

# Executive Compensation Disclosure (ECD) Taxonomy Guide

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## 1 GOAL

This document provides the technical specification for registrants required under 17 CFR Part 229 (Regulation S-K) Item 402(v), Item 402(w), Item 402(x), Item 408(a), and Item 408(b) using Interactive Data. Foreign private issuers, multi-jurisdictional disclosure system issuers, and registered investment companies are not subject to Regulation S-K. Instead, the relevant and equivalent provisions to Item 402(w) are Item 6.F of Form 20-F, paragraph (19) of General Instruction B to Form 40-F, and Item 18 of Form N-CSR<sup>1</sup>. The relevant and equivalent provision to Item 408(b) is Item 16J of Form 20-F. For brevity in this document only, the phrase “Item 402(w) and its equivalents” or “Item 408(b) and its equivalent” means the relevant provisions of the form type being submitted. This document explains to a technical audience how to create conforming Interactive Data documents. This specification does not provide interpretative guidance for any rule. Readers should be familiar with Interactive Data as described in the Electronic Data Gathering, Analysis, and Retrieval (EDGAR) Filer Manual [EFM] and EDGAR XBRL Guide [EXG], including Inline XBRL [iXBRL], the Inline Transformation Registry [TR], and XBRL Dimensions [DIM].

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<sup>1</sup> In addition, Items 8 and 22(b)(20) of Schedule 14A direct filers to provide the disclosure required by Item 402 of Regulation S-K and Item 18 of Form N-CSR, respectively. Item 7(b) of Schedule 14A directs filers to provide the disclosure required by Item 408(b) of Regulation S-K.

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## 2 TAXONOMY STRUCTURE

The taxonomy has two entry points most likely to be used in different situations.

1. `ecd-sub`. For submission types where executive compensation disclosures are required, but that have limited iXBRL tagging requirements, such as Schedule 14A, then entry point `ecd-sub` imports the necessary linkbases and schemas so as to require minimal customization. The linkbases embedded in the core schema and three entry points are largely sufficient for the EDGAR Renderer to produce a valid rendering.
2. `ecd`. For filers that wish to provide extensive filer-specific customization of rendering within the syntax of presentation linkbases, the core ECD schema is appropriate.

The entry point hierarchy is illustrated in the table below. Each arrow  $\searrow$  points from the importing schema to the imported one.

**Figure 1. ECD taxonomy schema contents and import relationships**

File base name	File type
ecd-entire	Top level entry point
↳ ecd-sub	Entry point presentation linkbase for submissions with limited tagging requirements
↳ ecd	ECD core schema, reference, definition and label linkbases, with no presentation links
↳ us-gaap	US-GAAP schema (also imports SRT and Country schemas)

Following the file naming of other standard taxonomies, a file from (for example) a “4<sup>th</sup> quarter 2023” taxonomy with a file base name of ecd-sub would be located at <https://xbrl.sec.gov/ecd/2023q4/ecd-sub-2023q4.xsd>.

Following the target namespace conventions of other EDGAR standard taxonomies, the current namespace<sup>2</sup> of the core ECD schema is <http://xbrl.sec.gov/ecd/2024>, prefixed ecd.

As with other EDGAR standard taxonomies, the schema is updated annually along with other taxonomies, and may also have interim quarterly updates.

Unlike older EDGAR standard taxonomies, there is no doc schema or linkbase providing additional text about each concept. Instead, the reference linkbase embedded in the core schema provides the location of the specific part of SEC rules or forms that describe the associated disclosure requirement.

## 2.1 Imported Namespaces

### 2.1.1 US-GAAP Concepts

Pay vs Performance (PvP) disclosures require a specific element – `us-gaap:NetIncomeLoss` – and it therefore appears in the ECD core schema’s embedded definition and label linkbases. Additional us-gaap concepts appear in the Insider Trading disclosures (see 7.1.2).

Therefore, any submission using any version of ECD will import a corresponding version of US-GAAP, SRT and COUNTRY.

Conversely, a submission that uses a given version of US-GAAP will be constrained as to versions of ECD that it may use.

This is no different from the EDGAR constraint that (for example) US-GAAP 2021 may only be used with DEI 2021 or DEI 2021q4.

## 2.2 Linkbase Roles

As in other EDGAR standard taxonomies, one set of linkbase roles serves to define presentation links, and a larger set serves to define definition links. All ECD role URIs begin with <http://xbrl.sec.gov/ecd/role/> and end with a camel-case token such as `ExecutiveCategories` as its Role ID. The definition text of each role follows the pattern established for other XBRL instance types, the digits indicating the level of detail to be tagged. The token “Disclosure” indicates a role with presentation and dimensional relationships, while “Document” indicates a role intended to have only dimensional relationships. The suffix “Only” indicates dimensional roles where filers are expected to add custom members.

**Figure 2. ECD taxonomy linkbase roles used in presentation links, embedded in the ecd-sub entry point.**

Role ID	Definition Text
PvpDisclosure	995410 - Disclosure - Pay vs Performance Disclosure
ErrCompDisclosure	995440 - Disclosure - Recovery of Erroneously Awarded Compensation
AwardTimingDisclosure	995443 - Disclosure - Award Timing Disclosure
InsiderTradingArrangements	995445 - Disclosure - Insider Trading Arrangements and Policies
InsiderTradingPoliciesProc	995447 - Disclosure - Insider Trading Policies and Procedures

**Figure 3. ECD taxonomy linkbase roles used in the dimensional links, embedded in the main schema.**

Role ID	Definition Text
PvpDisclosure	995410 - Disclosure - Pay vs Performance Disclosure
PvpDisclosureWithAdditionalMeasures	995411 - Document - Pay vs Performance Disclosure, with Additional Measures
PvpTable	995412 - Document - Pay vs Performance Table

<sup>2</sup> A namespace URI (uniform resource identifier) is not a URL (uniform resource locator); it does not identify a web address.

Role ID	Definition Text
PvpAdjustmentsToCompensation	995413 - Document - Adjustments to Compensation
TabularListsByExecutiveCategory	995414 - Document - Tabular Lists by Executive Category
TabularListMeasures	995415 - Document - Tabular List Measures
PvpMeasures	995424 - Document - Measures
PvpExecutiveCategoriesOnly	995425 - Document - Executive Categories
PvpAdjustmentsOnly	995426 - Document – Pay vs Performance Adjustments
IndividualsOnly	995427 - Document - Individuals
AwardTypeOnly	995428 - Document – Award Types
TradingArrangementsOnly	995429 - Document – Trading Arrangements
ErrCompDisclosure	995440 - Disclosure - Recovery of Erroneously Awarded Compensation
ForgoneRecoveries	995441 - Document - Forgone Recoveries, by Individual
OutstandingRecoveries	995442 - Document - Outstanding Recoveries
AwardTimingDisclosure	995443 - Disclosure - Award Timing Disclosure
AwardsCloseToMnpiDisclosure	995444 - Document - Awards Close to MNPI Disclosure
InsiderTradingArrangements	995445 - Disclosure - Insider Trading Arrangements and Policies
InsiderTradingArrangementsByInd	995446 - Document - Insider Trading Arrangements, by Individual
InsiderTradingPoliciesProc	995447 - Disclosure - Insider Trading Policies and Procedures
Defaults	995450 - Document - Defaults

The remaining roles are partitioned into different levels of detail and relationship to one or more forms, as described in sections below.

The presentation linkbase consolidates all of a form’s concepts into fewer XBRL presentation groups, with text and numbers inside of a table text block usually shown as children of that table text block.

The taxonomy linkbases do not, on their own, distinguish between required disclosures and optional ones; refer to the form’s instructions for this information. For example, all pay vs. performance disclosures will contain at least one Pay vs Performance Table Text Block, but more are permitted under Item 402(v)(6)(i).

## 2.3 Common Dimensions

ECD defines a small number of typed and explicit dimensions. Concepts may be dimensionally qualified by these dimensions and their members. This flexibility permits the iXBRL document to preserve human readability, while each individual tagged fact can be tagged with all relevant contextual details. For example, if the concept `ecd:PeoTotalCompAmt` appears in two places with different values for two different individuals, the filer defines members of the common dimension `IndividualAxis` and provides the detail necessary to distinguish them. The ECD definition linkbase limits the dimensions that can be used with any standard line item concept, and permits custom members to be added to those dimensions only within specific definition linkbase roles. Custom dimensional relationships beyond those required for XBRL syntax validation are optional<sup>3</sup>. If the filer provides additional, custom dimensional relationships other than those permitted within the roles identified for containing members of certain axes listed below, then those relationships must appear in definition linkbase roles other than the standard roles defined within the ECD taxonomy.

### 2.3.1 Measure Axis

Item 402(v) permits filers to define some number of distinct performance measures, one of which is distinguished as the “company selected measure” or CSM. For certain concepts, each fact must be dimensionally qualified by the `ecd:MeasureAxis` that takes on values that are integers represented by values of the element `ecd:MeasureAxis.domain`. The integers themselves have no semantic significance, although they are used in rendering to sequence lines of rendered output.

### 2.3.2 Executive Category Axis

Item 402(v)(6) requires filers, to the extent specified in the rule, to provide a “Tabular List” of the most important performance measures used by the filer to link executive compensation to company performance. Item 402(v)(6)(i) permits filers to partition the “Tabular List” of performance measures as (a) single list, (b) as two lists (one for the PEO and the other for Non-PEO NEOs), or (c) as a separate list for each individual NEO. Two explicit domain members of the `ecd:ExecutiveCategoryAxis` domain are fixed so that the default member is used in case (a), otherwise the two domain members are used in cases (b) and (c).

<sup>3</sup> The absence of a dimension default member (as might occur on a custom axis) can result in undesirable rendering outcomes, but does not by itself constitute a validation error.

### 2.3.2 Individual Axis

Items 402(v) and 402(x) require filers to detail certain compensation adjustments or equity awards on an individual basis, with the former permitting filers to distinguish separate “Tabular Lists” by individuals as described in the previous paragraph. Item 402(w) and its equivalents require several disclosures on an individualized basis for each NEO and for current and former non-NEOs as a group. Item 408(a) requires disclosures on an individualized basis for each director or officer that adopts or terminates certain arrangements for the purchase or sale of the registrant’s security during the reporting period.<sup>4</sup> Filers must add custom explicit members to `ecd:IndividualAxis` in the base set defined by the `IndividualsOnly` role and are encouraged to provide mnemonic names for these members since they represent the individual company NEOs or directors. A special member `ecd:NonNeosMember` represents forgone recoveries disclosed on an aggregate basis; see 6.1.2 below.

### 2.3.3 Adjustment to Compensation Axis

Item 402(v) requires some number or variety of adjustments to the Compensation as reported in the Summary Compensation Table, as compared to the Compensation Actually Paid. There are a number of standard members representing the adjustments described in Item 402(v)(2)(iii).

### 2.3.4 Restatement Determination Date Axis

Each fact in a disclosure under Item 402(w) and its equivalents will have at least one dimension, consisting of the Restatement Determination Date Axis with the date of the restatement.

### 2.3.5 Award Type Axis

A disclosure under Item 402(x)(2) in which an individual executive receives more than one award on a single date must distinguish those awards by type, such as stock options vs. stock appreciation rights (SARs). See section 7.1.2 below.

### 2.3.6 Trading Arrangement Axis

A disclosure under Item 408(a) in which there is more than one trading arrangement associated with a single individual must distinguish those trading arrangements, even if the trading arrangements were effective over different periods of time. See section 7 below.

## 3 SCHEMA ELEMENTS (CONCEPTS)

The taxonomy concepts follow element naming and standard label conventions that convey both meaning and data type. The definition linkbase organizes the concepts into dimensional tables, and the presentation linkbase organizes the concepts into a hierarchy (one for each form) and ordering to produce an adequate EDGAR rendering. There are several “Table Text Blocks”, but these are used only to encapsulate elements repeated along one or more dimensions.

### 3.1 Abbreviations

The following abbreviations are used in element names, and spelled out in the standard label.

**Figure 4. Abbreviations in the ECD taxonomy.**

Abbreviation	Text
Adj	Adjustment
Agg, Aggt	Aggregate
Amt	Amount
Arr	Arrangement
Avail	Available
Chng	Change
Comp, Compstn	Compensation
Cnsdrd	Considered
Disc	Disclosure
Exclg	Excluding
Exrc	Exercise

<sup>4</sup> Specifically, Item 408(a) of Regulation S-K requires disclosures regarding the adoption or termination of: i) any contract, instruction or written plan with a director or “officer” (as defined in Rule 16a-1(f) of the Exchange Act) for the purchase or sale of securities of the registrant intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) of the Exchange Act; or ii) any such contract, instruction or written plan that constitutes a “non-Rule 10b5-1 trading arrangement” as defined in Item 408(c) of Regulation S-K.

Abbreviation	Text
Fn	Footnote
Fr	Fair
Ind	Individual
Mkt	Market
Mnpi	Material Non-Public Information (MNPI)
Mtrl	Material
Neo	Named Executive Officer (NEO)
NonNeo	Executive Officer that is not or has not previously been an NEO
NonPeoNeo	Non-PEO Named Executive Officer
Pct	Percent
Peo	Principal Executive Officer (PEO)
Perf	Performance
Predtrmnd	Predetermined
Proc	Procedures
Pvp	Pay versus Performance
Rtn	Return
Trmnd	Terminated
Tmg	Timing
Undrlyg	Underlying
Val	Value

“Named executive officer” is a term defined in Items 402(a)(3) and (m)(2) of Regulation S-K that only applies to a subset of executive officers. See 17 CFR 229.402(a)(3), (m)(2). Note that “NEO” and “PEO” are not disjoint sets; rather the “PEO” is *one of* the “Named Executive Officers”.

### 3.2 Standard labels

All concepts have a standard label that is intended to align to the element name, with the data type sometimes shown in square brackets.

All ECD concepts are associated to their standard label via a link with priority “10” so that the label cannot be overridden.

### 3.3 Numeric Concepts

The suffix “Amt” denotes facts of a numeric data type, in almost every case representing a monetary amount; there are exceptions in which the amount might have any numeric unit:

Numeric Concept	Label
CoSelectedMeasureAmt	Company Selected Measure Amount
OtherPerfMeasureAmt	Other Performance Measure Amount
AwardUndrlygSecuritiesAmt	Award Underlying Securities Amount

### 3.4 Boolean Concepts

Boolean “[Flag]” named concepts generally need not appear in an Inline XBRL document as check boxes nor as the literal words “true” or “false”; tagging of any fragment of text as indicating the value can be accomplished using the built-in Inline XBRL transform registry [TR] functions `ixt:booleantrue` and `ixt:booleanfalse`. For example, the content shaded below may be tagged as a Boolean valued fact:

Under the Policy, the Compensation Committee shall not time the public release of material information for the purpose of affecting the value of executive compensation. In furtherance of this provision, the Committee has adopted the practice of approving option awards to the Company’s executive officers on an annual basis on September 20 (or, if such day is not a business day, on the following business day) (the “Annual Grant Date”).

The fragment above is tagged as shown:

```
<p>Under the Policy, the Compensation Committee shall not time the public release of material information for the purpose of affecting the value of executive compensation. In furtherance of this provision, <ix:nonNumeric contextref="FY22" format="ixt:booleantrue" name="ecd:AwardTmgPredtrmndFlag">the Committee has adopted the practice of approving option awards to the Company's executive officers on an annual basis on September 20</ix:nonNumeric>
```

(or, if such day is not a business day, on the following business day) (the "Annual Grant Date").</p>

### 3.5 Text Block Concepts

Text block concepts contain formatted XHTML text that is normally entirely or mostly narrative. Inline XBRL tags can be nested, or “wrap” other numeric or non-numeric Inline XBRL tags.

Suffix	Sample Element	Sample Label
TextBlock	NamedExecutiveOfficersFnTextBlock	Named Executive Officers Footnote [Text Block]

For example, the content outlined in double orange lines is a text block, the content shaded gray is `ecd:PeoName`:

For fiscal years 2018 through 2022, Fred W. Bock is included as the PEO, and Audie K. Gale, Florence A. Hood, Robin M. Murphy, and Nathan L. Bowie are included as other NEOs.

Because the content of a text block may be extracted and viewed in a browser within some other software application, the XHTML should have style attributes with sufficient CSS properties to display as intended. The fragment above, for example, is tagged with font family and size:

```
<ix:nonnumeric contextref="FY22" escape="true" name="ecd:NamedExecutiveOfficersFnTextBlock">
  <p style="font-family: Times New Roman; font-size: 10pt">
    For fiscal years 2018 through 2022, <ix:nonnumeric contextref="FY22_Bock"
      name="ecd:PeoName">Fred W. Bock</ix:nonnumeric> is included as the PEO, and Audie K.
      Gale, Florence A. Hood, Robin M. Murphy, and Nathan L. Bowie are included as other NEOs.
  </p></ix:nonNumeric>
```

The scope of text block content may encompass one or more images. The text block content can be quoted XHTML. Include escaped `img` tags with `src` attribute reference to a local `.gif` or `.jpg` file, consistent with current Interactive Data practices.

### 3.6 Table Text Block Concepts

A table text block differs from an ordinary text block only in its intended use to enclose a set of repeating or very similar elements.

Suffix	Sample Element	Sample Label
TableTextBlock	PvpTableTextBlock	Pay vs. Performance [Table Text Block]

For example, the following is a table text block (orange double outline) with tagged facts inside (gray shading):

Year	Summary Comp. Table		Average Summary Comp. Table Total for non-PEO Named Executive Officers		Value of Initial Fixed \$100 Investment Based On:			Company Selected Measure:
	Total for PEO	Comp. Actually Paid to PEO	Table Total for non-PEO Named Executive Officers	Average Comp. Actually Paid to non-PEO Named Executive Officers	Total Shareholder Return	Peer Group Total Shareholder Return	Net Income	Relative Total Shareholder Return (rTSR) Percentile
2022	\$ 8,702	\$ 8,102	\$ 2,872	1,372	\$ 44.50	\$ 159.59	\$ 43,375	5
2021	8,625	8,625	1,987	1,987	77.07	135.39	79,469	5
2020	9,398	9,398	2,239	2,239	145.79	117.45	76,526	72
2019	11,283	11,283	2,297	2,297	208.28	104.79	84,175	53
2018	18,121	18,121	4,466	4,466	186.30	101.00	140,267	92

### 3.7 Miscellaneous Concepts

A small number of other data types appear in the taxonomy.

Suffix	Sample Element	Sample Label	Type
Date	RestatementDeterminationDate	Restatement Determination Date	Date
Name	MeasureName	Measure Name	String

### 3.8 Authoritative References

The reference linkbase embedded in the ECD core schema uses a hierarchical order equivalent to those in other EDGAR standard taxonomies: Publisher, Name, Number, Section, Subsection, Paragraph, Subparagraph, Sentence, and Clause. For example, the concept “Aggregate Erroneous Compensation Amount” has four references:

**Figure 5. Reference part hierarchy used in the ECD taxonomy with examples.**

Reference Part	Regulation S-K 229.402(w)(1)(i)(B)	Form 20-F 6.F(1)(i)(B)	Form 40-F 19(b)(1)(ii)	Form N-CSR 18(a)(1)(ii)
Publisher	SEC	SEC	SEC	SEC
Name	Regulation S-K	Form 20-F	Form 40-F	Form N-CSR
Number	229			
Section	402	6	19	18
Subsection	w	F	b	a
Paragraph	1	1	1	1
Subparagraph	i	i	ii	ii
Sentence	B	B		

This example would be written out in this document as “402(w)(1)(i)(B)” for brevity.

## 4 INSTANCE DOCUMENT CONTENT

An Inline XBRL document<sup>5</sup> conforming to this specification will consist largely of eXtensible Hyper Text Markup Language (XHTML) elements and attributes, with a number of Inline XBRL (iXBRL) elements and attributes to mark the required information.

As of this writing, Inline XBRL tagging requirements for proxy or information statements are relatively new by comparison with tagging of financial statements. What would have previously been a DEF 14A, DEF 14C or other HTML file attachment must be converted to Inline XBRL, meaning that a typical first step will be to convert the old HTML into XHTML.

## 5 PAY VS PERFORMANCE DISCLOSURE

Item 402(v) identifies several distinct parts to the disclosure: the Pay vs Performance (“main”) table, its footnotes (of which there may be several), the descriptions of relationships between the compensation and performance measures presented in the table, and the “Tabular List” of performance measures, which is related in specific ways to the footnotes and main table.

### 5.1 Definition (Dimension) Links

The structure of the PvP disclosure is largely reflected in the dimensional links, which are not customizable (that is, they are embedded in the ecd schema, their arc priority is always 10, and they are dimensionally “closed”).

#### 5.1.1 Concepts normally appearing in the Required Context.

In the figure below a hypercube with no axes (Pay vs Performance Disclosure [Table]) reflects that these concepts are not expected to ever be in contexts with dimensions, and moreover, are normally going to appear in the Required Context [EXG].

**Figure 6. Dimensional links supporting PvP disclosure**

Definition Links and Concept Labels		
PvpDisclosure Role	Relationship	Reference
Pay vs Performance Disclosure [Line Items]		
Pay vs Performance Disclosure [Table]	all (closed table)	
Pay vs Performance [Table Text Block]	domain-member	402(v)(1)

<sup>5</sup> Technically, it is an Inline XBRL Document Set (IXDS) that may be provided in a submission, but the distinction is not important for the purposes of this Taxonomy Guide.



Definition Links and Concept Labels		
Peer Group Issuers, Footnote [Text Block]	domain-member	402(v)(2)(iv)
Changed Peer Group, Footnote [Text Block]	domain-member	402(v)(2)(iv)
Company Selected Measure Name	domain-member	402(v)(2)(vi)
Named Executive Officers, Footnote [Text Block]	domain-member	402(v)(3)
Adjustment To PEO Compensation, Footnote [Text Block]	domain-member	402(v)(3)
Adjustment to Non-PEO NEO Compensation Footnote [Text Block]	domain-member	402(v)(3)
Equity Valuation Assumption Difference, Footnote [Text Block]	domain-member	402(v)(4)
Compensation Actually Paid vs. Total Shareholder Return [Text Block]	domain-member	402(v)(5)(i)
Compensation Actually Paid vs. Net Income [Text Block]	domain-member	402(v)(5)(ii)
Compensation Actually Paid vs. Company Selected Measure [Text Block]	domain-member	402(v)(5)(iii)
Total Shareholder Return vs. Peer Group [Text Block]	domain-member	402(v)(5)(iv)
Compensation Actually Paid vs. Other Measures [Text Block]	domain-member	402(v)(5)(iv)
Additional 402(v) Disclosure [Text Block]	domain-member	402(v)

Some of these Text Blocks may be complex layouts containing multiple graphics and lengthy narratives. They are not covered further here; for specifics as to their content consult the corresponding rule reference.

The final text block, Additional 402(v) Disclosure, should be used for any additional material supporting Item 402(v) disclosures and any voluntary PvP disclosures.

It is generally unnecessary for this disclosure to define custom text blocks. However, several of the text blocks, when they appear, do require additional custom elements and linkbases, as covered in section 0 below.

### 5.1.2 Comparison text blocks potentially appearing with additional dimensions.

Item 402(v)(2)(vi) permits additional measures in addition to the Company Selected measure, in which case the relationship between each measure and compensation actually paid must be described narratively and/or graphically. The figure below shows the hypercube to accommodate a variety of possible such disclosures, as for example if different measures applied to different subsets of all NEOs.

**Figure 7. Dimensional links for descriptions of additional measures.**

Definition Links and Concept Labels	Relationship	Notes
PvpDisclosureWithAdditionalMeasures		
Pay vs Performance Additional Measure [Line Items]		
Pay vs Performance Additional Measure [Table]	all (closed table)	
Executive Category [Axis]	hypercube-dimension	No custom members
Individual [Axis]	hypercube-dimension	
Measure [Axis]	hypercube-dimension	Typed dimension of integers
Compensation Actually Paid vs. Other Measure [Text Block]	domain-member	

### 5.1.3 Concepts normally appearing without dimensions, one per fiscal year.

In the figure below a different hypercube with no axes (reflects that these concepts are not expected to ever be in contexts with dimensions, but because they are the quantitative disclosures required for a five year (or, for smaller reporting companies, three year) period, are normally appearing in the main table as columns. In some cases – where different individuals hold the PEO position in different periods – the Individual Axis (which has a default) is allowed:

**Figure 8. Dimensional links supporting Pvp main Table with multiple years**

Definition Links and Concept Labels	Relationship	Notes
PvpTable		
Pay vs Performance Table [Line Items]		
Pay vs Performance Disclosure [Table]	all (closed table)	
Individual [Axis]	hypercube-dimension	Typically defaulted
PEO Total Compensation Amount	domain-member	
PEO Actually Paid Compensation Amount	domain-member	
Non-PEO NEO Average Total Compensation Amount	domain-member	
Non-PEO NEO Average Compensation Actually Paid Amount	domain-member	
Total Shareholder Return Amount	domain-member	
Peer Group Total Shareholder Return Amount	domain-member	
Net Income (Loss)	domain-member	element in us-gaap namespace
Company Selected Measure Amount	domain-member	

The example shown earlier illustrates how the elements correspond to the eight columns. The fiscal year column is not tagged.

Year	Summary Comp. Table Total for PEO	Comp. Actually Paid to PEO	Average Summary Comp. Table Total for non-PEO Named Executive Officers		Average Comp. Actually Paid to non- PEO Named Executive Officers	Value of Initial Fixed \$100 Investment Based On:			[Company Selected Measure:]
			Total	Peer Group Total		Total Shareholder Return	Peer Group Total Shareholder Return	Net Income	

Item 402(v) details how the table should be shown if there are multiple PEO’s during the five years of disclosure. In that case the Individual Axis is used as a dimension that distinguishes between different individuals holding the position, as suggested by the columns below headed by [Member1] and [Member2]:

Year	[Member1] Summary Comp. Table Total for PEO	[Member2] Summary Comp. Table Total for PEO	[Member1] Comp. Actually Paid to PEO	[Member2] Comp. Actually Paid to PEO	Average Summary Comp. Table Total for non- PEO Named Executive Officers	Average Comp. Actually Paid to non-PEO Named Executive Officers	Value of Initial Fixed \$100 Investment Based On:			[Company Selected Measure:]
	Total	Total	Total	Total	Total Shareholder Return	Peer Group Total Shareholder Return	Total Shareholder Return	Peer Group Total Shareholder Return	Net Income	

**5.1.4 Adjustments to Compensation – up to three axes**

Item 402(v) requires tagging of the quantitative derivation of the difference between the “Total Compensation Amount” and the “Compensation Actually Paid” for both the PEO and the individuals comprising the Non-PEO NEOs, both of whom might change during the course of the five years of disclosure.

**Figure 9. Dimensional links supporting pay vs performance adjustments**

Definition Links and Concept Labels	Relationship	Notes
<b>Role PvpAdjustmentsToCompensation</b>		
Adjustment [Line Items]		
Pay vs. Performance Adjustments [Table]	all (closed table)	
Executive Category [Axis]	hypercube-dimension	No custom members
Individual [Axis]	hypercube-dimension	
Adjustment to Compensation [Axis]	hypercube-dimension	May be defaulted if only one kind of adjustment is involved.
Adjustment to Compensation Amount	domain-member	

Unlike the Individual Axis, all the members of the Adjustments to Compensation Axis need not be custom, because several typical adjustments as defined in Item 402(v)(2)(iii) appear as standard members. Each fact representing the amount of the adjustment also needs to reflect the executive category (PEO vs Non-PEO NEO) to which it applies. Below is some simple text that is represented in a table of hypothetical facts and contexts reflecting a set of adjustments made during the most recent reporting period. The sign of the numeric value should reflect whether the amount actually paid was due to additions (positive) or deductions (negative).

Adjusted per \$3.1m addition and \$2.5m deduction because of various and sundry reasons.

Includes the effect of deductions of \$1m for Messrs. Gale and Murphy, respectively, and \$860,000 for Ms. Hood for miscellaneous reasons and additions of \$250,000 for Ms. Hood and \$300,000 for Mr. Murphy also for various reasons.

Concept	Period	Executive Category Axis	Custom member of Individual Axis	Custom member of Adjustment to Compensation Axis	Value in millions
ecd:AdjToCompAmt	FY22	PeoMember	BockMember	AdjType1Member	3.1
ecd:AdjToCompAmt	FY22	PeoMember	BockMember	AdjType2Member	-2.5
ecd:AdjToCompAmt	FY22	NonPeoNeoMember	GaleMember	AdjType1Member	-1.0
ecd:AdjToCompAmt	FY22	NonPeoNeoMember	MurphyMember	AdjType1Member	-1.0
ecd:AdjToCompAmt	FY22	NonPeoNeoMember	MurphyMember	AdjType2Member	0.30
ecd:AdjToCompAmt	FY22	NonPeoNeoMember	HoodMember	AdjType1Member	-0.86
ecd:AdjToCompAmt	FY22	NonPeoNeoMember	HoodMember	AdjType2Member	0.25

### 5.1.5 The Company Selected Measure (CSM) and other Performance Measures

Item 402(v) requires the filer, to the extent specified in the rule, to define some number of performance measures considered important in determining executive compensation. One of these measures is distinguished as the CSM appearing in the rightmost column of the main table. The filer *may* include other measures in the table, along with their historical values, and in some cases must include a definition if the measure is considered “non-GAAP”. In any case all of the measures, including the CSM, appear as distinct items in the Tabular List. In the following definition link role, the filer assigns a name, and if it appears in the main table, provides an amount (which need not be a monetary amount) and in a footnote to the main table, its definition.

**Figure 10. Dimensional links supporting performance measure details**

Definition Links and Concept Labels	Relationship
<b>Role MeasuresOnly</b>	
Measures [Line Items]	
Measures [Table]	all (closed table)
Measure [Axis]	hypercube-dimension
Measure Name	domain-member
Non-GAAP Measure Description [Text Block]	domain-member
Other Performance Measure Amount	domain-member

An example in which two supplemental measures are defined and included in the main table is shown below. Note that the supplemental measures are clearly marked as such in the text of the footnotes.

**Figure 11. Main table with supplemental non-gaap performance measures.**

Year	Summary Comp. Table Total for PEO	Comp. Actually Paid to PEO	Average Summary Comp. Table Total for non-PEO Named Executive Officers	Average Comp. Actually Paid to non-PEO Named Executive Officers	Value of Initial Fixed \$100 Investment Based On:			[Company Selected Measure]	[1 <sup>st</sup> Additional Measure]	[2 <sup>nd</sup> Additional Measure]
					Total Shareholder Return	Peer Group Total Shareholder Return	Net Income			

Pay Versus Performance										
(in thousands, except as indicated)										
Year	Summary Comp. Table Total for PEO	Comp. Actually Paid to PEO	Average Summary Comp. Table Total for non-PEO Named Executive Officers	Average Comp. Actually Paid to non-PEO Named Executive Officers	Value of Initial Fixed \$100 Investment Based On:			[Company Selected Measure]	Additional Financial Performance Measures: [1 <sup>st</sup> Additional Measure]	[2 <sup>nd</sup> Additional Measure]
					Total Shareholder Return	Peer Group Total Shareholder Return	Net Income			
							Relative Total Shareholder Return (rTSR) Percentile	Adjusted Revenue (\$m)	Adjusted EPS	
2022	8,702	\$ 8,102 (1)	\$ 2,872 (2)	\$ 1,372 (3)	\$ 44.50	\$ 159.59	\$ 43,375	12(4)	\$ 1,492(5)	0.02(6)
2021	8,625	8,625	1,987	1,987	77.07	135.39	79,469	5	1,365	0.04
2020	9,398	9,398	2,239	2,239	145.79	117.45	76,526	72	1,226	0.15
* * *										

(4) Relative total shareholder return (rTSR) is defined as the percentile of the company’s three-year cumulative TSR within the peer group.

(5) Adjusted revenue, which is intended to reflect organic growth, is calculated as revenue determined in accordance with accounting principles generally accepted in the United States ("GAAP") and adjusted to remove the impacts of currency. It may also be adjusted for certain items that affect the comparability of results, including acquisitions or dispositions completed during the fiscal period, other specific large, unusual or nonrecurring items and changes in accounting principles pursuant to GAAP. This is a supplemental measure.

(6) Adjusted EPS is calculated as earnings per share determined in accordance with GAAP and adjusted for certain items that affect the comparability of results, including acquisitions or dispositions completed during the fiscal period, other specific large, unusual or nonrecurring items and changes in accounting principles pursuant to GAAP. This is a supplemental measure.

This results in the following facts for the CSM (relative total shareholder return) and two additional measures (adjusted revenue and adjusted EPS). Note that a separate element, `ecd:CoSelectedMeasureAmt`, is used for the values of the CSM. As a percentile, it is treated as a percent (ranges between 0 and 1, not 0 and 100).

**Figure 12. Performance measure facts.**

Element	Period	Measure Axis	Value - Unit
<code>ecd:MeasureName</code>	FY22	1	Relative Total Shareholder Return
<code>ecd:NonGaapMeasureDescriptionTextBlock</code>	FY22	1	Relative total shareholder return (rTSR) is defined as the percentile of the company’s three-year cumulative TSR within the peer group.
<code>ecd:CoSelectedMeasureAmt</code>	FY22	1	.12 - pure

Element	Period	Measure Axis	Value - Unit
ecd:CoSelectedMeasureAmt	FY21	1	.05 - pure
ecd:CoSelectedMeasureAmt	FY20	1	.72 - pure
ecd:MeasureName	FY22	2	Adjusted Revenue
ecd:NonGaapMeasureDescriptionTextBlock	FY22	2	Adjusted revenue, which is intended to reflect organic growth, is calculated as revenue determined in accordance with accounting principles generally accepted in the United States ("GAAP") and...
ecd:OtherPerfMeasureAmt	FY22	2	\$1,492,000,000
ecd:OtherPerfMeasureAmt	FY21	2	\$1,365,000,000
ecd:OtherPerfMeasureAmt	FY20	2	\$1,226,000,000
ecd:MeasureName	FY22	3	Adjusted EPS
ecd:NonGaapMeasureDescriptionTextBlock	FY22	3	Adjusted EPS is calculated as earnings per share determined in accordance with GAAP and adjusted for certain items that affect the comparability of results, including acquisitions or dispositions ...
ecd:OtherPerfMeasureAmt	FY22	3	.02 - USD/share
ecd:OtherPerfMeasureAmt	FY21	3	.04 – USD/share
ecd:OtherPerfMeasureAmt	FY20	3	.1515 – USD/share

### 5.1.6 Tabular lists and the PEO Name

The Tabular List as defined by 402(v)(6) is a simple list of measure names, as for example in this list where the measure names are tagged:

Relative Total Shareholder Return (rTSR)
Adjusted Revenue
Adjusted EPS

The three `ecd:MeasureName` facts appearing in Figure 12 above could be tagged in this table, although filers should take care to use identical text if the measure names will be shown in multiple locations. There is no necessary correspondence between the number in the table and the number used in the `MeasureAxis.domain` value.

As noted above in discussing the “Executive Category” axis, the individual items in the tabular list are measures, and they are characterized as to whether they appear in one of three formats for the tabular list. The “PEO Name” could have appeared in any dimensional link containing `IndividualAxis` without `MeasureAxis`.

**Figure 13. Dimensional links for one or more Tabular Lists**

Definition Links and Concept Labels	Relationship	Notes
TabularListsByExecutiveCategory		
Pay vs Performance Tabular Lists [Line Items]		
Pay vs Performance Tabular Lists [Table]	all (closed table)	
Executive Category [Axis]	hypercube-dimension	No custom members
Individual [Axis]	hypercube-dimension	
Tabular List [Table Text Block]	domain-member	
PEO Name	domain-member	

Each measure, whether a Company Selected Measure or a supplemental measure, will have a Measure Name. Measures presented in the main table will also require an explanation (graphical, narrative or both) of its relationship to compensation; however, this requirement will not apply to measures that are disclosed in the Tabular List but are not presented in the main table.

**Figure 14. Dimensional links for a single Tabular List**

Definition Links and Concept Labels	Relationship	Notes
TabularListMeasures		
Tabular List Measures [Line Items]		
Pay vs Performance Tabular Lists [Table]	all (closed table)	
Executive Category [Axis]	hypercube-dimension	No custom members
Individual [Axis]	hypercube-dimension	
Measure [Axis]	hypercube-dimension	Typed dimension of integers
Measure Name	domain-member	

## 5.2 Presentation Links

Presentation links for the ECD taxonomy’s Pay vs Performance disclosures all appear within a single role, `PvpDisclosure`, embedded in the `ecd-sub` schema and it provides a basic rendering, on the assumption that the content will either be viewed in a browser in its original layout, or as data captured and used by other means. The `ecd-sub` schema is optional, as is the `dei-sub` schema that it imports (as shown in Figure 1). Filers choosing not to use these optional schemas will need to provide their own presentation links for ECD elements so as to ensure that all facts are presented and otherwise conforming to EDGAR validations.

## 5.3 Custom Taxonomy Elements and Linkbases

The disclosure requirements in Items 402(v)(3) and 402(v)(4) which appear as the following three text blocks require quantitative detail to justify adjustments to compensation and changes in equity valuation.

Adjustment To PEO Compensation, Footnote [Text Block]
Adjustment to Non-PEO NEO Compensation Footnote [Text Block]
Equity Valuation Assumption Difference, Footnote [Text Block]

Specific parameters are not included in the ECD taxonomy because of the potential variety of possible derivations. Therefore, filers are free to create custom tags, presentation, calculation and label links to provide the required quantitative details, in much the same way that “Level 4” detail tagging as described in Regulation S-T 232.405 requires custom tagging in many financial statement footnotes. Quantitative amounts appearing only within image files referenced by text block can be tagged as if they had been displayed in a table.

# 6 ERRONEOUSLY AWARDED COMPENSATION RECOVERY DISCLOSURE

Item 402(w) and its equivalents identify a relatively small number of structured data items required when a company has prepared a required accounting restatement that triggers recovery analysis of erroneously awarded compensation (*i.e.*, a clawback), or when a company has an outstanding balance of erroneously awarded compensation to be recovered.<sup>6</sup>

## 6.1 Definition (Dimension) Links

The structure of Item 402(w) and its equivalent disclosure requirements is largely reflected in the dimensional links, which are not customizable (that is, they are embedded in the `ecd` schema and their arc priority is always 10). A unique feature of the disclosure is reflected in the text of the rule, which characterizes each occurrence of erroneously awarded compensation recovery as being associated with a specific restatement identified by the date of its determination. Therefore every fact in this disclosure will have at least one dimension, consisting of the Restatement Determination Date Axis and the determination date of the restatement.

<sup>6</sup> The erroneously awarded compensation recovery (*i.e.*, clawback) rulemaking also adds new tagged checkboxes to the cover pages of Form 10-K, Form 20-F, and Form 40-F (but not to Form N-CSR, Schedule 14A, or Schedule 14C). The tags for these checkboxes are contained in the `dei` taxonomy, not the `ecd` taxonomy.

### 6.1.1 Concepts appearing in the Required Context augmented with the restatement determination date.

In the figure below a hypercube with one axis (Erroneously Awarded Compensation Recovery [Table]) reflects that these concepts are not expected to ever be in contexts with any dimensions other than the Restatement Determination Date Axis, and moreover, are normally going to appear in the Required Context [EXG].

**Figure 15. Erroneously awarded compensation concepts with the restatement determination date dimension.**

Definition Links and Concept Labels	
ErrCompDisclosure Role	Relationship
Recovery of Erroneously Awarded Compensation Disclosure [Line Items]	
Erroneously Awarded Compensation Recovery [Table]	all (closed table)
Restatement Determination Date [Axis]	hypercube-dimension
Restatement Determination Date	domain-member
Aggregate Erroneous Compensation Amount	domain-member
Erroneous Compensation Analysis [Text Block]	domain-member
Stock Price or TSR Estimation Method [Text Block] <sup>7</sup>	domain-member
Outstanding Aggregate Erroneous Compensation Amount	domain-member
Aggregate Erroneous Compensation Not Yet Determined [Text Block]	domain-member
Restatement Does Not Require Recovery [Text Block]	domain-member

The simplest possible use of the ECD taxonomy would involve just two facts: the Restatement Determination Date, and the text indicating that the amount has not yet been determined, as for example:

On November 1, 2032, the Audit Committee of the Board, in consultation with the Company’s management, determined that the Company’s consolidated financial statements for the affected periods included in the 2031 Annual Report on Form 10-K were required to be restated. The Company is conducting an analysis under its Recovery of Erroneously Awarded Compensation Policy to determine whether any amount of compensation received by executive officers in fiscal years 2031, 2030, or 2029 is to be recovered. In light of the short period of time between the restatement determination date and the date of this filing, the company has not yet determined the amount of erroneously awarded executive compensation that must be recovered.

This only requires two facts, one of which exists only because Inline XBRL does not provide a way to “tag” an axis member:

Element	Period	Member of Restatement Determination Date Axis	Value
RestatementDeterminationDate	FY32	2032-11-01	2032-11-01
AggErrCompNotYetDeterminedTextBlock	FY32	2032-11-01	The Company is conducting an analysis under its Recovery of Erroneously Awarded Compensation Policy to determine whether any amount of compensation received by executive officers in fiscal years 2031, 2030, or 2029 is to be recovered. In light of the short period of time between the restatement determination date and the date of this filing, the company has not yet determined the amount of erroneously awarded executive compensation that must be recovered.

<sup>7</sup> With respect to the tagging of quantitative details included within narrative descriptions, such as including stock price or TSR estimates within the calculation of the stock price or TSR estimation methodology, please see the explanation related to custom tagging in Section 0, which is applicable here as well.

### 6.1.2 Forgone Recoveries

Sometimes a company will effectively abandon (*i.e.*, forgo) an attempt to recover compensation due to impracticability. In this case, each amount must be disclosed with a text block describing one of three valid reasons for the impracticability, for each current and former named executive officer, and for all other current and former executive officers as a group.

**Figure 16. Dimensional links for forgone recoveries, by restatement determination date and individual.**

Definition Links and Concept Labels	Relationship
ForgoneRecoveries Role	
Forgone Recoveries [Line Items]	
Forgone Recoveries, by Individual [Table]	all (closed table)
Restatement Determination Date [Axis]	hypercube-dimension
Individual [Axis]	hypercube-dimension
Forgone Recovery, Individual Name	domain-member
Forgone Recovery due to Expense of Enforcement, Amount	domain-member
Forgone Recovery due to Violation of Home Country Law, Amount	domain-member
Forgone Recovery due to Disqualification of Tax Benefits, Amount	domain-member
Forgone Recovery, Explanation of Impracticability [Text Block]	domain-member

The Individual Axis is used here as described for compensation recovery disclosures, with the exception that `ecd:NonNeosMember` must be used for the aggregate amount for all non-NEO current and former executive officers as a group.

### 6.1.3 Outstanding Recoveries

As long as the effort to collect continues, if the amounts owed by current and former named executive officers have been outstanding for at least 180 days, these amounts must also be disclosed, by individual.

**Figure 17. Dimensional links for outstanding recoveries, by restatement determination date and individual.**

Definition Links and Concept Labels	Relationship
OutstandingRecoveriesRole	
Outstanding Recoveries [Line Items]	
Outstanding Recoveries, by Individual [Table]	all (closed table)
Restatement Determination Date [Axis]	hypercube-dimension
Individual [Axis]	hypercube-dimension
Outstanding Recovery, Individual Name	domain-member
Outstanding Recovery Compensation Amount	domain-member

In the absence of text blocks encompassing the entire disclosure, it is likely that most tagging will appear as facts within narratives.

## 6.2 Presentation Links

Presentation links for the ECD taxonomy's Item 402(w) and equivalent disclosures all appear within a single role, `ErrCompDisclosure`, embedded in the `ecd-sub` schema, just as described above in section 5.2.

## 6.3 Custom Taxonomy Elements and Linkbases

Item 402(w)(1)(i)(B) and its equivalents require an analysis of how the aggregate dollar amount of erroneously awarded compensation attributable to the accounting restatement was calculated. These quantitative details should appear within the following text blocks:

Erroneous Compensation Analysis [Text Block]
Stock Price or TSR Estimation Method [Text Block]

Just as described above in section 5.3, specific parameters are not included in the ECD taxonomy because of the potential variety of possible derivations, and filers are free to create custom elements and linkbases in a similar manner.



## 7 INSIDER TRADING ARRANGEMENTS AND RELATED DISCLOSURES

Item 402(x) requires narrative disclosure of, among other things, the registrant’s policies and practices related to the grant of stock options, stock appreciation rights (“SARs”), and similar instruments with option-like features close in time to the release of material nonpublic information, as well as tabular disclosure describing any such awards granted to named executive officers during the reporting period. Item 402(x) is implemented in the ECD taxonomy via the concepts and definition links for “Award Timing Disclosure” and, when awards are made four business days before the filing of a periodic report or the filing or furnishing of a current report on Form 8-K that discloses material nonpublic information (including earnings information) and ending one business day after the triggering event, a table showing the recipient, grant date, amount, exercise price, value, and percentage change in market price associated with such awards via concepts and links for “Awards Close in Time to MNPI Disclosures”.

Items 408(a) and (b) require disclosure of trading arrangements with specific insiders (*i.e.*, directors and “officers” as that term is defined in Rule 16a-1(f) of the Exchange Act) and disclosure relating to company policies and procedures on insider trading, respectively.<sup>8</sup> These are implemented in concepts and definition links for “Insider Trading Arrangements”, and if the disclosure relates to specific arrangements with individual insiders, then in an additional set of concepts and definition links for “Trading Arrangements, by Individual”.

### 7.1 Definition (Dimension) Links

The taxonomy has two definition link groups – one derived from Item 402(x), the other from Items 408(a) and (b) – for which no dimensional disaggregation is allowed, so that the concepts are all reported within the Required Context [EXG].

#### 7.1.1 Concepts normally appearing in the Required Context

**Figure 18. Dimensional links for award timing disclosures under Item 402(x).**

Definition Links and Concept Labels	Relationship
Award Timing Disclosures [Line Items]	
Award Timing Disclosure [Table]	all
Award Timing MNPI Disclosure [Text Block]	domain-member
Award Timing Method [Text Block]	domain-member
Award Timing Predetermined [Flag]	domain-member
Award Timing MNPI Considered [Flag]	domain-member
Award Timing, How MNPI Considered [Text Block]	domain-member
MNPI Disclosure Timed for Compensation Value [Flag]	domain-member
Awards Close in Time to MNPI Disclosures [Table Text Block]	domain-member

**Figure 19. Dimensional links for insider trading policies and procedures under Item 408(b) and its equivalent.**

Definition Links and Concept Labels	Relationship
Insider Trading Policies and Procedures [Line Items]	
Insider Trading Policies and Procedures [Table]	all
Insider Trading Policies and Procedures Adopted [Flag]	domain-member
Insider Trading Policies and Procedures Not Adopted [Text Block]	domain-member

#### 7.1.2 Awards by individual, with optional award type dimension under Item 402(x).

When an award of stock options, SARs, or similar instruments with option-like features is made to individual named executive officers four business days before the filing of a periodic report or the filing or furnishing of a current report on Form 8-K that discloses material nonpublic information (including earnings information) and ending one business day after the triggering event, Item 402(x)(2) requires a tabular display of the awards by individual and, if different types of awards were made, distinct rows for each type of award. The ECD taxonomy uses five US-GAAP taxonomy dimensional concepts as shown in the figure below, which limits the type of award to one of the three recognized types. Note that the facts in this disclosure will have an “instant” context date to reflect the date of the award, *not* the date of the filing.

<sup>8</sup> Specifically, Item 408(b) relates to insider trading policies and procedures governing the purchase, sale, and/or other dispositions of the registrant’s securities by directors, officers and employees, or the registrant itself, that are reasonably designed to promote compliance with insider trading laws, rules and regulations, and any listing standards applicable to the registrant. If the registrant has not adopted such policies and procedures, it must explain why it has not done so.

**Figure 20. Dimensional links for the table of awards close in time to MNPI disclosures.**

Definition Links and Concept Labels	Relationship
Awards Close in Time to MNPI Disclosures [Line Items]	
Awards Close in Time to MNPI Disclosures [Table]	all
Individual [Axis]	hypercube-dimension
us-gaap:AwardTypeAxis	hypercube-dimension
us-gaap:ShareBasedCompensationArrangementsByShareBased-PaymentAwardAwardTypeAndPlanNameDomain	dimension-domain
us-gaap:EmployeeStockOptionMember	domain-member
us-gaap:StockAppreciationRightsSARSMember	domain-member
Awards Close in Time to MNPI Disclosures, Individual Name	domain-member
Award Underlying Securities Amount	domain-member
Award Exercise Price	domain-member
Award Grant Date Fair Value	domain-member
Underlying Security Market Price Change, Percent	domain-member

For example, the date shown in the table below appears not as a fact value, but as a context date.

Name	Grant date	Number of securities underlying the award	Exercise price of the award (\$/Share)	Grant date fair value of the award	Percentage change in the closing market price of the securities underlying the award between the trading day ending immediately prior to the disclosure of material nonpublic information and the trading day beginning immediately following the disclosure of material nonpublic information
John Smith, CEO	May 1, 2024	100,000	\$20	\$1,000,000	+0.05%

This row of data would appear as five facts in an instant context:

Element	Period	Individual Axis	Value	Unit
AwardsCloseToMnpiDiscIndName	2024-05-01	Smith [Member]	John Smith	
AwardUndrlygSecuritiesAmt	2024-05-01	Smith [Member]	100000	Shares
AwardExrcPrice	2024-05-01	Smith [Member]	20	USD/Share
AwardGrantDateFairValue	2024-05-01	Smith [Member]	1000000	USD
UndrlygSecurityMktPriceChngPct	2024-05-01	Smith [Member]	.05	Rate

### 7.1.3 Arrangements by Individual and/or Trading Plan under Item 408(a).

The material terms of trading arrangements may vary according to the individual adopting or terminating the trading arrangement, and the adoption or termination date of the trading arrangement. The dimensional relationships for trading arrangements permit either or both dimensions to be used on the narrative text block and other line items of this section. For instant type information, use the reporting period of the document (e.g., fiscal year end) for these facts. For duration type information, use the period applicable to the disclosures as required under Item 408(a) (e.g., 3 months ending on fiscal quarter end).

**Figure 21. Dimensional links for insider trading arrangements under Item 408(a).**

Definition Links and Concept Labels	Relationship
Trading Arrangements, by Individual [Line Items]	
Trading Arrangements, by Individual [Table]	all
Individual [Axis]	hypercube-dimension
Trading Arrangement [Axis]	hypercube-dimension
Material Terms of Trading Arrangement [Text Block]	domain-member
Trading Arrangement, Individual Name	domain-member
Trading Arrangement, Individual Title	domain-member
Rule 10b5-1 Arrangement Adopted [Flag]	domain-member
Non-Rule 10b5-1 Arrangement Adopted [Flag]	domain-member
Trading Arrangement Adoption Date	domain-member
Rule 10b5-1 Arrangement Terminated [Flag]	domain-member
Non-Rule 10b5-1 Arrangement Terminated [Flag]	domain-member
Trading Arrangement Termination Date	domain-member
Trading Arrangement Expiration Date	domain-member
Trading Arrangement Duration	domain-member
Trading Arrangement, Securities Aggregate Available Amount	domain-member

## 7.2 Presentation Links

Presentation links for the ECD taxonomy's Item 402(x) and Item 408(a) disclosures all appear within three roles shown in Figure 2. Presentation relationships are embedded in the `ecd-sub` schema to provide a basic rendering, on the assumption that the content will either be viewed in a browser in its original layout, or as data captured and used by other means, just as in section 5.2 above.

## 8 TECHNICAL REFERENCES

[DIM]	XBRL Dimensions 1.0 <a href="https://specifications.xbrl.org/spec-group-index-group-dimensions.html">https://specifications.xbrl.org/spec-group-index-group-dimensions.html</a>
[EFM]	EDGAR Filer Manual, Volume II, versions prior to v69, sections 5.2.5 and 6 on Interactive Data <a href="https://www.sec.gov/edgar/filer-information">https://www.sec.gov/edgar/filer-information</a>
[EXG]	EDGAR XBRL Guide <a href="https://www.sec.gov/edgar/filer-information">https://www.sec.gov/edgar/filer-information</a>
[iXBRL]	Inline XBRL 1.1. <a href="https://specifications.xbrl.org/work-product-index-inline-xbrl-inline-xbrl-1.1.html">https://specifications.xbrl.org/work-product-index-inline-xbrl-inline-xbrl-1.1.html</a>
[TR]	XII Transformation Registry <a href="https://specifications.xbrl.org/work-product-index-inline-xbrl-transformation-registry-5.html">https://specifications.xbrl.org/work-product-index-inline-xbrl-transformation-registry-5.html</a>

## 9 CONCEPT REFERENCES

## 10 PAY VS PERFORMANCE DISCLOSURE

label	refs	name
<b>Pay vs Performance Disclosure [Line Items]</b>	Reg. S-K (402)(v)(1)	PayVsPerformanceDisclosureLineItems
<b>Pay vs Performance Disclosure</b>	Reg. S-K (402)(v)(1)	PvpTable
<b>Executive Category:</b>	Reg. S-K (402)(v)(6)(i)	ExecutiveCategoryAxis
<b>All Executive Categories</b>	Reg. S-K (402)(v)(6)(i)	AllExecutiveCategoriesMember
<b>PEO</b>	Reg. S-K (402)(v)(6)(i)	PeoMember
<b>Non-PEO NEO</b>	Reg. S-K (402)(v)(6)(i)	NonPeoNeoMember
<b>Individual:</b>	Reg. S-K (402)(w)(1)(ii), Form 20-F (6)(F)(1)(ii), Form 40-F (19)(a)(2), Form N-CSR (18)(a)(2), Reg. S-K (402)(v)(6)(i), Reg. S-K (402)(x)(2), Reg. S-K (408)(a)(2)(A)	IndividualAxis
<b>All Individuals</b>	Reg. S-K (402)(w)(1)(ii), Form 20-F (6)(F)(1)(ii), Form 40-F (19)(a)(2), Form N-CSR (18)(a)(2), Reg. S-K (402)(v)(6)(i), Reg. S-K (402)(x)(2), Reg. S-K (408)(a)(2)(A)	AllIndividualsMember
<b>Adjustment to Compensation:</b>	Reg. S-K (402)(v)(3)	AdjToCompAxis
<b>All Adjustments to Compensation</b>	Reg. S-K (402)(v)(3)	AllAdjToCompMember
<b>Aggregate Change in Present Value of Accumulated Benefit for All Pension Plans Reported in Summary Compensation Table</b>	Reg. S-K (402)(v)(2)(iii)(A)	AggtChngPnsnValInSummryCompstnTblForAplblYrMember
<b>Aggregate Pension Adjustments Service Cost</b>	Reg. S-K (402)(v)(2)(iii)(B)(1)	AggtPnsnAdjsSvcCstMember
<b>Pension Adjustments Service Cost</b>	Reg. S-K (402)(v)(2)(iii)(B)(1)(i)	PnsnAdjsSvcCstMember
<b>Pension Adjustments Prior Service Cost</b>	Reg. S-K (402)(v)(2)(iii)(B)(1)(ii)	PnsnAdjsPrrSvcCstMember
<b>Equity Awards Adjustments</b>	Reg. S-K (402)(v)(2)(iii)(C)(1)	EqtyAwrdsAdjsMember
<b>Aggregate Grant Date Fair Value of Equity Award Amounts Reported in Summary Compensation Table</b>	Reg. S-K (402)(v)(2)(iii)(C)(1)	EqtyAwrdsInSummryCompstnTblForAplblYrMember
<b>Equity Awards Adjustments, Excluding Value Reported in Compensation Table</b>	Reg. S-K (402)(v)(2)(iii)(C)(1)	EqtyAwrdsAdjsExclgValRprtdInSummryCompstnTblMember
<b>Year-end Fair Value of Equity Awards Granted in Covered Year that are Outstanding and Unvested</b>	Reg. S-K (402)(v)(2)(iii)(C)(1)(i)	YrEndFrValOfEqtyAwrdsGrntdInCvrdYrOutsdngAndUnvstdMember
<b>Year-over-Year Change in Fair Value of Equity Awards Granted in Prior Years That are Outstanding and Unvested</b>	Reg. S-K (402)(v)(2)(iii)(C)(1)(ii)	ChngInFrValOfOutsdngAndUnvstdEqtyAwrdsGrntdInPrrYrsMember
<b>Vesting Date Fair Value of Equity Awards Granted and Vested in Covered Year</b>	Reg. S-K (402)(v)(2)(iii)(C)(1)(iii)	VstngDtFrValOfEqtyAwrdsGrntdAndVstdInCvrdYrMember
<b>Change in Fair Value as of Vesting Date of Prior Year Equity Awards Vested in Covered Year</b>	Reg. S-K (402)(v)(2)(iii)(C)(1)(iv)	ChngInFrValAsOfVstngDtOfPrrYrEqtyAwrdsVstdInCvrdYrMember
<b>Prior Year End Fair Value of Equity Awards Granted in Any Prior Year that Fail to Meet Applicable Vesting Conditions During Covered Year</b>	Reg. S-K (402)(v)(2)(iii)(C)(1)(v)	FrValAsOfPrrYrEndOfEqtyAwrdsGrntdInPrrYrsFldVstngCondsDrngCvrdYrMember
<b>Dividends or Other Earnings Paid on Equity Awards not Otherwise Reflected in Total Compensation for Covered Year</b>	Reg. S-K (402)(v)(2)(iii)(C)(1)(vi)	DvddsOrOthrErngsPdOnEqtyAwrdsNtOthrwRflctdInTtlCompForCvrdYrMember
<b>Measure:</b>	Reg. S-K (402)(v)(2)(vi)	MeasureAxis
<b>Pay vs Performance Disclosure, Table</b>	Reg. S-K (402)(v)(1)	PvpTableTextBlock
<b>Company Selected Measure Name</b>	Reg. S-K (402)(v)(2)(vi)	CoSelectedMeasureName
<b>Named Executive Officers, Footnote</b>	Reg. S-K (402)(v)(3)	NamedExecutiveOfficersFnTextBlock
<b>Peer Group Issuers, Footnote</b>	Reg. S-K (402)(v)(2)(iv)	PeerGroupIssuersFnTextBlock
<b>Changed Peer Group, Footnote</b>	Reg. S-K (402)(v)(2)(iv)	ChangedPeerGroupFnTextBlock
<b>PEO Total Compensation Amount</b>	Reg. S-K (402)(v)(2)(ii)	PeoTotalCompAmt
<b>PEO Actually Paid Compensation Amount</b>	Reg. S-K (402)(v)(2)(iii)	PeoActuallyPaidCompAmt

label	refs	name
Adjustment To PEO Compensation, Footnote	Reg. S-K (402)(v)(3)	AdjToPeoCompFnTextBlock
Non-PEO NEO Average Total Compensation Amount	Reg. S-K (402)(v)(2)(ii)	NonPeoNeoAvgTotalCompAmt
Non-PEO NEO Average Compensation Actually Paid Amount	Reg. S-K (402)(v)(2)(iii)	NonPeoNeoAvgCompActuallyPaidAmt
Adjustment to Non-PEO NEO Compensation Footnote	Reg. S-K (402)(v)(3)	AdjToNonPeoNeoCompFnTextBlock
Equity Valuation Assumption Difference, Footnote	Reg. S-K (402)(v)(4)	EquityValuationAssumptionDifferenceFnTextBlock
Compensation Actually Paid vs. Total Shareholder Return	Reg. S-K (402)(v)(5)(i)	CompActuallyPaidVsTotalShareholderRtnTextBlock
Compensation Actually Paid vs. Net Income	Reg. S-K (402)(v)(5)(ii)	CompActuallyPaidVsNetIncomeTextBlock
Compensation Actually Paid vs. Company Selected Measure	Reg. S-K (402)(v)(5)(iii)	CompActuallyPaidVsCoSelectedMeasureTextBlock
Total Shareholder Return Vs Peer Group	Reg. S-K (402)(v)(5)(iv)	TotalShareholderRtnVsPeerGroupTextBlock
Compensation Actually Paid vs. Other Measure	Reg. S-K (402)(v)(5)(iv)	CompActuallyPaidVsOtherMeasureTextBlock
Tabular List, Table	Reg. S-K (402)(v)(6)	TabularListTableTextBlock
Total Shareholder Return Amount	Reg. S-K (402)(v)(2)(iv)	TotalShareholderRtnAmt
Peer Group Total Shareholder Return Amount	Reg. S-K (402)(v)(2)(iv)	PeerGroupTotalShareholderRtnAmt
Net Income (Loss)		NetIncomeLoss
Company Selected Measure Amount	Reg. S-K (402)(v)(2)(vi)	CoSelectedMeasureAmt
Other Performance Measure, Amount	Reg. S-K (402)(v)(2)(vi)	OtherPerfMeasureAmt
Adjustment to Compensation, Amount	Reg. S-K (402)(v)(3)	AdjToCompAmt
PEO Name	Reg. S-K (402)(v)(3)	PeoName
Name	Reg. S-K (402)(v)(2)(vi)	MeasureName
Non-GAAP Measure Description	Reg. S-K (402)(v)(2)(vi)	NonGaapMeasureDescriptionTextBlock
Additional 402(v) Disclosure	Reg. S-K (402)(v)	Additional402vDisclosureTextBlock
Pension Benefits Adjustments, Footnote	Reg. S-K (402)(v)(2)(iii)	PnsnBnftsAdjFnTextBlock
Equity Awards Adjustments, Footnote	Reg. S-K (402)(v)(2)(iii)(B)(1)(ii)	EqtyAwrdsAdjFnTextBlock

## 11 RECOVERY OF ERRONEOUSLY AWARDED COMPENSATION

label	refs	element
Recovery of Erroneously Awarded Compensation Disclosure [Line Items]	Reg. S-K (402)(w)(1), Form 20-F (6)(F)(1), Form 40-F (19)(a), Form N-CSR (18)(a)	RecoveryOfErrCompDisclosureLineItems
Erroneously Awarded Compensation Recovery	Reg. S-K (402)(w)(1), Form 20-F (6)(F)(1), Form 40-F (19)(a), Form N-CSR (18)(a)	ErrCompRecoveryTable
Restatement Determination Date:	Reg. S-K (402)(w)(1)(i), Form 20-F (6)(F)(1)(i), Form 40-F (19)(a)(1), Form N-CSR (18)(a)(1)	RestatementDateAxis
Individual:	Reg. S-K (402)(w)(1)(ii), Form 20-F (6)(F)(1)(ii), Form 40-F (19)(a)(2), Form N-CSR (18)(a)(2), Reg. S-K (402)(v)(6)(i), Reg. S-K (402)(x)(2), Reg. S-K (408)(a)(2)(A)	IndividualAxis
All Individuals	Reg. S-K (402)(w)(1)(ii), Form 20-F (6)(F)(1)(ii), Form 40-F (19)(a)(2), Form N-CSR (18)(a)(2), Reg. S-K (402)(v)(6)(i), Reg. S-K (402)(x)(2), Reg. S-K (408)(a)(2)(A)	AllIndividualsMember
Non-NEOs	Reg. S-K (402)(v)(6)(i), Reg. S-K (402)(w)(1)(ii), Form 20-F (6)(F)(1)(ii), Form 40-F (19)(a)(2), Form N-CSR (18)(a)(2)	NonNeosMember

label	refs	element
<b>Restatement Determination Date</b>	Reg. S-K (402)(w)(1)(i)(A), Form 20-F (6)(F)(1)(i)(A), Form 40-F (19)(a)(1)(i), Form N-CSR (18)(a)(1)(i)	RestatementDeterminationDate
<b>Aggregate Erroneous Compensation Amount</b>	Reg. S-K (402)(w)(1)(i)(B), Form 20-F (6)(F)(1)(i)(B), Form 40-F (19)(a)(1)(ii), Form N-CSR (18)(a)(1)(ii)	AggtErrCompAmt
<b>Erroneous Compensation Analysis</b>	Reg. S-K (402)(w)(1)(i)(B), Form 20-F (6)(F)(1)(i)(B), Form 40-F (19)(a)(1)(ii), Form N-CSR (18)(a)(1)(ii)	ErrCompAnalysisTextBlock
<b>Stock Price or TSR Estimation Method</b>	Reg. S-K (402)(w)(1)(i)(C), Form 20-F (6)(F)(1)(i)(C), Form 40-F (19)(a)(1)(iii), Form N-CSR (18)(a)(1)(iii)	StkPrcOrTsrEstimationMethodTextBlock
<b>Outstanding Aggregate Erroneous Compensation Amount</b>	Reg. S-K (402)(w)(1)(i)(D), Form 20-F (6)(F)(1)(i)(D), Form 40-F (19)(a)(1)(iv), Form N-CSR (18)(a)(1)(iv)	OutstandingAggtErrCompAmt
<b>Aggregate Erroneous Compensation Not Yet Determined</b>	Reg. S-K (402)(w)(1)(i)(E), Form 20-F (6)(F)(1)(i)(E), Form 40-F (19)(a)(1)(v), Form N-CSR (18)(a)(1)(v)	AggtErrCompNotYetDeterminedTextBlock
<b>Name</b>	Reg. S-K (402)(w)(1)(ii), Form 20-F (6)(F)(1)(ii), Form 40-F (19)(a)(2), Form N-CSR (18)(a)(2)	ForgoneRecoveryIndName
<b>Forgone Recovery due to Expense of Enforcement, Amount</b>	Reg. S-K (402)(w)(1)(ii), Form 20-F (6)(F)(1)(ii), Form 40-F (19)(a)(2), Form N-CSR (18)(a)(2)	ForgoneRecoveryDueToExpense-OfEnforcementAmt
<b>Forgone Recovery due to Violation of Home Country Law, Amount</b>	Reg. S-K (402)(w)(1)(ii), Form 20-F (6)(F)(1)(ii), Form 40-F (19)(a)(2), Form N-CSR (18)(a)(2)	ForgoneRecoveryDueToViolation-OfHomeCountryLawAmt
<b>Forgone Recovery due to Disqualification of Tax Benefits, Amount</b>	Reg. S-K (402)(w)(1)(ii), Form 20-F (6)(F)(1)(ii), Form 40-F (19)(a)(2), Form N-CSR (18)(a)(2)	ForgoneRecoveryDueToDisqualification-OfTaxBenefitsAmt
<b>Forgone Recovery, Explanation of Impracticability</b>	Reg. S-K (402)(w)(1)(ii), Form 20-F (6)(F)(1)(ii), Form 40-F (19)(a)(2), Form N-CSR (18)(a)(2)	ForgoneRecoveryExplanationOfImpracticability-TextBlock
<b>Name</b>	Reg. S-K (402)(w)(1)(iii), Form 20-F (6)(F)(1)(iii), Form 40-F (19)(a)(3), Form N-CSR (18)(a)(3)	OutstandingRecoveryIndName
<b>Compensation Amount</b>	Reg. S-K (402)(w)(1)(iii), Form 20-F (6)(F)(1)(iii), Form 40-F (19)(a)(3), Form N-CSR (18)(a)(3)	OutstandingRecoveryCompAmt
<b>Restatement does not require Recovery</b>	Reg. S-K (402)(w)(2), Form 20-F (6)(F)(2), Form 40-F (19)(b), Form N-CSR (18)(b)	RestatementDoesNotRequireRecoveryTextBlock

## 12 AWARD TIMING DISCLOSURES

label	ref	name
<b>Award Timing Disclosures [Line Items]</b>	Reg. S-K (402)(x)(1)	AwardTmgDiscLineItems
<b>Award Timing MNPI Disclosure</b>	Reg. S-K (402)(x)(1)	AwardTmgMnpiDiscTextBlock
<b>Award Timing Method</b>	Reg. S-K (402)(x)(1)	AwardTmgMethodTextBlock

<b>Award Timing Predetermined</b>	Reg. S-K (402)(x)(1)	AwardTmgPredtrmndFlag
<b>Award Timing MNPI Considered</b>	Reg. S-K (402)(x)(1)	AwardTmgMnpiCnsdrdFlag
<b>Award Timing, How MNPI Considered</b>	Reg. S-K (402)(x)(1)	AwardTmgHowMnpiCnsdrdTextBlock
<b>MNPI Disclosure Timed for Compensation Value</b>	Reg. S-K (402)(x)(1)	MnpiDiscTimedForCompValFlag
<b>Awards Close in Time to MNPI Disclosures, Table</b>	Reg. S-K (402)(x)(2)	AwardsCloseToMnpiDiscTableTextBlock
<b>Awards Close in Time to MNPI Disclosures</b>	Reg. S-K (402)(x)(2)	AwardsCloseToMnpiDiscTable
<b>Individual:</b>	Reg. S-K (402)(w)(1)(ii), Form 20-F (6)(F)(1)(ii), Form 40-F (19)(a)(2), Form N-CSR (18)(a)(2), Reg. S-K (402)(v)(6)(i), Reg. S-K (402)(x)(2), Reg. S-K (408)(a)(2)(A)	IndividualAxis
<b>All Individuals</b>	Reg. S-K (402)(w)(1)(ii), Form 20-F (6)(F)(1)(ii), Form 40-F (19)(a)(2), Form N-CSR (18)(a)(2), Reg. S-K (402)(v)(6)(i), Reg. S-K (402)(x)(2), Reg. S-K (408)(a)(2)(A)	AllIndividualsMember
<b>Award Type</b>		AwardTypeAxis
<b>All Award Types</b>		ShareBasedCompensationArrangementsByShareBasedPaymentAwardTypeAndPlanNameDomain
<b>Employee Stock Option</b>		EmployeeStockOptionMember
<b>Stock Appreciation Rights (SARs)</b>		StockAppreciationRightsSARSMember
<b>Name</b>	Reg. S-K (402)(x)(2)(ii)(A)	AwardsCloseToMnpiDiscIndName
<b>Underlying Securities</b>	Reg. S-K (402)(x)(2)(ii)(C)	AwardUndrlygSecuritiesAmt
<b>Exercise Price</b>	Reg. S-K (402)(x)(2)(ii)(D)	AwardExrcPrice
<b>Fair Value as of Grant Date</b>	Reg. S-K (402)(x)(2)(ii)(E)	AwardGrantDateFairValue
<b>Underlying Security Market Price Change</b>	Reg. S-K (402)(x)(2)(ii)(F)	UndrlygSecurityMktPriceChngPct

## 13 INSIDER TRADING ARRANGEMENTS

label	ref	name
<b>Insider Trading Arrangements [Line Items]</b>	Reg. S-K (408)(a)	InsiderTradingArrLineItems
<b>Trading Arrangements, by Individual</b>	Reg. S-K (408)(a)(2)(A)	TradingArrByIndTable
<b>Trading Arrangement:</b>	Reg. S-K (408)(a)	TradingArrAxis
<b>All Trading Arrangements</b>	Reg. S-K (408)(a)	AllTradingArrangementsMember
<b>Individual:</b>	Reg. S-K (402)(w)(1)(ii), Form 20-F (6)(F)(1)(ii), Form 40-F (19)(a)(2), Form N-CSR (18)(a)(2), Reg. S-K (402)(v)(6)(i), Reg. S-K (402)(x)(2), Reg. S-K (408)(a)(2)(A)	IndividualAxis
<b>All Individuals</b>	Reg. S-K (402)(w)(1)(ii), Form 20-F (6)(F)(1)(ii), Form 40-F (19)(a)(2), Form N-CSR (18)(a)(2), Reg. S-K (402)(v)(6)(i), Reg. S-K (402)(x)(2), Reg. S-K (408)(a)(2)(A)	AllIndividualsMember

<b>Material Terms of Trading Arrangement</b>	Reg. S-K (408)(a)(1)	MtrlTermsOfTrdArrTextBlock
<b>Name</b>	Reg. S-K (408)(a)(2)(A)	TrdArrIndName
<b>Title</b>	Reg. S-K (408)(a)(2)(A)	TrdArrIndTitle
<b>Rule 10b5-1 Arrangement Adopted</b>	Reg. S-K (408)(a)(1)	Rule10b51ArrAdoptedFlag
<b>Non-Rule 10b5-1 Arrangement Adopted</b>	Reg. S-K (408)(a)(1)	NonRule10b51ArrAdoptedFlag
<b>Adoption Date</b>	Reg. S-K (408)(a)(2)(B)	TrdArrAdoptionDate
<b>Rule 10b5-1 Arrangement Terminated</b>	Reg. S-K (408)(a)(1)	Rule10b51ArrTrmntdFlag
<b>Non-Rule 10b5-1 Arrangement Terminated</b>	Reg. S-K (408)(a)(1)	NonRule10b51ArrTrmntdFlag
<b>Termination Date</b>	Reg. S-K (408)(a)(2)(B)	TrdArrTerminationDate
<b>Expiration Date</b>	Reg. S-K (408)(a)(2)(C)	TrdArrExpirationDate
<b>Arrangement Duration</b>	Reg. S-K (408)(a)(2)(C)	TrdArrDuration
<b>Aggregate Available</b>	Reg. S-K (408)(a)(2)(D)	TrdArrSecuritiesAggAvailAmt

## 14 INSIDER TRADING POLICIES AND PROCEDURES

label	ref	name
<b>Insider Trading Policies and Procedures [Line Items]</b>	Reg. S-K (408)(b)(1), Form 20-F (16)(J)(a)	InsiderTradingPoliciesProcLineItems
<b>Insider Trading Policies and Procedures Adopted</b>	Reg. S-K (408)(b)(1), Form 20-F (16)(J)(a)	InsiderTrdPoliciesProcAdoptedFlag
<b>Insider Trading Policies and Procedures Not Adopted</b>	Reg. S-K (408)(b)(1), Form 20-F (16)(J)(a)	InsiderTrdPoliciesProcNotAdoptedTextBlock