

Self-Regulatory Organizations (SRO) Taxonomy Guide

March 18, 2024

1 GOAL

This document explains to a technical audience how to create conforming Interactive Data documents, with specifications as to the use of the eXtensible Business Reporting Language [XBRL] for the submission of Interactive Data disclosures required from Self-Regulatory Organizations. Currently, there is only one such rule:

- Exchange Act Rule 17Ad-27(b)

Readers should have exposure to Interactive Data as defined in Regulation S-T and described in the Electronic Data Gathering, Analysis, and Retrieval (EDGAR) Filer Manual [EFM] and EDGAR XBRL Guide [EXG]. This taxonomy guide contains details about data formatting, validation, and processing; it does not provide interpretative guidance for any rule.

1.1 Notations

Literal technical syntax appears in `fixed width font`. XBRL element names never contain hyphens (-); they appear only in tabular displays for long names to introduce line breaks that improves layout in this document.

1.2 Taxonomy status

Technical details may change between this and any subsequent version to be published upon its implementation in EDGAR. Element names, labels, or links may change to become more explicit or compact. References to forms, exhibits and regulations may be revised to provide greater or less specificity. New data validations specific to the taxonomy may be added to, or removed from, current EDGAR validations.

CONTENTS

1	Goal	1
1.1	Notations	1
1.2	Taxonomy status.....	1
2	Forms, Exhibits, and Instances	2
2.1	Physical Location and Organization.....	3
2.2	Versioning	3
2.3	Imports.....	3
3	Tables, Axes, and Members.....	4
3.1	Zero-axis Tables	5
3.1.1	Sample facts with zero axes	5
3.1.2	Document and Entity Information.....	6
3.1.3	CMSP Report	7
3.2	Axes for 17Ad-27 Table Data	7
3.2.1	CMSP Service Types Axis	8
3.2.2	CMSP User Types Axis.....	8
3.2.3	CMSP Asset Classes Axis.....	9
3.2.4	CMSP Submitted Hours Axis.....	9
3.2.5	CMSP Affirmed Hours Axis	9
3.3	Tables for 17Ad-27 Data.....	9
3.3.1	CMSP Submissions Table	10
3.3.2	CMSP Cancellations Table.....	11
3.3.3	CMSP Affirmations Table.....	12

3.3.4 CMSP Progress Table..... 12

4 Presentation and Label Links..... 13

4.1 Required presentation and label customizations 13

4.2 Permitted presentation and label customizations..... 13

4.3 Customized Rendering 13

5 References 14

6 Appendix: Concept References 14

6.1 CMSP Straight Through Processing Report..... 14

6.2 CMSP Submissions Table 14

6.3 CMSP Cancellations Table..... 15

6.4 CMSP Affirmations Table..... 15

6.5 CMSP Progress Table 16

FIGURES

Figure 1. Taxonomy files, by purpose..... 3

Figure 2. Taxonomy files, import relationships 4

Figure 3. Namespace URIs and prefixes. 4

Figure 4. Font and Color-Coding Legend 4

Figure 5. Example showing presentation of nine facts with a single taxonomy-defined dimension 4

Figure 6. Example showing different presentation of the same nine facts 5

Figure 7. Sample facts in a 10-K instance 5

Figure 8. Definition linkbase relationships in the zero-axis Document Information linkbase role..... 6

Figure 9. Example showing sample facts for a single period..... 7

Figure 10. Rule 17Ad-27(b) parts (1), (2) and (5)..... 7

Figure 11. Concepts and definition linkbase relationships in the zero-axis STP Report role 7

Figure 12. Rule 17Ad-27(b)(3)(iv) and (b)(4) clauses (ii), (iii) and (iv) specify ways to slice the data 8

Figure 13. Definition linkbase relationships in Service Types Only 8

Figure 14. Definition linkbase relationships in User Types Only 8

Figure 15. Definition linkbase relationships in Asset Classes Only..... 9

Figure 16. Definition linkbase relationships in Submitted Hours Only 9

Figure 17. Definition linkbase relationships in Affirmed Hours Only 9

Figure 18. Rule 17Ad-27 (b) (3)..... 10

Figure 19. Definition links in the CMSP Submissions Table role 10

Figure 20. A sample fact of the CMSP Submissions Table 11

Figure 21. Definition links in the Cancellations Table role 12

Figure 22. Definition links in the Affirmations Table role..... 12

Figure 23. Definition links in the Progress Table role 13

2 FORMS, EXHIBITS, AND INSTANCES

Multiple forms and exhibits are potentially encompassed by the SRO taxonomy. These separate parts are organized as XBRL taxonomy *entry points*.

- 17ad27 entry point: Disclosures specific to 240.17Ad-27, “Straight-through processing by clearing agencies that provide a central matching service.”

Generally, different form types will use different combinations of entry points in different XBRL instances within the submission; as the illustration below shows, there is currently only one such entry point for the SRO taxonomy:

Form: 17Ad-27

Attachment:

Primary [†] Instance	17ad27
-------------------------------	--------

[†]The EDGAR primary instance is an Inline XBRL attachment having the same attachment type name as its EDGAR submission type. An 17AD-27/A submission will have an Inline XBRL document of EDGAR attachment type 17AD-27/A containing the primary instance.

2.1 Physical Location and Organization

The taxonomy is rooted at URLs of the form

`https://xbrl.sec.gov/sro/{version}/`

The taxonomy is specifically at the base URL

`https://xbrl.sec.gov/sro/2024/`

There is a zip file containing all files located at

`https://xbrl.sec.gov/sro/2024/sro-2024.zip`

2.2 Versioning

Following the file naming of other standard taxonomies, a file from (for example) a “2nd Quarter 2032” taxonomy file containing reference links would be located at `https://xbrl.sec.gov/xyz/2032q2/xyz-2032q2_ref.xsd`.

Following the target namespace conventions of other EDGAR standard taxonomies, the current namespace¹ of the core SRO schema is `https://xbrl.sec.gov/sro/2024` with standard prefix `sro`. This is analogous to the namespace of the Document and Entity Information schema, `https://xbrl.sec.gov/dei/2024` with prefix `dei`.

An SRO taxonomy version of any given year (irrespective of quarter) is compatible with any other EDGAR standard taxonomy version of the same year, and incompatible with other years’ versions.

2.3 Imports

EDGAR submissions are required, permitted, or disallowed from referencing various files comprising the SRO taxonomy, as summarized in the figure below.

All instances requiring a self-regulatory organizations disclosure must reference the appropriate entry point or points.

Figure 1. Taxonomy files, by purpose

Taxonomy name and folder	May be referenced in submissions	Used only in validation and rendering	Entry Point (do not reference)
Self-Regulatory Organizations (SRO) <code>https://xbrl.sec.gov/sro/2024/</code>	<code>sro-17ad27-2024.xsd</code> <code>sro-2024.xsd</code>		<code>sro-entire-2024.xsd</code>

Figure 2 below uses indentation and the `↵` character to illustrate the hierarchy of schema imports, and thus implicitly also shows the Discoverable Taxonomy Set (DTS) of each file.

¹A namespace URI (uniform resource identifier) is not a URL (uniform resource locator); it does not identify a web address.

Figure 2. Taxonomy files, import relationships

Name	Description
sro-entire	All SRO taxonomy components.
↘ sro-17ad27	Embedded presentation and label links specific to 17Ad-27(b) disclosure
↘ sro	Main schema with embedded definition, reference, and label links for all elements
↘ dei	Concepts required across many EDGAR form types [DEI]

Figure 3 shows the namespace prefixes and the most recent namespaces in use on concept declarations as of the date of this document.

Figure 3. Namespace URIs and prefixes.

Prefix	Namespace URI ²
sro	http://xbrl.sec.gov/sro/2024
dei	http://xbrl.sec.gov/dei/2024

3 TABLES, AXES, AND MEMBERS

All XBRL instances contain *facts* defined as a *value* characterized by a set of *dimensions*. The set of dimensions of a fact contain at most one of each *core dimension* (*entity*, *period*, and *concept* among them) and will have zero or more *taxonomy-defined dimensions*. The taxonomy-defined dimensions are used to define *hypercubes* [DIM]. In this document as in all SEC standard taxonomies a taxonomy-defined dimension is called an *Axis*. Members of an axis may be its *default* member, a *standard* member, or a *custom* member defined by the filer. In addition to indicators such as names and indentations within tables, concept types used in this document are color-coded as shown in Figure 4.

Figure 4. Font and Color-Coding Legend

Concept or value type	Color
Concept core dimension and concepts	Green
Other core dimensions and their members	Gray
Fact values	None
Taxonomy-defined dimension (Axis)	Orange
Standard members	Medium Blue
Custom members	Purple
Abstract placeholder concepts not appearing in instances, such as hypercubes, line items, domain defaults, and non-usable domain members.	Light Blue

A hypercube of only a single taxonomy-defined dimension can be visualized as a table as it might be presented in a disclosure as illustrated in Figure 5 (in this example, there is no total across the three regions).

Figure 5. Example showing presentation of nine facts with a single taxonomy-defined dimension

entity: Example01 period: FY30 units: USD		Concepts Dimension		
		Product Revenue	Service Revenue	Total Revenue
Region Axis	Region A	23,000,000	12,000,000	35,000,000
	Region B	17,000,000	8,000,000	25,000,000
	Region C	9,000,000	6,000,000	15,000,000

² A Uniform Resource Identifier (URI) is not a Uniform Resource Locator (URL) and does not point to a web address.

Presentation of the data to a human reader does not change the meaning, and therefore does not change the characterization of each of the nine facts. Figure 6 shows the same facts, with the concept dimension presented as rows, and the class dimension as columns.

Figure 6. Example showing different presentation of the same nine facts

entity: Example01 period: FY30 units: USD		Region Axis		
		Region A	Region B	Region C
Concepts Dimension	Product Revenue	23,000,000	17,000,000	9,000,000
	Service Revenue	12,000,000	8,000,000	6,000,000
	Total Revenue	35,000,000	25,000,000	15,000,000

SRO is organized into hypercubes with zero or more axes; as the previous two figures show, they are usually thought of – and referred to as – *Tables*. Some axes have a set of members fixed by the taxonomy, others are empty in the taxonomy and are populated only by custom members. All the tables are *closed*, meaning that filers cannot define facts that use additional axes beyond those in the table. Furthermore, filers are not permitted to add additional custom concepts or definition, calculation, or presentation relationships to any SRO role except where explicitly permitted (see section 4 below).

Each section will present an example of each kind of table, in increasing complexity.

3.1 Zero-axis Tables

Every EDGAR instance has a zero-axis table. Concepts such as the EDGAR Central Index Key (CIK) `dei:EntityCentralIndexKey`, or that only appear once on a filing cover page, such as its Form type `dei:DocumentType` or the Company “Conformed” name `dei:EntityRegistrantName`, are implicitly concepts in a zero-axis table [DEI]. A zero-axis table contains facts that are characterized only by core dimensions - concept, entity, period, and either unit (for numeric facts) or language (for non-numeric facts). EDGAR instance documents are constrained to have only a one member of the entity dimension represented in a single instance, and facts are assumed to have language `en-US` (US English) unless indicated otherwise. EDGAR *Required Contexts*, having no taxonomy-defined dimensions, define a zero-axis table for every EDGAR XBRL document.

3.1.1 Sample facts with zero axes

Facts in an instance may be visualized as one row per fact and one column per core dimension, so in the case of concepts in the zero-axis table, there are only a few columns, as illustrated in Figure 7.

Figure 7. Sample facts in a 10-K instance

concept	entity	period	value
<code>dei:DocumentType</code>	<code>cik:0000012345</code>	1/1/2030 - 12/31/2030	10-K
<code>dei:EntityRegistrantName</code>	<code>cik:0000012345</code>	1/1/2030 - 12/31/2030	Example01

Or, using XBRL-JSON syntax [OIM], as a list of fact objects:

```
[{ "concept" : "dei:DocumentType",
  "period": "2030-01-01/2030-12-31",
  "entity": "cik:0000012345",
  "value": "10-K" },
 { "concept" : "dei:EntityRegistrantName",
  "period": "2030-01-01/2030-12-31",
  "entity": "cik:0000012345",
  "value": "Example01" }]
```

Or, in the original XML-based XBRL instance syntax [XBRL]:

```
<context id="c1">
  <entity>
```

```

<identifier scheme="https://www.sec.gov/CIK">0000012345</identifier>
</entity>
<period>
  <startDate>2030-01-01</startDate>
  <endDate>2030-12-31</endDate>
</period>
</context>
<dei:DocumentType contextRef="c1">10-K</dei:DocumentType>
<dei:EntityRegistrantName contextRef id="c1">Example01</dei:EntityRegistrantName>

```

Or, in Inline XBRL [iXBRL] using the same syntax for <context> c1:

```

<ix:nonNumeric name="dei:DocumentType" contextRef="c1">10-K</ix:nonNumeric>
<ix:nonNumeric name="dei:EntityRegistrantName" contextRef id="c1" >Example01</ix:nonNumeric>

```

3.1.2 Document and Entity Information

In any EDGAR XBRL instance, there are a few facts that must have no taxonomy-defined dimensions. Figure 8 shows the concept dimension, the concepts, the dimensional relationship (arc) that relates them to their parent concept, and their type. Where a type is restricted by a pattern, small set of values, or [EXG] validations, this is noted with daggers (†).

As detailed in the Dimensional specification [DIM], definition linkbases have arcs that link concepts of different types to define the table structure. The figure below illustrates these concepts and relationships as they appear in the taxonomy, a tree pattern that is repeated via naming and ordering conventions throughout SRO. The concepts shaded light blue exist as mere placeholders within the dimensional structure. The “Line Items” concept is a placeholder for all the concepts, the “Report Table” is a placeholder for all the axes, and the tree root “Abstract” concept ties the concept dimension to the set of axes.

Figure 8. Definition linkbase relationships in the zero-axis Document Information linkbase role

Concept	Type	Arcs
dei:CoverAbstract	Abstract	
dei:DocumentInformationTable	Hypercube	all
dei:DocumentInformationLineItems	Line Items Abstract	domain-member
dei:DocumentType	String †	domain-member
dei:AmendmentFlag	Boolean †	domain-member
dei:AmendmentDescription	String †	domain-member
dei:EntityCentralIndexKey	String †	domain-member
dei:EntityRegistrantName	String †	domain-member
dei:DocumentPeriodEndDate	Date	domain-member

† See [EXG] for data type and other restrictions on these fact values.

Rendering via the presentation and label linkbases of the facts in a zero-axis table typically resembles the layout of the concept dimension in the definition linkbase. Structural concepts (such as Abstracts and Hypercubes in the example of Figure 9) do not necessarily appear, and if all the facts are in a single period, there will be a single column of fact values.

Figure 9. Example showing sample facts for a single period

entity: Example01		period
language: en-US		FY30
Concepts Dimension	Document Type	10-K
	Amendment Flag	true
	Amendment Description	Exhibit contains revised figures relative to previous submission.
	Entity Central Index Key	0000012345
	Entity Registrant Name	Example01 Company

3.1.3 CMSP Report

The reports required under Rule 17Ad-27 under the Exchange Act are submitted by clearing agencies that are central matching service providers (“CMSPs”). We can therefore refer to these reports as “CMSP Reports.”

There is currently one zero-axis table specific to the SRO taxonomy; its presentation links appear only in the 17ad27 entry point, and its content is expected only in Form 17Ad-27 instances.

Figure 10. Rule 17Ad-27(b) parts (1), (2) and (5)

<p>§ 240.17Ad-27 Straight-through processing by clearing agencies that provide a central matching service.</p> <p>(a) * * *</p> <p>(b) A clearing agency that provides a central matching service must submit to the Commission every twelve months a report that includes the following:</p> <p>(1) A summary of the clearing agency’s policies and procedures required under paragraph (a) of this section, current as of the last day of the twelve-month period covered by the report required under paragraph (b) of this section;</p> <p>(2) A qualitative description of the clearing agency’s progress in facilitating straight-through processing during the twelve-month period covered by the report required under paragraph (b) of this section;</p> <p>* * *</p> <p>(5) A qualitative description of the actions the clearing agency intends to take to further facilitate straight-through processing of securities transactions at the clearing agency during the twelve-month period that follows the period covered by the report required under paragraph (b) of this section.</p>
--

These disclosure items correspond to the three Text Block concepts in Figure 11 and in the appendix at section 6.1.

Figure 11. Concepts and definition linkbase relationships in the zero-axis STP Report role

Concept	Type	Arcs
sro:CmspReportAbstract	Abstract	
sro:CmspReportTable	Hypercube	all
sro:CmspReportLineItems	Line Items Abstract	domain-member
sro:CmspStpPlyPrcdrSmryTextBlock	Text Block †	domain-member
sro:CmspStpPrgrsTextBlock	Text Block	domain-member
sro:CmspActnIntdsToTakeForStpTextBlock	Text Block	domain-member

† See [EXG]for restrictions on this fact value.

3.2 Axes for 17Ad-27 Table Data

Other tables in the report represent data for a common set of metrics that are partitioned and/or aggregated along different dimensions. {Figure below} quotes the clauses related to partitioning the data.

Figure 12. Rule 17Ad-27(b)(3)(iv) and (b)(4) clauses (ii), (iii) and (iv) specify ways to slice the data

<p>§ 240.17Ad-27 Straight-through processing by clearing agencies that provide a central matching service.</p> <p>(b) * * *</p> <p>(3) A quantitative presentation of data that includes:</p> <p>(i) * * *</p> <p>(ii) * * *</p> <p>(iii) * * *</p> <p>(iv) The percentage of confirmations submitted to the clearing agency that are affirmed on trade date, specifying to the extent practicable the relevant timeframe in which the affirmation is processed on trade date;</p> <p>(v) * * *</p> <p>(vi) * * *</p> <p>(4) Each of the data sets required under paragraph (b)(3) of this section shall be:</p> <p>(i) * * *</p> <p>(ii) Separated, where applicable, between the use of central matching and electronic trade confirmation services offered by the clearing agency;</p> <p>(iii) Separated, as appropriate, by asset class;</p> <p>(iv) Separated by type of user; and</p> <p>(v) * * *</p>	
--	--

Currently, all SRO taxonomy axes are XBRL explicit dimensions [DIM].

3.2.1 CMSP Service Types Axis

Service types are in role `http://xbrl.sec.gov/17ad27/role/ServiceTypesOnly`. There are two standard members representing the service types listed in the rule.

Figure 13. Definition linkbase relationships in Service Types Only

Concept	Label	Type	Arcs
<code>sro:CmspSvcTypAxis</code>	CMSP Service Type [Axis]	Axis	
<code>sro:CmspSvcTypDomain</code>	CMSP Service Type [Domain]	Domain	dimension-domain dimension-default
<code>sro:CentralMatchingMember</code>	Central Matching [Member]	Member	domain-member
<code>sro:ElectronicTradeConfirmation-Member</code>	Electronic Trade Confirmation [Member]	Member	domain-member

3.2.2 CMSP User Types Axis

User types are in role `http://xbrl.sec.gov/17ad27/role/UserTypesOnly`. In Figure 14 below, a hypothetical filer using namespace prefix `eg` defines two user types.

Figure 14. Definition linkbase relationships in User Types Only

Concept	Label	Type	Arcs
<code>sro:CmspUsrTypAxis</code>	CMSP User Type [Axis]	Axis	
<code>sro:CmspUsrTypDomain</code>	CMSP User Type [Domain]	Domain	dimension-domain dimension-default
<code>eg:InstitutionMember</code>	Institution [Member]	Member	domain-member
<code>eg:BrokerDealerMember</code>	Broker-Dealer [Member]	Member	domain-member

3.2.3 CMSP Asset Classes Axis

Asset classes are in role <http://xbrl.sec.gov/17ad27/role/AssetClassesOnly>. In Figure 15 below, a filer selects two standard asset classes from the `us-gaap` taxonomy. Note that the members are standard, but the filer attaches them as domain-members using custom domain-member arcs.

Figure 15. Definition linkbase relationships in Asset Classes Only

Concept	Label	Type	Arcs
<code>sro:CmspUsrTypAxis</code>	CMSP User Type [Axis]	Axis	
<code>sro:CmspUsrTypDomain</code>	CMSP User Type [Domain]	Domain	dimension-domain dimension-default
<code>us-gaap:EquitiesSecuritiesMember</code>	Equities Securities [Member]	Member	domain-member
<code>us-gaap:FixedIncomeInvestments-Member</code>	Fixed Income Investments [Member]	Member	domain-member

3.2.4 CMSP Submitted Hours Axis

The hours during which trades are submitted to a CMSP are the members of the Submitted Hours axis definition link <http://xbrl.sec.gov/17ad27/role/SubmittedHoursOnly>. Figure 16 shows a hypothetical filer with namespace prefix `eg` defining members that represent three non-overlapping periods within a trading day. The default member represents the entire trading day.

Figure 16. Definition linkbase relationships in Submitted Hours Only

Concept	Label	Type	Arcs
<code>sro:CmspSubmHrsAxis</code>	CMSP Submitted Hours [Axis]	Axis	
<code>sro:CmspSubmHrsDomain</code>	CMSP Submitted Hours [Domain]	Domain	dimension-domain dimension-default
<code>eg:Before4pmMember</code>	Before 4 PM [Member]	Member	domain-member
<code>eg:From4to7pmMember</code>	From 4 to 7 PM [Member]	Member	domain-member
<code>eg:From7pmToMidnight-Member</code>	From 7 PM to Midnight [Member]	Member	domain-member

3.2.5 CMSP Affirmed Hours Axis

The hours during which trades are affirmed by a CMSP is defined in definition link <http://xbrl.sec.gov/17ad27/role/AffirmedHoursOnly>. In this case the filer defines only one period, and the default member will represent affirmations occurring any time during the entire trading day.

Figure 17. Definition linkbase relationships in Affirmed Hours Only

Concept	Label	Type	Arcs
<code>sro:CmspAffrmHrsAxis</code>	CMSP Affirmed Hours [Axis]	Axis	
<code>sro:CmspAffrmHrsDomain</code>	CMSP Affirmed Hours [Domain]	Domain	dimension-domain dimension-default
<code>sro:Before9pmMember</code>	Before 9 PM [Member]	Member	domain-member

3.3 Tables for 17Ad-27 Data

Items (b)(3)(i) through (vi) of the rule specify the metrics to be reported. Figure 18 quotes the relevant clauses.

Figure 18. Rule 17Ad-27 (b) (3)

§ 240.17Ad-27 Straight-through processing by clearing agencies that provide a central matching service.

(b) * * *

(3) A quantitative presentation of data that includes:

- (i) The total number of trades submitted to the clearing agency for processing;
- (ii) The total number of allocations submitted to the clearing agency;
- (iii) The total number of confirmations submitted to the clearing agency, as well as the total number of confirmations cancelled by a user;
- (iv) The percentage of confirmations submitted to the clearing agency that are affirmed on trade date, specifying to the extent practicable the relevant timeframe in which the affirmation is processed on trade date;
- (v) The percentage of allocations and confirmations submitted to the clearing agency that are matched and automatically confirmed through the clearing agency’s services; and
- (vi) Metrics concerning the use of manual and automated processes by the clearing agency’s users with respect to its services that may be used to assess progress in facilitating straight-through processing.

Clauses (i), (ii) and the first part of (iii) share the same four axes from (b)(4), and so are represented in a single table.

Clause (iii) cancellations are in a separate table because it has only three axes – timeframe is not relevant.

Clauses (iv) and (v) resemble clauses (i) and (ii) but use a different timeframe axis.

Finally, clause (vi) is open-ended, having at least three, but possibly more axes at the filer’s discretion.

Each table is described separately in the following sections; in Figure 19, Figure 21, Figure 21 and Figure 22, each hypercube-dimension arc has a `targetRole` value that connects it to the corresponding definition link for that axis.

3.3.1 CMSP Submissions Table

Figure 19. Definition links in the CMSP Submissions Table role

Concept	Type	Arcs
sro:CmspSubmissionAbstract	Abstract	
sro:CmspSubmissionsTable	Hypercube	all
sro:CmspSvcTypAxis	Axis	hypercube-dimension
sro:CmspTpUserAxis	Axis	hypercube-dimension
sro:CmspAsstClsAxis	Axis	hypercube-dimension
sro:CmspSubmHrsAxis	Axis	hypercube-dimension
sro:CmspSubmissionsLineItems	Abstract	domain-member
sro:CmspTrdsSubmittdAmt	Non-negative Integer	domain-member
sro:CmspAllcnsSubmittdAmt	Non-negative Integer	domain-member
sro:CmspConfsSubmittdAmt	Non-negative Integer	domain-member

These three metrics cannot be fractions or negative numbers.

3.3.1.1 Sample fact for CMSP Submissions Table

Facts in an instance may be visualized as one row per fact and one column per dimension, so in the case of concepts in a four-axis table, there are three core dimensions (entity, period, unit) and four taxonomy-specific dimensions. Figure 20 shows a fact representing exactly one million centrally matched trades of equities for broker-dealer users, submitted prior to 4 PM on the trading day, for the month of January 2030.

Figure 20. A sample fact of the CMSP Submissions Table

concept	entity	period	unit	service type	asset class	user type	submission hours	value
sro:Cmsp-Trds-Submittd-Amt	cik:0000-012345	1/1/2030 - 1/31/2030	Trades	sro:Central-Matching-Member	us-gaap:Equities-SecuritiesMember	eg:Broker-Dealer-Member	eg:Before-4PmMember	1000000

Or, using XBRL-JSON syntax [OIM], as a list of fact objects:

```
[{ "concept" : "sro:CmspTrdsSubmittdAmt",
  "period" : "2030-01-01/2030-01-31",
  "entity" : "cik:0000012345",
  "unit" : "sro:Trades",
  "dimensions" : {
    "sro:CmspSvcTypAxis" : "sro:CentralMatchingMember",
    "sro:CmspAsstClsAxis" : "us-gaap:EquitiesSecuritiesMember",
    "sro:CmspTpUserAxis" : "eg:BrokerDealerMember",
    "sro:CmspSubmHrsAxis" : "eg:Before4PmMember"
  }
  "value": "1000000" }
]
```

Or, in the original XML-based XBRL instance syntax [XBRL]:

```
<context id="c1" >
  <entity>
    <identifier scheme="https://www.sec.gov/CIK">0000012345</identifier>
    <segment>
      <xbrldi:explicitMember dimension="sro:CmspSvcTypAxis"
        >sro:CentralMatchingMember</xbrldi:explicitMember>
      <xbrldi:explicitMember dimension="sro:CmspAsstClsAxis"
        >us-gaap:EquitiesSecuritiesMember</xbrldi:explicitMember>
      <xbrldi:explicitMember dimension="sro:CmspTpUserAxis"
        >eg:BrokerDealerMember</xbrldi:explicitMember>
      <xbrldi:explicitMember dimension="sro:CmspSubmHrsAxis"
        >eg:Before4PmMember</xbrldi:explicitMember>
    </segment>
  </entity>
  <period>
    <startDate>2030-01-01</startDate>
    <endDate>2030-01-31</endDate>
  </period>
</context>
<unit id="Trades"><measure>sro:Trades</measure></unit>
<sro:CmspTrdsSubmittdAmt contextRef="c1" unitRef="Trades"
  decimals="INF">1000000</dei:DocumentType>
```

Or, in Inline XBRL [iXBRL] using the same syntax for <context> c1 and <unit> Trades:

```
<ix:nonFraction name="dei:CmspTrdsSubmittdAmt" contextRef="c1" format="ixt:numdotdecimal"
  decimals="INF" unitRef="Trades">1,000,000</ix:nonFraction>
```

3.3.2 CMSP Cancellations Table

The second part of rule clause (b)(3)(iii) does not imply a need to specify a timeframe for cancellations, and therefore does not have the Submission Hours axis. It has only one metric, the (non-negative) number of cancellations.

Figure 21. Definition links in the Cancellations Table role

Concept	Type	Arcs
sro:CmspCancellationsAbstract	Abstract	
sro:CmspCancellationsTable	Hypercube	all
sro:CmspSvcTypAxis	Axis	hypercube-dimension
sro:CmspTpUserAxis	Axis	hypercube-dimension
sro:CmspAsstClsAxis	Axis	hypercube-dimension
sro:CmspCancellationsLineItems	Abstract	domain-member
sro:CmspConfsCancAmt	Non-negative Integer	domain-member

3.3.3 CMSP Affirmations Table

Affirmations have an associated timeframe, but this may differ from the timeframe for submissions, and therefore has a different axis.

Figure 22. Definition links in the Affirmations Table role

Concept	Type	Arcs
sro:CmspAffirmationsAbstract	Abstract	
sro:CmspAffirmationsTable	Hypercube	all
sro:CmspSvcTypAxis	Axis	hypercube-dimension
sro:CmspTpUserAxis	Axis	hypercube-dimension
sro:CmspAsstClsAxis	Axis	hypercube-dimension
sro:CmspAffrmHrsAxis	Axis	hypercube-dimension
sro:CmspAffirmationsLineItems	Abstract	domain-member
sro:CmspConfsAffrmdTradDtPct	Percent	domain-member
sro:CmspPctAllcnsAndConfsMtchdAndConfdPct	Percent	domain-member

Note that in XBRL facts, percent type values are represented as fractional, so “10%” is represented as 0.10.

3.3.4 CMSP Progress Table

The progress table, representing the open-ended reporting in clause (b)(3)(vi), is the only table where filers are free to define additional concepts not limited to domain members. In Figure 23, the three main axes are shown, but there are no standard concepts. The filer with prefix *eg* has added an axis and its domain and a member along with a filer-specific progress metric measured as a percentage.

Figure 23. Definition links in the Progress Table role

Concept	Type	Arcs
sro:CmspProgressAbstract	Abstract	
sro:CmspProgressTable	Hypercube	all
sro:CmspSvcTypAxis	Axis	hypercube-dimension
sro:CmspTpUserAxis	Axis	hypercube-dimension
sro:CmspAsstClsAxis	Axis	hypercube-dimension
eg:CmspSpecificAxis	Axis	hypercube-dimension
eg:CmspSpecificDomain	Domain	dimension-domain
eg:CmspSpecificFirstMember	Member	domain-member
sro:CmspProgressLineItems	Abstract	domain-member
eg:CmspSpecificProgressMetric	Percent	domain-member

4 PRESENTATION AND LABEL LINKS

Just as there are limits on the custom concepts that filers can define, and requirements on the definition links that they may participate in, there are requirements and limitations on presentation links. The SRO taxonomy entry points have embedded presentation links, so that the EDGAR Renderer can treat parts of SRO instances specially and minimize the need for filer customization. While filers have the freedom to define aspects such as order of presentation or abbreviated labels, the rendering of the data is of secondary concern to the accuracy and completeness of the content.

4.1 Required presentation and label customizations

Each custom concept used in an instance requires a label and at least one corresponding presentation link in any table where it will appear.

In the case of entry point `17ad27`, the presentation arc for a custom concept will correspond to its required location in the definition link.

Concepts imported from other taxonomies into SRO are not provided with labels in SRO entry points, because these concepts may be used for other disclosures elsewhere in an instance. Because validation requires any concept appearing in an instance (whether as a fact, dimension, or member) to have a label, filers usually must provide such concepts with labels. In the case of entry point `17ad27`, this includes concepts in the `dei` and `us-gaap` namespaces.

Domain default members of explicit axes generally never appear in an instance nor do their labels figure into the EDGAR rendering process, and so do not strictly require labels.

4.2 Permitted presentation and label customizations

There are currently no presentation or label customizations permitted by the SRO taxonomy other than those required for entry point `17ad27`.

4.3 Customized Rendering

Any entry point may contain a set of presentation links that the EDGAR renderer will recognize and produce a specialized layout that may transpose the usual layout placing concept dimension members as columns, with periods and other axis members in rows, or any other arrangement thereof.

5 REFERENCES

- [DEI] Document and Entity Information (DEI) Taxonomy
www.sec.gov/structureddata/dera_taxonomies
- [DIM] XBRL Dimensions 1.0
<https://specifications.xbrl.org/spec-group-index-group-dimensions.html>
- [EFM] EDGAR Filer Manual, Volume II, sections on Interactive Data
www.sec.gov/edgar/filer-information
- [EXG] EDGAR XBRL Guide
www.sec.gov/edgar/filer-information
- [iXBRL] Inline XBRL 1.1
<https://specifications.xbrl.org/work-product-index-inline-xbrl-inline-xbrl-1.1.html>
- [OIM] xBRL-XML: XML Mappings for the Open Information Model 1.0
www.xbrl.org/Specification/xbrl-xml/REC-2021-10-13+errata-2023-04-19/xbrl-xml-REC-2021-10-13+corrected-errata-2023-04-19.html
- [XBRL] XBRL 2.1
<https://specifications.xbrl.org/work-product-index-group-base-spec-base-spec.html>

6 APPENDIX: CONCEPT REFERENCES

6.1 CMSP Straight Through Processing Report

Role <http://xbrl.sec.gov/17ad27/role/ReportTable>

label	reference	name (* indicates dei concept)
CMSP Report [Abstract]	Exchange Act 240.17Ad-27.b	CmspReportAbstract
CMSP Report [Table]	Exchange Act 240.17Ad-27.b	CmspReportTable
CMSP Report [Line Items]	Exchange Act 240.17Ad-27.b	CmspReportLineItems
		DocumentType*
		AmendmentFlag*
		AmendmentDescription*
		EntityRegistrantName*
		EntityCentralIndexKey*
		DocumentPeriodEndDate*
STP Policies and Procedures Summary	Exchange Act 240.17Ad-27.b.1	CmspStpPlyPrcdrSmryTextBlock
STP Progress	Exchange Act 240.17Ad-27.b.2	CmspStpPrgrsTextBlock
Actions CMSP Intends to Take for STP	Exchange Act 240.17Ad-27.b.5	CmspActnIntdsToTakeForStpTextBlock

6.2 CMSP Submissions Table

Role <http://xbrl.sec.gov/17ad27/role/SubmissionsTable>

label	reference	name
CMSP Submissions [Abstract]	Exchange Act 240.17Ad-27.b.3	CmspSubmissionAbstract
CMSP Submissions	Exchange Act 240.17Ad-27.b.3	CmspSubmissionsTable
Service Type	Exchange Act 240.17Ad-27.b.4.ii	CmspSvcTypAxis
Service Type	Exchange Act 240.17Ad-27.b.4.ii	CmspSvcTypDomain

label	reference	name
CM	Exchange Act 240.17Ad-27.b.4.ii	CentralMatchingMember
ETC	Exchange Act 240.17Ad-27.b.4.ii	ElectronicTradeConfirmationMember
User Type	Exchange Act 240.17Ad-27.b.4.iii	CmspUsrTypAxis
User Type	Exchange Act 240.17Ad-27.b.4.iii	CmspUsrTypDomain
Asset Class	Exchange Act 240.17Ad-27.b.4.iv	CmspAsstClsAxis
Asset Class	Exchange Act 240.17Ad-27.b.4.iv	CmspAsstClsDomain
Submitted Hours	Exchange Act 240.17Ad-27.b.3	CmspSubmHrsAxis
Submitted Hours	Exchange Act 240.17Ad-27.b.3	CmspSubmHrsDomain
Submissions	Exchange Act 240.17Ad-27.b.3	CmspSubmissionsLineItems
Trades Submitted	Exchange Act 240.17Ad-27.b.3.i	CmspTrdsSubmittdAmt
Allocations Submitted	Exchange Act 240.17Ad-27.b.3.ii	CmspAllcnsSubmittdAmt
Confirmations Submitted	Exchange Act 240.17Ad-27.b.3.iii	CmspConfsSubmittdAmt

6.3 CMSP Cancellations Table

Role <http://xbrl.sec.gov/17ad27/role/CancellationsTable>

label	reference	name
CMSP Cancellations [Abstract]	Exchange Act 240.17Ad-27.b.3.iii	CmspCancellationsAbstract
Cancellations	Exchange Act 240.17Ad-27.b.3.iii	CmspCancellationsTable
Service Type	Exchange Act 240.17Ad-27.b.4.ii	CmspSvcTypAxis
Service Type	Exchange Act 240.17Ad-27.b.4.ii	CmspSvcTypDomain
CM	Exchange Act 240.17Ad-27.b.4.ii	CentralMatchingMember
ETC	Exchange Act 240.17Ad-27.b.4.ii	ElectronicTradeConfirmationMember
User Type	Exchange Act 240.17Ad-27.b.4.iii	CmspUsrTypAxis
User Type	Exchange Act 240.17Ad-27.b.4.iii	CmspUsrTypDomain
Asset Class	Exchange Act 240.17Ad-27.b.4.iv	CmspAsstClsAxis
Asset Class	Exchange Act 240.17Ad-27.b.4.iv	CmspAsstClsDomain
Cancellations	Exchange Act 240.17Ad-27.b.3.iii	CmspCancellationsLineItems
Confirmations Cancelled	Exchange Act 240.17Ad-27.b.3.iii	CmspConfsCancAmt

6.4 CMSP Affirmations Table

Role <http://xbrl.sec.gov/17ad27/role/AffirmationsTable>

label	reference	name
CMSP Affirmations [Abstract]	Exchange Act 240.17Ad-27.b.3.iv	CmspAffirmationsAbstract
Affirmations	Exchange Act 240.17Ad-27.b.3.iv	CmspAffirmationsTable
Service Type	Exchange Act 240.17Ad-27.b.4.ii	CmspSvcTypAxis
Service Type	Exchange Act 240.17Ad-27.b.4.ii	CmspSvcTypDomain
CM	Exchange Act 240.17Ad-27.b.4.ii	CentralMatchingMember
ETC	Exchange Act 240.17Ad-27.b.4.ii	ElectronicTradeConfirmationMember
User Type	Exchange Act 240.17Ad-27.b.4.iii	CmspUsrTypAxis
User Type	Exchange Act 240.17Ad-27.b.4.iii	CmspUsrTypDomain
Asset Class	Exchange Act 240.17Ad-27.b.4.iv	CmspAsstClsAxis
Asset Class	Exchange Act 240.17Ad-27.b.4.iv	CmspAsstClsDomain
Affirmed Hours	Exchange Act 240.17Ad-27.b.3	CmspAffrmHrsAxis
Affirmed Hours	Exchange Act 240.17Ad-27.b.3	ClrAgencyAffrmHoursDomain
Affirmations	Exchange Act 240.17Ad-27.b.3.iv	CmspAffirmationsLineItems
Confirmations Affirmed Trade Date Percent	Exchange Act 240.17Ad-27.b.3.iv	CmspConfsAffrmdTradDtPct
Allocations and Confirmations Matched and Confirmed Percent	Exchange Act 240.17Ad-27.b.3.v	CmspPctAllcnsAndConfsMtchdAndConfPdPct

6.5 CMSP Progress Table

Role <http://xbrl.sec.gov/17ad27/role/ProgressTable>

label	reference	name (* indicates dei concept)
CMSP Progress [Abstract]	Exchange Act 240.17Ad-27.b.3.vi	CmspProgressAbstract
Progress	Exchange Act 240.17Ad-27.b.3.vi	CmspProgressTable
Service Type	Exchange Act 240.17Ad-27.b.4.ii	CmspSvcTypAxis
Service Type	Exchange Act 240.17Ad-27.b.4.ii	CmspSvcTypDomain
CM	Exchange Act 240.17Ad-27.b.4.ii	CentralMatchingMember
ETC	Exchange Act 240.17Ad-27.b.4.ii	ElectronicTradeConfirmationMember
User Type	Exchange Act 240.17Ad-27.b.4.iii	CmspUsrTypAxis
User Type	Exchange Act 240.17Ad-27.b.4.iii	CmspUsrTypDomain
Asset Class	Exchange Act 240.17Ad-27.b.4.iv	CmspAsstClsAxis
Asset Class	Exchange Act 240.17Ad-27.b.4.iv	CmspAsstClsDomain
Progress	Exchange Act 240.17Ad-27.b.3.vi	CmspProgressLineItems