Report Status Type” defines the status of a report |

| Attribute Name | Data Type | Condition | Description and Rule |
|------------------------|-------------|-------------|---|
| | | | <p>record. The state "61" Report Documented identifies reports not processed by the SIX RegHub platform but documented and archived on the Six RegHub platform and send using an alternative path, e.g. paper mail.</p> <p>Rule: If RegHubReceiver is defined, the status 61 cannot be set.</p> |
| reportDate | date | Recommended | Defines creation/report date of the Sales Report |
| distributorName | string(128) | Recommended | Name of the organization which actually distributed the instrument, i.e. Distributor (If possible VDF institution long name); and is the effective source of the report (the technical sender of the report is identified by the "Sending Report RegHub Member ID", which can be distributor collecting also the reports from the sub-distributors or also an aggregation platform collecting reports of various distributors). |
| distributorScheme | string(8) | Recommended | A map of " Institution Scheme " of the organisation which actually distributed the instrument, i.e. Distributor or Sub-Distributor; and is the effective source of the report (the technical sender of the report is identified by the "Sending Report RegHub Member ID", which can be distributor collecting also the reports from the sub-distributors or also an aggregation platform collecting reports of various distributors). |
| distributorID | string(32) | Recommended | This attribute contains the identifier for the distributor of sales report. |
| subDistributorName | string(128) | Optional | Name of the "Redistributor" of the instrument (If possible VDF institution long name). In case if an indirect distribution takes place, this value can be filled to provide more transparency towards the receiver. |
| subDistributorScheme | string(8) | Optional | A map of " Institution Scheme " for the "Redistributor". In case if an indirect distribution takes place, this value can be filled to provide more transparency towards the receiver. |
| subDistributorID | string(32) | Optional | This attribute contains the identifier for the subdistributor of sales report. In case if an indirect distribution takes place, this value can be filled to provide more transparency towards the receiver. |
| sixBomVersion | string(32) | Optional | SIX RegHub produced attribute: The attribute "SIXBomVersion" contains BOM Version information. |
| sixMappingFileVersion | string(32) | Optional | SIX RegHub produced attribute. The attribute "SIX Mapping File Version" contains the mapping file information. |
| reportingFormat | int | Optional | The attribute " Reporting Format " contains the information about the type of submission chosen by distributor. |
| sixModelComplianceType | int | Optional | SIX RegHub produced attribute: The attribute "SIX Model Compliance Type" contains the information, whether the provided data fulfil the SIX data model requirements. |
| sourcingStrategyType | int | Recommended | <p>The attribute "Sourcing Strategy" indicates how the data for this record was sourced by the party who delivered this data into the SIX Regulatory Hub.</p> <p>Rule: If "sourcingStrategyType" is empty then → Default value "99" (Sourcing strategy not defined) is used Else → Transmitted value is used</p> |
| processingInformation | int | Optional | The attribute " Processing Information " holds an internal status code of the data intake, i.e. file import, processing success. |
| ReportSender: | | | |

| Attribute Name | Data Type | Condition | Description and Rule |
|------------------------|------------|----------------------|---|
| senderRegHubMemberID | int | Mandatory (KEY) | This attribute defines the sending SIX RegHub member for a "Report". The sender is identified by using the "RegHub Member Identifier". The available SIX RegHub Members and their corresponding IDs can be retrieved via the SIX RegHub GUI or API. |
| senderCreationTs | dateTime | Mandatory (readOnly) | SIX RegHub produced attribute: This attribute provides the information when the data record was initially created by the sender. |
| senderCreationUserID | string(32) | Mandatory (readOnly) | SIX RegHub produced attribute: This attribute contains the Identifier of the RegHub User who initially created the data record by the sender. |
| senderUpdateTs | dateTime | Mandatory (readOnly) | SIX RegHub produced attribute: This attribute provides the information when the data record was last updated by the sender. In case of creating a data record, this attribute has to be filled with the same value as "senderCreationTs". |
| senderUpdateUserID | string(32) | Mandatory (readOnly) | SIX RegHub produced attribute: This attribute contains the Identifier of the RegHub User who last updated of the data record by the sender. In case of creating a data record, this attribute has to be filled with the same value as "senderCreationUserID". |
| ReportReceiver: | | | |
| receiverRegHubMemberID | int | Recommended | This attribute defines the report receiving SIX RegHub member, e.g. receiver of a "MiFID 2 Sales Report". The ID is set, latest with the transition into state "2 Reported", if the report is processed, i.e. send, by the SIX RegHub Platform. Else this attribute is empty. One "Report" record can only be send to exactly one specific "Report Receiver" (and not to multiple). The available SIX RegHub Members and their corresponding IDs can be retrieved via the SIX RegHub GUI or API. |
| receiverUpdateTs | dateTime | See Rule (readOnly) | SIX RegHub produced attribute: This attribute provides the information when the data record was last updated by the receiver. Rule: If "reportStatusType" equals = "6" or equals = "7" or equals "8" then → this value is updated by RegHub if Receiver changes the status Else → No action required |
| receiverUpdateUserID | string(32) | See Rule (readOnly) | SIX RegHub produced attribute: This attribute contains the Identifier of the RegHub User who last updated of the data record by the receiver. Rule: If "reportStatusType" is equals "6" then → this value is updated by RegHub if Receiver changes the status Else → No action required |
| StatusChangeLog | | | |
| reportStatusType | int | Mandatory (readOnly) | SIX RegHub produced attribute: The attribute " Report Status Type " defines the status of a report record at the updated time. |
| updateTs | dateTime | Mandatory (readOnly) | SIX RegHub produced attribute: This attribute provides the information when the data record was last updated by the sender. In case of creating a data record, this |

| Attribute Name | Data Type | Condition | Description and Rule |
|--|-------------|----------------------|---|
| | | | attribute has to be filled with the same value as "senderCreationTs". |
| updateUserID | string(32) | Mandatory (readOnly) | SIX RegHub produced attribute: This attribute contains the Identifier of the RegHub User who initially updates the status. |
| updateMemberID | int | Mandatory (readOnly) | SIX RegHub produced attribute: This attribute contains the Identifier of the RegHub Member who updates the status. |
| MiFID2SalesReportHeader: | | | |
| instrumentClassificationCFI | string(255) | Optional | This attribute contains the classifications value of CFI. It defines and describes codes for an internationally valid system to classify financial instruments (CFI: ISO 10962). |
| manufacturerName | string(128) | Recommended | Name of the "Manufacturer" of the instrument (If possible VDF institution long name). |
| manufacturerScheme | string(8) | Recommended | A map of " Institution Scheme " and "Institution Identifiers" for the "Manufacturer". |
| manufacturerID | string(32) | Recommended | Identifier of the "Manufacturer" of the instrument. |
| reportingDateFrom | date | Mandatory | The "Reporting Date From" defines the creation date of the sales report (begin period of the lifecycle). |
| reportingDateTo | date | Mandatory | The "Reporting Date To" defines the end date of the sales report (end period of the lifecycle). |
| reportingCcyType | string(3) | Recommended | Currency Code of the "Reporting Currency" (for absolute sales volumes) (ISO 4217). Rule: If reportingAmount is not Empty then → Mandatory Else → Empty |
| reportingAggregatedType | int | Recommended | The purpose of " Reporting Aggregated Value " is providing an item of overall quantity is to allow the manufacturer to work out the proportion of sales within the NTM and/or to a wider distribution channel v overall sales of the same instrument within the relevant period. Rule: If Enum = 3 = Volume than reportingCcyType is added to Volume from attribute reportingAggregatedValue |
| reportingAggregatedValue | double | Recommended | This attribute contains information about the aggregated reporting value in currency. |
| indicationOfAdditionalFeedbackSummaryOfSalesReport | int | Optional | Distributor can indicate if there is any additional Feedback Summary of Sales Report "Indication of Additional Feedback Summary of Salesreport" |
| indicationOfSalesOutsideTargetMarket | int | Optional | Distributor can provide specific Information about Target Market "Indication of Sales Outside Target Market" |
| indicationOfSpecificFeedbackOnTargetMarketReport | int | Optional | Distributor can provide specific Information about Target Market "Indication of Specific Feedback on Target Market Report" |
| Volume: | | | |
| targetMarketConstellation | int | Mandatory | Defines the target market constellation of the volumes belong to " Target Market Constellation " |
| volumeNumberOfSales | int | Optional | The sales volume of the "MiFID 2 Sales Report" in amount of the currency, sold in the identified target market constellation |
| volumeInUnit | double | See Rule | The sales volume of the "MiFID 2 Sales Report" in units sold in the identified target market constellation Rule: At least one of the of the following must be set: volumeInAmount volumeInUnits volumeInPercentage |
| volumeInPercentage | double | See Rule | The sales volume of the "MiFID 2 Sales Report" in percentage as sold in the identified target market constellation. 100% = 100 |

| Attribute Name | Data Type | Condition | Description and Rule |
|-------------------------|-------------|-----------------|--|
| | | | <p>Rule: One of the following must be set: volumeInAmount volumeInUnits volumeInPercentage</p> |
| volumeInCcy | double | See Rule | The sales volume of the "MiFID 2 Sales Report" in amount of given currency. |
| | | | <p>Rule: One of the following must be set: volumeInAmount volumeInUnits volumeInPercentage</p> |
| volumeCurrencyType | string(3) | See Rule | Currency Code of the "Reporting Currency" (for absolute sales volumes) (ISO 4217). |
| | | | <p>Rule: If "volumeInCcy" is filled then → Mandatory Else → Not Required</p> |
| Instrument: | | | |
| primaryInstrumentScheme | string(8) | Mandatory (KEY) | This attribute contains the primary used " Instrument Scheme ". |
| | | | <p>Rule: Only the following "Instrument Scheme" are allowed: - "I", "CH", "DE", "FR", "R1", "R2", "R3", "OTC", "ETD-I" and "ETD-CH"</p> |
| primaryInstrumentID | string(51) | Mandatory (KEY) | This attribute contains the primary used "Instrument Identifier" related to the chosen primary used "Instrument Scheme". |
| | | | <p>In the case the "Primary Instrument Scheme" is filled with "OTC", the following formatting rules apply.</p> <ul style="list-style-type: none"> • Concatenated String: OTC ISIN, Bank Internal Identifier and UPI (Unique Product Identifier) • Attribute separator: "-" <p>The following three examples are possible scenarios for filling this field. The separator has always to be provided even if one of the attributes is missing/ empty.</p> <ul style="list-style-type: none"> • Example 1 (Bank Internal Identifier): Value: -123456- • Example 2 (OTC ISIN and UPI): Value: CH0012345678--123456789 • Example 3 (OTC ISIN and Bank Internal Identifier): Value: CH0012345678-123456- <p>In the case the "Primary Instrument Scheme" is filled with "ETD-CH", the "Instrument Identifier" has to be enriched with the attribute separator "-" and the attribute "Contract Side Type".</p> <ul style="list-style-type: none"> • Example 1 (CH and contract side long): Value: 94647315-1 • Example 2 (CH and contract side short): Value: 94647315-2 |
| instrumentName | string(255) | Optional | This attribute defines the "Instrument Name" of the sales report related Instrument. |
| instrumentCcy | string(3) | Recommended | Currency Code of the "Instrument Currency" (ISO 4217). |
| CostumField: | | | |
| key | string(100) | Mandatory | Defines the key of the provided information e.g. can be used for entering a free text. |
| value | string(255) | Mandatory | Distributor can provide specific Information as free text (for the defined key) |

| Attribute Name | Data Type | Condition | Description and Rule |
|------------------------------|--------------|-------------|---|
| SalesReportDetail: | | | |
| targetMarketConstellation | int | Optional | Defines the target market constellation of the volumes belong to " Target Market Constellation " |
| volumeNumberOfSales | int | Optional | The sales volume of the "MiFID 2 Sales Report" in numbers of trades (e.g. to separate investors) sold in the identified constellation. 200 = 200 Trades Rule: At least one of the following must be set: volumeInAmount volumeInUnits volumeInPercentage volumeInNumberOfSales |
| volumeInUnit | double | Optional | The sales volume of the "MiFID 2 Sales Report" in Units sold in the identified constellation. 10 = 10 Units (e.g. shared) Rule: At least one of the following must be set: volumeInAmount volumeInUnits volumeInPercentage volumeInNumberOfSales |
| volumeInCcy | double | Optional | The sales volume of the "MiFID 2 Sales Report" in currency sold in the identified constellation. 10000 = 10000 EUR Rule: At least one of the following must be set: volumeInAmount volumeInUnits volumeInPercentage volumeInNumberOfSales |
| volumeInPercentage | double | Optional | The sales volume of the "MiFID 2 Sales Report" in percentage sold in the identified constellation. 100% = 100 Rule: At least one of the following must be set: volumeInAmount volumeInUnits volumeInPercentage volumeInNumberOfSales |
| numberOfInvestors | int | Optional | This attributes contains the details behind the "aggregatedDataValue" attribute in "MiFID1SalesReportHeader"-Object |
| transactionReferenceCode | string(128) | Optional | Reference Code used to identify the transaction |
| transactionStatus | int | Recommended | The attribute " Transaction status " indicates if sales were made in "Negative Target Market" or "Negative Distribution Channel" |
| additionalFeedbackReport | string(2000) | Optional | This field can be used in case "MiFID 2 Sales Report" is not transmitted in structured but in unstructured form (i.e. free text). |
| isSalesWithinRestrictedJurs | boolean | Optional | The "Sales within Restricted Jurisdictions" gives an indication in this case the sales happened within a jurisdiction which is restricted or not. |
| appropriatenessTestType | int | Optional | The " Appropriateness Test Type " informs about the result of the appropriateness test |
| Complaint: | | | |
| complaintType | int | Mandatory | The " Complaint Type " defines the type of the related complaint. |
| commentForDeviationComplaint | string(400) | Optional | This attribute defines the textual of the " Comment for deviation complaint " 99 (= "other"). |

| Attribute Name | Data Type | Condition | Description and Rule |
|---------------------------------|--------------------------|-----------|---|
| | | | Rule: If "deviationReasonType" equals "99" then → Field fillable Else → Not fillable |
| Reason: | | | |
| deviationReasonType | int | Mandatory | The " Deviation Reason Type " defines the type of the related deviation reason. |
| commentForDeviationReason | string(400) | Optional | This attribute defines the textual of the " Comment for deviation reason " 99 (= other). Rule: If "deviationReasonType" equals "99" then → Field fillable Else -> Not fillable |
| TMReportingDimension: | | | |
| targetMarketConstellationDetail | int | Mandatory | The " Target Market Constellation Details " allows to define the specific constellation of a sales. E.g. it allows to report on a specific volume AND communicate the constellation of the sales (constellation in the meaning of client-type/ distributor type / product in the context of Target Market). <u>Use Cases</u> 1) It allows to define which client type, distribution type or product aspect was outside the defined target market 2) In certain cases probably only one parameter (e.g. distribution) was outside target market. In this case the distributor may still wish to give information about the client type, even this was within the defined Target Market 3) Maybe the whole constellation of the sales was within the target market, but the distributor got a complaint. In this case he may still want to report the constellation (client type, distribution type) of the sales. |
| ReportDimension: | | | |
| reportType | int | Mandatory | The " Report Type " defines to which client type this "Outside Target Market" sales were made. Remark: Maybe the "ReportType" itself is within the "Target Market" (as defined by the manufacturer). |
| ClientDimension: | | | |
| clientType | int | Mandatory | The " Client Type " defines to which client type this "Outside Target Market" sales were made. Remark: Maybe the "Client Type" itself is within the "Target Market" (as defined by the manufacturer). (business comment: As soon as Either Client type or Distribution type is not equal "98" (not broken down), this is high level report. Otherwise this is specific/detailed report) |
| DistributorDimension: | | | |
| distributionType | int | Mandatory | The " Distribution Type " defines via which distribution channel this "Outside Target Market" sales were made. Remark: Maybe the "Distribution Type" channel itself is within the target market (as defined by the manufacturer). (business comment: As soon as Either Client type or Distribution type is not equal "98" (not broken down), this is high level report. Otherwise this is specific/detailed report). |
| RegionDimension: | | | |
| specificJurisdictions | array 0-n (string(2)) | See Rule | This attribute contains an array of specific jurisdictions in which the Document metadata is valid. The values have to be according |

| Attribute Name | Data Type | Condition | Description and Rule |
|--------------------------|-----------|-----------|---|
| | | | to ISO 3166-1 (two letter code). Rule: The attribute "regionType" or "specificJurisdictions" is Mandatory (KEY) . Rule: If "specificJurisdictions" contains data → The attribute "specificJurisdictions" has the higher priority as the attribute "regionType" Else → The attribute "regionType" has the higher priority |
| regionType | int | See Rule | The attribute " Region Type " describes the region for which the instrument data is valid. Rule: The attribute "regionType" or "specificJurisdictions" is Mandatory (KEY) . Rule: If "specificJurisdictions" contains data → The attribute "specificJurisdictions" has the higher priority as the attribute "regionType" Else → The attribute "regionType" has the higher priority |
| ProductDimension: | | | |
| productArea | int | Mandatory | Distributor can define the related " Product Area " on the Sales Report |
| specificProductArea | int | Mandatory | Distributor can define the related " Specific Product Area " on the Sales Report |

Table 12: Sales report (SR) attributes

2.7. Utility Objects

This chapter describes all utility classes. A utility object does not belong to the actual business objects but they serve several additional information along the main business objects.

2.7.1. SIX RegHub Member

The utility object model and the listed attributes below provide an overview of the SIX RegHub Member object. The explicit representation in the services format is shown in a later chapter.

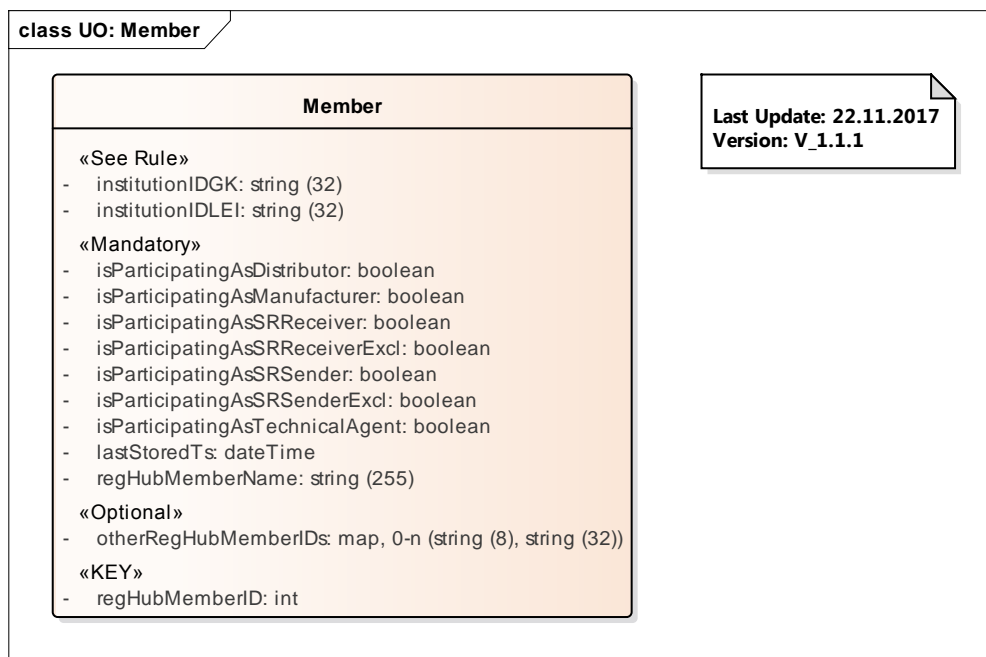


Figure 10: Utility Object: SIX RegHub Member

Description of the class:

- **Member:** This class provides an overview of all legal entity which uses the SIX RegHub. In addition to the “SIX RegHub Member Identifier” and the “SIX RegHub Member Name” all functions are displayed that a SIX RegHub Member uses. This overview is important to see for example who wants to receive a SalesReport via the SIX RegHub.

| Attribute Name | Data Type | Condition | Description and Rule |
|---------------------------------|-----------|-----------------|--|
| Member: | | | |
| regHubMemberID | int | Mandatory (KEY) | This attribute contains the “RegHub Member ID” (five-digit number, e.g. “12345”). This RegHub internal identifier is used for adding members to entitlement channels for content data or submitting “MiFID 2 Sales Reports” to a receiving member. |
| isParticipatingAsDistributor | boolean | Mandatory | This attribute defines if the member is participating as a “Distributor” to SIX RegHub. |
| isParticipatingAsManufacturer | boolean | Mandatory | This attribute defines if the member is participating as a “Manufacturer” to SIX RegHub. |
| isParticipatingAsSRReceiver | boolean | Mandatory | This attribute defines if the member is participating as a “Receiver” of “MiFID 2 Sales Reports” to SIX RegHub. |
| isParticipatingAsSRReceiverExcl | boolean | Mandatory | This attribute defines if the member is participating exclusively as a “Receiver” of “MiFID 2 Sales Reports” to SIX RegHub. |
| isParticipatingAsSRSEnder | boolean | Mandatory | This attribute defines if the member is participating as a “Sender” of “MiFID 2 Sales Reports” to SIX RegHub. |

| | | | |
|---------------------------------|------------------------------------|-----------|--|
| isParticipatingAsSRSEncl | boolean | Mandatory | This attribute defines if the member is participating exclusively as a "Sender" of "MiFID 2 Sales Reports" to SIX RegHub. |
| isParticipatingAsTechnicalAgent | boolean | Mandatory | This attribute defines if the member is participating as a "Technical Agent" to SIX RegHub. |
| lastStoredTs | dateTime | Mandatory | SIX RegHub produced attribute: This attribute provides the information when the data record was stored in SIX RegHub. |
| regHubMemberName | string (255) | Mandatory | This attribute contains the "RegHub Member Name". |
| institutionIDGK | string (32) | See Rule | This attribute contains the "RegHub Member's Institutions ID" for the "Institution Scheme GK". Rule: - "institutionIDGK" or "institutionIDLEI" is Mandatory |
| institutionIDLEI | string (32) | See Rule | This attribute contains the "RegHub Member's Institutions ID" for the "Institution Scheme LEI". Rule: - "institutionIDGK" or "institutionIDLEI" is Mandatory |
| otherInstitutionIDs | map, 0-n (string (8), string (32)) | Optional | A map of " Institution Scheme " and "Institution Identifiers" for the "RegHub Member". |

Table 13: Utility Object: SIX RegHub Member

2.8. Definitions for scheme fields (general)

This chapter describes the schema fields across the whole Business Objects.

2.8.1. Institution Scheme

| Scheme Name | Description |
|-------------------------------|---|
| Institution Scheme string (8) | BIC = Bank Identifier Code (ISO 9362) CIF = Spanish Fiscal Identification Code CVR = Danish CVR Number GK = SIX Internal Institution ID (Gesellschafts-Key) LEI = Legal Entity Identifier (ISO 17442) MDY = Moody's Institution Identification RCS = French Register Number S&P = Standard&Poor's Institution Identification UIC = Italian Issuer Identification Number UKCN = UK Company Number VP = VP Issuer ID |

Table 14: Institution Scheme

2.8.2. Instrument Scheme

| Scheme Name | Description |
|------------------------------|---|
| Instrument Scheme string (8) | I- = ISIN CH = Swiss Valorennumber DE = German NSIN (WKN) GB = SEDOL (1.) US = CUSIP (2.) FR = Euroclear France R1 = Supplier specific 1 R2 = Supplier specific 2 R3 = SIX DocGen OTC (e.g. unique product Identifier of Manufacturer) OTC = Composite OTC Identifier ETD-I = ISIN hyphen " Contract Side Type " (3.) ETD-CH = Swiss Valorennumber hyphen " Contract Side Type " (3.) ETD-All = All (Alternative Instrument Identifier) hyphen " Contract Side Type " (3.) |

Table 15: Instrument Scheme

Here are the explanations to the numbers listed above:

- SEDOL:** For a Distributor, the "Instrument Scheme" SEDOL requires a data license. Otherwise SIX is not allowed to distribute this "Instrument Scheme" and the "Instrument ID" in a machinable readable way (via file delivery or via REST services). If the data license is not available, the "Instrument Scheme" SEDOL and the "Instrument ID" are filtered out of the answer.
- CUSIP:** For a Distributor, the "Instrument Scheme" CUSIP requires a data license. Otherwise SIX is not allowed to distribute this "Instrument Scheme" and the "Instrument ID" in a machinable readable way (via file delivery or via REST services). Because the US-ISINs consists from the CUSIP, the US ISINs (ISIN begins with: US, CA, AN, KY, VG, BM and BS) fall under the same data license and are treated the same. If the data license is not available, the "Instrument Scheme" CUSIP and the below described ISINs and the "Instrument ID" are filtered out of the answer.
- ETD-***: The Derivative Exchanges will provide aggregated KIDs for the buy-side (long) and the sell-side (short). Besides the related Content data e.g. Target Market data can be different depending on if the investor buys or sells an ETD (Exchange traded derivatives) contract. As a consequence a new ETD identifier has to be introduced to uniquely identify the KID and the Content data which is related to the buy and the sell-side.
The ETD identifier is a combination of an unique instrument identifier (e.g. ISIN, Swiss Valorennumber, etc.), a hyphen and a unique "[Contract Side Type](#)" (1=long/ 2=short).

2.9. Enumeration definitions for type fields (general)

This chapter describes the enumerations fields across the whole Business Objects.

2.9.1. Contract Side Type

| Scheme Name | Description |
|--------------------|---------------------------------|
| Contract Side Type | 1 = Buyer (long) |
| | 2 = Seller/ Underwriter (short) |

Table 16: Contract Side Type

2.9.2. ETD Product Type

| Scheme Name | Description |
|------------------|-----------------|
| ETD Product Type | 1 = Option call |
| | 2 = Option put |
| | 3 = Future |

Table 17: ETD Product Type

2.9.3. Publication Classification Type

| Scheme Name | Description |
|---------------------------------|--|
| Publication Classification Type | 1 = Public publishing |
| | 2 = Closed user group (clients of the Distributor) |

Table 18: Publication Classification Type

2.9.4. Region Type

| Scheme Name | Description |
|-------------|----------------------------------|
| Region Type | 1 = EEA (European Economic Area) |
| | 2 = EU (European Union) |

Table 19: Region Type

2.9.5. SIX Model Compliance Type

| Scheme Name | Description |
|---------------------------|-------------------------|
| SIX Model Compliance Type | 1 = Partially compliant |
| | 10 = Fully compliant |

Table 20: SIX Model Compliance Type

2.9.6. Sourcing Strategy Type

| Type Name | Description |
|------------------------|--|
| Sourcing Strategy Type | 1 = Data / document is sourced directly by the manufacturer |
| | 2 = Data / document is sourced by the technical agent who is mandated by the manufacturer to generate the data or documents |
| | 3 = Data / document is sourced by a platform which is selected by the manufacturer to distribute his data and documents |
| | 4 = Data / document is sourced by a platform collecting data and documents |
| | 5 = Data / document is sourced via internet search |
| | 99 = Sourcing strategy not defined |
| | 999 = Sourcing activity stopped |

Table 21: Sourcing Strategy Type

2.10. Enumeration definitions for type fields (only for DMD)

This chapter describes the enumerations for type fields only for the Business Object Document metadata.

2.10.1. Document Type

| Type Name | Description |
|--|--|
| Document Type | Investor protection regulatory documents: |
| | 1 = PRIIP KID |
| | 2 = German PIB |
| | 3 = UCITS/ AIF (Non-UCITS) KIID |
| | 4 = Spanish Order Documents |
| | 5 = Swiss BIB |
| | 6 = Italian Scheda prodotto |
| | 7 = Multi Option Products (MOP) style: Generic including KID |
| | 8 = Multi Option Products (MOP) style: Generic plus supplements |
| | Publication and certification obligations: |
| | 101 = Prospectus |
| | 102 = Semi-annual Report |
| | 103 = Annual Report |
| | 104 = Terms of Contract |
| | 105 = Interim Report Short Form |
| | 106 = Additional Information for Investors |
| | 107 = Simplified Prospectus |
| | 108 = Product Highlight Sheet |
| | 109 = Key Fact Statement |
| | 110 = Regulations/ Fund Regulation |
| | 111 = Annual Report Short Form |
| 112 = Supplement Information Document | |
| 113 = Dividend Table | |
| 114 = Subscription Form | |
| 115 = Supplement Subscription Form | |
| 116 = Trimestrial Financial Report | |
| 117 = § 21 Abs. 1 AIFMG - Angaben | |
| 118 = Audit Report | |
| 119 = Termsheet | |
| 120 = Legal Publication | |
| Marketing material: | |
| 201 = Monthly Report | |
| 202 = Quarterly Report | |
| 203 = Manager Commentary | |
| 204 = Fund profile | |
| 205 = Sales Presentation | |
| 206 = Marketing Brochure | |
| 207 = Sales Aid | |
| 208 = Other Marketing Material | |
| 209 = Factsheet | |
| 210 = Research | |

Table 22: Document Type

2.10.2. Generation Method Type

| Type Name | Description |
|------------------------|---|
| Generation Method Type | 1 = Generated on the fly |
| | 2 = Pre-generated (intraday) |
| | 3 = Pre-generated on a daily basis only (or even more infrequently) |
| | 9999 = Unknown |

Table 23: Generation Method Type

2.10.3. MIME Type

| Type Name | Description |
|-----------|---------------------|
| MIME Type | 1 = application/pdf |

Table 24: MIME Type

2.11. Enumeration definitions for type fields (only for CD)

This chapter describes the enumerations for type fields only for the Business Object Content data.

2.11.1. Complexity Local Flavor Type

| Type Name | Description |
|------------------------------|--------------------------|
| Complexity Local Flavor Type | 1 = Complex |
| | 2 = Non-complex |
| | 3 = Very/ highly complex |

Table 25: Complexity Local Flavor Type

2.11.2. Complexity Type

| Type Name | Description |
|-----------------|-----------------|
| Complexity Type | 1 = Complex |
| | 2 = Non-complex |

Table 26: Complexity Type

2.11.3. Costs Type

| Type Name | Description |
|--|---|
| Costs Type | 1 = Incidental Costs |
| | 2 = Incidental Costs Carried Interests |
| | 3 = Incidental Costs Performance Fee |
| | 4 = Inducement Costs |
| | 5 = Management Fee |
| | 6 = One-off Entry Costs |
| | 7 = One-off Entry Costs Acquired |
| | 8 = One-off Exit Costs |
| | 9 = One-off Exit Costs 1Y |
| | 10 = One-off Exit Costs Acquired |
| | 11 = One-off Exit Costs Half RHP |
| | 12 = One-off Exit Costs RHP |
| | 13 = One-off Exit Costs Structured Securities Prior RHP |
| | 14 = One-off Exit Costs Typical |
| | 15 = Ongoing Other Costs |
| | 16 = Ongoing Transaction Costs |
| | 17 = Net One-Off Entry Costs |
| | 18 = Gearing Costs |
| | 101 = Ongoing Other Costs (Accumulated) |
| | 201 = One-off Entry Costs (Maximum) Italy |
| 202 = One-off Exit Costs (Maximum) Italy | |

Table 27: Costs Type

2.11.4. Credit Risk Measure (CRM) Class Type

| Type Name | Description |
|--------------------------------------|-------------------------------|
| Credit Risk Measure (CRM) Class Type | 1 = CR1 (Credit Risk Class 1) |
| | 2 = CR2 (Credit Risk Class 2) |
| | 3 = CR3 (Credit Risk Class 3) |
| | 4 = CR4 (Credit Risk Class 4) |
| | 5 = CR5 (Credit Risk Class 5) |
| | 6 = CR6 (Credit Risk Class 6) |

Table 28: Credit Risk Measure (CRM) Class Type

2.11.5. Distribution Strategy Type

| Type Name | Description |
|----------------------------|------------------|
| Distribution Strategy Type | 1 = Retail |
| | 2 = Professional |
| | 3 = Both |
| | 4 = Neither |

Table 29: Distribution Strategy Type

2.11.6. EMT Instrument Legal Structure Type

| Type Name | Description |
|-------------------------------------|----------------------------------|
| EMT Instrument Legal Structure Type | 1 = Structured Securities |
| | 2 = Structured Funds |
| | 3 = UCITS |
| | 4 = Non UCITS |
| | 5 = UCITS Money Market Funds |
| | 6 = Non UCITS Money Market Funds |
| | 7 = Exchange Traded Commodities |

Table 30: EMT Instrument Legal Structure Type

2.11.7. General Boolean Type

| Type Name | Description |
|----------------------|-----------------------|
| General Boolean Type | 1 = Yes |
| | 2 = No View / Neutral |

Table 31: General Boolean Type

2.11.8. Hypothetical Investment Type

| Type Name | Description |
|------------------------------|--|
| Hypothetical Investment Type | 1 = Lump Sum (LS), Single Premium (SP) |
| | 2 = Regular Premium (RP) |

Table 32: Hypothetical Investment Type

2.11.9. Lifecycle Status Type

| Type Name | Description |
|-----------------------|----------------|
| Lifecycle Status Type | 1 = Indicative |
| | 2 = Active |
| | 3 = Inactive |
| | 4 = Deleted |

Table 33: Lifecycle Status Type

2.11.10. Liquidity Risk Indicator (LRI) Type

| Type Name | Description |
|-------------------------------------|--------------------------------------|
| Liquidity Risk Indicator (LRI) Type | 1 = Material relevant liquidity risk |
| | 2 = Illiquid |
| | 3 = Liquid |

Table 34: Liquidity Risk Indicator (LRI) Type

2.11.11. Manufacturer PRIIPs Scope Indicator Type

| Type Name | Description |
|--|--------------------------------|
| Manufacturer PRIIPs Scope Indicator Type | 1 = Applicable - confirmed |
| | 2 = Not Applicable - confirmed |

Table 35: Manufacturer PRIIPs Scope Indicator Type

2.11.12. Market Risk Measure (MRM) Class Type

| Type Name | Description |
|--------------------------------------|---|
| Market Risk Measure (MRM) Class Type | 1 = MR1 (Annualized volatility < 0.5%) |
| | 2 = MR2 (Annualized volatility 0.5% - 5%) |
| | 3 = MR3 (Annualized volatility 5% - 12%) |
| | 4 = MR4 (Annualized volatility 12% - 20%) |
| | 5 = MR5 (Annualized volatility 20% - 30%) |
| | 6 = MR6 (Annualized volatility 30% - 80%) |
| | 7 = MR7 (Annualized volatility >80%) |

Table 36: Market Risk Measure (MRM) Class Type

2.11.13. Other MiFID 2 Risk Indicator Type

| Type Name | Description |
|-----------------------------------|-------------|
| Other MiFID 2 Risk Indicator Type | 2 = Low |
| | 4 = Medium |
| | 6 = High |

Table 37: Other MiFID 2 Risk Indicator Type

2.11.14. Peculiarity Type

| Type Name | Description |
|------------------|----------------------|
| Peculiarity Type | 1 = Simple contract |
| | 2 = Complex contract |

Table 38: Peculiarity Type

2.11.15. Performance Scenario Type

| Type Name | Description |
|---------------------------|-----------------|
| Performance Scenario Type | 1 = Unfavorable |
| | 2 = Moderate |
| | 3 = Favorable |
| | 4 = Stress |

Table 39: Performance Scenario Type

2.11.16. Period Type

| Type Name | Description |
|-------------|-------------|
| Period Type | 1 = 1 Year |
| | 2 = RHP/2 |
| | 3 = RHP |

Table 40: Period Type

2.11.17. Periodicity Type

| Type Name | Description |
|------------------|----------------|
| Periodicity Type | 0 = Other Than |
| | 1 = Annual |
| | 2 = Biannual |
| | 4 = Quarterly |
| | 12 = Monthly |
| | 24 = Bimonthly |
| | 52 = Weekly |
| | 104 = Biweekly |
| 252 = Daily | |

Table 41: Periodicity Type

2.11.18. PRIIPS Category Type

| Type Name | Description |
|----------------------|-----------------------|
| PRIIPS Category Type | 1 = PRIIPS Category 1 |
| | 2 = PRIIPS Category 2 |
| | 3 = PRIIPS Category 3 |
| | 4 = PRIIPS Category 4 |

Table 42: PRIIPS Category Type

2.11.19. Professional Target Market Type

| Type Name | Description |
|---------------------------------|--|
| Professional Target Market Type | 1 = Positive Target market |
| | 2 = Negative Target market |
| | 3 = Positive and Negative Target market |
| | 4 = No View/ Neutral |
| | 5 = Positive Target market for Professional Per Se |
| | 6 = Positive Target market for Elective Professional |
| | 7 = Positive Target market for Professional Per Se & Elective Professional |

Table 43: Professional Target Market Type

2.11.20. Sales Report Frequency Type

| Type Name | Description |
|-----------------------------|-----------------|
| Sales Report Frequency Type | 1 = Yearly |
| | 2 = Half-yearly |
| | 3 = Quarterly |
| | 4 = Monthly |
| | 5 = Daily |

Table 44: Sales Report Frequency Type

2.11.21. Spanish SRI Type

| Type Name | Description |
|-------------------|---|
| Distribution Type | 1 = SRISP1 (Spanish Summary Risk Indicator 1) |
| | 2 = SRISP2 (Spanish Summary Risk Indicator 2) |
| | 3 = SRISP3 (Spanish Summary Risk Indicator 3) |
| | 4 = SRISP4 (Spanish Summary Risk Indicator 4) |
| | 5 = SRISP5 (Spanish Summary Risk Indicator 5) |
| | 6 = SRISP6 (Spanish Summary Risk Indicator 6) |

Table 45: Spanish SRI Type

2.11.22. Summary Risk Indicator (SRI) Type

| Type Name | Description |
|-----------------------------------|-------------------------------------|
| Summary Risk Indicator (SRI) Type | 1 = SRI1 (Summary Risk Indicator 1) |
| | 2 = SRI2 (Summary Risk Indicator 2) |
| | 3 = SRI3 (Summary Risk Indicator 3) |
| | 4 = SRI4 (Summary Risk Indicator 4) |
| | 5 = SRI5 (Summary Risk Indicator 5) |
| | 6 = SRI6 (Summary Risk Indicator 6) |
| | 7 = SRI7 (Summary Risk Indicator 7) |

Table 46: Summary Risk Indicator (SRI) Type

2.11.23. Synthetic Risk and Reward Indicator (SRR) Type

| Type Name | Description |
|--|------------------------------|
| Synthetic Risk and Reward Indicator (SRR) Type | 1 = SRR1 1 (0% to <0,5%) |
| | 2 = SRR1 2 (≥0,5% to <2,0%) |
| | 3 = SRR1 3 (≥2,0% to <5,0%) |
| | 4 = SRR1 4 (≥5,0% to <10,0%) |

| | | |
|---|---|---------------------------|
| 5 | = | SRRI 5 (≥10,0% to <15,0%) |
| 6 | = | SRRI 6 (≥15,0% to <25,0%) |
| 7 | = | SRRI 7 (≥25,0%) |

Table 47: Synthetic Risk and Reward Indicator (SRRI) Type

2.11.24. Target Market Type

| Type Name | Description |
|--------------------|---|
| Target Market Type | 1 = Positive Target market |
| | 2 = Negative Target market |
| | 3 = Positive and Negative Target market |
| | 4 = No View/ Neutral |

Table 48: Target Market Type

2.11.25. Tax Applicability Type

| Type Name | Description |
|------------------------|--|
| Tax Applicability Type | 13 = Not applicable/ liable; confirmed |
| | 33 = In scope; confirmed |
| | 35 = Out of scope/ potentially in scope for combined transactions; confirmed |
| | 37 = Exempt qualified index; confirmed |

Table 49: Tax Applicability Type

2.11.26. Tax Particularity Type

| Type Name | Description |
|------------------------|------------------------------------|
| Tax Particularity Type | 1 = Withholding tax paid by issuer |

Table 50: Tax Particularity Type

2.11.27. Time Period Type

| Type Name | Description |
|------------------|-------------|
| Time Period Type | 1 = Year |
| | 2 = Month |
| | 3 = Week |
| | 4 = Day |

Table 51: Time Period Type

2.11.28. UCITS Transaction Costs Methodology Type

| Type Name | Description |
|--|-----------------------------|
| UCITS Transaction Costs Methodology Type | 1 = New PRIIPS methodology |
| | 2 = Full PRIIPS methodology |
| | 3 = Other methodology |
| | 4 = None |
| | 5 = Description |

Table 52: UCITS Transaction Costs Methodology Type

2.11.29. Unit Type

| Type Name | Description |
|-----------|-------------------------------|
| Unit Type | 1 = Percentage (100% = 100) |
| | 2 = Absolute in "costCcy" |
| | 9999 = Not provided by source |

Table 53: Unit Type

2.12. Enumeration definitions for type fields (only for SR)

This chapter describes the enumerations for type fields only for the Business Object Sales Report.

2.12.1. Appropriateness Test Type

| Type Name | Description |
|---------------------------|---------------------|
| Appropriateness Test Type | 1 = Passed |
| | 2 = Failed |
| | 96 = No information |
| | 98 = Not assessed |
| | 99 = Not relevant |

Table 54: Appropriateness Test Type

2.12.2. Client Type

| Type Name | Description |
|-------------|------------------------------------|
| Client Type | 1 = Retail |
| | 2 = Professional |
| | 3 = EligibleCounterparty |
| | 4 = Both (Retail and Professional) |
| | 5 = Semi-Professional |
| | 6 = Institutional |
| | 98 = Not assessed |
| | 99 = Not relevant |

Table 55: Client Type

2.12.3. Product Area

| Type Name | Description |
|------------|---|
| productrea | 1 = KnowledgeAndExperience |
| | 2 = FinancialSituationAbilityToBearLoss |
| | 3 = RiskTolerance |
| | 4 = ObjectivesAndNeeds |
| | 5 = Client Type |
| | 6 = Distribution Strategy |
| | 7 = Not within NTM |
| | 98 = Not assessed |
| | 99 = No information |

Table 56: Product Area

2.12.4. Complaint Type

| Type Name | Description |
|----------------|---|
| Complaint Type | 1 = Lower performance than disclosed in unfavorable scenario |
| | 2 = More costs than disclosed pretrade |
| | 3 = Product behavior too difficult to understand for retail investor |
| | 98 = No complaints |
| | 99 = Other (possible add free text in "Comment for complaint") |
| | 100 = Not defined |

Table 57: Complaint Type

2.12.5. Constellation Outside Target Market Type

| Type Name | Description |
|--|---|
| Constellation Outside Target Market Type | 1 = Within Negative Target Market |
| | 2 = Outside Positive Target Market |

Table 58: Constellation Outside Target Market Type

2.12.6. Deviation Reason Type

| Type Name | Description |
|-----------------------|---|
| Deviation Reason Type | 1 = Hedging |
| | 2 = Portfolio diversification |
| | 3 = Tax optimization |
| | 4 = Implementation of client portfolio strategy (investment view) |
| | 5 = Exercise of (optional) right |
| | 6 = Client order/client demand |
| | 7 = Sophistication of client |
| | 95 = Other (possible add free text in ("Comment in Deviation Reason")) |
| | 96 = No information |
| | 98 = Not assessed |
| | 99 = Not relevant |

Table 59: Deviation Reason Type

2.12.7. Distribution Type

| Type Name | Description |
|-------------------|---|
| Distribution Type | 1 = AdvisedDistribution |
| | 2 = ExecutionOnly |
| | 3 = ExecutionSpecial |
| | 4 = PortfolioManagement |
| | 5 = Execution Only – Appropriateness test failed |
| | 6 = Execution with Appropriateness |
| | 7 = Not NDC |
| | 98 = Not assessed |
| | 99 = Not relevant |

Table 60: Distribution Type

2.12.8. Report Status Type

| Type Name | Description |
|--------------------|----------------------------|
| Report Status Type | 1 = In draft (only for UI) |
| | 2 = Reported |

Table 61: Report Status Type

| Type Name | Description |
|-----------|-------------|
|-----------|-------------|

2.12.9. Reporting Unit Type

| Type Name | Description |
|---------------------|---|
| Reporting Unit Type | 1 = Percentage (100% = 100) |
| | 2 = Absolute in "reportingCcy" |
| | 3 = Unites (total number of units in purchased) |

Table 62: Reporting Unit Type

2.12.10. Comment for deviation complaint

| Type Name | Description |
|---------------------------------|---------------------|
| Comment for deviation complaint | 1 = Has Freetext |
| | 2 = Has no Freetext |

Table 63: Comment for deviation complaint

2.12.11. Comment for deviation reason

| Type Name | Description |
|------------------------------|---------------------|
| Comment for deviation reason | 1 = Has Freetext |
| | 2 = Has no Freetext |

Table 64: Comment for deviation reason

2.12.12. Report Type

| Type Name | Description |
|-------------|--|
| Report Type | 1 = Total sales |
| | 2 = Report of sales within Positive Target market |
| | 3 = Report of sales within Negative Target market |
| | 4 = Report of sales within Positive and Negative Target market |
| | 5 = Report of sales within Target market within "No View/ Neutral" |
| | 6 = Report of sales within a not assessed Target market |
| | 99 = No information |

Table 65: Report Type

2.12.13. Specific Product Area

| Type Name | Description |
|----------------------|---|
| Specific ProductArea | KnowledgeAndExperience |
| | 10 = Advanced |
| | 11 = Basics |
| | 12 = Expert Germany |
| | 13 = Informed |
| | FinancialSituationAbilityToBearLoss |
| | 20 = Capital Loss Maximum (Limited capital loss level) |
| | 21 = Fully protected capital (Clients who cannot bear capital loss) |
| | 22 = Loss of more than capital (Clients who can bear loss beyond capital) |
| | 23 = Not protected capital (Clients who cannot bear capital loss) |
| | 24 = Partially protected |
| | RiskTolerance |
| | 30 = RiskTolerance low risk |
| | 31 = RiskTolerance medium risk |
| | 32 = RiskTolerance high risk |
| | 33 = SRI |
| | 34 = SRRRI |
| | 35 = Spanisch SRI |
| | 36 = Lowest risk tolerance (Germany) |
| | ObjectivesAndNeeds |
| | 40 = Capital pureservation (return profile) |
| | 41 = Cash liquidity supply (return) |
| | 42 = Growth |
| | 43 = Hedging of capital |
| | 44 = Income |
| | 45 = Option or Leverage |
| | 46 = Others |
| | 47 = Pension Scheme Germany |
| | 48 = Retirement provision |
| | 49 = Time horizon long term |
| | 50 = Time horizon medium term |
| | 51 = Time horizon short term |
| | 52 = Time horizon very short term |
| | 53 = Time horizon recommended holding period |
| | 98 = Not assessed |
| | 99 = No information |

Table 66: Specific Product Area

2.12.14. Indication of Additional Feedback Summary of Salesreport

| Type Name | Description |
|--|---------------------------------------|
| Indication of Additional Feedback Summary of Salesreport | 1 = No specific target market details |
| | 2 = Specific target market details |
| | 99 = Not defined |

Table 67: Indication of Additional Feedback Summary of Salesreport

2.12.15. Indication of Complaint

| Type Name | Description |
|-------------------------|-------------------|
| Indication of Complaint | 1 = No Complaints |

| | | |
|----|---|-------------|
| 2 | = | Complaints |
| 99 | = | Not defined |

Table 68: Indication of Complaint

2.12.16. Indication of Sales Outside Target Market

| Type Name | Description |
|---|--|
| Indication of Sales Outside Target Market | 1 = Sales only within positive target market |
| | 2 = Sales outside positive target market |
| | 3 = Sales within negative target market |
| | 4 = Combination of cases |
| | 99 = Not defined |

Table 69: Indication of Sales Outside Target Market

2.12.17. Indication of Specific Feedback on Target Market Report

| Type Name | Description |
|---|---------------------------------------|
| Indication of Specific Feedback on Target Market Report | 1 = No specific target market details |
| | 2 = Specific target market details |
| | 99 = Not defined |

Table 70: Indication of Specific Feedback on Target Market Report

| Type Name | Description |
|-----------|-------------|
|-----------|-------------|

Table 71: Reporting Date Type

2.12.18. Region Type

| Type Name | Description |
|-------------|----------------------------------|
| Region Type | 1 = EEA (European Economic Area) |
| | 2 = EU (European Union) |

Table 72: Region Type

2.12.19. Sourcing Strategy

| Type Name | Description |
|-------------------|---|
| Sourcing Strategy | 1 = Data / document is sourced directly by the manufacturer |
| | 2 = Data / document is sourced by the technical agent who is mandated by the manufacturer to generate the data or |
| | 3 = Data / document is sourced by a platform which is selected by the manufacturer to distribute his data and documents |
| | 4 = Data / document is sourced by a platform collecting data and documents |
| | 5 = Data / document is sourced via internet search |
| | 6 = Data / documents calculated/generated by data supplier (not by manufacturer) |
| | 7 = Data / documents calculated/generated by SIX rule set (not by manufacturer) |
| | 99 = Sourcing strategy not defined |
| | 999 = Sourcing activity stopped |

Table 73: Sourcing Strategy

2.12.20. Processing Information

| Type Name | Description |
|------------------------|---|
| Processing Information | Date fields missing |
| | 1 = No date provided by sender, which would indicate when this record was created. RegHub has set the date based on when the record was received. |
| | 2 = (MIFID relevant only) No date field provided for ex-post cost start date. RegHub has set the date based on when the record was received. |
| | Basic reference data missing |
| | 20 = Data source has only delivered manufacturer name (but not LEI). Based on name (and pre-defined mapping) LEI got mapped |

Table 74: Processing Information

2.12.21. Target Market Constellation

| Type Name | Description |
|-----------------------------|--|
| Target Market Constellation | 1 = Total sales |
| | 2 = insidePositiveTargetMarket |
| | 3 = outsidePositiveTargetMarket |
| | 4 = insideNegativeTargetMarket |
| | 5 = neutral, i.e. neither inside positive nor negative target market |

Table 75: Target Market Constellation

2.12.22. Target Market Constellation Details

| Type Name | Description |
|-----------------------------|---|
| Target Market Constellation | 1 = Positive Target market |
| | 2 = Negative Target market |
| | 3 = Positive and Negative Target market |
| | 4 = No View/ Neutral |
| | 5 = Not assessed |
| | 6 = No information |

Table 76: Target Market Constellation Details

2.12.23. Reporting Format

| Type Name | Description |
|-----------------|--|
| reportingFormat | 1 = Exception reporting - Aggregate |
| | 2 = Exception reporting – Transaction Level |
| | 3 = Transaction Level Full Target Market Level |

Table 779: Reporting Format

2.12.24. Reporting Aggregated Type

| Type Name | Description |
|-------------------------|--------------|
| reportingAggregatedType | 1 = Investor |
| | 2 = Unit |
| | 3 = Volume |

Table 80: Reporting Aggregated Type

2.12.25. Transaction Status

| Type Name | Description |
|-------------------|---|
| transactionStatus | 1 = Not sold within NTM and/or NDC |
| | 2 = Sold within NTM and/or NDC as part of a diversified and/or hedged portfolio |
| | 3 = Sold within NTM and/or NDC due to disagreement with manufacturers TM assessment |
| | 4 = Sold within NTM and/or NDC due to other reasons |

Table 81: Transaction Status

2.12.26. Transaction Distribution Channel

| Type Name | Description |
|---------------------------------|--|
| transactionDistribution Channel | 1 = Execution Only |
| | 2 = Execution with Appropriateness Test - Passed |
| | 3 = Execution with Appropriateness Test - Failed |
| | 4 = Investment advice |
| | 5 = Portfolio Management |

Table 82: Transaction Distribution Channel

3. API between SIX RegHub and Manufacturers

3.1. API: Overview

3.1.1. Term definitions

| Term | Description |
|-----------------------|--|
| Full file delivery | <p>"Full file" delivery: This means that a Technical Agent (or Manufacturer) provides his complete universe of Document metadata (DMD) or Content data (CD) with all filled attributes and structures into a file.</p> <p>TBD: Normally a "Full file" is sent during the night between 00:00 to 05:00 UTC and on a daily basis. Some Technical Agents may not send the full file daily, but maybe only weekly/ monthly (e.g. if they have very static products). Supported technologies are CSV or XML and can be submitted via SFTP/ FTP or email.</p> |
| Delta file delivery | <p>"Delta file" delivery: This feature (supported for DMD as well as CD) allows a Technical Agent to submit only what has changed between "Full file" deliveries. This is typically only a small set of data.</p> <p>TBD: To correctly interpret the changes, all keys and mandatory attributes must be provided and, of course, the changed attributes themselves (for further details see following chapters where the implementation of the corresponding file technologies is described). The minimum time interval between two "Delta file" deliveries is 15 minutes.</p> <p>However, the delta delivery approach is also supported via "REST service".</p> |
| REST Service delivery | <p>TBD: This means that a Technical Agent provides his DMD and/ or CD with all keys, mandatory attributes and the changed ones via the REST API to the SIX RegHub.</p> |

Table 78: Term definitions

3.1.2. Delivery Patterns

It is a very difficult task to connect several hundreds different Technical Agents to the SIX RegHub. The reason is that everyone already has its own individual defined business processes and IT landscape run. The target is to provide a solution which can be integrated with a reasonable effort. For this reason, the SIX RegHub offers six different main "Delivery Patterns". Each of these patterns describes a possible delivery behavior of a Technical Agent.

| Pattern | Description |
|--------------------|--|
| Delivery Pattern 1 | The Technical Agent delivers always a "Full file". |
| Delivery Pattern 2 | The Technical Agent delivers one "Full file" every day, and during the day he delivers several "Delta files". |
| Delivery Pattern 3 | The Technical Agent delivers periodically a "Full file" (E.g. once per week/ month, for verification purposes) and delivers a few dozen "Delta files" per day. |
| Delivery Pattern 4 | The Technical Agent delivers one to a few dozen "Delta files" per day. He will never deliver a "Full File". |
| Delivery Pattern 5 | The Technical Agent delivers periodically a "Full file" (E.g. once per week/ month, for verification purposes) and delivers all his changes near real time via the "REST Service". |
| Delivery Pattern 6 | The Technical Agent delivers all his changes near real time via the rest "REST Service API". He will never deliver a "Full file". |

Table 79: Delivery Patterns

The pattern proposal is better explained with the help of some scenarios.

| Delivery scenario | Proposal |
|---|---|
| 1. Rare data delivery to a maximum of one | For this scenario, SIX recommends using "Delivery Pattern 1". |

| | | |
|----|--|--|
| | delivery daily. | |
| 2. | Daily data delivery. | For this scenario, SIX recommends using "Delivery Pattern 1". |
| 3. | Multiple data deliveries within one day. | For this scenario, SIX recommends using "Delivery Pattern 2" or "Delivery Pattern 3", because an additional "Full file" delivery improves the quality and the correctness of the data. The "Delivery Pattern 4" is also a valid option. |
| 4. | Nearly real-time data deliveries within one day. | For this scenario, SIX recommends using "Delivery Pattern 5", because an additional "Full file" delivery improves the quality and the correctness of the data (This makes a lot of sense if some products are changing fast (e.g. barrier reverse convertible)). However, the "Delivery Pattern 6" is also a valid option. |

Table 80: Delivery scenarios and pattern proposal

3.2. File: Overview

3.2.1. Filename convention

The filename convention is documented with the [Frontdoor Manual](#).

3.2.2. Delivery technology for files

The delivery technologies are documented with the [Frontdoor Manual](#).

3.2.3. Feedback loop

If a file is sent via SFTP/ FTP to SIX RegHub, you can subscribe for a response from the SIX RegHub, if the file was successfully uploaded (asynchronously). The subscription must be placed with your onboarding manager.

After the success message the file delivery is finished. If a file is sent via email, you will not receive any direct response from the SIX RegHub (asynchronous) (See [“explanation of the notation”](#) in the sequence diagram). Afterwards, all uploaded files will be processed (standard FIFO, “first in, first out”).

The Technical Agent has the possibility to get informed about the success or failure of each individual file processed file. This means, the Technical Agent receives an email with an extract of the logfile for each given file.

As default configuration the Technical Agent will be notified via email in case an error-event only. SIX recommends using the default setting, as otherwise an email flood is to be expected.

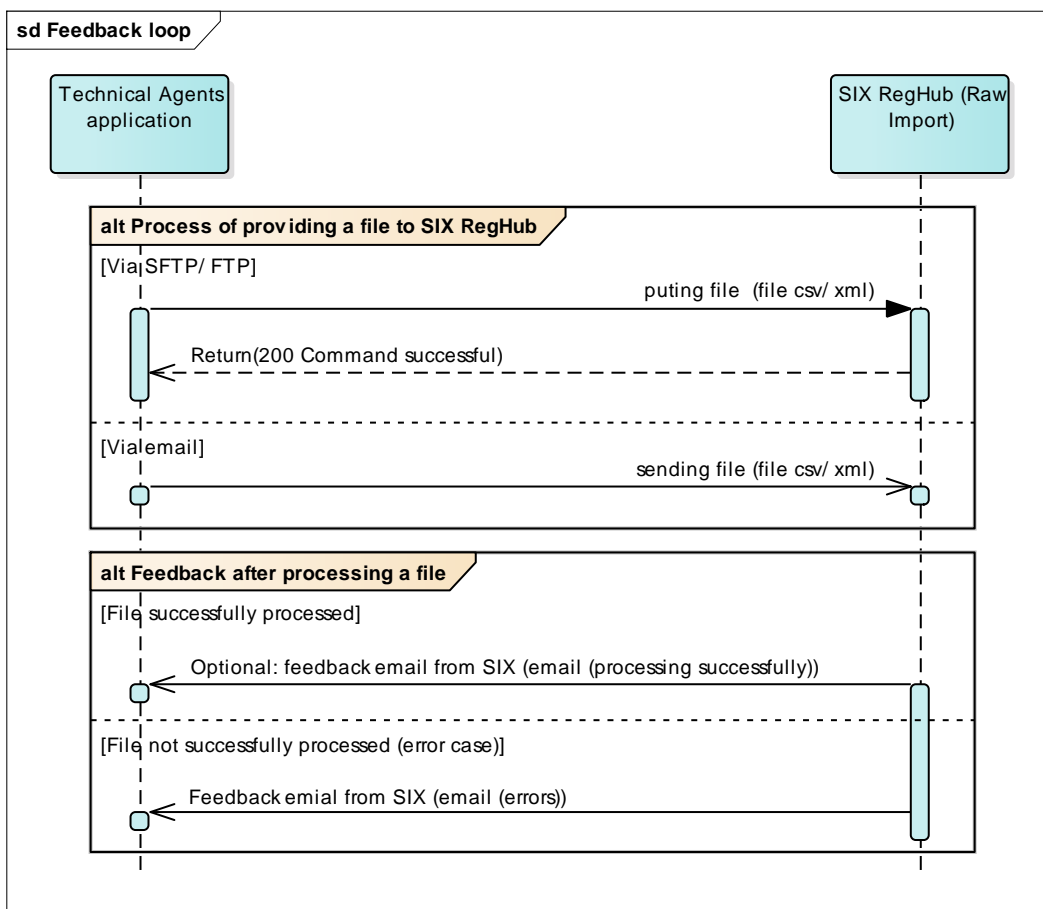


Figure 11: File: Feedback loop

3.2.4. Feedback email

This chapter describes the feedback email format, called in the previous chapter, and its structure.

Subject: “**AppName**” - “**Filename**” - “**Status**” - “**Environment**”
Sender: “**EnvironmentMail**”

Body:

Dear Ladies and Gentlemen,

You receive this email as a result of an event within the application “**AppName**”:

- File: “**Filename**”
- Start: “**StartTs**”
- End: “**EndTs**”
- Total numbers of records processed: “**TotalNoRecords**”
- Successfully imported: “**NoSuccessful**”
- Failed: “**NoError**”
- Link: “**Link**”

Thank you for your attention.

Best regards
 “**AppName**”

This is an automatically generated email, please do not reply

Figure 12: Feedback email template

| Element | Description |
|---|--|
| AppName | The name of the application which sends the status mail “ SIX RegHub ”. |
| Filename | See “ Filename convention ” described in the chapter before. |
| Status | Possible answers are: <ul style="list-style-type: none"> • processed sucessfully • processed with errors • could not be processed |
| Environment | SIX RegHub is available in three environments: <ul style="list-style-type: none"> • Prod = Production • MT2 = Membertest 2 • MT1 = Membertest 1 |
| EnvironmentMail | SIX RegHub is available in three environments with different email addresses: <ul style="list-style-type: none"> • SIX-RegHub-Input@six-financial-information.com = Production • Test2.SIX-RegHub-Input@six-financial-information.com = Membertest 2 • Test.SIX-RegHub-Input@six-financial-information.com = Membertest 1 |
| StartTs, EndTs | The timestamp will be delivered in the following format: <ul style="list-style-type: none"> • yyyy-mm-ddThh:mm:ss |
| TotalNoRecords, NoSuccessful, NoError | An integer value. In the case of a CSV File the specific row is counted. In the case of an XML file the main objects are counted. |
| Link | Providing a link with more details to download in case of an error. |

Table 81: Elements of the feedback email

Subject: SIX RegHub - 20170530_090929_CH12345_M_F_2_00001.csv - processed with errors - Prod
Sender: SIX-RegHub-Input@six-financial-information.com

Body:

Dear Ladies and Gentlemen,

You receive this email as a result of an event within the application SIX RegHub:

- File: 20170530_090929_CH12345_M_F_2_00001.csv
- Start: 2017-05-30T09:12:11
- End: 2017-05-30T09:12:59
- Total numbers of records processed: 1000
- Successfully imported: 999
- Failed: 1
- Link: <https://six-reghub.com/import/1234567890>

Thank you for your attention.

Best regards
 SIX RegHub

This is an automatically generated email, please do not reply

Figure 13: Feedback email example

3.2.5. CSV files

This chapter describes general information used for all CSV files for SIX RegHub.

| Topic | Description |
|--------------------------|---|
| Column separation | “;” semicolon. |
| Encoding | The encoding used is UTF-8 without Byte Order Mark. |
| Escape character | If a value contains line breaks (CRLF) or the column separator (e.g. comma (,) or semicolon (;)), the complete value should be enclosed in double-quotes. If in an enclosure case, the value contains double-quotes (“) each double-quote has to be prefix with a double-quote. (RFC 4180). For example: <ul style="list-style-type: none"> • No enclosure: aaa;bbb;ccc (orig. value: aaa/ bbb/ ccc) • No enclosure: a"aa;bbb;ccc (orig. value: aaa/ bbb/ ccc) • Enclosure the column separator: aaa;"b;bb";ccc (orig. value: aaa/ b;bb/ ccc) Enclosure the column separator and double-quotes: aaa;bbb; "c" "c;" "c" (orig. value: aaa/ bbb/ c" c;" c) |
| File end convention | All csv files end with the text “end” in the last row. |
| Multiple value separator | “ ” pipe. The pipe is used by the data types array and map to share the individual elements. E.g. Attribute: distributions, array, 0-n (string (5)) : 12345 67890 C0002 C0006. |

Table 82: General information for all used CSV files

Each CSV record starts with the following two mandatory attributes.

| Attribute Name | Data Type | Condition | Description and Rule |
|----------------|------------|-----------|--|
| modifier | string (1) | Mandatory | Describes the modification type of a record: <p>Full file delivery:</p> <ul style="list-style-type: none"> • S = Static: In the full file delivery, all records are marked as static. The full file delivery provides the whole universe of document metadata or content data. <p>Delta file delivery:</p> <ul style="list-style-type: none"> • I = Insert: A new record will be created. • M = Modify: Changes data in one record. From a record point of view all data in this record has to be provided. If an attribute is |

| | | | |
|------------|-----|-----------|--|
| | | | not set the interpretation will be that the value of an attribute will be delete. <ul style="list-style-type: none"> • D = Delete: Delete the complete record. In minimum all mandatory attributes has to be set. SIX recommends sending the complete filled record. |
| recordType | int | Mandatory | This attribute describes the type of a record. In the fact that classes have one-to-many relations, there is a need to build this fact in a record based structure: 1001 = InstrumentDMD 1002 = DocumentMetadata 1101 = Instrument 1110 = MiFID2 1111 = CostGroupMiFID2ExAnte 1112 = CostGroupMiFID2ExPost 1113 = TargetMarketMiFID2 1120 = PRIIP 1121 = CostGroupPRIIP 1122 = CostSection 1123 = NarrativeInformation 1124 = PerformanceScenario 1125 = PIA 1126 = UCITS 1130 = CEPT 1131 = CEPTCostSection 1132 = CEPTPerformanceScenario 1133 = Price 1140 = Tax871m 1141 = UnderlyingInstrument 1142 = DividendEquivalentAmount |

Table 83: Mandatory attributes for all CSV files

3.2.6. XML files

This chapter describes general information used for all XML files for SIX RegHub.

| Topic | Description |
|-------------------------------|---|
| Root element | Each XML document has exactly one single root element. It encloses all the other elements and is therefore the sole parent element to all others. Root element = " SIXRegHub " |
| TLO | Top Level Object: This is the main class of an object group. All further classes and elements are subordinated to the parent class. In the SIX RegHub we have the following TLOs: TLO = " Instrument " |
| XML attribute "et" | The XML attribute " Extract Type " can be set only to the TLO: <ul style="list-style-type: none"> • s = Static: In the full file delivery, all TLO's are marked as static. The full file delivery provides the whole universe of Document metadata or Content data. If the "Extract Type" is defined as static the other XML attribute "Manipulation Type" can't set. • u = Updatable: In the delta file delivery, all TLO's are marked as updatable. If the "Extract Type" is defined as updatable the XML attribute "Manipulation Type" must set. |
| XML attribute "mt" | The XML attribute " Manipulation Type " can be set only to the TLO: <ul style="list-style-type: none"> • i = Insert: A TLO will be inserted. • m = Modify: Classes or elements of a TLO will be modified. • d = Delete: A TLO will be deleted. |
| Naming convention for a class | Camel case, the first letter for classes is capitalized. |
| One to one class relation | The relation is named like the class, but begins with a lowercase letter. |
| A to many class relation | The relation is named like the class, but begins with a lowercase letter and ends with an additional character "s". |

Table 84: General information for all used XML files

Please note, that, in contrast to the CSV notation, the extract and manipulation type are in lower case.

Extract Type and Manipulation type are submitted with the TLO only. Update, delete or insert on classes and elements is processed as follows:

Modification Type “i”, i.e. insert:

- A TLO is created
- At least all mandatory classes and elements needs to be provided

Modification Type “m”, i.e. modify:

- The TLO is updated / modified
- At least all mandatory classes and elements needs to be provided
- If the value of a class / element is unchanged, the class / element will not be updated
- If a new, i.e. not submitted before, class / element is provided the new class / element is inserted
- If the value of a class / element is changed, the class / element will be updated with the new value
- If the value of a class / element is empty or not provided the class / element will be deleted

3.2.7. Modification Example: Update costGroupMiFID2ExPosts

To update, i.e. add a new CostGroupMiFID2ExPost entry, the TLO Instrument with the MiFID2 element is updated. Therefore, the mandatory attributes of the Instrument and MiFID 2 needs to be provided with the new CostGroupMiFID2ExPost record. Please note, a CostGroupMiFID2ExPost itself cannot be updated nor deleted. Any modification is a new CostGroupMiFID2ExPost record.

Example

```
<?xml version="1.0" encoding="UTF-8"?>
<SIXRegHub>
  <Instrument mt="m" et="u">
    <primaryInstrumentScheme>CH</primaryInstrumentScheme>
    <primaryInstrumentID>1234567</primaryInstrumentID>
    <primaryManufacturerScheme>LEI</primaryManufacturerScheme>
    <primaryManufacturerID>ABCDEFGHIJKLMNQRST</primaryManufacturerID>
    <primaryTechnicalAgentScheme>GK</primaryTechnicalAgentScheme>
    <primaryTechnicalAgentID>98754</primaryTechnicalAgentID>
    <supplierLastUpdateTs>2018-05-18T08:44:00+02:00</supplierLastUpdateTs>
    <MiFID2>
      <supplierLastUpdateTs>2018-05-18T08:44:00+02:00</supplierLastUpdateTs>
      <distributions>
        <distribution>22111</distribution>
        <distribution>22333</distribution>
      </distributions>
      <publicationClassificationType>2</publicationClassificationType>
      <sourcingStrategyType>1</sourcingStrategyType>
      <isReceivingSRViaSIX>1</isReceivingSRViaSIX>
      <receivingSRRegHubMemberID>22111</receivingSRRegHubMemberID>
      <oneOffEntryCosts>0.627</oneOffEntryCosts>
      <oneOffEntryCostsUnitType>1</oneOffEntryCostsUnitType>
      <costGroupMiFID2ExPosts>
        <CostGroupMiFID2ExPost>
          <supplierLastUpdateTs>2018-05-18T08:44:00+02:00</supplierLastUpdateTs>
          <distributions>
            <distribution>22111</distribution>
            <distribution>22333</distribution>
          </distributions>
          <declarationDate>2018-05-18</declarationDate>
          <exPostCostType>6</exPostCostType>
          <periodStartDate>2018-05-17</periodStartDate>
          <costUnitType>1</costUnitType>
          <costValue>0.627</costValue>
          <periodEndDate>2018-05-17</periodEndDate>
          <calculationDate>2018-05-18</calculationDate>
        </CostGroupMiFID2ExPost>
      </costGroupMiFID2ExPosts>
    </MiFID2>
  </Instrument>
</SIXRegHub>
```

3.3. REST Service Overview

The detailed JSON schemas for each service are published with the SWAGGER UI and will be provided for download on the member area.

3.3.1. SIX RegHub API versions

The SIX RegHub API provides currently one main version. See the following table for more details.

| SIX RegHub API version | Description |
|------------------------|--------------------------------------|
| v1 | Initial SIX RegHub REST API version. |

Table 85: SIX RegHub: REST API versions

3.3.2. Environments

| Topic | URL |
|---------------------------------|---|
| Production: | |
| Base URL SIX API Portal | https://api.six-group.com |
| Base URL for SIX RegHub | https://api.six-group.com/api/reghub |
| Authentication/ Identity Server | https://www.tkfweb.com/reghub/apilogin?FD_TID=175.000.200.005 |
| Member Test 2: | |
| Base URL SIX API Portal | https://api-vpd.six-group.com |
| Base URL for SIX RegHub | https://api-vpd.six-group.com/api/reghub |
| Authentication/ Identity Server | https://www.integra.tkfweb.com/reghub/apilogin?FD_TID=175.000.200.003 |
| Member Test 1: | |
| Base URL SIX API Portal | https://api-etu.six-group.com |
| Base URL for SIX RegHub | https://api-etu.six-group.com/api/reghub |
| Authentication/ Identity Server | https://www.integra.tkfweb.com/reghub/apilogin?FD_TID=175.000.200.002 |

Table 86: SIX RegHub: REST API environments

3.3.3. Authentication for SIX RegHub

This chapter describes the authentication mechanism for SIX RegHub. Customer shall use this for a machine based authenticated connection. The flow consists of three steps:

1. Authenticating end-user
2. Authenticating client application
3. Use of the SIX RegHub API

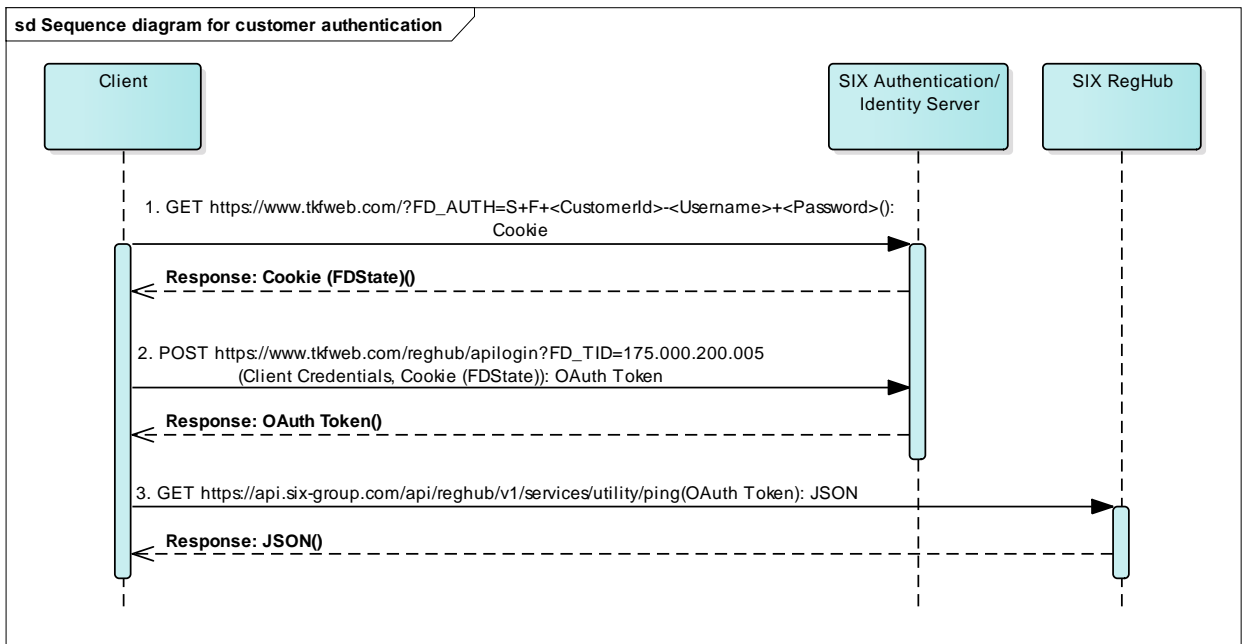


Figure 14: Authentication flow

1. Authenticating end-user:

Prior requesting an access token, the end-user must be authenticated with “FD_AUTH”. To authenticate the end-user the user’s credentials (CustomerId, Username and Password (all attributes are case sensitive)) are necessary. To request an end-user authentication a http GET request must be sent in the following schema:

- `https://www.tkfweb.com/?FD_AUTH=S+F+<CustomerId>-<Username>+<Password>`"

Example:

| | |
|---------|--|
| URI: | GET https://www.tkfweb.com/?FD_AUTH=S+F+<CustomerId>-<Username>+<Password> |
| Header: | None |
| Body: | None |

Figure 15: Detailed call: Authenticating end-user

| | |
|---------------|---|
| Response: | HTTP/1.1 200 Ok |
| Header: | |
| content-type: | text/html |
| cookie: | FDState=b64-U2VzYW11LWlhq3uBnT3FvKA3FEppay7Qt5-Hj4SltrLTQ8UzOKn-aLJ0AXTNlmLr7qpvNYrr9PnmyABg0kE8J5\$37COo0OGoh8pkXljzyx0FjIifpA-uhqsBdCUAOAgDdfmO4piGDKk9HCfb4CJiAbY9UdsvYmYiiC0eRjNu4lj3QcXV0j5Qzv5-LnXfVVOhcvcqOxTZbfq6nsncDRRN8EdiAhyvGm4-IUbbGdE\$W498sMpP\$-vu-GUndZbHz9uL8Eqa9Vd4N2lekQ7afSS7fj8OuCGC0QqSTxL0Gg2QYJ82UkRTGqOfkkdbmZG46HU= |

Figure 16: Example of the response of the call Authenticating end-user

2. Authenticating client application:

If the user authentication was successful an access_token request can be issued. The access_token request must be sent in an http POST to the SIX authorization server with the following parameters. In addition, the FDState cookie received in the preceding step must be added to the request.

| Attribute Name | Data Type | Condition | Description and Rule |
|----------------|-----------|-----------|--|
| "grant_type" | string | Mandatory | Must be set fix and afterward also the "client credentials". |
| Client_id | string | Mandatory | The client application id. |
| Client_secret | string | Mandatory | The client application secret. |

Table 87: Body attributes for the call Authenticating client application

Example:

```
URI:      POST https://www.tkfweb.com/reghub/apilogin?FD_TID=175.000.200.005
Header:   None
Body:
grant_type=client_credentials&client_id=<Client_id>&client_secret=<Client_secret>
cookie:   FDState=b64-U2VzYW11LWlhq3uBnT3FvKA3FEppay7Qt5-Hj4SItRLTQ8UzOKn-
          aLJ0AXTNImLr7qpvNYrr9PnmyABg0kE8J5$37COo0OGoh8pkXljzyx0FjlfipA-
          uhqsBdCUAOAgDdfmO4pIGDKk9HCfb4CJiAbY9UdsvYmYiiC0eRjNu4lj3QcXV0j5Qzv5-
          LnXfVV0hcvcqOxTZbfq6nsncDRRN8EdiAhyvGm4-IUbbGdE$W498sMpP$-vu-
          GUndZbHz9uL8Eqa9Vd4N2lekQ7afSS7fj8OuCGC0QqSTxL0Gg2QYJ82UkRTGqOfkkdbMZG46HU
          =
```

Figure 17: Detailed call: Authenticating client application

```
Response: HTTP/1.1 200 OK
Header:   content-type: application/json
Body:
{"access_token":"gmVwhg0Cw620q2ULBa9GQV7vqEEmu18V3Si6SJozc11RTaVKke9Shx","token_type":"Bearer",
"expires_in":3599,"scope":["resource.WRITE, resource.READ]}
```

Figure 18: Example of the response of the call Authenticating client application

3. Use of the SIX RegHub API:

After the two authentication steps we try to check the REST Service availability (“.../services/utility/ping”). When calling an SIX RegHub API service the client application sends the access token with in the http header attribute “Authorization”.

Example:

```
URI:      GET https://api.six-group.com/api/reghub/v1/services/utility/ping
Header:
authorization: Bearer gmVwhg0Cw620q2ULBa9GQV7vqEEmu18V3Si6SJozc11RTaVKke9Shx
Body:     None
```

Figure 19: Detailed call: GET /services/utility/ping

```
Response: HTTP/1.1 200 OK
Header:
content-type: application/json
Body:
{
  "result": {
    "message": "Welcome to SIX RegHub",
    "version": "0.10-SNAPSHOT"
  },
  "notifications": []
}
```

Figure 20: Example of the response of the call GET /services/utility/ping

3.3.4. Response format of the REST services

The SIX RegHub returns a structured response for all REST services. In the response header part the following two attributes are important to describe:

| Header Attributes | Description |
|-------------------|--|
| content-type | The content-type header entity is used to indicate the media type of the resource. For example: <ul style="list-style-type: none"> content-type: text/html; charset=UTF-8 content-type: application/json |
| location | Responses from a POST- or PUT-REST Service include the attribute location in the header. It indicates the URL to the newly created resource. For example: <ul style="list-style-type: none"> location: /instruments/I- /CH0012345678/LEI/888800ABCDEFGHIJKL00/LEI/12300ABCDEFKMQAKL12 |

Table 88: REST header attributes

In the response body part the JSON answer always contains the two attributes "result" and "notification".

| Header Attributes | Description |
|-------------------------------|---|
| result (as object "{ }") | The result attribute includes either a complete JSON object or an array of JSON objects. The response data of the service call can then be found in the object. |
| result (as array "[]") | The result attribute includes either a complete JSON object or an array of JSON objects. The response data of the service call can then be found in the array. |
| notification (as array "[]") | The notifications attribute always contain an array of JSON objects (0..*) One notification object contains the following two attributes <ul style="list-style-type: none"> type: A string enumeration with the values ("ERROR", "INFO", "WARNING"). message: A simple string with the length of 4096 characters. |

Table 89: REST body attributes

```

Response:    HTTP/1.1 200 OK
Header:
content-type: application/json
Body:
  {
    "result": [
      {
        "message": "The DocHub is up and ready."
      },
      {
        "message": "The DataHub is up and ready."
      }
    ],
    "notifications": []
  }
  
```

Figure 21: Response example with the attribute result as array and zero notification objects

```

Response:    HTTP/1.1 201 Created
Header:
content-type: application/json
location:    https://api.six-group.com/api/reghub/v1/instruments/I-
             /CH0012345678/LEI/888800ABCDEFGHIJKL00/GK/188935
Body:
  {
    "result": {
      "primaryKeyValues": {
        "primaryInstrumentScheme": "I-",
        "primaryInstrumentID": "CH0012345678",
        "primaryManufacturerScheme": "LEI",
        "primaryManufacturerID": "888800ABCDEFGHIJKL00",
        "primaryTechnicalAgentScheme": "GK",
      }
    }
  }
  
```

```

    "primaryTechnicalAgentID": "188935"
  },
  "notifications": [
    {
      "type": "WARNING",
      "message": "Recommended Field [/pRIIP/costCcy] is not set."
    },
    {
      "type": "WARNING",
      "message": "Recommended Field [/pRIIP/cEPT/costCcy] is not set."
    }
  ]
}

```

Figure 22: Response example with the attribute result as object and two notification objects

3.3.5. Overview of all REST API Calls

The REST API provides functions to create, update and delete the business objects mentioned in the previous chapters. The following table shows all possible REST API calls for Manufacturers. If an API call is marked as **draft** this means that this call will not be productively available.

| Resource | HTTP Method | Short Description |
|---|------------------|--|
| InstrumentDMD (Providing DMD): | | |
| /v1/instrumentdmds | GET | Search for an InstrumentDMD with various parameters including parameters for Document metadata. |
| /v1/instrumentdmds | POST | Create a new InstrumentDMD with zero or more Document metadata records. |
| /v1/instrumentdmds/{instrumentScheme}/{instrumentID}/{manufacturerScheme}/{manufacturerID}/{technicalAgentScheme}/{technicalAgentID} | DELETE | Delete an InstrumentDMD with all dependent Document metadata records. |
| /v1/instrumentdmds/{instrumentScheme}/{instrumentID}/{manufacturerScheme}/{manufacturerID}/{technicalAgentScheme}/{technicalAgentID} | GET | Get an InstrumentDMD with all dependent Document metadata records. |
| /v1/instrumentdmds/{instrumentScheme}/{instrumentID}/{manufacturerScheme}/{manufacturerID}/{technicalAgentScheme}/{technicalAgentID} | PATCH (draft) | Update an Instrument and all Content data records by providing only the changed or new attributes with all needed keys. |
| /v1/instrumentdmds/{instrumentScheme}/{instrumentID}/{manufacturerScheme}/{manufacturerID}/{technicalAgentScheme}/{technicalAgentID} | PUT | Replace an InstrumentDMD and all Document metadata records by providing the complete updated InstrumentDMD and all Content data records. |
| /v1/instrumentdmds/{instrumentScheme}/{instrumentID}/{manufacturerScheme}/{manufacturerID}/{technicalAgentScheme}/{technicalAgentID}/documentmetadatas | POST | Create one new Document metadata record under an existing InstrumentDMD. |
| /v1/instrumentdmds/{instrumentScheme}/{instrumentID}/{manufacturerScheme}/{manufacturerID}/{technicalAgentScheme}/{technicalAgentID}/documentmetadatas/{documentID} | DELETE | Delete a Document metadata record. |
| /v1/instrumentdmds/{instrumentScheme}/{instrumentID}/{manufacturerScheme}/{manufacturerID}/{technicalAgentScheme}/{technicalAgentID}/documentmetadatas/{documentID} | GET | Get a Document metadata record. |

| | | |
|---|------------------|---|
| /v1/instrumentdmds/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID}/ /documentmetadatas/{documentID} | PATCH (draft) | Update a Document metadata record by providing only the changed or new attributes with all needed keys. |
| /v1/instrumentdmds/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID}/ /documentmetadatas/{documentID} | PUT | Replace a Document metadata record by providing the complete updated Document metadata record. |
| Instrument (Providing CD): | | |
| /v1/instruments | GET | Search for an Instrument with various parameters. |
| /v1/instruments | POST | Create a new Instruments with zero or more Content data records. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID} | DELETE | Delete an Instrument with all dependent Content data records. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID} | GET | Get an Instrument with all dependent Content data records. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID} | PATCH (draft) | Update an Instrument and all Content data records by providing only the changed or new attributes with all needed keys. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID} | PUT | Replace an Instrument and all Content data records by providing the complete updated Instrument and Content data records. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID}/ (mifid2 or priip or tax871m) | DELETE | Delete the (MiFID2 or PRIIP or Tax871m) Content data record. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID}/ (mifid2 or priip or tax871m) | GET | Get the (MiFID2 or PRIIP or Tax871m) Content data record. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID}/ (mifid2 or priip or tax871m) | PATCH (draft) | Update the (MiFID2 or PRIIP or Tax871m) Content data record by providing only the changed or new attributes with all needed keys. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID}/ (mifid2 or priip or tax871m) | POST | Create the new (MiFID2 or PRIIP or Tax871m) Content data record and paste it to the given Instrument. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID}/ (mifid2 or priip or tax871m) | PUT | Replace the (MiFID2 or PRIIP or Tax871m) Content data record by providing the complete updated (MiFID2 or PRIIP or Tax871m) Content data record. |
| ExPostCosts: | | |
| /manufacturerExPostAPI/v1/exPostCosts | POST (draft) | Submit a new ExPostCost element to RegHub. The element is appended. There is no correction of an ExPostCost record This service is not yet provided and scheduled for a later release |
| /manufacturerExPostQueryAPI/v1/exPostCosts | POST (draft) | Request ExPostCosts time series for defined Instruments of the manufacturers inventory, |

| | | |
|--|-----------------|--|
| /exPostCosts/v1/reports | POST (draft) | Request for a ExPostCost report as a file. The report is defined by the provided query filter and the file type is defined by the output type definition. The service returns a processing id identifying the request. |
| Sales Report: | | |
| /v1/salesreports/receiver | GET | Get a list of all MifiDII Sales Report for the member is entitled to and where " reportStatusType " is in "7" or "8". |
| /v1/salesreports/receiver/{senderRegHubMemberID}/{reportID} | GET | Get the Sales Report with the reportId of the identified report sender, i.e. distributor member id. The sales reports needs to be visible to the receiver, if " reportStatusType " is in "7" or "8". |
| /v1/salesreports/receiver/{senderRegHubMemberID}/{reportID}/status | PUT (draft) | Update the " reportStatusType " of the Sales Report reportId of the identified report sender, i.e. distributor member id , to value "7" or "8". |
| /manufacturerSalesreportQueryAPI/v1/salesreport | POST (draft) | Request for Sales Report report. The report is defined by the provided query filter. |
| /manufacturerSalesreport/v1/salesreport | POST (draft) | Request for a SalesReport report as a file. The report is defined by the provided query filter. The service returns a processing id identifying the request. |
| Services: | | |
| /v1/services/otcisin (private) | POST (draft) | Returns an OTC ISIN from ANNA-DSB. |
| /v1/services/utility/members | GET | Get all SIX RegHub Member with various information. |
| /v1/services/utility/ping | GET | Get some information on the SIX RegHub system. Will used for checks if the system is available. |
| Services: File Services | | |
| /reportAPI/v1/reports/jobID | GET (draft) | Request the processing state of a request. The service returns the processing state and, in case of "Completed", the fileURL. The fileURL is valid for 48 hours. |
| <fileUrl> | GET (draft) | Returns the file, i.e. MIME attachment application/octet-stream |

Table 90: Overview of the SIX RegHub REST API calls for Manufacturer

3.4. API: Document metadata (DMD)

3.4.1. CSV Format: DMD (version 2)

A description of the respective data type and an implementation in the corresponding technology can be found in chapter [“Description of Data Types”](#).

The following graphic gives an overview of the records and all the attributes in the CSV file for DMD. The attributes are numbered to indicate the sequence in the CSV file. The grouping is used to show the delivery condition for each attribute.

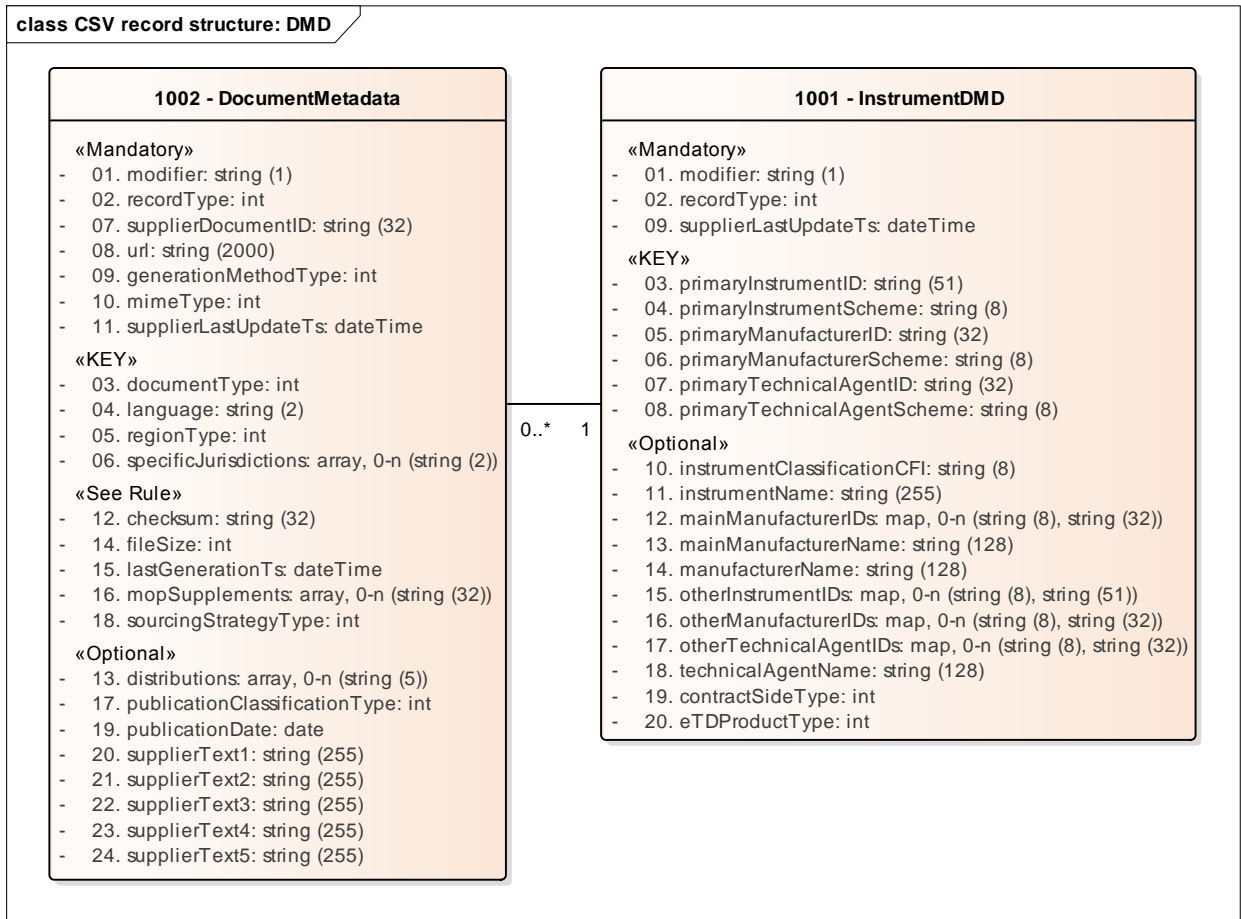


Figure 23: Overview CSV record structure for DMD

| No | Attribute Name | Example |
|-------------------------------------|-----------------------------|---------------------------|
| Record: 1001 - InstrumentDMD | | |
| 01 | modifier | I |
| 02 | recordType | 1001 |
| 03 | primaryInstrumentID | CH0012345678 |
| 04 | primaryInstrumentScheme | I- |
| 05 | primaryManufacturerID | 888800ABCDEFGHIJKL00 |
| 06 | primaryManufacturerScheme | LEI |
| 07 | primaryTechnicalAgentID | 888800ABCDEFGHIJKL00 |
| 08 | primaryTechnicalAgentScheme | LEI |
| 09 | supplierLastUpdateTs | 2017-07-16T10:00:00+02:00 |
| 10 | instrumentClassificationCFI | DB |
| 11 | instrumentName | Example Instrument |

| | | |
|--|-------------------------------|------------------------------|
| 12 | mainManufacturerIDs | GK=2211 LEI=9998811ABCDEFL00 |
| 13 | mainManufacturerName | The Main Manufacturer |
| 14 | manufacturerName | The Instrument Manufacturer |
| 15 | otherInstrumentIDs | DE=D1234567 CH=1234567 |
| 16 | otherManufacturerIDs | GK=2211 BIC=8888232 |
| 17 | otherTechnicalAgentIDs | GK=2211 BIC=8888232 |
| 18 | technicalAgentName | The Instrument Manufacturer |
| 19 | contractSideType | 1 |
| 20 | eTDPProductType | 2 |
| Record: 1002 - DocumentMetadata | | |
| 01 | modifier | 1 |
| 02 | recordType | 1002 |
| 03 | documentType | 1 |
| 04 | language | en |
| 05 | regionType | |
| 06 | specificJurisdictions | DE CH |
| 07 | supplierDocumentID | |
| 08 | url | http://test.ch/1 |
| 09 | generationMethodType | 2 |
| 10 | contentType | 1 |
| 11 | supplierLastUpdateTs | 2017-07-16T10:00:00+02:00 |
| 12 | checksum | |
| 13 | distributions | 12345 67890 C0002 C0006 |
| 14 | fileSize | |
| 15 | lastGenerationTs | |
| 16 | mopSupplements | |
| 17 | publicationClassificationType | 2 |
| 18 | sourcingStrategyType | 99 |
| 19 | publicationDate | 2017-07-17 |
| 20 | supplierText1 | Example Text 1 |
| 21 | supplierText2 | Example Text 2 |
| 22 | supplierText3 | Example Text 3 |
| 23 | supplierText4 | Example Text 4 |
| 24 | supplierText5 | Example Text 5 |

Table 91: DMD attributes in CSV format

The following example shows one CSV example (multi line) with one static TLO (InstrumentDMD record and two DocumentMetadata records). Important, this sample shows one complete object, it is a part out of a **“Full file”**.

```
S;1001;CH0012345678;l;888800ABCDEFGHIJKL00;LEI;888800ABCDEFGHIJKL00;LEI;2017-07-16T10:00:00+02:00;DB;Example Instrument;GK=2211|LEI=9998811ABCDEFL00;The Main Manufacturer;The Instrument Manufacturer;DE=D1234567|CH=1234567;GK=2211|BIC=8888232;GK=2211|BIC=8888232;The Manufacturer;1;2;
S;1002;1;en;;DE|CH;;http://test.ch/1;2;1;2017-07-16T10:00:00+02:00;;12345|67890|C0002|C0006;;;2;99;2017-07-17;Example Text 1;Example Text 2;Example Text 3;Example Text 4;Example Text 5;
S;1002;8;de;2;;;http://test.ch/1;3;1;2017-07-16T10:00:00+02:00;2EF6BD36F9;12345|67890|C0002|C0006;122;2017-07-16T10:00:00+02:00;CH0012345678|DE0012345678;2;99;2017-07-17;Beispiel Test 1;Beispiel Test 2;Beispiel Test 3;Beispiel Test 4;Beispiel Test 5;
end
```

Figure 24: Example part of a DMD file in CSV format (“Full file”)

The following example shows one CSV example (multi line) with one new TLO (InstrumentDMD record and two DocumentMetadata records) which will be inserted. Important, this sample shows one complete object, it is a part out of a **“Delta file”**.

```
I;1001;CH0012345678;I-;888800ABCDEFGHIJKL00;LEI;888800ABCDEFGHIJKL00;LEI;2017-07-16T10:00:00+02:00;DB;Example Instrument;GK=2211|LEI=9998811ABCDEF00;The Main Manufacturer;The Instrument Manufacturer;DE=D1234567|CH=1234567;GK=2211|BIC=8888232;GK=2211|BIC=8888232;The Manufacturer;1;2;
I;1002;1;en;;DE|CH;;http://test.ch/1;2;1;2017-07-16T10:00:00+02:00;;12345|67890|C0002|C0006;;;2;99;2017-07-17;Example Text 1;Example Text 2;Example Text 3;Example Text 4;Example Text 5;
I;1002;8;de;2;;;http://test.ch/1;3;1;2017-07-16T10:00:00+02:00;2EF6BD36F9;12345|67890|C0002|C0006;122;2017-07-16T10:00:00+02:00;CH0012345678|DE0012345678;2;99;2017-07-17;Beispiel Test 1;Beispiel Test 2;Beispiel Test 3;Beispiel Test 4;Beispiel Test 5;
end
```

Figure 25: Example part of a DMD file in CSV format (“Delta file”)

3.4.2. XML Format: DMD (version 2)

A description of the respective data type and an implementation in the corresponding technology can be found in chapter ["Description of Data Types"](#).

The following graphic gives an overview of the classes, relations and attributes in the XML file for DMD. The grouping is used to show the delivery condition for each attribute.

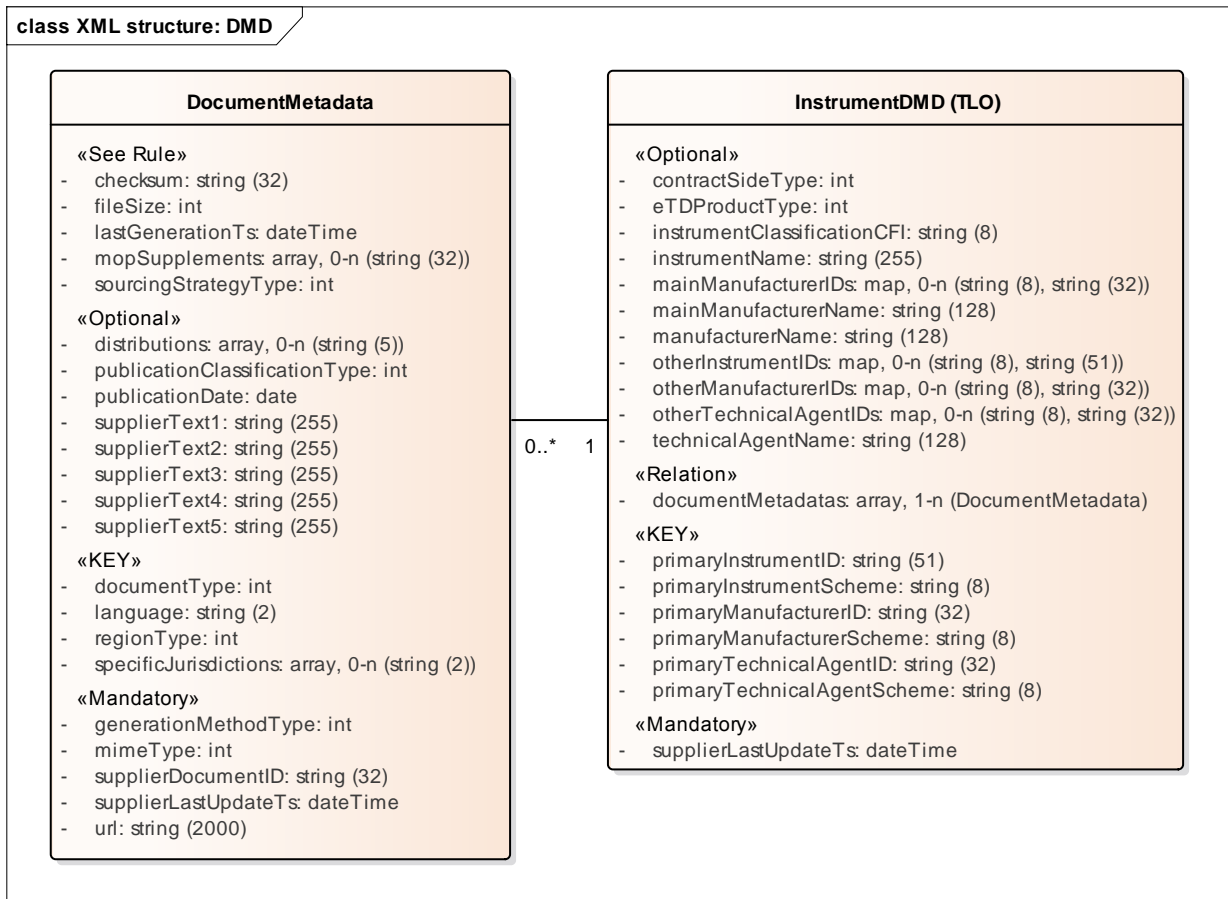


Figure 26: Overview XML structure for DMD

The DMD structure in XML is encapsulated with the root element **"SIXRegHub"**. The explanation of the XML attributes **"et"** and **"mt"** is in the chapter ["General information for all used XML files"](#).

The following example shows one XML example with one static TLO (InstrumentDMD and two DocumentMetadata classes). Important, this sample shows one complete object, it is a part out of a **"Full file"**.

```

<SIXRegHub>
  <InstrumentDMD et="s">
    <primaryInstrumentScheme>I</primaryInstrumentScheme>
    <primaryInstrumentID>CH2112345678</primaryInstrumentID>
    <primaryManufacturerScheme>LEI</primaryManufacturerScheme>
    <primaryManufacturerID>888800ABCDEFGHIJKL00</primaryManufacturerID>
    <primaryTechnicalAgentScheme>LEI</primaryTechnicalAgentScheme>
    <primaryTechnicalAgentID>12300ABCDEFKMQAKL12</primaryTechnicalAgentID>
    <supplierLastUpdateTs>2017-07-16T10:00:00+02:00</supplierLastUpdateTs>
    <contractSideType>1</contractSideType>
    <eTDProductType>2</eTDProductType>
    <instrumentClassificationCFI>DB</instrumentClassificationCFI>
    <instrumentName>Example Instrument</instrumentName>
    <mainManufacturerIDs>
      <mainManufacturerID scheme="GK">2211</mainManufacturerID>
      <mainManufacturerID scheme="LEI">9998811ABCDEFGHIJKL00</mainManufacturerID>
    </mainManufacturerIDs>
    <mainManufacturerName>The Main Manufacturer</mainManufacturerName>
  </InstrumentDMD>
</SIXRegHub>
  
```

```
<manufacturerName>The Instrument Manufacturer</manufacturerName>
<otherInstrumentIDs>
  <otherInstrumentID scheme="DE">2112345678</otherInstrumentID>
  <otherInstrumentID scheme="CH">D2112345678</otherInstrumentID>
</otherInstrumentIDs>
<otherManufacturerIDs>
  <otherManufacturerID scheme="GK">2211</otherManufacturerID>
  <otherManufacturerID scheme="BIC">8888232</otherManufacturerID>
</otherManufacturerIDs>
<otherTechnicalAgentIDs>
  <otherTechnicalAgentID scheme="GK">2211</otherTechnicalAgentID>
  <otherTechnicalAgentID scheme="BIC">8888232</otherTechnicalAgentID>
</otherTechnicalAgentIDs>
<technicalAgentName>The Instrument Manufacturer</technicalAgentName>
<documentMetadatas>
  <DocumentMetadata>
    <supplierLastUpdateTs>2017-07-16T10:00:00+02:00</supplierLastUpdateTs>
    <distributions>
      <distribution>12345</distribution>
      <distribution>67890</distribution>
      <distribution>C0002</distribution>
      <distribution>C0006</distribution>
    </distributions>
    <publicationClassificationType>2</publicationClassificationType>
    <documentType>1</documentType>
    <language>en</language>
    <specificJurisdictions>
      <specificJurisdiction>DE</specificJurisdiction>
      <specificJurisdiction>CH</specificJurisdiction>
    </specificJurisdictions>
    <generationMethodType>2</generationMethodType>
    <mimeType>1</mimeType>
    <url><![CDATA[http://testdocument.ch/1]]></url>
    <sourcingStrategyType>99</sourcingStrategyType>
    <publicationDate>2017-07-17</publicationDate>
    <supplierText1><![CDATA[Example Text Document 1]]></supplierText1>
    <supplierText2><![CDATA[Example Text Document 2]]></supplierText2>
    <supplierText3><![CDATA[Example Text Document 3]]></supplierText3>
    <supplierText4><![CDATA[Example Text Document 4]]></supplierText4>
    <supplierText5><![CDATA[Example Text Document 5]]></supplierText5>
  </DocumentMetadata>
  <DocumentMetadata>
    <supplierLastUpdateTs>2017-07-16T10:00:00+02:00</supplierLastUpdateTs>
    <distributions>
      <distribution>67890</distribution>
      <distribution>C0006</distribution>
    </distributions>
    <publicationClassificationType>2</publicationClassificationType>
    <documentType>8</documentType>
    <language>de</language>
    <regionType>2</regionType>
    <generationMethodType>3</generationMethodType>
    <mimeType>1</mimeType>
    <url><![CDATA[http://testdocument.ch/2]]></url>
    <checksum>2EF6BD38F9</checksum>
    <fileSize>456</fileSize>
    <lastGenerationTs>2017-07-16T10:00:00+02:00</lastGenerationTs>
    <mopSupplements>
      <mopSupplement>CH2112345678</mopSupplement>
      <mopSupplement>DE2112345678</mopSupplement>
    </mopSupplements>
    <sourcingStrategyType>99</sourcingStrategyType>
    <publicationDate>2017-07-17</publicationDate>
    <supplierText1><![CDATA[Beispiel Test Dokument 1]]></supplierText1>
    <supplierText2><![CDATA[Beispiel Test Dokument 2]]></supplierText2>
    <supplierText3><![CDATA[Beispiel Test Dokument 3]]></supplierText3>
    <supplierText4><![CDATA[Beispiel Test Dokument 4]]></supplierText4>
    <supplierText5><![CDATA[Beispiel Test Dokument 5]]></supplierText5>
  </DocumentMetadata>
</documentMetadatas>
</InstrumentDMD>
</SIXRegHub>
```

Figure 27: Example part of a DMD file in XML format ("Full file")

The following example shows one XML example with one new TLO (InstrumentDMD and two DocumentMetadata classes) which will be inserted. Important, this sample shows one complete object, it is a part out of a "Delta file".

```
<SIXRegHub>
  <InstrumentDMD et="u" mt="i">
    <primaryInstrumentScheme>I</primaryInstrumentScheme>
    <primaryInstrumentID>CH0012345678</primaryInstrumentID>
    <primaryManufacturerScheme>LEI</primaryManufacturerScheme>
    <primaryManufacturerID>888800ABCDEFGHIJKL00</primaryManufacturerID>
    <primaryTechnicalAgentScheme>LEI</primaryTechnicalAgentScheme>
    <primaryTechnicalAgentID>12300ABCDEFKMQAKL12</primaryTechnicalAgentID>
    <supplierLastUpdateTs>2017-07-16T10:00:00+02:00</supplierLastUpdateTs>
    <contractSideType>1</contractSideType>
    <eTDPProductType>2</eTDPProductType>
    <instrumentClassificationCFI>DB</instrumentClassificationCFI>
    <instrumentName>Example Instrument</instrumentName>
    <mainManufacturerIDs>
      <mainManufacturerID scheme="GK">2211</mainManufacturerID>
      <mainManufacturerID scheme="LEI">9998811ABCDEF00</mainManufacturerID>
    </mainManufacturerIDs>
    <mainManufacturerName>The Main Manufacturer</mainManufacturerName>
    <manufacturerName>The Instrument Manufacturer</manufacturerName>
    <otherInstrumentIDs>
      <otherInstrumentID scheme="DE">D1234567</otherInstrumentID>
      <otherInstrumentID scheme="CH">1234567</otherInstrumentID>
    </otherInstrumentIDs>
    <otherManufacturerIDs>
      <otherManufacturerID scheme="GK">2211</otherManufacturerID>
      <otherManufacturerID scheme="BIC">8888232</otherManufacturerID>
    </otherManufacturerIDs>
    <otherTechnicalAgentIDs>
      <otherTechnicalAgentID scheme="GK">2211</otherTechnicalAgentID>
      <otherTechnicalAgentID scheme="BIC">8888232</otherTechnicalAgentID>
    </otherTechnicalAgentIDs>
    <technicalAgentName>The Instrument Manufacturer</technicalAgentName>
    <documentMetadatas>
      <DocumentMetadata>
        <supplierLastUpdateTs>2017-07-16T10:00:00+02:00</supplierLastUpdateTs>
        <distributions>
          <distribution>12345</distribution>
          <distribution>67890</distribution>
          <distribution>C0002</distribution>
          <distribution>C0006</distribution>
        </distributions>
        <publicationClassificationType>2</publicationClassificationType>
        <documentType>1</documentType>
        <language>en</language>
        <specificJurisdictions>
          <specificJurisdiction>DE</specificJurisdiction>
          <specificJurisdiction>CH</specificJurisdiction>
        </specificJurisdictions>
        <generationMethodType>2</generationMethodType>
        <mimeType>1</mimeType>
        <url><![CDATA[http://test.ch/1]]></url>
        <sourcingStrategyType>99</sourcingStrategyType>
        <publicationDate>2017-07-17</publicationDate>
        <supplierText1><![CDATA[Example Text 1]]></supplierText1>
        <supplierText2><![CDATA[Example Text 2]]></supplierText2>
        <supplierText3><![CDATA[Example Text 3]]></supplierText3>
        <supplierText4><![CDATA[Example Text 4]]></supplierText4>
        <supplierText5><![CDATA[Example Text 5]]></supplierText5>
      </DocumentMetadata>
      <DocumentMetadata>
        <supplierLastUpdateTs>2017-07-16T10:00:00+02:00</supplierLastUpdateTs>
        <distributions>
          <distribution>67890</distribution>
          <distribution>C0006</distribution>
        </distributions>
        <publicationClassificationType>2</publicationClassificationType>
      </DocumentMetadata>
    </documentMetadatas>
  </InstrumentDMD>
</SIXRegHub>
```

```
<documentType>8</documentType>
<language>de</language>
<regionType>2</regionType>
<generationMethodType>3</generationMethodType>
<mimeType>1</mimeType>
<url><![CDATA[http://test.ch/2]]></url>
<checksum>2EF6BD36F9</checksum>
<fileSize>122</fileSize>
<lastGenerationTs>2017-07-16T10:00:00+02:00</lastGenerationTs>
<mopSupplements>
  <mopSupplement>CH0012345678</mopSupplement>
  <mopSupplement>DE0012345678</mopSupplement>
</mopSupplements>
<sourcingStrategyType>99</sourcingStrategyType>
<publicationDate>2017-07-17</publicationDate>
<supplierText1><![CDATA[Beispiel Test 1]]></supplierText1>
<supplierText2><![CDATA[Beispiel Test 2]]></supplierText2>
<supplierText3><![CDATA[Beispiel Test 3]]></supplierText3>
<supplierText4><![CDATA[Beispiel Test 4]]></supplierText4>
<supplierText5><![CDATA[Beispiel Test 5]]></supplierText5>
</DocumentMetadata>
</documentMetadatas>
</InstrumentDMD>
</SIXRegHub>
```

Figure 28: Example of a DMD file in XML format (“Delta file”)

3.4.3. REST Service: DMD (version 1)

A description of the respective data type and an implementation in the corresponding technology can be found in chapter [“Description of Data Types”](#).

The following table give an overview of all REST operations for this topic.

3.4.3.1. Overview of all REST API Calls for DMD

If an API call is marked as **draft** this means that this call will not be productively available.

| Resource | HTTP Method | Short Description |
|---|------------------|---|
| InstrumentDMD (Providing DMD): | | |
| /v1/instrumentdmds | GET | Search for an InstrumentDMD with various parameters including parameters for Document metadata. |
| /v1/instrumentdmds | POST | Create a new InstrumentDMD with zero or more Document metadata records. |
| /v1/instrumentdmds/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID} | DELETE | Delete an InstrumentDMD with all dependent Document metadata records. |
| /v1/instrumentdmds/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID} | GET | Get an InstrumentDMD with all dependent Document metadata records. |
| /v1/instrumentdmds/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID} | PATCH (draft) | Update an Instrument and all Content data records by providing only the changed or new attributes with all needed keys. |
| /v1/instrumentdmds/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID}?strategy=UPS ERT or MERGE | PUT | Replace an InstrumentDMD and all Document metadata records by providing the complete updated InstrumentDMD and all Content data records. Optional request parameter UPSERT: Execution of insert or update, existing records are fully replaced. Optional request parameter request parameter MERGE: Execution of insert or update, existing records are merged, i.e. for not delivered childs the values still exist. Default behavior is UPSERT. |
| /v1/instrumentdmds/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID} /documentmetadatas | POST | Create one new Document metadata record under an existing InstrumentDMD. |
| /v1/instrumentdmds/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID} /documentmetadatas/{documentID} | DELETE | Delete a Document metadata record. |
| /v1/instrumentdmds/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID} /documentmetadatas/{documentID} | GET | Get a Document metadata record. |
| /v1/instrumentdmds/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID} /documentmetadatas/{documentID} | PATCH (draft) | Update a Document metadata record by providing only the changed or new attributes with all needed keys. |
| /v1/instrumentdmds/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID} | PUT | Replace a Document metadata record by providing the complete updated Document metadata record. |

/documentmetadatas/{documentID}

Table 92: Overview of the SIX RegHub REST API calls for DMD

TBD: All chapters with the details REST Service description will be provided with the next specification version. Sample files can be downloaded from the SIX RegHub Member Area.

3.5. API: Content data (CD)

3.5.1. CSV Format: CD (version 1)

A description of the respective data type and an implementation in the corresponding technology can be found in chapter [“Description of Data Types”](#).

The following graphic gives an overview of the record and all the attributes in the CSV file for CD. The attributes are numbered to indicate the sequence in the CSV file. The grouping is used to show the delivery condition for each attribute.

3.5.1.1. Overview CSV record structure for CD

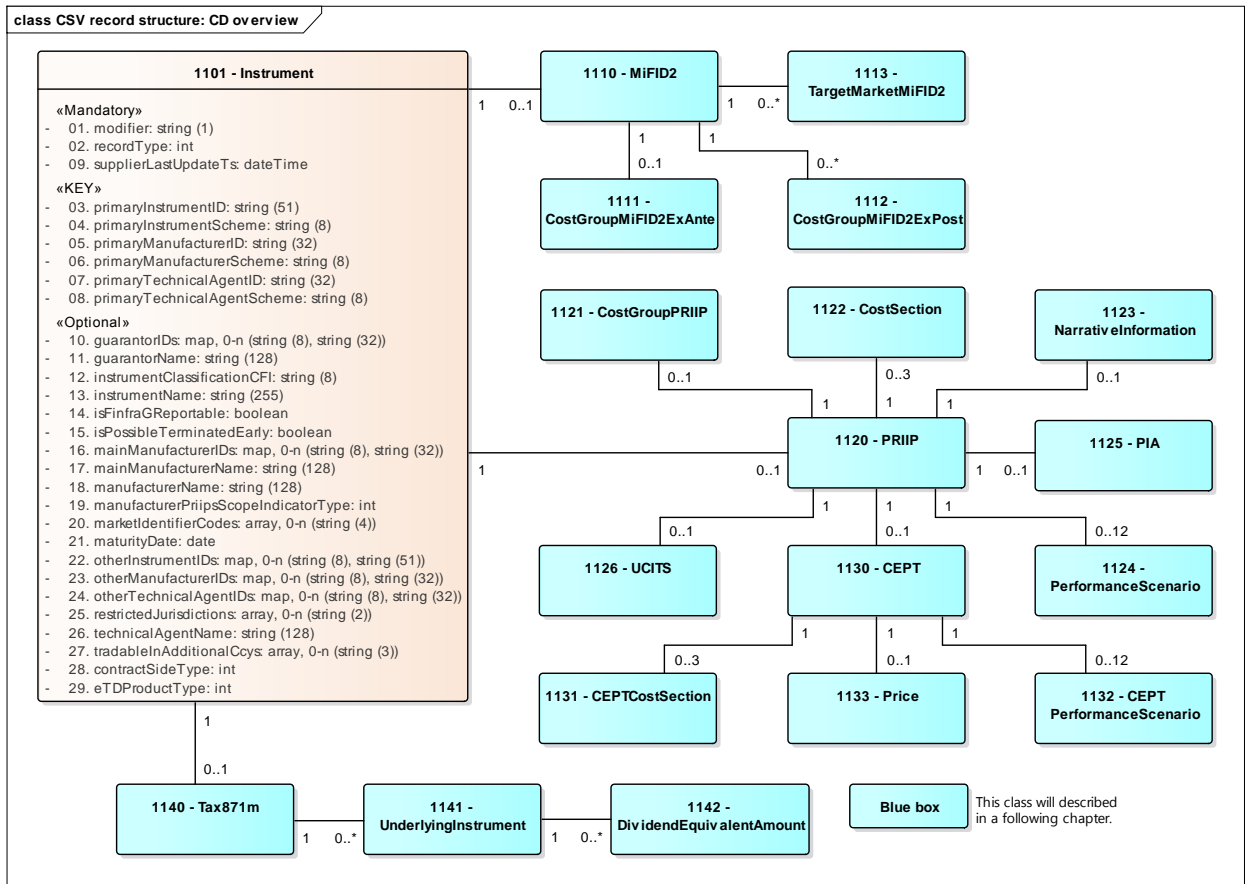


Figure 29: Overview CSV record structure for CD

| No | Attribute Name | Example |
|----------------------------------|-----------------------------|---------------------------|
| Record: 1101 - Instrument | | |
| 01 | modifier | I |
| 02 | recordType | 1101 |
| 03 | primaryInstrumentID | CH0012345678 |
| 04 | primaryInstrumentScheme | I- |
| 05 | primaryManufacturerID | 888800ABCDEFGHIJKL00 |
| 06 | primaryManufacturerScheme | LEI |
| 07 | primaryTechnicalAgentID | 888800ABCDEFGHIJKL00 |
| 08 | primaryTechnicalAgentScheme | LEI |
| 09 | supplierLastUpdateTs | 2017-07-17T00:00:00+02:00 |
| 10 | guarantorIDs | GK=123148 BIC=2920933 |

| | | |
|----|--------------------------------------|------------------------------|
| 11 | guarantorName | Guarantor Name |
| 12 | instrumentClassificationCFI | DB |
| 13 | instrumentName | Example Instrument |
| 14 | isFinfraGReportable | 1 |
| 15 | isPossibleTerminatedEarly | 0 |
| 16 | mainManufacturerIDs | GK=2211 LEI=9998811ABCDEFL00 |
| 17 | mainManufacturerName | The Main Manufacturer |
| 18 | manufacturerName | The Manufacturer |
| 19 | manufacturerPriipsScopeIndicatorType | 1 |
| 20 | marketIdentifierCodes | XFRA DOTS |
| 21 | maturityDate | 2017-07-17 |
| 22 | otherInstrumentIDs | DE=D1234567 CH=1234567 |
| 23 | otherManufacturerIDs | GK=2211 BIC=8888232 |
| 24 | otherTechnicalAgentIDs | GK=2211 BIC=8888232 |
| 25 | restrictedJurisdictions | DE CH |
| 26 | technicalAgentName | The Manufacturer |
| 27 | tradableInAdditionalCcys | EUR CHF |
| 28 | contractSideType | 1 |
| 29 | eTDProductType | 2 |
| 30 | manufacturerLEI | 9998811ABCDEFL00 |
| 31 | manufacturerEmail | manufacturer@xyz-group.com |
| 32 | productGovernanceProcess | 1 |

Table 93: Instrument (part of CD) attributes in CSV format

The following example shows one CSV example (multi line) with one new TLO (Instrument with each Content data classes like MiFID2, PRIIP and Tax871m) which will be inserted. Important, this sample shows one complete object, it is a part out of a “**Delta file**”. All the followed examples are part of this TLO splitted per model part.

```
I;1101;CH0012345678;-;8888000ABCDEFGHIJKL00;LEI;8888000ABCDEFGHIJKL00;LEI;2017-07-17T00:00:00+02:00;GK=123148|BIC=2920933;Guarantor Name;DB;Example Instrument;1;0;GK=2211|LEI=9998811ABCDEFL00;The Main Manufacturer;The Manufacturer;1;XFRA|DOTS;2017-07-17;DE=D1234567|CH=1234567;GK=2211|BIC=8888232;GK=2211|BIC=8888232;DE|CH;The Manufacturer;EUR|CHF;1;2;
[Other parts possible]
end
```

Figure 30: Example of the Instrument part of a CD file in CSV format

3.5.1.2. CSV record structure for MiFID 2 (part of CD)

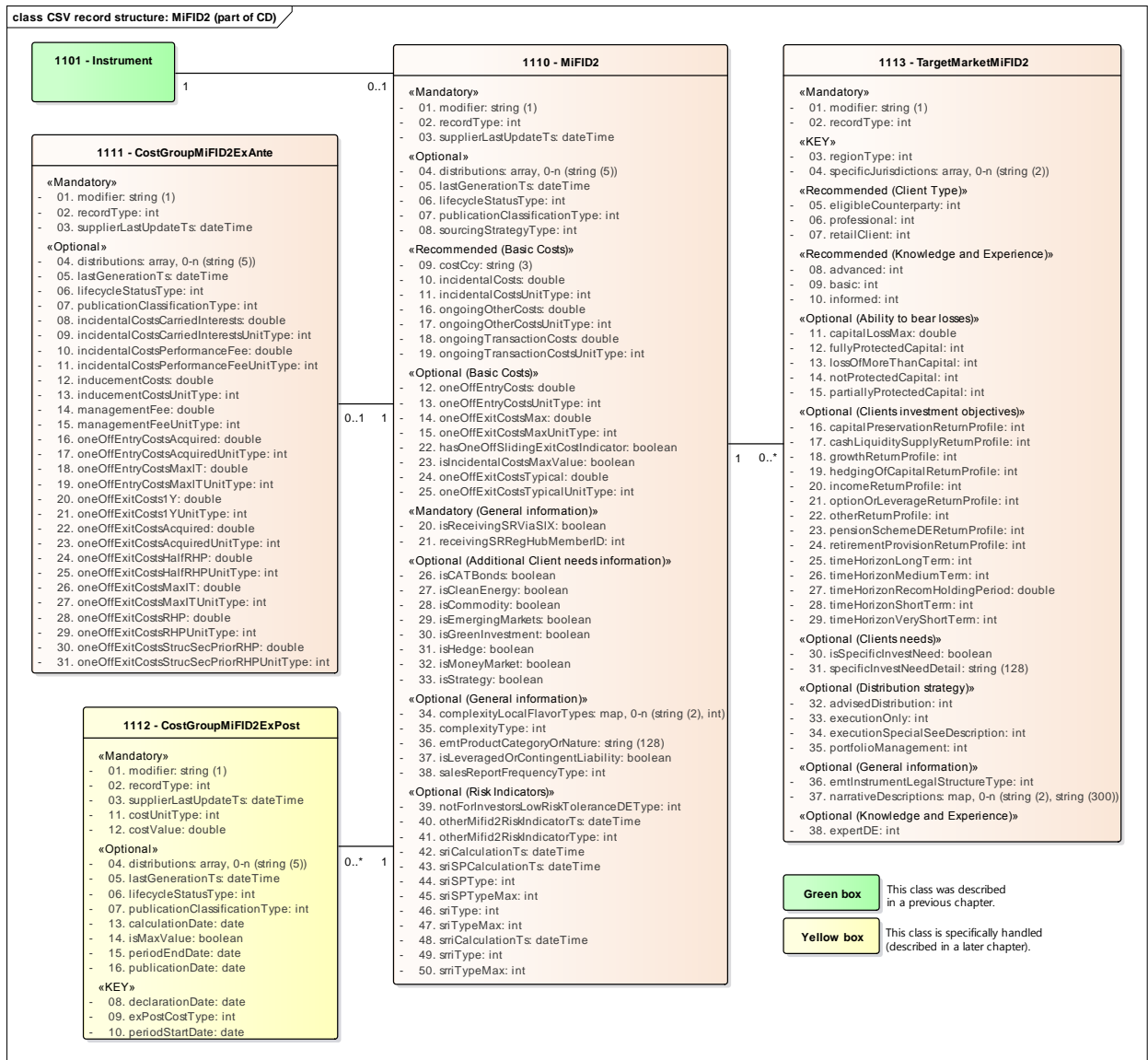


Figure 31: CSV record structure for MiFID 2 (part of CD)

| No | Attribute Name | Example |
|------------------------------|-------------------------------|---------------------------|
| Record: 1110 - MiFID2 | | |
| 01 | modifier | 1 |
| 02 | recordType | 1110 |
| 03 | supplierLastUpdateTs | 2017-07-17T00:00:00+02:00 |
| 04 | distributions | 12345 67890 C0002 C0006 |
| 05 | lastGenerationTs | 2017-07-17T00:00:00+02:00 |
| 06 | lifecycleStatusType | 2 |
| 07 | publicationClassificationType | 1 |
| 08 | sourcingStrategyType | 1 |
| 09 | costCcy | EUR |
| 10 | incidentalCosts | 0.05 |
| 11 | incidentalCostsUnitType | 1 |
| 12 | oneOffEntryCosts | 0.0125 |

| | | |
|---|---|---------------------------|
| 13 | oneOffEntryCostsUnitType | 1 |
| 14 | oneOffExitCostsMax | 1.293 |
| 15 | oneOffExitCostsMaxUnitType | 2 |
| 16 | ongoingOtherCosts | 3.303 |
| 17 | ongoingOtherCostsUnitType | 1 |
| 18 | ongoingTransactionCosts | 0.0125 |
| 19 | ongoingTransactionCostsUnitType | 1 |
| 20 | isReceivingSRViaSIX | 1 |
| 21 | receivingSRRegHubMemberID | 30932 |
| 22 | hasOneOffSlidingExitCostIndicator | 1 |
| 23 | isIncidentalCostsMaxValue | 0 |
| 24 | oneOffExitCostsTypical | 2.29 |
| 25 | oneOffExitCostsTypicalUnitType | 2 |
| 26 | isCATBonds | 0 |
| 27 | isCleanEnergy | 1 |
| 28 | isCommodity | 0 |
| 29 | isEmergingMarkets | 0 |
| 30 | isGreenInvestment | 1 |
| 31 | isHedge | 0 |
| 32 | isMoneyMarket | 1 |
| 33 | isStrategy | 0 |
| 34 | complexityLocalFlavorTypes | DE=3 CH=1 |
| 35 | complexityType | 1 |
| 36 | emtProductCategoryOrNature | EMT Template |
| 37 | isLeveragedOrContingentLiability | 0 |
| 38 | salesReportFrequencyType | 5 |
| 39 | notForInvestorsLowRiskToleranceDEType | 2 |
| 40 | otherMifid2RiskIndicatorTs | 2017-07-16T11:30:00+02:00 |
| 41 | otherMifid2RiskIndicatorType | 4 |
| 42 | sriCalculationTs | 2017-07-17T00:00:00+02:00 |
| 43 | sriSPCalculationTs | 2017-07-16T02:00:00+02:00 |
| 44 | sriSPTType | 2 |
| 45 | sriSPTTypeMax | 4 |
| 46 | sriType | 3 |
| 47 | sriTypeMax | 7 |
| 48 | sriCalculationTs | 2017-07-17T00:00:00+02:00 |
| 49 | sriType | 2 |
| 50 | sriTypeMax | 5 |
| 51 | recordInputFormatVersion | EMT_V1 |
| 52 | inputFileGenerationDate | 2017-07-17T00:00:00+02:00 |
| 53 | hasPerformanceFee | 1 |
| 54 | hasDistributionOfCash | 1 |
| 55 | structuredSecuritiesProductCategoryOrNature | |
| 56 | structuredSecuritiesQuotation | 1 |
| Record: 1111 - CostGroupMiFID2ExAnte | | |
| 01 | modifier | 1 |
| 02 | recordType | 1111 |
| 03 | supplierLastUpdateTs | 2017-07-17T00:00:00+02:00 |
| 04 | distributions | 12345 67890 C0002 C0006 |
| 05 | lastGenerationTs | 2017-07-17T00:00:00+02:00 |
| 06 | lifecycleStatusType | 2 |
| 07 | publicationClassificationType | 1 |
| 08 | incidentalCostsCarriedInterests | 1.293 |

| | | |
|---|---|---------------------------|
| 09 | incidentalCostsCarriedInterestsUnitType | 2 |
| 10 | incidentalCostsPerformanceFee | 2.398 |
| 11 | incidentalCostsPerformanceFeeUnitType | 2 |
| 12 | inducementCosts | 0.05 |
| 13 | inducementCostsUnitType | 1 |
| 14 | managementFee | 0.0125 |
| 15 | managementFeeUnitType | 1 |
| 16 | oneOffEntryCostsAcquired | 2.304 |
| 17 | oneOffEntryCostsAcquiredUnitType | 2 |
| 18 | oneOffEntryCostsMaxIT | 0.123 |
| 19 | oneOffEntryCostsMaxITUnitType | 1 |
| 20 | oneOffExitCosts1Y | 2.28 |
| 21 | oneOffExitCosts1YUnitType | 2 |
| 22 | oneOffExitCostsAcquired | 7.383 |
| 23 | oneOffExitCostsAcquiredUnitType | 2 |
| 24 | oneOffExitCostsHalfRHP | 8.05 |
| 25 | oneOffExitCostsHalfRHPUnitType | 2 |
| 26 | oneOffExitCostsMaxIT | 0.125 |
| 27 | oneOffExitCostsMaxITUnitType | 1 |
| 28 | oneOffExitCostsRHP | 0.09 |
| 29 | oneOffExitCostsRHPUnitType | 1 |
| 30 | oneOffExitCostsStrucSecPriorRHP | 4.932 |
| 31 | oneOffExitCostsStrucSecPriorRHPUntType | 1 |
| 32 | referenceValueExAnte | 1000.00 |
| 33 | referenceDateExAnte | 2017-07-17 |
| 34 | gearingCosts | 0.0123 |
| 35 | gearingCostsUnitType | 1 |
| 36 | netOnOffEntryCosts | 0.0125 |
| 37 | netOneOffEntryCostsUnitType | 1 |
| Record: 1112 - CostGroupMiFID2ExPost | | |
| 01 | modifier | 1 |
| 02 | recordType | 1112 |
| 03 | supplierLastUpdateTs | 2017-07-17T00:00:00+02:00 |
| 04 | distributions | 12345 67890 C0002 C0006 |
| 05 | lastGenerationTs | 2017-07-17T00:00:00+02:00 |
| 06 | lifecycleStatusType | 2 |
| 07 | publicationClassificationType | 1 |
| 08 | declarationDate | 2017-07-17 |
| 09 | exPostCostType | 5 |
| 10 | periodStartDate | 2017-07-18 |
| 11 | costUnitType | 2 |
| 12 | costValue | 5.938 |
| 13 | calculationDate | 2017-07-16 |
| 14 | isMaxValue | |
| 15 | periodEndDate | 2017-08-25 |
| 16 | publicationDate | 2017-07-16 |
| 17 | referenceValueExPost | 1000.00 |
| 18 | referenceDateExPost | 2017-07-17 |
| Record: 1113 - TargetMarketMiFID2 | | |
| 01 | modifier | 1 |
| 02 | recordType | 1113 |
| 03 | regionType | |
| 04 | specificJurisdictions | EU DE |

| | | |
|----|----------------------------------|---|
| 05 | eligibleCounterparty | 4 |
| 06 | professional | 7 |
| 07 | retailClient | 3 |
| 08 | advanced | 3 |
| 09 | basic | 2 |
| 10 | informed | 4 |
| 11 | capitalLossMax | 0.0875 |
| 12 | fullyProtectedCapital | 2 |
| 13 | lossOfMoreThanCapital | 1 |
| 14 | notProtectedCapital | 2 |
| 15 | partiallyProtectedCapital | 2 |
| 16 | capitalPreservationReturnProfile | 4 |
| 17 | cashLiquiditySupplyReturnProfile | 2 |
| 18 | growthReturnProfile | 3 |
| 19 | hedgingOfCapitalReturnProfile | 2 |
| 20 | incomeReturnProfile | 3 |
| 21 | optionOrLeverageReturnProfile | 2 |
| 22 | otherReturnProfile | 1 |
| 23 | pensionSchemeDEReturnProfile | 3 |
| 24 | retirementProvisionReturnProfile | 3 |
| 25 | timeHorizonLongTerm | 5 |
| 26 | timeHorizonMediumTerm | |
| 27 | timeHorizonRecomHoldingPeriod | 12 |
| 28 | timeHorizonShortTerm | |
| 29 | timeHorizonVeryShortTerm | |
| 30 | isSpecificInvestNeed | 1 |
| 31 | specificInvestNeedDetail | Ethical Invest Product |
| 32 | advisedDistribution | 3 |
| 33 | executionOnly | 2 |
| 34 | executionSpecialSeeDescription | 3 |
| 35 | portfolioManagement | 4 |
| 36 | emInstrumentLegalStructureType | 2 |
| 37 | narrativeDescriptions | en=German Narrative Target Market de=Deutsche Marktbeschreibung |
| 38 | expertDE | |
| 39 | timeHorizonHoldToMaturity | |

Table 94: MiFID 2 (part of CD) attributes in CSV format

[Instrument part 1101]

```
I;1110;2017-07-17T00:00:00+02:00;12345[67890]C0002|C0006;2017-07-17T00:00:00+02:00;2;1;1;EUR;0.05;1;0.0125;1;1.293;2;3.303;2;0.0125;1;1;30932;1;0;2.29;2;0;1;0;0;1;0;1;0;DE=3|CH=1;1;EMT Template;0;5;2;2017-07-16T11:30:00+02:00;4;2017-07-17T00:00:00+02:00;2017-07-16T02:00:00+02:00;2;4;3;7;2017-07-17T00:00:00+02:00;2;5;I;1111;2017-07-17T00:00:00+02:00;12345[67890]C0002|C0006;2017-07-17T00:00:00+02:00;2;1;1.293;2;2.398;2;0.05;1;0.0125;1;2.304;2;0.123;1;2.28;2;7.383;2;8.05;2;0.125;1;0.09;1;4.932;1;I;1112;2017-07-17T00:00:00+02:00;12345[67890]C0002|C0006;2017-07-17T00:00:00+02:00;2;1;2017-07-17;5;2017-07-18;2;5.938;2017-07-16;;2017-08-25;2017-07-16;I;1113;2;4;7;3;3;2;4;0.0875;2;1;2;2;4;2;3;2;1;3;3;;;12;;;1;Ethical Invest Product;3;2;3;4;2;de=Europ. Marktbeschreibung|en=European Narrative Target Market;;I;1113;;DE;4;7;3;3;2;4;0.03075;2;1;2;2;4;2;3;2;1;3;3;;;12;;;1;Ethical Invest Product;3;2;3;4;2;de=Deutsche Marktbeschreibung|en=German Target Market Description;;I;1113;;CH;4;7;3;3;2;4;0.01075;2;1;2;2;4;2;3;2;1;3;3;;;12;;;1;Ethical Invest Product;3;2;3;4;2;de=Schweizer Marktbeschreibung|en=Swiss Target Market Description;;
```

[Other parts possible]

end

Figure 32: Example of the MiFID 2 part of a CD file in CSV format

3.5.1.3. CSV record structure for PRIIP (part of CD)

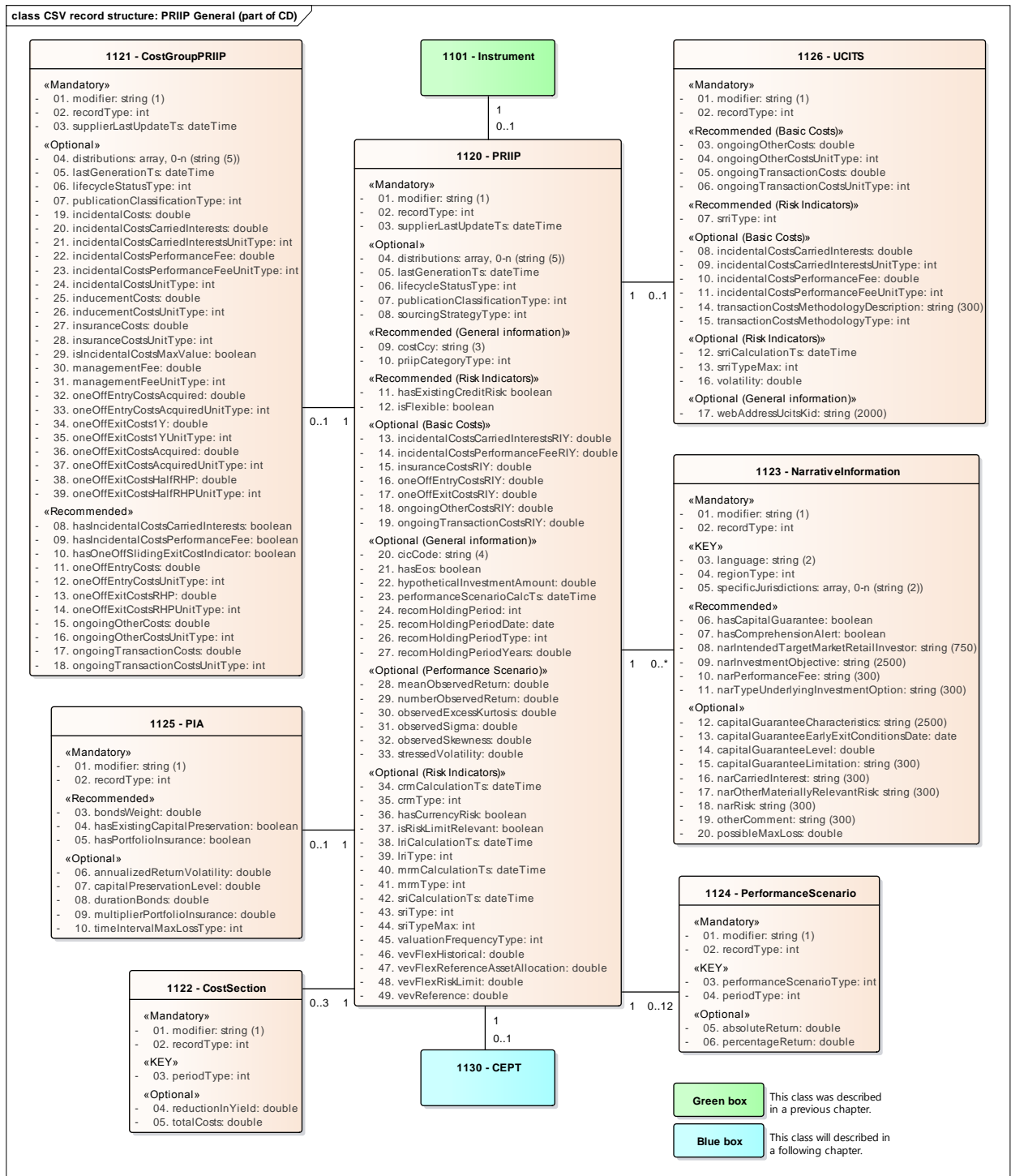


Figure 33: CSV record structure for PRIIP (part of CD)

| No | Attribute Name | Example |
|-----------------------------|----------------------|---------------------------|
| Record: 1120 - PRIIP | | |
| 01 | modifier | I |
| 02 | recordType | 1120 |
| 03 | supplierLastUpdateTs | 2017-07-17T00:00:00+02:00 |
| 04 | distributions | 12345 67890 C0002 C0006 |

| | | |
|--------------------------------------|------------------------------------|---------------------------|
| 05 | lastGenerationTs | 2017-07-17T00:00:00+02:00 |
| 06 | lifecycleStatusType | 2 |
| 07 | publicationClassificationType | 2 |
| 08 | sourcingStrategyType | 1 |
| 09 | costCcy | EUR |
| 10 | priipCategoryType | 3 |
| 11 | hasExistingCreditRisk | 1 |
| 12 | isFlexible | 0 |
| 13 | incidentalCostsCarriedInterestsRIY | 12.256 |
| 14 | incidentalCostsPerformanceFeeRIY | |
| 15 | insuranceCostsRIY | 11.125 |
| 16 | oneOffEntryCostsRIY | |
| 17 | oneOffExitCostsRIY | |
| 18 | ongoingOtherCostsRIY | 2.393 |
| 19 | ongoingTransactionCostsRIY | |
| 20 | cicCode | XL22 |
| 21 | hasEos | 0 |
| 22 | hypotheticalInvestmentAmount | 2.293 |
| 23 | performanceScenarioCalcTs | 2017-07-17T00:00:00+02:00 |
| 24 | recomHoldingPeriod | 2 |
| 25 | recomHoldingPeriodDate | 2017-07-17 |
| 26 | recomHoldingPeriodType | 4 |
| 27 | recomHoldingPeriodYears | 2.0 |
| 28 | meanObservedReturn | 35.393 |
| 29 | numberObservedReturn | |
| 30 | observedExcessKurtosis | |
| 31 | observedSigma | 54.029 |
| 32 | observedSkewness | |
| 33 | stressedVolatility | 9.282 |
| 34 | crmCalculationTs | 2017-07-17T00:00:00+02:00 |
| 35 | crmType | 4 |
| 36 | hasCurrencyRisk | 0 |
| 37 | isRiskLimitRelevant | |
| 38 | lriCalculationTs | 2017-07-17T00:00:00+02:00 |
| 39 | lriType | 3 |
| 40 | mrmCalculationTs | 2017-07-17T00:00:00+02:00 |
| 41 | mrmType | 3 |
| 42 | sriCalculationTs | 2017-07-17T00:00:00+02:00 |
| 43 | sriType | 2 |
| 44 | sriTypeMax | 6 |
| 45 | valuationFrequencyType | 252 |
| 46 | vevFlexHistorical | |
| 47 | vevFlexReferenceAssetAllocation | |
| 48 | vevFlexRiskLimit | |
| 49 | vevReference | 0.1132 |
| Record: 1121 - CostGroupPRIIP | | |
| 01 | modifier | 1 |
| 02 | recordType | 1121 |
| 03 | supplierLastUpdateTs | 2017-07-17T00:00:00+02:00 |
| 04 | distributions | 12345 67890 C0002 C0006 |
| 05 | lastGenerationTs | 2017-07-17T00:00:00+02:00 |

| | | |
|--|---|------------------------------|
| 06 | lifecycleStatusType | 2 |
| 07 | publicationClassificationType | 1 |
| 08 | hasIncidentalCostsCarriedInterests | 1 |
| 09 | hasIncidentalCostsPerformanceFee | 1 |
| 10 | hasOneOffSlidingExitCostIndicator | 1 |
| 11 | oneOffEntryCosts | 1.29 |
| 12 | oneOffEntryCostsUnitType | 2 |
| 13 | oneOffExitCostsRHP | 0.014 |
| 14 | oneOffExitCostsRHPUnitType | 1 |
| 15 | ongoingOtherCosts | 0.0122 |
| 16 | ongoingOtherCostsUnitType | 1 |
| 17 | ongoingTransactionCosts | 3.202 |
| 18 | ongoingTransactionCostsUnitType | 2 |
| 19 | incidentalCosts | 2.912 |
| 20 | incidentalCostsCarriedInterests | 0.122 |
| 21 | incidentalCostsCarriedInterestsUnitType | 1 |
| 22 | incidentalCostsPerformanceFee | 0.088 |
| 23 | incidentalCostsPerformanceFeeUnitType | 1 |
| 24 | incidentalCostsUnitType | 2 |
| 25 | inducementCosts | 3.298 |
| 26 | inducementCostsUnitType | 2 |
| 27 | insuranceCosts | 0.1282 |
| 28 | insuranceCostsUnitType | 1 |
| 29 | isIncidentalCostsMaxValue | |
| 30 | managementFee | 0.1214 |
| 31 | managementFeeUnitType | 2 |
| 32 | oneOffEntryCostsAcquired | |
| 33 | oneOffEntryCostsAcquiredUnitType | |
| 34 | oneOffExitCosts1Y | 1.19 |
| 35 | oneOffExitCosts1YUnitType | 2 |
| 36 | oneOffExitCostsAcquired | 0.001 |
| 37 | oneOffExitCostsAcquiredUnitType | 1 |
| 38 | oneOffExitCostsHalfRHP | 0.005 |
| 39 | oneOffExitCostsHalfRHPUnitType | 1 |
| Record: 1122 - CostSection | | |
| 01 | modifier | 1 |
| 02 | recordType | 1122 |
| 03 | periodType | 1 |
| 04 | reductionInYield | 0.015 |
| 05 | totalCosts | 2.25 |
| Record: 1123 - NarrativeInformation | | |
| 01 | modifier | 1 |
| 02 | recordType | 1123 |
| 03 | language | en |
| 04 | regionType | 2 |
| 05 | specificJurisdictions | |
| 06 | hasCapitalGuarantee | 1 |
| 07 | hasComprehensionAlert | 0 |
| 08 | narIntendedTargetMarketRetailInvestor | Intended for European Union |
| 09 | narInvestmentObjective | Objective for European Union |
| 10 | narPerformanceFee | Performance Output EU |
| 11 | narTypeUnderlyingInvestmentOption | Investment Trust |

| | | |
|---|---|----------------------------------|
| 12 | capitalGuaranteeCharacteristics | Characteristics of the guarantee |
| 13 | capitalGuaranteeEarlyExitConditionsDate | 2017-07-17 |
| 14 | capitalGuaranteeLevel | 15.028 |
| 15 | capitalGuaranteeLimitation | Limited Guarantee for EU |
| 16 | narCarriedInterest | Carried Interest EU |
| 17 | narOtherMateriallyRelevantRisk | |
| 18 | narRisk | |
| 19 | otherComment | Other Comment for EU |
| 20 | possibleMaxLoss | 11.29 |
| Record: 1124 - PerformanceScenario | | |
| 01 | modifier | I |
| 02 | recordType | 1124 |
| 03 | performanceScenarioType | 2 |
| 04 | periodType | 2 |
| 05 | absoluteReturn | 2.15 |
| 06 | percentageReturn | 0.115 |
| Record: 1125 - PIA | | |
| 01 | modifier | I |
| 02 | recordType | 1125 |
| 03 | bondsWeight | 89.38 |
| 04 | hasExistingCapitalPreservation | 1 |
| 05 | hasPortfolioInsurance | 0 |
| 06 | annualizedReturnVolatility | 45.29 |
| 07 | capitalPreservationLevel | 12.29 |
| 08 | durationBonds | 11.12 |
| 09 | multiplierPortfolioInsurance | |
| 10 | timeIntervalMaxLossType | |
| Record: 1126 - UCITS | | |
| 01 | modifier | I |
| 02 | recordType | 1126 |
| 03 | ongoingOtherCosts | 2.23 |
| 04 | ongoingOtherCostsUnitType | 2 |
| 05 | ongoingTransactionCosts | 1.125 |
| 06 | ongoingTransactionCostsUnitType | 1 |
| 07 | sriType | 6 |
| 08 | incidentalCostsCarriedInterests | 32.92 |
| 09 | incidentalCostsCarriedInterestsUnitType | 2 |
| 10 | incidentalCostsPerformanceFee | 22.28 |
| 11 | incidentalCostsPerformanceFeeUnitType | 2 |
| 12 | sriCalculationTs | 2017-07-17T00:00:00+02:00 |
| 13 | sriTypeMax | 7 |
| 14 | transactionCostsMethodologyDescription | |
| 15 | transactionCostsMethodologyType | 3 |
| 16 | volatility | |
| 17 | webAddressUcitsKid | |

Table 95: PRIIP (part of CD) attributes in CSV format

[Instrument part 1101]

!;1120;2017-07-17T00:00:00+02:00;12345|67890|C0002|C0006;2017-07-17T00:00:00+02:00;2;2;1;EUR;3;1;0;12.256;;11.125;;;2.393;;XL22;0;2.293;2017-07-17T00:00:00+02:00;2;2017-07-17;4;2.0;35.393;;;54.029;;9.282;2017-07-17T00:00:00+02:00;4;0;;2017-07-17T00:00:00+02:00;3;2017-07-17T00:00:00+02:00;3;2017-07-17T00:00:00+02:00;2;6;252;;;0.1132;

```
I;1121;2017-07-17T00:00:00+02:00;12345|67890|C0002|C0006;2017-07-17T00:00:00+02:00;2;1;1;1;1.29;2;0.014;1;0.0122;1;3.202;2;2.912;0.122;1;0.088;1;2;3.298;2;0.1282;1;;0.1214;2;;;1.19;2;0.001;1;0.005;1;
I;1122;1;0.015;2.25;
I;1122;2;0.02;1.96;
I;1122;3;0.023;1.06;
I;1123;en;2;;1;0;Intended for European Union;Objective for European Union;Performance Output EU;Investment Trust;Characteristics of the guarantee;2017-07-17;15.028;Limited Guarantee for EU;Carried Interest EU;;;Other Comment for EU;11.29;
I;1123;en;;DE;1;0;Intended for Germany;Objective for Germany;Performance Output DE;Investment Trust;Characteristics of the guarantee;2017-07-17;10.18;Limited Guarantee for DE;Carried Interest DE;;;Other Comment for DE;13.39;
I;1123;en;;CH;1;0;Intended for Switzerland;Objective for Switzerland;Performance Output CH;Investment Trust;Characteristics of the guarantee;2017-07-17;9.28;Limited Guarantee for DE;Carried Interest CH;;;Other Comment for CH;7.58;
I;1124;2;2;1.15;0.09;
I;1124;2;2;2.15;0.115;
I;1124;2;2;2.36;0.125;
I;1125;89.38;1;0;45.29;12.29;11.12;;;
I;1126;2.23;2;1.125;1;6;32.92;2;22.28;2;2017-07-17T00:00:00+02:00;7;;3;;;
[Other parts possible]
end
```

Figure 34: Example of the PRIIP part of a CD file in CSV format

3.5.1.4. CSV record structure for PRIIP CEPT (part of CD)

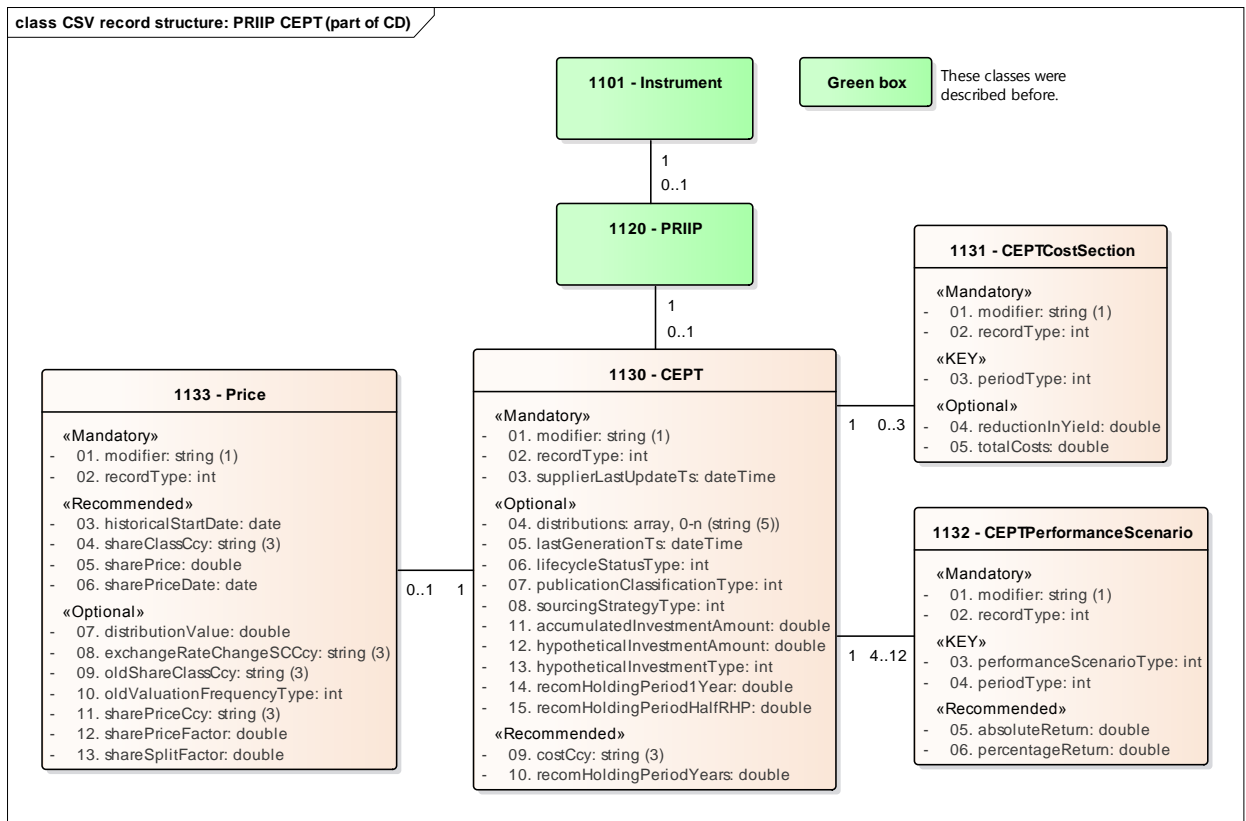


Figure 35: CSV record structure for PRIIP CEPT (part of CD)

| No | Attribute Name | Example |
|---|-------------------------------|---------------------------|
| Record: 1130 - CEPT | | |
| 01 | modifier | |
| 02 | recordType | 1130 |
| 03 | supplierLastUpdateTs | 2017-07-17T00:00:00+02:00 |
| 04 | distributions | 12345 67890 C0002 C0006 |
| 05 | lastGenerationTs | 2017-07-17T00:00:00+02:00 |
| 06 | lifecycleStatusType | 2 |
| 07 | publicationClassificationType | 2 |
| 08 | sourcingStrategyType | 1 |
| 09 | costCcy | EUR |
| 10 | recomHoldingPeriodYears | 1.5 |
| 11 | accumulatedInvestmentAmount | 2.49 |
| 12 | hypotheticalInvestmentAmount | 2.05 |
| 13 | hypotheticalInvestmentType | 2 |
| 14 | recomHoldingPeriod1Year | |
| 15 | recomHoldingPeriodHalfRHP | |
| Record: 1131 - CEPTCostSection | | |
| 01 | modifier | |
| 02 | recordType | 1131 |
| 03 | periodType | 1 |
| 04 | absoluteReturn | 0.75 |
| 05 | percentageReturn | 2.05 |
| Record: 1132 - CEPTPerformanceScenario | | |

| | | |
|-----------------------------|---------------------------|------------|
| 01 | modifier | I |
| 02 | recordType | 1132 |
| 03 | performanceScenarioType | 2 |
| 04 | periodType | 1 |
| 05 | absoluteReturn | 25.39 |
| 06 | percentageReturn | 0.095 |
| Record: 1133 - Price | | |
| 01 | modifier | I |
| 02 | recordType | 1133 |
| 03 | historicalStartDate | 2000-07-17 |
| 04 | shareClassCcy | EUR |
| 05 | sharePrice | 16.06 |
| 06 | sharePriceDate | 2017-06-20 |
| 07 | distributionValue | |
| 08 | exchangeRateChangeSCCcy | EUR |
| 09 | oldShareClassCcy | DDM |
| 10 | oldValuationFrequencyType | 104 |
| 11 | sharePriceCcy | EUR |
| 12 | sharePriceFactor | 7.18 |
| 13 | shareSplitFactor | 3.57 |

Table 96: CEPT (part of CD) attributes in CSV format

```

[Instrument part 1101]
[PRIIP part 1120]
I;1130;2017-07-17T00:00:00+02:00;12345|67890|C0002|C0006;2017-07-
17T00:00:00+02:00;2;2;1;EUR;1.5;2.49;2.05;2;;;
I;1131;1;0.75;2.05;
I;1131;2;1.05;3.05;
I;1131;3;1.55;5.05;
I;1132;2;1;25.39;0.095;
I;1132;2;2;36.39;0.124;
I;1132;3;1;55.93;0.234;
I;1132;3;2;62.93;0.55;
I;1133;2000-07-17;EUR;16.06;2017-06-20;;EUR;DDM;104;EUR;7.18;3.57;
[Other parts possible]
end
  
```

Figure 36: Example of the PRIIP CEPT part of a CD file in CSV format

3.5.1.5. CSV record structure for Tax871m (part of CD)

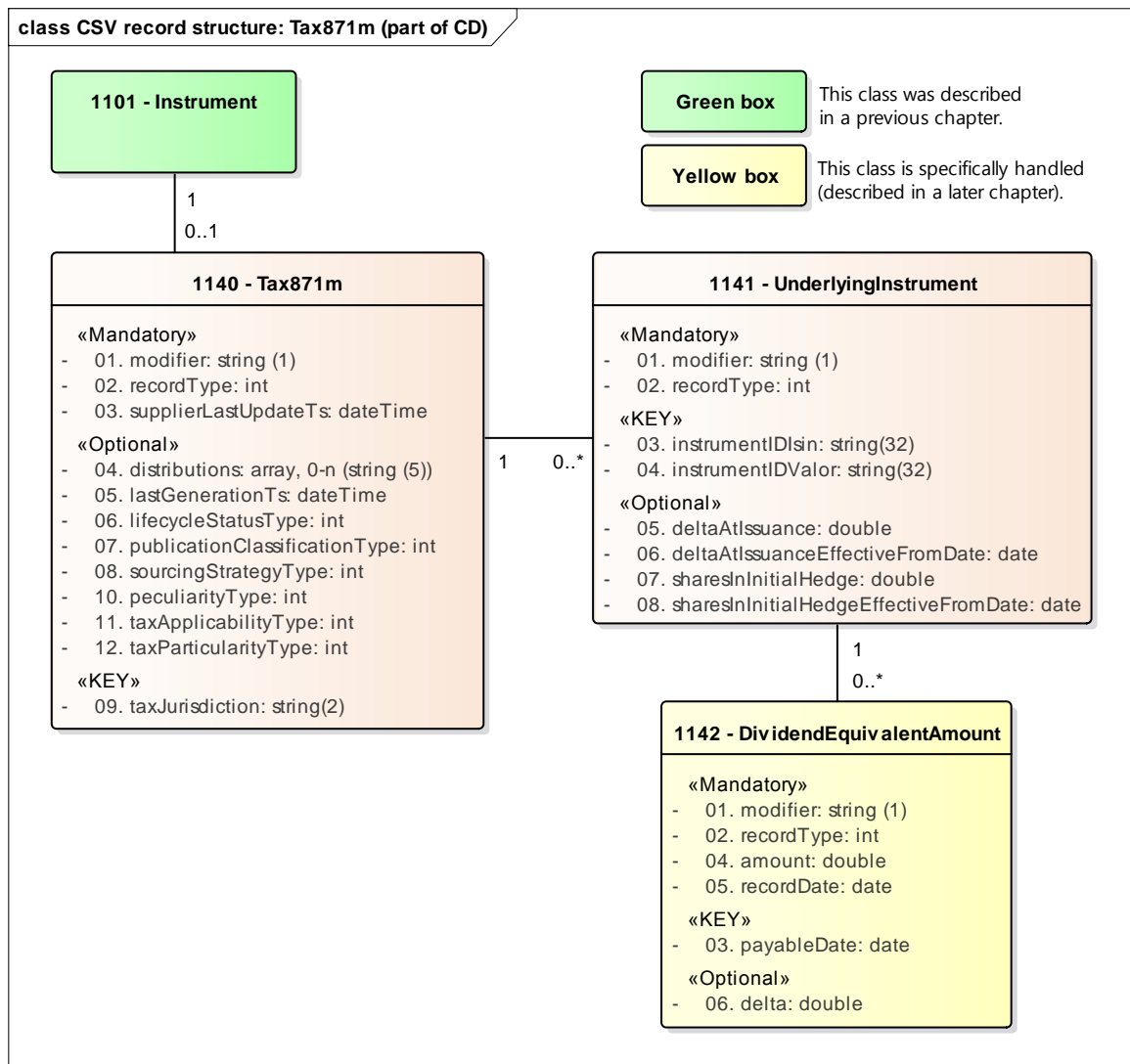


Figure 37: CSV record structure for Tax871m (part of CD)

| No | Attribute Name | Example |
|--|-------------------------------|---------------------------|
| Record: 1140 - Tax871m | | |
| 01 | modifier | I |
| 02 | recordType | 1140 |
| 03 | supplierLastUpdateTs | 2017-07-17T00:00:00+02:00 |
| 04 | distributions | 12345 67890 C0002 C0006 |
| 05 | lastGenerationTs | 2017-07-17T00:00:00+02:00 |
| 06 | lifecycleStatusType | 2 |
| 07 | publicationClassificationType | 1 |
| 08 | sourcingStrategyType | 1 |
| 09 | taxJurisdiction | US |
| 10 | peculiarityType | 1 |
| 11 | taxApplicabilityType | 33 |
| 12 | taxParticularityType | 1 |
| Record: 1141 - UnderlyingInstrument | | |
| 01 | modifier | I |

| | | |
|--|---------------------------------------|------------|
| 02 | recordType | 1141 |
| 03 | instrumentIDisin | US10291212 |
| 04 | instrumentIDValor | |
| 05 | deltaAtIssuance | 12.2902 |
| 06 | deltaAtIssuanceEffectiveFromDate | 2017-07-17 |
| 07 | sharesInInitialHedge | |
| 08 | sharesInInitialHedgeEffectiveFromDate | |
| Record: 1142 - DividendEquivalentAmount | | |
| 01 | modifier | I |
| 02 | recordType | 1142 |
| 03 | payableDate | 2017-08-03 |
| 04 | amount | 2.298 |
| 05 | recordDate | 2017-07-17 |
| 06 | delta | 0.11 |

Table 97: Tax871m (part of CD) attributes in CSV format

```

[Instrument part 1101]
I;1140;2017-07-17T00:00:00+02:00;12345|67890|C0002|C0006;2017-07-17T00:00:00+02:00;2;1;1;US;1;33;1;
I;1141;;US10291212;;12.2902;2017-07-17;;;
I;1142;2017-08-03;2.298;2017-07-17;0.11;
I;1142;2017-09-10;3.493;2017-07-17;0.15;
I;1141;;US10001111;;9.322;2017-08-19;;;
I;1142;2017-08-18;3.292;2017-07-17;1.12;
I;1142;2017-10-25;4.001;2017-07-17;0.98;
[Other parts possible]
end
  
```

Figure 38: Example of the part Tax871m of a CD file in CSV format

3.5.1.6. Complete CD CSV File

```
I;1101;CH0012345678;-;888800ABCDEFGHIJKL00;LEI;888800ABCDEFGHIJKL00;LEI;2017-07-17T00:00:00+02:00;GK=123148|BIC=2920933;Guarantor Name;DB;Example Instrument;1;0;GK=2211|LEI=9998811ABCDEF00;The Main Manufacturer;The Manufacturer;1;XFRA|DOTS;2017-07-17;DE=D1234567|CH=1234567;GK=2211|BIC=8888232;GK=2211|BIC=8888232;DE|CH;The Manufacturer;EUR|CHF;1;2;
I;1110;2017-07-17T00:00:00+02:00;12345|67890|C0002|C0006;2017-07-17T00:00:00+02:00;2;1;1;EUR;0.05;1;0.0125;1;1.293;2;3.303;2;0.0125;1;1;30932;1;0;2.29;2;0;1;0;0;1;0;1;0;DE=3|CH=1;1;EMT Template;0;5;2;2017-07-16T11:30:00+02:00;4;2017-07-17T00:00:00+02:00;2017-07-16T02:00:00+02:00;2;4;3;7;2017-07-17T00:00:00+02:00;2;5;
I;1111;2017-07-17T00:00:00+02:00;12345|67890|C0002|C0006;2017-07-17T00:00:00+02:00;2;1;1.293;2;2.398;2;0.05;1;0.0125;1;2.304;2;0.123;1;2.28;2;7.383;2;8.05;2;0.125;1;0.09;1;4.932;1;
I;1112;2017-07-17T00:00:00+02:00;12345|67890|C0002|C0006;2017-07-17T00:00:00+02:00;2;1;2017-07-17;5;2017-07-18;2;5.938;2017-07-16;;2017-08-25;2017-07-16;
I;1113;2;;4;7;3;3;2;4;0.0875;2;1;2;2;4;2;3;2;3;2;1;3;3;;12;;1;Ethical Invest Product;3;2;3;4;2;de=Europ. Marktbeschreibung|en=European Narrative Target Market;;
I;1113;;DE;4;7;3;3;2;4;0.03075;2;1;2;2;4;2;3;2;3;2;1;3;3;;12;;1;Ethical Invest Product;3;2;3;4;2;de=Deutsche Marktbeschreibung|en=German Target Market Description;3;
I;1113;;CH;4;7;3;3;2;4;0.01075;2;1;2;2;4;2;3;2;3;2;1;3;3;;12;;1;Ethical Invest Product;3;2;3;4;2;de=Schweizer Marktbeschreibung|en=Swiss Target Market Description;;
I;1120;2017-07-17T00:00:00+02:00;12345|67890|C0002|C0006;2017-07-17T00:00:00+02:00;2;2;1;EUR;3;1;0;12.256;;11.125;;2.393;;XL22;0;2.293;2017-07-17T00:00:00+02:00;2;2017-07-17;4;2.0;35.393;;54.029;;9.282;2017-07-17T00:00:00+02:00;4;0;;2017-07-17T00:00:00+02:00;3;2017-07-17T00:00:00+02:00;3;2017-07-17T00:00:00+02:00;2;6;252;;0.1132;
I;1121;2017-07-17T00:00:00+02:00;12345|67890|C0002|C0006;2017-07-17T00:00:00+02:00;2;1;1;1;1.29;2;0.014;1;0.0122;1;3.202;2;2.912;0.122;1;0.088;1;2;3.298;2;0.1282;1;;0.1214;2;;1.19;2;0.001;1;0.005;1;
I;1122;1;0.015;2.25;
I;1122;2;0.02;1.96;
I;1122;3;0.023;1.06;
I;1123;en;2;;1;0;Intended for European Union;Objective for European Union;Performance Output EU;Investment Trust;Characteristics of the guarantee;2017-07-17;15.028;Limited Guarantee for EU;Carried Interest EU;;Other Comment for EU;11.29;
I;1123;en;;DE;1;0;Intended for Germany;Objective for Germany;Performance Output DE;Investment Trust;Characteristics of the guarantee;2017-07-17;10.18;Limited Guarantee for DE;Carried Interest DE;;Other Comment for DE;13.39;
I;1123;en;;CH;1;0;Intended for Switzerland;Objective for Switzerland;Performance Output CH;Investment Trust;Characteristics of the guarantee;2017-07-17;9.28;Limited Guarantee for DE;Carried Interest CH;;Other Comment for CH;7.58;
I;1124;2;2;1.15;0.09;
I;1124;2;2;2.15;0.115;
I;1124;2;2;2.36;0.125;
I;1125;89.38;1;0;45.29;12.29;11.12;;
I;1126;2.23;2;1.125;1;6;32.92;2;22.28;2;2017-07-17T00:00:00+02:00;7;3;;
I;1130;2017-07-17T00:00:00+02:00;12345|67890|C0002|C0006;2017-07-17T00:00:00+02:00;2;2;1;EUR;1.5;2.49;2.05;2;;
I;1131;1;0.75;2.05;
I;1131;2;1.05;3.05;
I;1131;3;1.55;5.05;
I;1132;2;1;25.39;0.095;
I;1132;2;2;36.39;0.124;
I;1132;3;1;55.93;0.234;
I;1132;3;2;62.93;0.55;
I;1133;2000-07-17;EUR;16.06;2017-06-20;;1.98;DDM;104;EUR;7.18;3.57;
I;1140;2017-07-17T00:00:00+02:00;12345|67890|C0002|C0006;2017-07-17T00:00:00+02:00;2;1;1;US;1;33;1;
I;1141;;US10291212;;12.2902;2017-07-17;;
I;1142;2017-08-03;2.298;2017-07-17;0.11;
I;1142;2017-09-10;3.493;2017-07-17;0.15;
I;1141;;US10001111;;9.322;2017-08-19;;
I;1142;2017-08-18;3.292;2017-07-17;1.12;
I;1142;2017-10-25;4.001;2017-07-17;0.98;
end
```

Figure 39: Example of the complete CD file in CSV format

3.5.2. XML Format: CD (version 1)

A description of the respective data type and an implementation in the corresponding technology can be found in chapter ["Description of Data Types"](#).

The following graphic gives an overview of the classes, relations and attributes in the XML file for ContentData. The grouping is used to show the delivery condition for each attribute.

3.5.2.1. Overview XML structure for CD

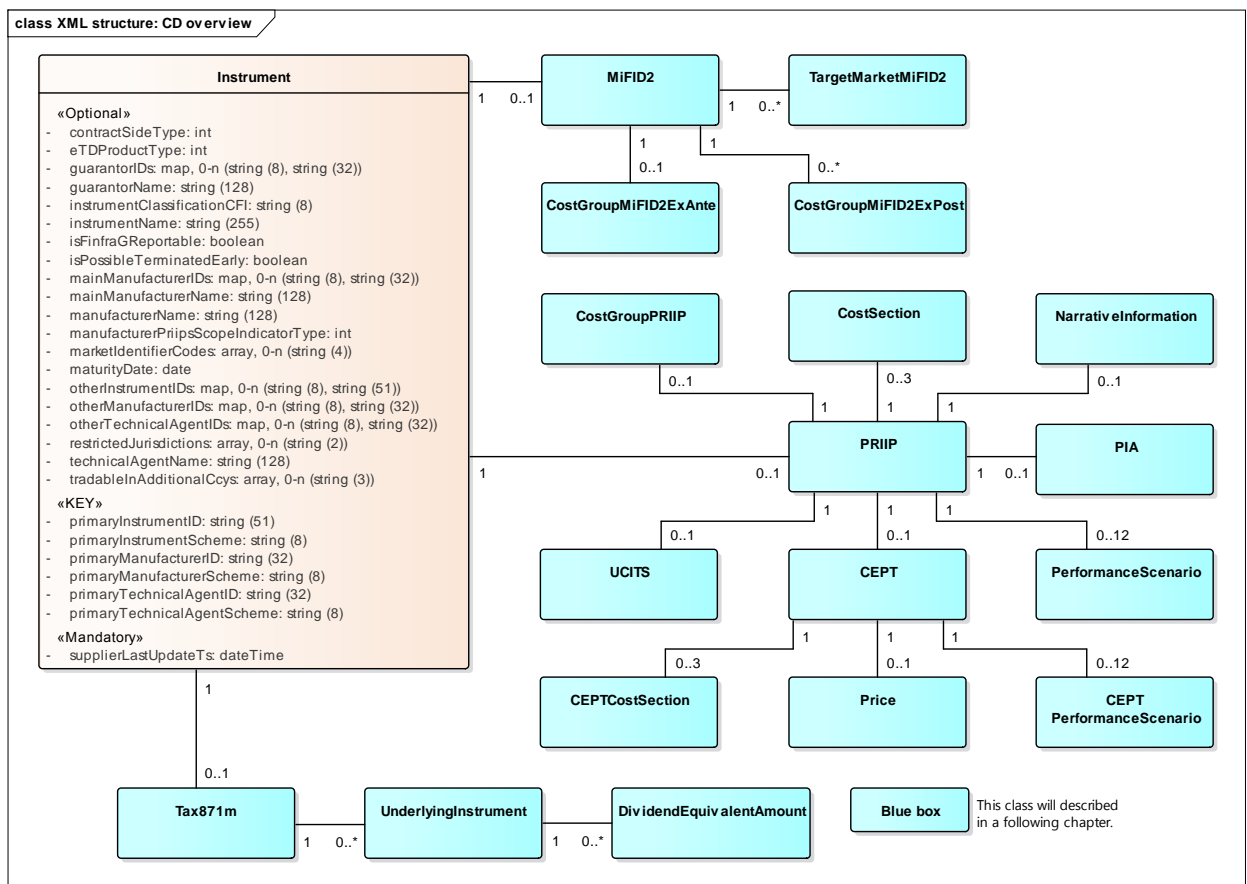


Figure 40: Overview XML structure for CD

The DMD structure in XML is encapsulated with the root element **"SIXRegHub"**. The explanation of the XML attributes **"et"** and **"mt"** is in the chapter ["General information for all used XML files"](#).

The following example shows one XML example with one new TLO (Instrument with each Content data classes like MiFID2, PRIIP and Tax871m) which will be inserted. Important, this sample shows one complete object, it is a part out of a **"Delta file"**. All the followed examples are part of this TLO splitted per model part.

```
<SIXRegHub>
<Instrument et="u" mt="i">
  <primaryInstrumentScheme>I</primaryInstrumentScheme>
  <primaryInstrumentID>CH0012345678</primaryInstrumentID>
  <primaryManufacturerScheme>LEI</primaryManufacturerScheme>
  <primaryManufacturerID>888800ABCDEFGHIJKL00</primaryManufacturerID>
  <primaryTechnicalAgentScheme>LEI</primaryTechnicalAgentScheme>
  <primaryTechnicalAgentID>12300ABCDEFKMQAKL12</primaryTechnicalAgentID>
  <supplierLastUpdateTs>2017-07-17T00:00:00+02:00</supplierLastUpdateTs>
  <contractSideType>1</contractSideType>
  <eTDPProductType>2</eTDPProductType>
  <guarantorIDs>
    <guarantorID scheme="GK">123148</guarantorID>
```



```
<guarantorID scheme="BIC">2920933</guarantorID>
</guarantorIDs>
<guarantorName>Guarantor Name</guarantorName>
<instrumentClassificationCFI>DB</instrumentClassificationCFI>
<instrumentName>Example Instrument</instrumentName>
<isFinraGReportable>1</isFinraGReportable>
<isPossibleTerminatedEarly>0</isPossibleTerminatedEarly>
<mainManufacturerIDs>
  <mainManufacturerID scheme="GK">2211</mainManufacturerID>
  <mainManufacturerID scheme="LEI">9998811ABCDEFL00</mainManufacturerID>
</mainManufacturerIDs>
<mainManufacturerName>The Main Manufacturer</mainManufacturerName>
<manufacturerName>The Manufacturer</manufacturerName>
<manufacturerPriipsScopeIndicatorType>1</manufacturerPriipsScopeIndicatorType>
<marketIdentifierCodes>
  <marketIdentifierCode>XFRA</marketIdentifierCode>
  <marketIdentifierCode>DOTS</marketIdentifierCode>
</marketIdentifierCodes>
<maturityDate>2017-07-17</maturityDate>
<otherInstrumentIDs>
  <otherInstrumentID scheme="DE">D1234567</otherInstrumentID>
  <otherInstrumentID scheme="CH">1234567</otherInstrumentID>
</otherInstrumentIDs>
<otherManufacturerIDs>
  <otherManufacturerID scheme="GK">2211</otherManufacturerID>
  <otherManufacturerID scheme="BIC">8888232</otherManufacturerID>
</otherManufacturerIDs>
<otherTechnicalAgentIDs>
  <otherTechnicalAgentID scheme="GK">2211</otherTechnicalAgentID>
  <otherTechnicalAgentID scheme="BIC">8888232</otherTechnicalAgentID>
</otherTechnicalAgentIDs>
<restrictedJurisdictions>
  <restrictedJurisdiction>DE</restrictedJurisdiction>
  <restrictedJurisdiction>CH</restrictedJurisdiction>
</restrictedJurisdictions>
<technicalAgentName>The Manufacturer</technicalAgentName>
<tradableInAdditionalCcys>
  <tradableInAdditionalCcy>EUR</tradableInAdditionalCcy>
  <tradableInAdditionalCcy>CHF</tradableInAdditionalCcy>
</tradableInAdditionalCcys>
<!--Other parts possible-->
</Instrument>
</SIXRegHub>
```

Figure 41: Example of the Instrument part of a CD file in XML format

3.5.2.2. XML structure for MiFID 2 (part of CD)

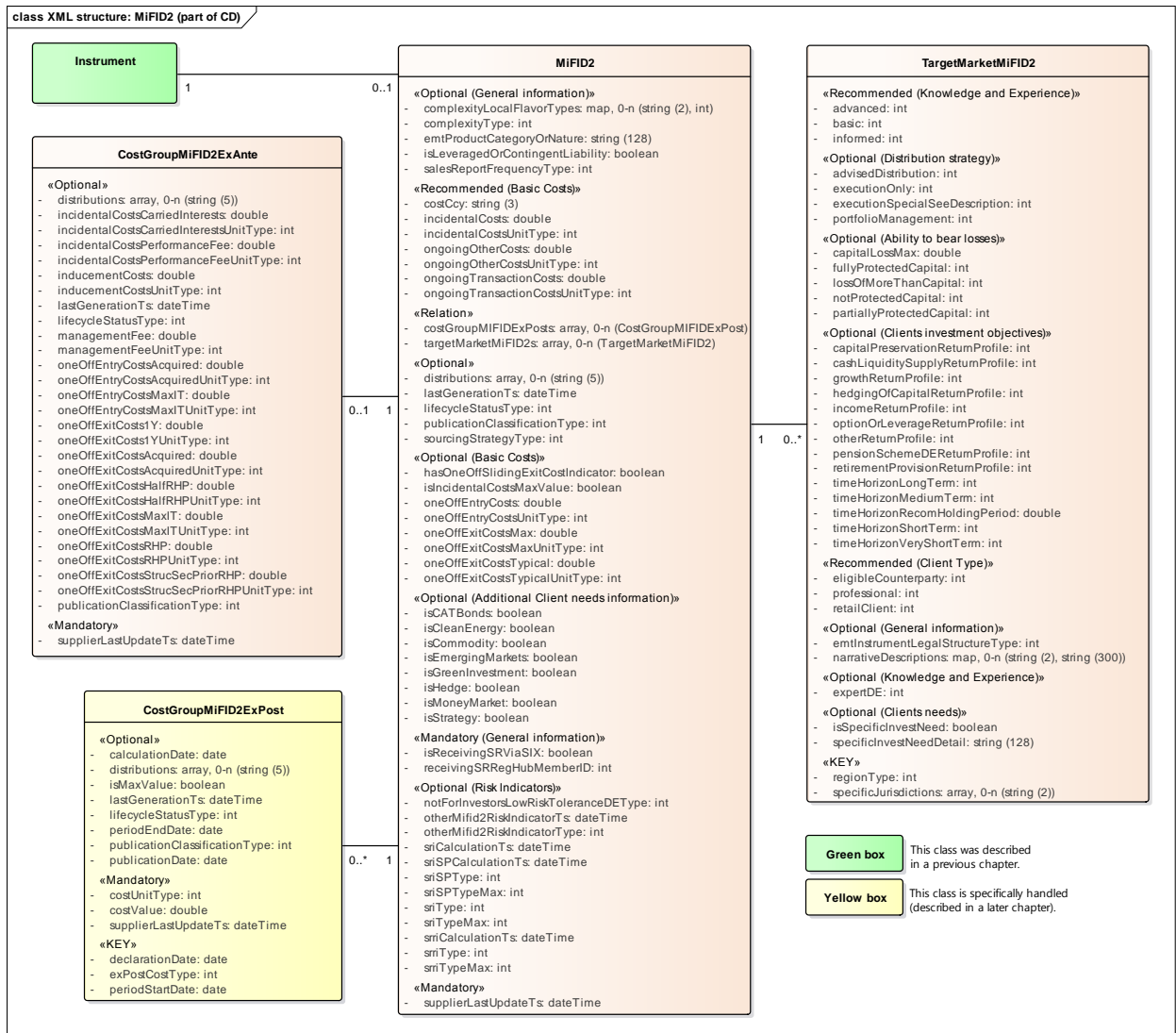


Figure 42: XML structure for MiFID 2 (part of CD)

```

<SIXRegHub>
<Instrument et="u" mt="i">
  <!--Instrument attributes-->
  <MiFID2>
    <supplierLastUpdateTs>2017-07-17T00:00:00+02:00</supplierLastUpdateTs>
    <distributions>
      <distribution>12345</distribution>
      <distribution>67890</distribution>
      <distribution>C0002</distribution>
      <distribution>C0006</distribution>
    </distributions>
    <lastGenerationTs>2017-07-17T00:00:00+02:00</lastGenerationTs>
    <lifecycleStatusType>2</lifecycleStatusType>
    <publicationClassificationType>1</publicationClassificationType>
    <sourcingStrategyType>1</sourcingStrategyType>
    <isCATBonds>0</isCATBonds>
    <isCleanEnergy>1</isCleanEnergy>
    <isCommodity>0</isCommodity>
    <isEmergingMarkets>0</isEmergingMarkets>
    <isGreenInvestment>1</isGreenInvestment>
    <isHedge>0</isHedge>
    <isMoneyMarket>1</isMoneyMarket>
    <isStrategy>0</isStrategy>
  </MiFID2>
</Instrument>
  
```

```
<isReceivingSRViaSIX>1</isReceivingSRViaSIX>
<receivingSRRegHubMemberID>30932</receivingSRRegHubMemberID>
<complexityLocalFlavorTypes>
  <complexityLocalFlavorType jurisdiction="DE">3</complexityLocalFlavorType>
  <complexityLocalFlavorType jurisdiction="CH">1</complexityLocalFlavorType>
</complexityLocalFlavorTypes>
<complexityType>1</complexityType>
<emtProductCategoryOrNature>EMT Template</emtProductCategoryOrNature>
<isLeveragedOrContingentLiability>0</isLeveragedOrContingentLiability>
<salesReportFrequencyType>5</salesReportFrequencyType>
<otherMifid2RiskIndicatorTs>2017-07-16T11:30:00+02:00</otherMifid2RiskIndicatorTs>
<otherMifid2RiskIndicatorType>4</otherMifid2RiskIndicatorType>
<notForInvestorsLowRiskToleranceDEType>2</notForInvestorsLowRiskToleranceDEType>
<sriCalculationTs>2017-07-17T00:00:00+02:00</sriCalculationTs>
<sriSPCalculationTs>2017-07-16T02:00:00+02:00</sriSPCalculationTs>
<sriSPTType>2</sriSPTType>
<sriSPTTypeMax>4</sriSPTTypeMax>
<sriType>3</sriType>
<sriTypeMax>7</sriTypeMax>
<srriCalculationTs>2017-07-17T00:00:00+02:00</srriCalculationTs>
<srriType>2</srriType>
<srriTypeMax>5</srriTypeMax>
<costCcy>EUR</costCcy>
<incidentalCosts>0.05</incidentalCosts>
<incidentalCostsUnitType>1</incidentalCostsUnitType>
<oneOffEntryCosts>0.0125</oneOffEntryCosts>
<oneOffEntryCostsUnitType>1</oneOffEntryCostsUnitType>
<oneOffExitCostsMax>1.293</oneOffExitCostsMax>
<oneOffExitCostsMaxUnitType>2</oneOffExitCostsMaxUnitType>
<ongoingOtherCosts>3.303</ongoingOtherCosts>
<ongoingOtherCostsUnitType>2</ongoingOtherCostsUnitType>
<ongoingTransactionCosts>0.0125</ongoingTransactionCosts>
<ongoingTransactionCostsUnitType>1</ongoingTransactionCostsUnitType>
<hasOneOffSlidingExitCostIndicator>1</hasOneOffSlidingExitCostIndicator>
<isIncidentalCostsMaxValue>0</isIncidentalCostsMaxValue>
<oneOffExitCostsTypical>2.29</oneOffExitCostsTypical>
<oneOffExitCostsTypicalUnitType>2</oneOffExitCostsTypicalUnitType>
<targetMarketMiFID2s>
  <TargetMarketMiFID2>
    <regionType>2</regionType>
    <emtInstrumentLegalStructureType>2</emtInstrumentLegalStructureType>
    <narrativeDescriptions>
      <narrativeDescription language="de">Europ. Marktbeschreibung</narrativeDescription>
      <narrativeDescription language="en">European Narrative Target Market</narrativeDescription>
    </narrativeDescriptions>
    <capitalLossMax>0.0875</capitalLossMax>
    <fullyProtectedCapital>2</fullyProtectedCapital>
    <lossOfMoreThanCapital>1</lossOfMoreThanCapital>
    <notProtectedCapital>2</notProtectedCapital>
    <partiallyProtectedCapital>2</partiallyProtectedCapital>
    <eligibleCounterparty>4</eligibleCounterparty>
    <professional>7</professional>
    <retailClient>3</retailClient>
    <capitalPreservationReturnProfile>4</capitalPreservationReturnProfile>
    <cashLiquiditySupplyReturnProfile>2</cashLiquiditySupplyReturnProfile>
    <growthReturnProfile>3</growthReturnProfile>
    <hedgingOfCapitalReturnProfile>2</hedgingOfCapitalReturnProfile>
    <incomeReturnProfile>3</incomeReturnProfile>
    <optionOrLeverageReturnProfile>2</optionOrLeverageReturnProfile>
    <otherReturnProfile>1</otherReturnProfile>
    <pensionSchemeDEReturnProfile>3</pensionSchemeDEReturnProfile>
    <retirementProvisionReturnProfile>3</retirementProvisionReturnProfile>
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    <isSpecificInvestNeed>1</isSpecificInvestNeed>
    <specificInvestNeedDetail>Ethical Invest Product</specificInvestNeedDetail>
    <advisedDistribution>3</advisedDistribution>
    <executionOnly>2</executionOnly>
    <executionSpecialSeeDescription>3</executionSpecialSeeDescription>
    <portfolioManagement>4</portfolioManagement>
    <advanced>3</advanced>
    <basic>2</basic>
    <informed>4</informed>
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</TargetMarketMiFID2>
```

```
<specificJurisdiction>  
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</specificJurisdiction>  
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  <narrativeDescription language="de">Deutsche Marktbeschreibung</narrativeDescription>  
  <narrativeDescription language="en">German Target Market Description</narrativeDescription>  
</narrativeDescriptions>  
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<notProtectedCapital>2</notProtectedCapital>  
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<eligibleCounterparty>4</eligibleCounterparty>  
<professional>7</professional>  
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<growthReturnProfile>3</growthReturnProfile>  
<hedgingOfCapitalReturnProfile>2</hedgingOfCapitalReturnProfile>  
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<otherReturnProfile>1</otherReturnProfile>  
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<retirementProvisionReturnProfile>3</retirementProvisionReturnProfile>  
<timeHorizonRecomHoldingPeriod>12</timeHorizonRecomHoldingPeriod>  
<isSpecificInvestNeed>1</isSpecificInvestNeed>  
<specificInvestNeedDetail>Ethical Invest Product</specificInvestNeedDetail>  
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<executionOnly>2</executionOnly>  
<executionSpecialSeeDescription>3</executionSpecialSeeDescription>  
<portfolioManagement>4</portfolioManagement>  
<advanced>3</advanced>  
<basic>2</basic>  
<expertDE>3</expertDE>  
<informed>4</informed>  
</TargetMarketMiFID2>  
<TargetMarketMiFID2>  
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    <specificJurisdiction>CH</specificJurisdiction>  
  </specificJurisdiction>  
<emtInstrumentLegalStructureType>2</emtInstrumentLegalStructureType>  
<narrativeDescriptions>  
  <narrativeDescription language="de">Schweizer Marktbeschreibung</narrativeDescription>  
  <narrativeDescription language="en">Swiss Target Market Description</narrativeDescription>  
</narrativeDescriptions>  
<capitalLossMax>0.01075</capitalLossMax>  
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<lossOfMoreThanCapital>1</lossOfMoreThanCapital>  
<notProtectedCapital>2</notProtectedCapital>  
<partiallyProtectedCapital>2</partiallyProtectedCapital>  
<eligibleCounterparty>4</eligibleCounterparty>  
<professional>7</professional>  
<retailClient>3</retailClient>  
<capitalPreservationReturnProfile>4</capitalPreservationReturnProfile>  
<cashLiquiditySupplyReturnProfile>2</cashLiquiditySupplyReturnProfile>  
<growthReturnProfile>3</growthReturnProfile>  
<hedgingOfCapitalReturnProfile>2</hedgingOfCapitalReturnProfile>  
<incomeReturnProfile>3</incomeReturnProfile>  
<optionOrLeverageReturnProfile>2</optionOrLeverageReturnProfile>  
<otherReturnProfile>1</otherReturnProfile>  
<pensionSchemeDEReturnProfile>3</pensionSchemeDEReturnProfile>  
<retirementProvisionReturnProfile>3</retirementProvisionReturnProfile>  
<timeHorizonRecomHoldingPeriod>12</timeHorizonRecomHoldingPeriod>  
<isSpecificInvestNeed>1</isSpecificInvestNeed>  
<specificInvestNeedDetail>Ethical Invest Product</specificInvestNeedDetail>  
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<executionOnly>2</executionOnly>  
<executionSpecialSeeDescription>3</executionSpecialSeeDescription>  
<portfolioManagement>4</portfolioManagement>  
<advanced>3</advanced>  
<basic>2</basic>  
<informed>4</informed>  
</TargetMarketMiFID2>
```

```
</targetMarketMiFID2s>
<CostGroupMiFID2ExAnte>
  <supplierLastUpdateTs>2017-07-17T00:00:00+02:00</supplierLastUpdateTs>
  <distributions>
    <distribution>12345</distribution>
    <distribution>67890</distribution>
    <distribution>C0002</distribution>
    <distribution>C0006</distribution>
  </distributions>
  <lastGenerationTs>2017-07-17T00:00:00+02:00</lastGenerationTs>
  <lifecycleStatusType>2</lifecycleStatusType>
  <publicationClassificationType>1</publicationClassificationType>
  <incidentalCostsCarriedInterests>1.293</incidentalCostsCarriedInterests>
  <incidentalCostsCarriedInterestsUnitType>2</incidentalCostsCarriedInterestsUnitType>
  <incidentalCostsPerformanceFee>2.398</incidentalCostsPerformanceFee>
  <incidentalCostsPerformanceFeeUnitType>2</incidentalCostsPerformanceFeeUnitType>
  <inducementCosts>0.05</inducementCosts>
  <inducementCostsUnitType>1</inducementCostsUnitType>
  <managementFee>0.0125</managementFee>
  <managementFeeUnitType>1</managementFeeUnitType>
  <oneOffEntryCostsAcquired>2.304</oneOffEntryCostsAcquired>
  <oneOffEntryCostsAcquiredUnitType>2</oneOffEntryCostsAcquiredUnitType>
  <oneOffEntryCostsMaxIT>0.123</oneOffEntryCostsMaxIT>
  <oneOffEntryCostsMaxITUnitType>1</oneOffEntryCostsMaxITUnitType>
  <oneOffExitCosts1Y>2.28</oneOffExitCosts1Y>
  <oneOffExitCosts1YUnitType>2</oneOffExitCosts1YUnitType>
  <oneOffExitCostsAcquired>7.383</oneOffExitCostsAcquired>
  <oneOffExitCostsAcquiredUnitType>2</oneOffExitCostsAcquiredUnitType>
  <oneOffExitCostsHalfRHP>8.05</oneOffExitCostsHalfRHP>
  <oneOffExitCostsHalfRHPUnitType>2</oneOffExitCostsHalfRHPUnitType>
  <oneOffExitCostsMaxIT>0.125</oneOffExitCostsMaxIT>
  <oneOffExitCostsMaxITUnitType>1</oneOffExitCostsMaxITUnitType>
  <oneOffExitCostsRHP>0.09</oneOffExitCostsRHP>
  <oneOffExitCostsRHPUnitType>1</oneOffExitCostsRHPUnitType>
  <oneOffExitCostsStrucSecPriorRHP>4.932</oneOffExitCostsStrucSecPriorRHP>
  <oneOffExitCostsStrucSecPriorRHPUnitType>1</oneOffExitCostsStrucSecPriorRHPUnitType>
</CostGroupMiFID2ExAnte>
<costGroupMiFID2ExPost>
  <CostGroupMiFID2ExPost>
    <supplierLastUpdateTs>2017-07-17T00:00:00+02:00</supplierLastUpdateTs>
    <distributions>
      <distribution>67890</distribution>
      <distribution>C0006</distribution>
    </distributions>
    <lastGenerationTs>2017-07-17T00:00:00+02:00</lastGenerationTs>
    <lifecycleStatusType>2</lifecycleStatusType>
    <publicationClassificationType>1</publicationClassificationType>
    <declarationDate>2017-07-17</declarationDate>
    <exPostCostType>5</exPostCostType>
    <periodStartDate>2017-07-18</periodStartDate>
    <costUnitType>2</costUnitType>
    <costValue>5.938</costValue>
    <periodEndDate>2017-08-25</periodEndDate>
    <calculationDate>2017-07-16</calculationDate>
    <publicationDate>2017-07-16</publicationDate>
  </CostGroupMiFID2ExPost>
</costGroupMiFID2ExPost>
</MiFID2>
<!--Other parts possible-->
</Instrument>
</SIXRegHub>
```

Figure 43: Example of the MiFID 2 part of a CD file in XML format

3.5.2.3. XML structure for PRIIP (part of CD)

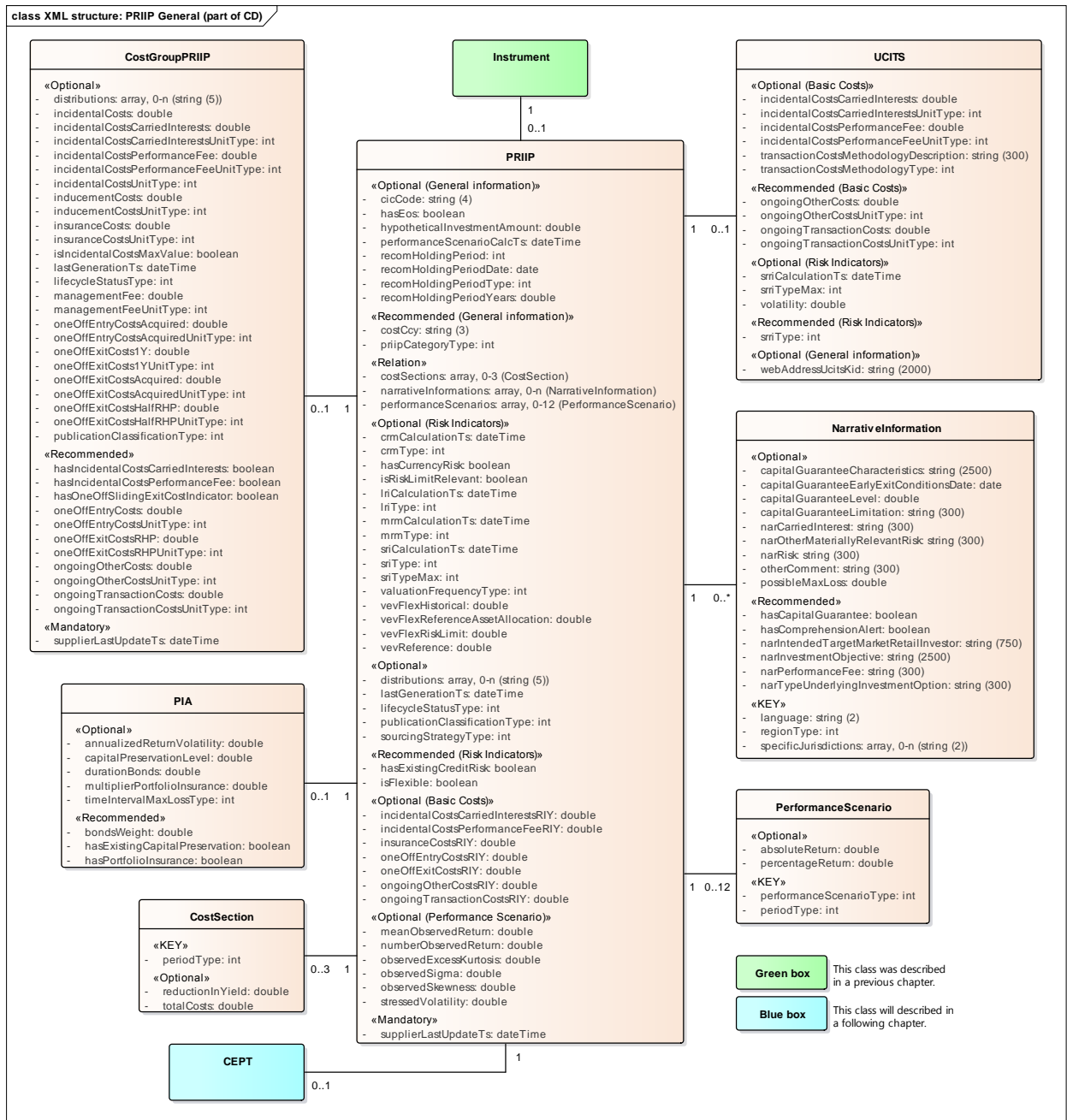


Figure 44: XML structure for PRIIP (part of CD)

```

<SIXRegHub>
<Instrument et="u" mt="i">
<!--Instrument attributes-->
<PRIIP>
<supplierLastUpdateTs>2017-07-17T00:00:00+02:00</supplierLastUpdateTs>
<distributions>
<distribution>12345</distribution>
<distribution>67890</distribution>
<distribution>C0002</distribution>
<distribution>C0006</distribution>
</distributions>
<lastGenerationTs>2017-07-17T00:00:00+02:00</lastGenerationTs>
<lifecycleStatusType>2</lifecycleStatusType>
<publicationClassificationType>2</publicationClassificationType>
  
```

```
<sourcingStrategyType>1</sourcingStrategyType>
<hasExistingCreditRisk>1</hasExistingCreditRisk>
<isFlexible>0</isFlexible>
<crmCalculationTs>2017-07-17T00:00:00+02:00</crmCalculationTs>
<crmType>4</crmType>
<hasCurrencyRisk>0</hasCurrencyRisk>
<lriCalculationTs>2017-07-17T00:00:00+02:00</lriCalculationTs>
<lriType>3</lriType>
<mrmCalculationTs>2017-07-17T00:00:00+02:00</mrmCalculationTs>
<mrmType>3</mrmType>
<sriCalculationTs>2017-07-17T00:00:00+02:00</sriCalculationTs>
<sriType>2</sriType>
<sriTypeMax>6</sriTypeMax>
<valuationFrequencyType>252</valuationFrequencyType>
<vevReference>0.1132</vevReference>
<costCcy>EUR</costCcy>
<priipCategoryType>3</priipCategoryType>
<cicCode>XL22</cicCode>
<hasEos>0</hasEos>
<hypotheticalInvestmentAmount>2.293</hypotheticalInvestmentAmount>
<performanceScenarioCalcTs>2017-07-17T00:00:00+02:00</performanceScenarioCalcTs>
<recomHoldingPeriod>2</recomHoldingPeriod>
<recomHoldingPeriodDate>2017-07-17</recomHoldingPeriodDate>
<recomHoldingPeriodType>4</recomHoldingPeriodType>
<recomHoldingPeriodYears>2.0</recomHoldingPeriodYears>
<incidentalCostsCarriedInterestsRIY>12.256</incidentalCostsCarriedInterestsRIY>
<insuranceCostsRIY>11.125</insuranceCostsRIY>
<ongoingOtherCostsRIY>2.393</ongoingOtherCostsRIY>
<meanObservedReturn>35.393</meanObservedReturn>
<observedSigma>54.029</observedSigma>
<stressedVolatility>9.282</stressedVolatility>
<PIA>
  <bondsWeight>89.38</bondsWeight>
  <hasExistingCapitalPreservation>1</hasExistingCapitalPreservation>
  <hasPortfolioInsurance>0</hasPortfolioInsurance>
  <annualizedReturnVolatility>45.29</annualizedReturnVolatility>
  <capitalPreservationLevel>12.29</capitalPreservationLevel>
  <durationBonds>11.12</durationBonds>
</PIA>
<UCITS>
  <ongoingOtherCosts>2.23</ongoingOtherCosts>
  <ongoingOtherCostsUnitType>2</ongoingOtherCostsUnitType>
  <ongoingTransactionCosts>1.125</ongoingTransactionCosts>
  <ongoingTransactionCostsUnitType>1</ongoingTransactionCostsUnitType>
  <srriType>6</srriType>
  <incidentalCostsCarriedInterests>32.92</incidentalCostsCarriedInterests>
  <incidentalCostsCarriedInterestsUnitType>2</incidentalCostsCarriedInterestsUnitType>
  <incidentalCostsPerformanceFee>22.28</incidentalCostsPerformanceFee>
  <incidentalCostsPerformanceFeeUnitType>2</incidentalCostsPerformanceFeeUnitType>
  <sriCalculationTs>2017-07-17T00:00:00+02:00</sriCalculationTs>
  <srriTypeMax>7</srriTypeMax>
  <transactionCostsMethodologyType>3</transactionCostsMethodologyType>
</UCITS>
<costSections>
  <CostSection>
    <periodType>1</periodType>
    <reductionInYield>0.015</reductionInYield>
    <totalCosts>2.25</totalCosts>
  </CostSection>
  <CostSection>
    <periodType>2</periodType>
    <reductionInYield>0.02</reductionInYield>
    <totalCosts>1.96</totalCosts>
  </CostSection>
  <CostSection>
    <periodType>3</periodType>
    <reductionInYield>0.023</reductionInYield>
    <totalCosts>1.06</totalCosts>
  </CostSection>
</costSections>
<CostGroupPRIIP>
  <supplierLastUpdateTs>2017-07-17T00:00:00+02:00</supplierLastUpdateTs>
  <distributions>
    <distribution>12345</distribution>
```

```
<distribution>67890</distribution>
<distribution>C0002</distribution>
<distribution>C0006</distribution>
</distributions>
<lastGenerationTs>2017-07-17T00:00:00+02:00</lastGenerationTs>
<lifecycleStatusType>2</lifecycleStatusType>
<publicationClassificationType>1</publicationClassificationType>
<hasIncidentalCostsCarriedInterests>1</hasIncidentalCostsCarriedInterests>
<hasIncidentalCostsPerformanceFee>1</hasIncidentalCostsPerformanceFee>
<hasOneOffSlidingExitCostIndicator>1</hasOneOffSlidingExitCostIndicator>
<oneOffEntryCosts>1.29</oneOffEntryCosts>
<oneOffEntryCostsUnitType>2</oneOffEntryCostsUnitType>
<oneOffExitCostsRHP>0.014</oneOffExitCostsRHP>
<oneOffExitCostsRHPUnitType>1</oneOffExitCostsRHPUnitType>
<ongoingOtherCosts>0.0122</ongoingOtherCosts>
<ongoingOtherCostsUnitType>1</ongoingOtherCostsUnitType>
<ongoingTransactionCosts>3.202</ongoingTransactionCosts>
<ongoingTransactionCostsUnitType>2</ongoingTransactionCostsUnitType>
<incidentalCosts>2.912</incidentalCosts>
<incidentalCostsUnitType>2</incidentalCostsUnitType>
<incidentalCostsCarriedInterests>0.122</incidentalCostsCarriedInterests>
<incidentalCostsCarriedInterestsUnitType>1</incidentalCostsCarriedInterestsUnitType>
<incidentalCostsPerformanceFee>0.088</incidentalCostsPerformanceFee>
<incidentalCostsPerformanceFeeUnitType>1</incidentalCostsPerformanceFeeUnitType>
<inducementCosts>3.298</inducementCosts>
<inducementCostsUnitType>2</inducementCostsUnitType>
<insuranceCosts>0.1282</insuranceCosts>
<insuranceCostsUnitType>1</insuranceCostsUnitType>
<managementFee>0.1214</managementFee>
<managementFeeUnitType>2</managementFeeUnitType>
<oneOffExitCosts1Y>1.19</oneOffExitCosts1Y>
<oneOffExitCosts1YUnitType>2</oneOffExitCosts1YUnitType>
<oneOffExitCostsAcquired>0.001</oneOffExitCostsAcquired>
<oneOffExitCostsAcquiredUnitType>1</oneOffExitCostsAcquiredUnitType>
<oneOffExitCostsHalfRHP>0.005</oneOffExitCostsHalfRHP>
<oneOffExitCostsHalfRHPUnitType>1</oneOffExitCostsHalfRHPUnitType>
</CostGroupPRIIP>
<narrativeInformations>
  <NarrativeInformation>
    <language>en</language>
    <regionType>2</regionType>
    <hasCapitalGuarantee>1</hasCapitalGuarantee>
    <hasComprehensionAlert>0</hasComprehensionAlert>
    <narIntendedTargetMarketRetailInvestor><![CDATA[Intended for European
Union]]></narIntendedTargetMarketRetailInvestor>
    <narInvestmentObjective><![CDATA[Objective for European Union]]></narInvestmentObjective>
    <narPerformanceFee><![CDATA[Performance Output EU]]></narPerformanceFee>
    <narTypeUnderlyingInvestmentOption><![CDATA[Investment Trust]]></narTypeUnderlyingInvestmentOption>
    <capitalGuaranteeCharacteristics><![CDATA[Characteristics of the guarantee]]></capitalGuaranteeCharacteristics>
    <capitalGuaranteeEarlyExitConditionsDate>2017-07-17</capitalGuaranteeEarlyExitConditionsDate>
    <capitalGuaranteeLevel>15.028</capitalGuaranteeLevel>
    <capitalGuaranteeLimitation><![CDATA[Limited Guarantee for EU]]></capitalGuaranteeLimitation>
    <narCarriedInterest><![CDATA[Carried Interest EU]]></narCarriedInterest>
    <otherComment><![CDATA[Other Comment for EU]]></otherComment>
    <possibleMaxLoss>11.29</possibleMaxLoss>
  </NarrativeInformation>
  <NarrativeInformation>
    <language>en</language>
    <specificJurisdictions>
      <specificJurisdiction>DE</specificJurisdiction>
    </specificJurisdictions>
    <hasCapitalGuarantee>1</hasCapitalGuarantee>
    <hasComprehensionAlert>0</hasComprehensionAlert>
    <narIntendedTargetMarketRetailInvestor><![CDATA[Intended for Germany]]></narIntendedTargetMarketRetailInvestor>
    <narInvestmentObjective><![CDATA[Objective for Germany]]></narInvestmentObjective>
    <narPerformanceFee><![CDATA[Performance Output DE]]></narPerformanceFee>
    <narTypeUnderlyingInvestmentOption><![CDATA[Investment Trust]]></narTypeUnderlyingInvestmentOption>
    <capitalGuaranteeCharacteristics><![CDATA[Characteristics of the guarantee]]></capitalGuaranteeCharacteristics>
    <capitalGuaranteeEarlyExitConditionsDate>2017-07-17</capitalGuaranteeEarlyExitConditionsDate>
    <capitalGuaranteeLevel>10.18</capitalGuaranteeLevel>
    <capitalGuaranteeLimitation><![CDATA[Limited Guarantee for DE]]></capitalGuaranteeLimitation>
    <narCarriedInterest><![CDATA[Carried Interest DE]]></narCarriedInterest>
    <otherComment><![CDATA[Other Comment for DE]]></otherComment>
    <possibleMaxLoss>13.39</possibleMaxLoss>
  </NarrativeInformation>
</narrativeInformations>
```



```
</NarrativeInformation>
<NarrativeInformation>
  <language>en</language>
  <specificJurisdictions>
    <specificJurisdiction>CH</specificJurisdiction>
  </specificJurisdictions>
  <hasCapitalGuarantee>1</hasCapitalGuarantee>
  <hasComprehensionAlert>0</hasComprehensionAlert>
  <narIntendedTargetMarketRetailInvestor><![CDATA[Intended for Switzerland]]></narIntendedTargetMarketRetailInvestor>
  <narInvestmentObjective><![CDATA[Objective for Switzerland]]></narInvestmentObjective>
  <narPerformanceFee><![CDATA[Performance Output CH]]></narPerformanceFee>
  <narTypeUnderlyingInvestmentOption><![CDATA[Investment Trust]]></narTypeUnderlyingInvestmentOption>
  <capitalGuaranteeCharacteristics><![CDATA[Characteristics of the guarantee]]></capitalGuaranteeCharacteristics>
  <capitalGuaranteeEarlyExitConditionsDate>2017-07-17</capitalGuaranteeEarlyExitConditionsDate>
  <capitalGuaranteeLevel>9.28</capitalGuaranteeLevel>
  <capitalGuaranteeLimitation><![CDATA[Limited Guarantee for DE]]></capitalGuaranteeLimitation>
  <narCarriedInterest><![CDATA[Carried Interest CH]]></narCarriedInterest>
  <otherComment><![CDATA[Other Comment for CH]]></otherComment>
  <possibleMaxLoss>7.58</possibleMaxLoss>
</NarrativeInformation>
</narrativeInformations>
<performanceScenarios>
  <PerformanceScenario>
    <performanceScenarioType>2</performanceScenarioType>
    <periodType>2</periodType>
    <absoluteReturn>1.15</absoluteReturn>
    <percentageReturn>0.09</percentageReturn>
  </PerformanceScenario>
  <PerformanceScenario>
    <performanceScenarioType>2</performanceScenarioType>
    <periodType>2</periodType>
    <absoluteReturn>2.15</absoluteReturn>
    <percentageReturn>0.115</percentageReturn>
  </PerformanceScenario>
  <PerformanceScenario>
    <performanceScenarioType>2</performanceScenarioType>
    <periodType>2</periodType>
    <absoluteReturn>2.36</absoluteReturn>
    <percentageReturn>0.125</percentageReturn>
  </PerformanceScenario>
</performanceScenarios>
</PRIIP>
<!--Other parts possible-->
</Instrument>
</SIXRegHub>
```

Figure 45: Example of the PRIIP part of a CD file in XML format

3.5.2.4. XML structure for PRIIP CEPT (part of CD)

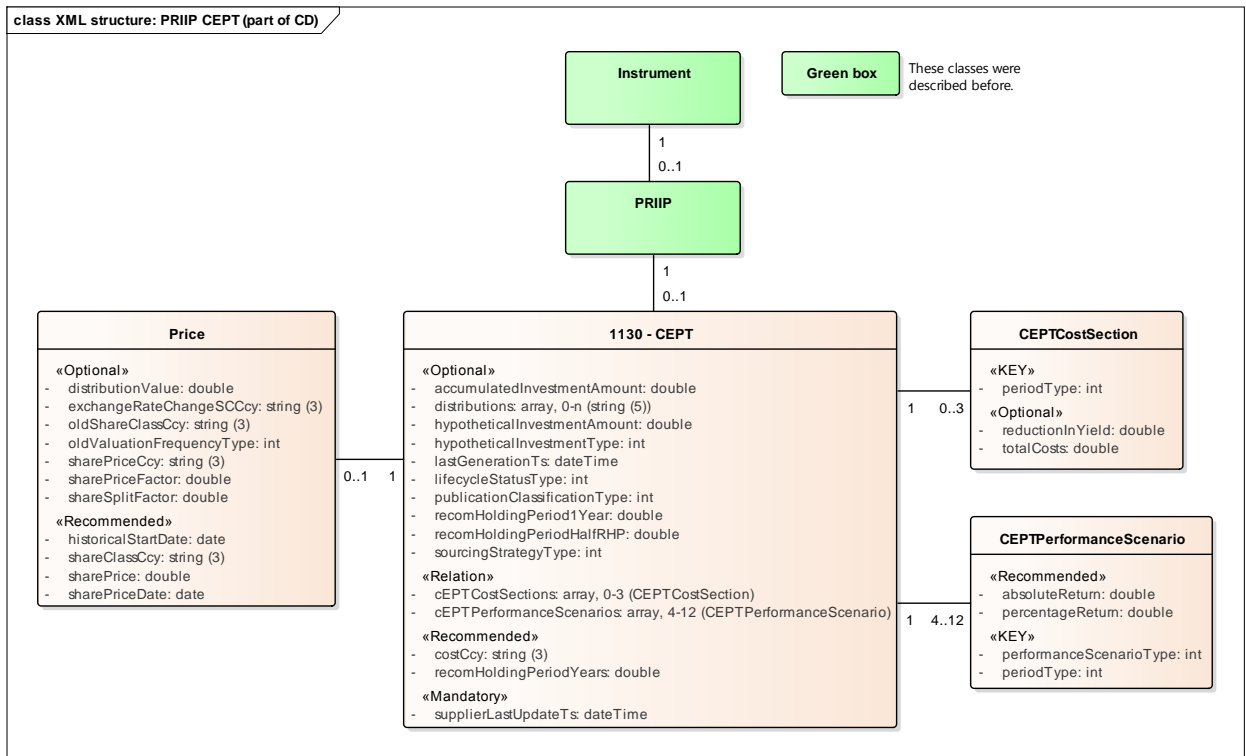


Figure 46: XML structure for PRIIP CEPT (part of CD)

```

<SIXRegHub>
<Instrument et="u" mt="i">
<!--Instrument attributes-->
<PRIIP>
<!--PRIIP Classes and attributes-->
<CEPT>
<supplierLastUpdateTs>2017-07-17T00:00:00+02:00</supplierLastUpdateTs>
<distributions>
<distribution>12345</distribution>
<distribution>67890</distribution>
<distribution>C0002</distribution>
<distribution>C0006</distribution>
</distributions>
<lastGenerationTs>2017-07-17T00:00:00+02:00</lastGenerationTs>
<lifecycleStatusType>2</lifecycleStatusType>
<publicationClassificationType>2</publicationClassificationType>
<sourcingStrategyType>1</sourcingStrategyType>
<costCcy>EUR</costCcy>
<recomHoldingPeriodYears>1.5</recomHoldingPeriodYears>
<accumulatedInvestmentAmount>2.49</accumulatedInvestmentAmount>
<hypotheticalInvestmentAmount>2.05</hypotheticalInvestmentAmount>
<hypotheticalInvestmentType>2</hypotheticalInvestmentType>
<cEPTCostSections>
<CEPTCostSection>
<periodType>1</periodType>
<reductionInYield>0.75</reductionInYield>
<totalCosts>2.05</totalCosts>
</CEPTCostSection>
<CEPTCostSection>
<periodType>2</periodType>
<reductionInYield>1.05</reductionInYield>
<totalCosts>3.05</totalCosts>
</CEPTCostSection>
<CEPTCostSection>
<periodType>3</periodType>
<reductionInYield>1.55</reductionInYield>
  
```

```
<totalCosts>5.05</totalCosts>
</CEPTCostSection>
</cEPTCostSections>
<cEPTPerformanceScenarios>
  <CEPTPerformanceScenario>
    <performanceScenarioType>2</performanceScenarioType>
    <periodType>1</periodType>
    <absoluteReturn>25.39</absoluteReturn>
    <percentageReturn>0.095</percentageReturn>
  </CEPTPerformanceScenario>
  <CEPTPerformanceScenario>
    <performanceScenarioType>2</performanceScenarioType>
    <periodType>2</periodType>
    <absoluteReturn>36.39</absoluteReturn>
    <percentageReturn>0.124</percentageReturn>
  </CEPTPerformanceScenario>
  <CEPTPerformanceScenario>
    <performanceScenarioType>3</performanceScenarioType>
    <periodType>1</periodType>
    <absoluteReturn>55.93</absoluteReturn>
    <percentageReturn>0.234</percentageReturn>
  </CEPTPerformanceScenario>
  <CEPTPerformanceScenario>
    <performanceScenarioType>3</performanceScenarioType>
    <periodType>2</periodType>
    <absoluteReturn>62.93</absoluteReturn>
    <percentageReturn>0.55</percentageReturn>
  </CEPTPerformanceScenario>
</cEPTPerformanceScenarios>
<Price>
  <historicalStartDate>2000-07-17</historicalStartDate>
  <shareClassCcy>EUR</shareClassCcy>
  <sharePrice>16.06</sharePrice>
  <sharePriceDate>2017-06-20</sharePriceDate>
  <exchangeRateChangeSCCcy>EUR</exchangeRateChangeSCCcy>
  <oldShareClassCcy>DDM</oldShareClassCcy>
  <oldValuationFrequencyType>104</oldValuationFrequencyType>
  <sharePriceCcy>EUR</sharePriceCcy>
  <sharePriceFactor>7.18</sharePriceFactor>
  <shareSplitFactor>3.57</shareSplitFactor>
</Price>
</CEPT>
</PRIIP>
<!--Other parts possible-->
</Instrument>
</SIXRegHub>
```

Figure 47: Example of the PRIIP CEPT part of a CD file in XML format

3.5.2.5. XML structure for Tax871m (part of CD)

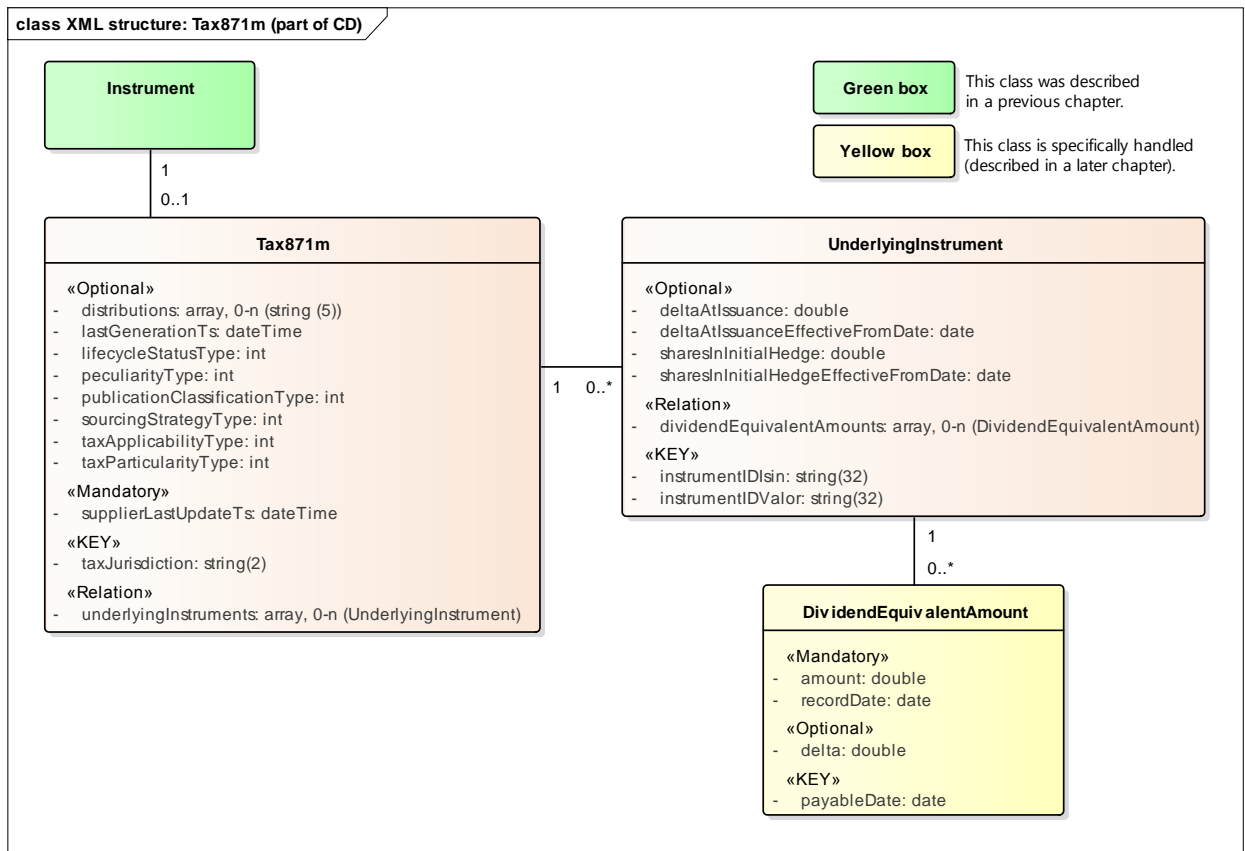


Figure 48: XML structure for Tax871m (part of CD)

```

<SIXRegHub>
<Instrument et="u" mt="i">
  <!--Instrument attributes-->
  <Tax871m>
    <supplierLastUpdateTs>2017-07-17T00:00:00+02:00</supplierLastUpdateTs>
    <distributions>
      <distribution>12345</distribution>
      <distribution>67890</distribution>
      <distribution>C0002</distribution>
      <distribution>C0006</distribution>
    </distributions>
    <lastGenerationTs>2017-07-17T00:00:00+02:00</lastGenerationTs>
    <lifecycleStatusType>2</lifecycleStatusType>
    <publicationClassificationType>1</publicationClassificationType>
    <sourcingStrategyType>1</sourcingStrategyType>
    <taxJurisdiction>US</taxJurisdiction>
    <peculiarityType>1</peculiarityType>
    <taxApplicabilityType>33</taxApplicabilityType>
    <taxParticularityType>1</taxParticularityType>
    <underlyingInstruments>
      <UnderlyingInstrument>
        <instrumentIDisin>US10291212</instrumentIDisin>
        <deltaAtIssuance>12.2902</deltaAtIssuance>
        <deltaAtIssuanceEffectiveFromDate>2017-07-17</deltaAtIssuanceEffectiveFromDate>
        <dividendEquivalentAmounts>
          <DividendEquivalentAmount>
            <payableDate>2017-08-03</payableDate>
            <amount>2.298</amount>
            <delta>0.11</delta>
            <recordDate>2017-07-17</recordDate>
          </DividendEquivalentAmount>
          <DividendEquivalentAmount>
            <payableDate>2017-09-10</payableDate>
  
```

```
<amount>3.493</amount>
<delta>0.15</delta>
<recordDate>2017-07-17</recordDate>
</DividendEquivalentAmount>
</dividendEquivalentAmounts>
</UnderlyingInstrument>
<UnderlyingInstrument>
<instrumentIDisin>US10001111</instrumentIDisin>
<deltaAtIssuance>9.322</deltaAtIssuance>
<deltaAtIssuanceEffectiveFromDate>2017-08-19</deltaAtIssuanceEffectiveFromDate>
<dividendEquivalentAmounts>
<DividendEquivalentAmount>
<payableDate>2017-08-18</payableDate>
<amount>3.292</amount>
<delta>1.12</delta>
<recordDate>2017-07-17</recordDate>
</DividendEquivalentAmount>
<DividendEquivalentAmount>
<payableDate>2017-10-25</payableDate>
<amount>4.001</amount>
<delta>0.98</delta>
<recordDate>2017-07-17</recordDate>
</DividendEquivalentAmount>
</dividendEquivalentAmounts>
</UnderlyingInstrument>
</underlyingInstruments>
</Tax871m>
<!--Other parts possible-->
</Instrument>
</SIXRegHub>
```

Figure 49: Example of the part Tax871m of a CD file in XML format

3.5.2.6. Complete CD XML File

This link leads you to an example of a [DMD file in XML format \("Full file"\)](#).

This link leads you to an example of a [DMD file in XML format \("Delta file"\)](#).

3.5.3. REST Service: CD (version 1)

A description of the respective data type and an implementation in the corresponding technology can be found in chapter [“Description of Data Types”](#).

The following table give an overview of all REST operations for this topic.

3.5.3.1. Overview of all REST API Calls for CD

If an API call is marked as **draft** this means that this call will not be productively available.

| Resource | HTTP Method | Short Description |
|---|-------------------------|---|
| Instrument (Providing CD): | | |
| /v1/instruments | GET | Search for an Instrument with various parameters. |
| /v1/instruments | POST | Create a new Instruments with zero or more Content data records. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID} | DELETE | Delete an Instrument with all dependent Content data records. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID} | GET | Get an Instrument with all dependent Content data records. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID} | PATCH (draft) | Update an Instrument and all Content data records by providing only the changed or new attributes with all needed keys. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID}?strategy=UPS ERT or MERGE | PUT | Replace an Instrument and all Content data records by providing the complete updated Instrument and Content data records. Optional request parameter UPSERT: Execution of insert or update, existing records are fully replaced. Optional request parameter request parameter MERGE: Execution of insert or update, existing records are merged, i.e. for not delivered childs the values still exist. Default behavior is UPSERT. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID}/ (mifid2 or priip or tax871m) | DELETE | Delete the (MiFID2 or PRIIP or Tax871m) Content data record. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID}/ (mifid2 or priip or tax871m) | GET | Get the (MiFID2 or PRIIP or Tax871m) Content data record. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID}/ (mifid2 or priip or tax871m) | PATCH (draft) | Update the (MiFID2 or PRIIP or Tax871m) Content data record by providing only the changed or new attributes with all needed keys. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID}/ (mifid2 or priip or tax871m) | POST | Create the new (MiFID2 or PRIIP or Tax871m) Content data record and paste it to the given Instrument. |
| /v1/instruments/ {instrumentScheme}/{instrumentID}/ {manufacturerScheme}/{manufacturerID}/ {technicalAgentScheme}/{technicalAgentID}/ (mifid2 or priip or tax871m) | PUT | Replace the (MiFID2 or PRIIP or Tax871m) Content data record by providing the complete updated (MiFID2 or PRIIP or Tax871m) Content data record. |

Table 98: Overview of the SIX RegHub REST API calls for CD

3.5.3.2. REST Services: MiFID 2 ExPostCosts

| Resource | HTTP Method | Short Description |
|--|------------------------|--|
| /manufacturerExPostAPI/v1/exPostCosts | POST (draft) | Submit a new ExPostCost element to RegHub. The element is appended. There is no correction of an ExPostCost record This service is not yet provided and scheduled for a later release |
| /manufacturerExPostQueryAPI/v1/exPostCosts | POST (draft) | Request ExPostCosts time series for defined Instruments of the manufacturers inventory, |
| /exPostCosts/v1/reports | POST (draft) | Request for a ExPostCost report as a file. The report is defined by the provided query filter and the file type is defined by the output type definition. The service returns a processing id identifying the request. |

The POST service require a query filter object. The query filter attributes are outlined below.

| Attribute | Sub Attribute | Condition | Data Type | Description | Result if not provided | Comment |
|---------------------------|------------------|-----------|--|---|--|--|
| searchPeriodStartDate | | mandatory | Date | The start date of the search period | HTTP 400 "Bad Request" | |
| searchPeriodEndDate | | optional | Date | The end date of the search period | The current date is used as search end date | |
| reportOutputType | | mandatory | Enum of supported return formats | Identifies the return channel. Valid values are: "0": JSON File "1": XML File (Prio 2; supported in a later stage) *2": CSV File (Prio 2; supported in a later stage) | If not provided or "out of range", default is JSON | Only required for file request, not for REST GET request |
| instrumentIdentifications | | optional | an array of the objects, where each object contains the attributes below | | | |
| | instrumentScheme | optional | string (8) | The "Instrument Scheme" - e.g. ISIN, Valor, etc - according to API specification | Based on the other filter criterias | HTTP 400 "Bad Request" If provided without |

| Attribute | Sub Attribute | Condition | Data Type | Description | Result if not provided | Comment |
|---------------|--------------------------|-----------|-------------------------|---|--------------------------------------|--|
| | | | | | | Identifier scheme |
| | instrumentIdentifier | optional | string (32) | The actual identifier string | | HTTP 400 "Bad Request" If provided without Identifier |
| | manufacturerScheme | optional | string (8) | The "Institution Identifier" - e.g. LEI, GK, etc - according to API specification | Based on the other filter criterias | HTTP 400 "Bad Request" If provided without Identifier |
| | manufacturerIdentifier | optional | string (32) | The actual identifier string of the manufacturer | | HTTP 400 "Bad Request" If provided without Identifier scheme |
| | technicalAgentScheme | optional | string (8) | The "Institution Identifier" - e.g. LEI, GK, etc - according to API specification | Based on the other filter criterias | HTTP 400 "Bad Request" If provided without Identifier |
| | technicalAgentIdentifier | optional | string (32) | <p>The actual identifier string of the technical agent.</p> <p>The technical agent is of advantage, if the universe contains a physical instrument more than once. This happens if an instrument is part of more than one technical agent inventory</p> | | HTTP 400 "Bad Request" If provided without Identifier scheme |
| distributions | | optional | array, 0-n (string (5)) | Defines the distributions channels the search is applied to | results of all distribution channels | |

| Attribute | Sub Attribute | Condition | DataType | Description | Result if not provided | Comment |
|----------------|---------------|-----------|----------|--|------------------------|---------|
| exPostCostType | | optional | int | The cost type as defined with 'he attribute " Costs Type ". This search filter is prio 2 | | |

3.6. API: Sales report (SR)

If an API call is marked as **draft** this means that this call will not be productively available.

| Resource | HTTP Method | Short Description |
|---|------------------------|--|
| /manufacturersalesreportQueryAPI/v1/salesreport | POST (draft) | Request for Sales Report report. The report is defined by the provided query filter. |
| /manufacturerSalesreport/v1/salesreport | POST (draft) | Request for a SalesReport report as a file. The report is defined by the provided query filter. The service returns a processing id identifying the request. |

The POST service require a query filter object. The query filter attributes are outlined below.

| Attribute | Subattribute | Condition | Data Type | Description | Result if not provided | Comment |
|---------------------------|-------------------------|-----------|---|--|---|--|
| reportingDateFrom | | Mandatory | Date | The start date of the search period | HTTP 400 "Bad Request" | |
| reportingDateTo | | Optional | Date | The end date of the search period | The current date is used as search end date | |
| instrumentIdentifications | | Optional | An array of the objects, where each object contains the subattributes below | | | |
| | primaryInstrumentScheme | Optional | String(8) | The "Instrument Scheme" - e.g. ISIN, Valor, etc - according to API specification NOTE: First step only ISIN | Based on the other filter criterias | HTTP 400 "Bad Request" If provided without Identifier scheme |
| | primaryInstrumentID | Optional | String(32) | Instrument identifier string | Based on the other filter criterias | HTTP 400 "Bad Request" If provided without Identifier |
| manufacturerScheme | | Optional | String(8) | The "Institution Identifier" - e.g. LEI, GK, etc - according to API specification | Based on the other filter criterias | HTTP 400 "Bad Request" If provided without Identifier |
| manufacturerID | | Optional | String(32) | The actual identifier string of the manufacturer | Based on the other filter criterias | HTTP 400 "Bad Request" If provided without Identifier scheme |

| Attribute | Subattribute | Condition | Data Type | Description | Result if not provided | Comment |
|-------------------|--------------|-----------|------------|---|-------------------------------------|--|
| distributorScheme | | Optional | String(8) | The "Institution Identifier" - e.g. LEI, GK, etc - according to API specification | Based on the other filter criterias | HTTP 400 "Bad Request" If provided without Identifier |
| distributorID | | Optional | String(32) | The actual identifier string of the technical agent. | Based on the other filter criterias | HTTP 400 "Bad Request" If provided without Identifier scheme |

3.6.1. REST Service: SR (version 1)

A description of the respective data type and an implementation in the corresponding technology can be found in chapter "[Description of Data Types](#)".

The following table give an overview of all REST operations for this topic.

3.6.1.1. Overview of all REST API Calls for SR

If an API call is marked as **draft** this means that this call will not be productively available.

| Resource | HTTP Method | Short Description |
|---|----------------|--|
| Sales Report: | | |
| /v1/salesreports/receiver | GET | Get a list of all MifiDII Sales Report for the member is entitled to and where " reportStatusType " is in "7" or "8". |
| /v1/salesreports/receiver/{senderRegHubMemberID}/{report ID} | GET | Get the Sales Report with the reportId of the identified report sender, i.e. distributor member id. The sales reports needs to be visible to the receiver, if " reportStatusType " is in "7" or "8". |
| /v1/salesreports/receiver/{senderRegHubMemberID}/{report ID}/status | PUT (draft) | Update the " reportStatusType " of the Sales Report reportId of the identified report sender, i.e. distributor member id , to value "7" or "8". |

Table 99: Overview of the SIX RegHub REST API calls for SR

3.7. API: Services

3.7.1. REST Service: Services (version 1)

A description of the respective data type and an implementation in the corresponding technology can be found in chapter "[Description of Data Types](#)".

The following table give an overview of all REST operations for this topic.

3.7.1.1. Overview of all REST API Calls for Services

If an API call is marked as **draft** this means that this call will not be productively available.

| Resource | HTTP Method | Short Description |
|--------------------------------|--------------|---|
| Services: | | |
| /v1/services/otcisin (private) | POST (draft) | Returns an OTC ISIN from ANNA-DSB. |
| /v1/services/utility/members | GET | Get all SIX RegHub Member with various information. |
| /v1/services/utility/ping | GET | Get some information on the SIX RegHub system. Will used for checks if the system is available. |

Table 100: Overview of the SIX RegHub REST API calls for Services

TBD: All chapters with the details REST Service description will be provided with the next specification version. Sample files can be downloaded from the SIX RegHub Member Area.

3.7.1.2. REST Service: File Service API

Reports are provided by a dedicated Reports API. In general the report is a file and handled by the file service API. The report is request by a particular domain linked service, e.g. /reghub/exPostCosts/v1/reports.

| Resource | HTTP Method | Short Description |
|-----------------------------|-------------|--|
| /reportAPI/v1/reports/jobID | GET (draft) | Request the processing state of a request. The service returns the processing state and, in case of "Completed", the fileURL. The fileURL is valid for 48 hours. |
| <fileUrl> | GET (draft) | Returns the file, i.e. MIME attachment application/octet-stream |

3.8. 3rd Party API: “Call document” and “Call content data”

TBD: Please be aware that we are currently aligning this process. Afterwards this chapter will be updated with a later specification version.

This part describes the way how the SIX RegHub could get the document or content data from a 3rd Party Supplier. For the document and content data retrieval SIX will be able to implement an existing document delivery platform providing either direct HTTP/HTTPS links, SOAP or REST service.

3.8.1. Onboarding process and attributes

The onboarding process is the sum of actions to integrate the 3rd Party Supplier API's into the SIX RegHub. There can be different ways how documents and content data are offered by the supplier (Example: requested via direct link or SOAP) and the authentication is handled.

Hence the following information will need to be defined during the onboarding process, in order to adapt the 3rd Party Suppliers different API's

| No | Name | Type | Condition | Description and Rule |
|----|----------------------------------|--------------|-----------|--|
| 1 | 3rd Party Supplier | String (128) | Required | The 3rd Party Supplier field stores the identifier how the supplier is known in the SIX DocGen environments. |
| 2 | Document Request Technology Type | Integer | Required | Describes the type of technology who can be used to request a document from a the 3rd Party Supplier: 1 = Document is requestable via SOAP. 2 = Document is requestable via Direct Link. 3 = Document is requestable via REST. |
| 3 | API Request Function | String (64) | See Rule | In order to request a document, the according API function needs to be defined. Rule: If “Document Request Technology Type” = 1 or 3 then → Required |
| 4 | Authentication Type | Integer | Required | Indicates whether a authentication is required in order to request a document and which type of authentication is used: 1 = A static API Key is required. 2 = A username and password are required. 3 = No authentication is required |
| 5 | API Key | String (64) | See Rule | The API Key to add to a document request. Rule: If “Authentication Type” = 1 then → Required |
| 6 | User Name | String (64) | See Rule | The User Name for login process. Rule: If “Authentication Type” = 2 then → Required |
| 7 | Password | String (64) | See Rule | The Password for login process. Rule: If “Authentication Type” = 2 then → Required |
| 8 | Support Mailbox | String (128) | Required | Support mailbox required, to provide errors, problems, etc. to our customer. |

Table 101: Onboarding attributes

3.8.2. Direct Link/ REST

In order to request a document via direct link, the corresponding links have to be provided in the document metadata or content data file (attribute “url”).

3.8.3. SOAP

In order to request a document via SOAP, the API description from the 3rd Party Supplier needs to be provided to SIX. It is assumed that a document or a content data record can be downloaded with a single SOAP function (e.g. "getDocument" or "getContentData"). The general function information will be defined during the onboarding process and stored in stable attributes. The other parameters to call a document or a content data record can be delivered in the attribute "url" or "supplierDocumentID" sent with the metadata or the content data file.

4. Appendix

4.1. Notation: Sequence diagram

The various possibilities for displaying synchronous and asynchronous messages in the sequence diagram are shown below.

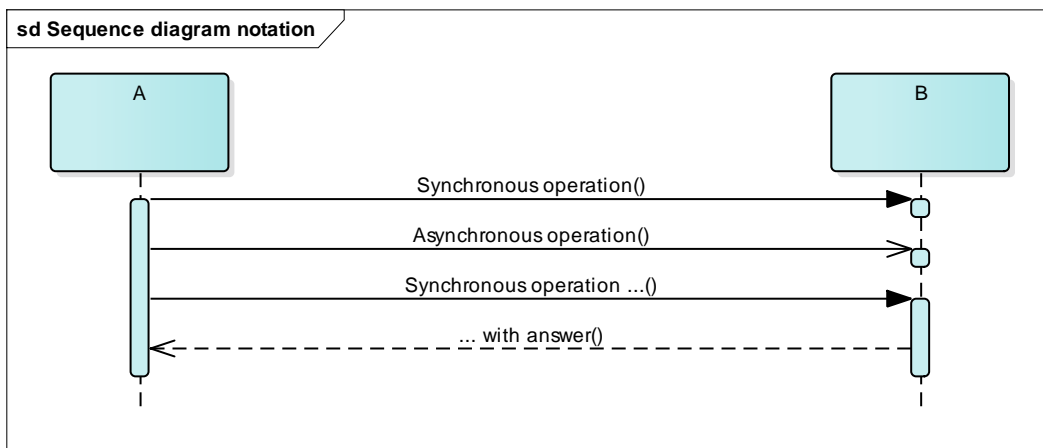


Figure 50: Sequence diagram notation

4.2. Description of Data Types

4.2.1. Array

| Format of array | Description |
|-----------------|---|
| array, C (E) | C = Describes the number of elements which can be provided with this structure. E = The data type of the elements. |

Table 102: Format of the data type array

| Implementation | Example for array |
|-------------------|---|
| Basic Information | Attribute: distributions, array, 0-n (string (5)) (values: 12345 and 67890 and C0002 and C0006) |
| File: CSV | 12345 67890 C0002 C0006; |
| File: XML | <pre> <distributions> <distribution>12345</distribution> <distribution>67890</distribution> <distribution>C0002</distribution> <distribution>C0006</distribution> </distributions> </pre> |
| Service: JSON | <pre> "distributions": ["12345", "67890", "C0002", "C0006"] </pre> |

Table 103: Implementation example for array

4.2.2. Boolean

Boolean data type is used to store values with two states: **1 = true** or **0 = false**.

| Implementation | Example for date |
|-------------------|---|
| Basic Information | Attribute: hasCurrencyRisk (value: 0) |
| File: CSV | 0; |
| File: XML | <code><hasCurrencyRisk>0</hasCurrencyRisk></code> |
| Service: JSON | <code>"hasCurrencyRisk": false</code> |

Table 104: Implementation example for date

4.2.3. Date

| Format of date | Description |
|-------------------|--|
| yyyy-mm-dd | <p>yyyy = Year. - = Separator between parts of the date portion. mm = Month. - = Separator between parts of the date portion. dd = Day.</p> <p>All the date values have to be provided in the UTC time zone, i.e. RegHub is not converting the date into the UTC time zone.</p> |

Table 105: Format of the data type date

| Implementation | Example for date |
|-------------------|--|
| Basic Information | Attribute: periodStartDate (value: 2017-05-18) |
| File: CSV | 2017-05-18; |
| File: XML | <code><periodStartDate>2017-05-18</periodStartDate></code> |
| Service: JSON | <code>"periodStartDate": "2017-05-18"</code> |

Table 106: Implementation example for date

4.2.4. DateTime

| Format of dateTime | Description |
|---------------------------------|--|
| yyyy-mm-ddThh:mm:sszzzzz | <p>yyyy = Year. - = Separator between parts of the date portion. mm = Month. - = Separator between parts of the date portion. dd = Day.</p> <p>T = Separator indicating that time-of-day follows. hh = Hours. - = Separator between parts of the time-of-day portion. mm = Minutes. - = Separator between parts of the time-of-day portion. ss = Seconds.</p> <p>zzzzz = Time zone regions with standard offset from UTC.</p> <p>More details can be found at: http://www.w3.org/TR/xmlschema-2/#dateTime.</p> |

Table 107: Format of the data type dateTime

| Implementation | Example for dateTime |
|-------------------|---|
| Basic Information | Attribute: lastUpdateTs (value: date: 2017-05-18, time: 11:49:02, time zone: +02:00) |
| File: CSV | 2017-05-18T11:49:02+02:00; |
| File: XML | <code><lastUpdateTs>2017-05-18T11:49:02+02:00</lastUpdateTs></code> |
| Service: JSON | <code>"lastUpdateTs": "2017-05-18T11:49:02+02:00"</code> |

Table 108: Implementation example for dateTime

4.2.5. Double

Double is a floating-point data type. It is used to represent numbers with a fractional part.

| Implementation | Example for double |
|-------------------|---|
| Basic Information | Attribute: oneOffCharges (value: 13.18) |
| File: CSV | 13.18; |
| File: XML | <code><oneOffCharges>13.18</oneOffCharges></code> |
| Service: JSON | <code>"oneOffCharges": 13.18</code> |

Table 109: Implementation example for double

4.2.6. Int (Integer)

Integer type can hold whole numbers such as for example 123 and -96.

| Implementation | Example for integer |
|-------------------|---|
| Basic Information | Attribute: sriType (value: 1) |
| File: CSV | 1; |
| File: XML | <code><sriType>1</sriType></code> |
| Service: JSON | <code>"sriType": 1</code> |

Table 110: Implementation example for integer

4.2.7. Enumeration

The Enumeration type holds a defined integer as value (not the defined text).

| Implementation | Example for Enumeration |
|-------------------|---|
| Basic Information | Attribute: unitType (value: 2) Enumeration Unit Type: - 1 = Percentage (100%=100) - 2 = Absolute in "costCccy" |
| File: CSV | 2; |
| File: XML | <code><unitType>2</unitType></code> |
| Service: JSON | <code>"unitType": 2</code> |

Table 111: Implementation example for Enumeration

4.2.8. Map

| Format of map | Description |
|----------------------|---|
| map, C (K, V) | <p>C = Describes the amount of key- value pairs who can be provided with this structure.</p> <p>K = The data type of the keys for use this map.</p> <p>V = The data type of mapped values.</p> |

Table 112: Format of the data type map

| Implementation | Example for map |
|-------------------|--|
| Basic Information | Attribute: instrumentIDs, map, 1-n (string (8), string (32)) (values: I-,CH0012345678 and CH,1234567) |
| File: CSV | I=CH0012345678 CH=1234567; |
| File: XML | <pre><instrumentIDs> <instrumentID scheme="I-">CH0012345678</instrumentID> <instrumentID scheme="CH">1234567</instrumentID> </instrumentIDs></pre> |
| Service: JSON | <pre>"instrumentIDs": { "I-": "CH0012345678", "CH": "1234567" }</pre> |

Table 113: Implementation example for map

4.2.9. String

| Format of string | Description |
|-------------------|---|
| String (L) | L = Numeric value, defines the length of the represented character string. |

Table 114: Format of the data type map

| Implementation | Example for string (simple value) |
|-------------------|--|
| Basic Information | Attribute: language, string (2) (value: de) |
| File: CSV | de; |
| File: XML | <pre><language>de</language></pre> |
| Service: JSON | <pre>"language": "de"</pre> |
| Implementation | Example for string (free text) |
| Basic Information | Attribute: url, string (2000) (value: https://www.RegHub.com/Here_should_stand_the_rest_of_a_URL) |
| File: CSV | https://www.RegHub.com/Here_should_stand_the_rest_of_a_URL; |
| File: XML | <pre><url><![CDATA[https://www.RegHub.com/Here_should_stand_the_rest_of_a_URL]]></url></pre> |
| Service: JSON | <pre>"url": "https://www.RegHub.com/Here_should_stand_the_rest_of_a_URL"</pre> |

Table 115: Implementation examples for string

4.3. Example Files

4.3.1. CD file in XML format ("Full file")

```
<SIXRegHub>
  <Instrument et="s">
    <primaryInstrumentScheme>I</primaryInstrumentScheme>
    <primaryInstrumentID>CH0012345678</primaryInstrumentID>
    <primaryManufacturerScheme>LEI</primaryManufacturerScheme>
    <primaryManufacturerID>888800ABCDEFGHIJKL00</primaryManufacturerID>
    <primaryTechnicalAgentScheme>LEI</primaryTechnicalAgentScheme>
    <primaryTechnicalAgentID>12300ABCDEFKMQAKL12</primaryTechnicalAgentID>
    <supplierLastUpdateTs>2017-07-17T00:00:00+02:00</supplierLastUpdateTs>
    <contractSideType>1</contractSideType>
    <eTDProductType>2</eTDProductType>
    <guarantorIDs>
      <guarantorID scheme="GK">123148</guarantorID>
      <guarantorID scheme="BIC">2920933</guarantorID>
    </guarantorIDs>
    <guarantorName>Guarantor Name</guarantorName>
    <instrumentClassificationCFI>DB</instrumentClassificationCFI>
    <instrumentName>Example Instrument</instrumentName>
    <isFinraGReportable>1</isFinraGReportable>
    <isPossibleTerminatedEarly>0</isPossibleTerminatedEarly>
    <mainManufacturerIDs>
      <mainManufacturerID scheme="GK">2211</mainManufacturerID>
      <mainManufacturerID scheme="LEI">9998811ABCDEF00</mainManufacturerID>
    </mainManufacturerIDs>
    <mainManufacturerName>The Main Manufacturer</mainManufacturerName>
    <manufacturerName>The Manufacturer</manufacturerName>
    <manufacturerPriipScopeIndicatorType>1</manufacturerPriipScopeIndicatorType>
    <marketIdentifierCodes>
      <marketIdentifierCode>XFRA</marketIdentifierCode>
      <marketIdentifierCode>DOTS</marketIdentifierCode>
    </marketIdentifierCodes>
    <maturityDate>2017-07-17</maturityDate>
    <otherInstrumentIDs>
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      <otherInstrumentID scheme="CH">1234567</otherInstrumentID>
    </otherInstrumentIDs>
    <otherManufacturerIDs>
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    </otherTechnicalAgentIDs>
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      <restrictedJurisdiction>CH</restrictedJurisdiction>
    </restrictedJurisdictions>
    <technicalAgentName>The Manufacturer</technicalAgentName>
    <tradableInAdditionalCcys>
      <tradableInAdditionalCcy>EUR</tradableInAdditionalCcy>
      <tradableInAdditionalCcy>CHF</tradableInAdditionalCcy>
    </tradableInAdditionalCcys>
    <PRIIP>
      <supplierLastUpdateTs>2017-07-17T00:00:00+02:00</supplierLastUpdateTs>
      <distributions>
        <distribution>12345</distribution>
        <distribution>67890</distribution>
        <distribution>C0002</distribution>
        <distribution>C0006</distribution>
      </distributions>
      <lastGenerationTs>2017-07-17T00:00:00+02:00</lastGenerationTs>
      <lifecycleStatusType>2</lifecycleStatusType>
      <publicationClassificationType>2</publicationClassificationType>
      <sourcingStrategyType>1</sourcingStrategyType>
      <hasExistingCreditRisk>1</hasExistingCreditRisk>
      <isFlexible>0</isFlexible>
      <crmCalculationTs>2017-07-17T00:00:00+02:00</crmCalculationTs>
      <crmType>4</crmType>
      <hasCurrencyRisk>0</hasCurrencyRisk>
      <lriCalculationTs>2017-07-17T00:00:00+02:00</lriCalculationTs>
      <lriType>3</lriType>
      <mrmCalculationTs>2017-07-17T00:00:00+02:00</mrmCalculationTs>
      <mrmType>3</mrmType>
      <sriCalculationTs>2017-07-17T00:00:00+02:00</sriCalculationTs>
      <sriType>2</sriType>
      <sriTypeMax>6</sriTypeMax>
      <valuationFrequencyType>252</valuationFrequencyType>
      <vevReference>0.1132</vevReference>
      <costCcy>EUR</costCcy>
      <priipCategoryType>3</priipCategoryType>
      <cicCode>XL22</cicCode>
      <hasEos>0</hasEos>
      <hypotheticalInvestmentAmount>2.293</hypotheticalInvestmentAmount>
      <performanceScenarioCalcTs>2017-07-17T00:00:00+02:00</performanceScenarioCalcTs>
      <recomHoldingPeriod>2</recomHoldingPeriod>
      <recomHoldingPeriodDate>2017-07-17</recomHoldingPeriodDate>
      <recomHoldingPeriodType>4</recomHoldingPeriodType>
      <recomHoldingPeriodYears>2.0</recomHoldingPeriodYears>
    </PRIIP>
  </Instrument>
</SIXRegHub>
```

```
<incidentalCostsCarriedInterestsRIY>12.256</incidentalCostsCarriedInterestsRIY>
<insuranceCostsRIY>11.125</insuranceCostsRIY>
<ongoingOtherCostsRIY>2.393</ongoingOtherCostsRIY>
<meanObservedReturn>35.393</meanObservedReturn>
<observedSigma>54.029</observedSigma>
<stressedVolatility>9.282</stressedVolatility>
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<bondsWeights>89.38</bondsWeights>
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<hasPortfolioInsurance>0</hasPortfolioInsurance>
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<capitalPreservationLevel>12.29</capitalPreservationLevel>
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</PIA>
<UCITS>
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<srriType>6</srriType>
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<incidentalCostsCarriedInterestsUnitType>2</incidentalCostsCarriedInterestsUnitType>
<incidentalCostsPerformanceFee>22.28</incidentalCostsPerformanceFee>
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<srriTypeMax>7</srriTypeMax>
<transactionCostsMethodologyType>3</transactionCostsMethodologyType>
</UCITS>
<CEPT>
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<distribution>67890</distribution>
<distribution>C0002</distribution>
<distribution>C0006</distribution>
</distributions>
<lastGenerationTs>2017-07-17T00:00:00+02:00</lastGenerationTs>
<lifecycleStatusType>2</lifecycleStatusType>
<publicationClassificationType>2</publicationClassificationType>
<sourcingStrategyType>1</sourcingStrategyType>
<costCcy>EUR</costCcy>
<recomHoldingPeriodYears>1.5</recomHoldingPeriodYears>
<accumulatedInvestmentAmount>2.49</accumulatedInvestmentAmount>
<hypotheticalInvestmentAmount>2.05</hypotheticalInvestmentAmount>
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<reductionInYield>0.75</reductionInYield>
<totalCosts>2.05</totalCosts>
</CEPTCostSection>
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<reductionInYield>1.05</reductionInYield>
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<periodType>1</periodType>
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<percentageReturn>0.095</percentageReturn>
</CEPTPerformanceScenario>
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</CEPTPerformanceScenario>
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<percentageReturn>0.55</percentageReturn>
</CEPTPerformanceScenario>
</cEPTPerformanceScenarios>
<Price>
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<shareClassCcy>EUR</shareClassCcy>
<sharePrice>16.06</sharePrice>
<sharePriceDate>2017-06-20</sharePriceDate>
<exchangeRateChangeSCCcy>1.98</exchangeRateChangeSCCcy>
<oldShareClassCcy>DDM</oldShareClassCcy>
<oldValuationFrequencyType>104</oldValuationFrequencyType>
<sharePriceCcy>EUR</sharePriceCcy>
<sharePriceFactor>7.18</sharePriceFactor>
```

```
<shareSplitFactor>3.57</shareSplitFactor>
</Price>
</CEPT>
<costSections>
  <CostSections>
    <periodType>1</periodType>
    <reductionInYield>0.015</reductionInYield>
    <totalCosts>2.25</totalCosts>
  </CostSections>
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Figure 51: Example part of a CD file in XML format ("Full file")

4.3.2. CD file in XML format ("Delta file")

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Figure 52: Example part of a CD file in XML format (“Delta file”)