



PROPOSED TAXONOMY STYLE GUIDE

Version 1.0

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Decision Tree for Hierarchical and Distinct Domains

FASB U.S. GAAP Financial Reporting Taxonomy (Taxonomy) Style Guide Series

This draft is issued by the Financial Accounting Standards Board (FASB) to solicit views on this proposed style guide. Written comments should be addressed to:
Chief of Taxonomy Development
File Reference No. 2016-201

Financial Accounting Standards Board

The Decision Tree for Hierarchical and Distinct Domains Guide is not authoritative; rather, it is a document that communicates how the U.S. GAAP Financial Reporting Taxonomy (Taxonomy) is designed. It also provides other information to help a user of the Taxonomy understand how elements and relationships are structured.

Notice to Recipients of This Draft

The FASB invites individuals and organizations to send written comments on all matters in this draft or to send comments using the [electronic feedback form](#). Responses from those wishing to comment on the Proposed Taxonomy Style Guide must be received in writing by July 25, 2016. Interested parties should submit their comments by email to xbrlguide@fasb.org, File Reference No. 2016-201. Those without email should send their comments to "Chief of Taxonomy Development, File Reference No. 2016-201, FASB, 401 Merritt 7, PO Box 5116, Norwalk, CT 06856-5116." Do not send responses by fax.

The FASB will make all comments publicly available by posting them to the [Online Comment Letters XBRL Page](#).

An electronic copy of this proposed Taxonomy Style Guide is available on the FASB's website.

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Questions for Respondents

1. Do you find this proposed decision tree useful? If yes, are there additional improvements that you would recommend? If no, what changes would you propose?
2. Do you agree with the proposed decision tree? If not, what changes would you propose?
3. Are there other criteria in deciding whether to model Hierarchical Domains or Distinct Domains that are not identified in this document? If yes, what are such ways?
4. Do you agree with the ways in which the glossary terms are defined, excluding the definitions from the XBRL Dimensions 1.0?
5. Do you agree with the examples provided in explaining the difference between Hierarchical Domains and Distinct Domains? If not, what examples would you suggest?
6. Do you agree with examples provided in the appendix? If not, what examples would you suggest?

1. Overview

The purpose of this Guide is to provide guidance for determining when to use Hierarchical Domains or Distinct Domains for dimensional modeling included in the U.S. GAAP Financial Reporting Taxonomy (Taxonomy). This Guide is used by the Financial Accounting Standards Board (FASB) Taxonomy staff to structure dimensional modeling using a clear, structured, and consistent framework. Additionally, it is intended to serve as a reference for users of the Taxonomy in interpreting the modeling for particular disclosure topics.

The abstract elements in the Taxonomy that have an item declaration in the `xbrldt:dimensionItem` substitution group are denoted by having the standard label end in *[Axis]*. In this Guide, because *dimension* is the technical term, it is the term used to identify axis or axes. Dimensional modeling or structures refer to the combination of the dimension and `domainItemType` elements and their definition linkbase relationships.

When modeling a new disclosure or remodeling a disclosure topic, the FASB Taxonomy staff uses this guide in deciding modeling choices given for the disclosure. This Guide will be part of a series on the different aspects of dimensional modeling.

While constituents may find the information in this guide useful, users looking for guidance to conform to SEC XBRL filing requirements should look to the SEC EDGAR Filer Manual and other information provided on the SEC's website at xbrl.sec.gov.

Certain dimensional modeling within the current Taxonomy does not conform to this Guide. However, new dimensional modeling will be modeled using this Guide. Existing Taxonomy dimensional modeling will be evaluated in connection with topical focus and other projects.

2. Glossary

2.1 Domain

From XBRL Dimensions 1.0: A (possibly empty or possibly infinite) set of members. A typical example could be the Longitude and Latitude dimensions. The numbers from -180 to +180 are a domain. In this case, both dimensions have the same domain.

FASB Taxonomy Staff Interpretation: A set of `domainItemTypes` [Members] with at least one common attribute.

2.2 Member

From XBRL Dimensions 1.0: Each one of the possibilities in the domain of a Dimension. Explicit domains are defined by domain-member relations. Example: In the "Products Dimension" an explicit domain can be created with each one of the products as a member. Member items are in the substitution group of `xbri:item`.

FASB Taxonomy Staff Interpretation: An element in the Taxonomy that has a data type of `domainItemType` and represents a concept included within the Domain.

2.3 Domain-Member Structure

A set of relationships expressed in the definition linkbase that defines the Members contained in the Domain.

2.4 Hierarchical Domain

A Domain-Member Structure that includes relationships between Members that render in a branching fashion. This may be referred to as a nested, hierarchical structure, or parent-child. Section 4.1 is an example of a Hierarchical Domain.

2.5 Distinct Domain

A Domain-Member¹ structure in which all Members have a relationship to a single Domain "parent" and do not include any relationships between the Members themselves. Visually, this renders as a flat list of Members with a single Domain parent. Section 4.2 is an example of a Distinct Domain.

2.6 Mutually Exclusive

No more than one Member of a Domain may be used on a fact. For example, the outcomes in a single coin toss may result in heads or tails, but not both. The opposite of Orthogonal.

2.7 Orthogonal

Two or more unique Domains that cannot exist as part of a common Domain because Members from each of the unique Domains could be required to describe the same fact. For example, *revenue* may be broken down by *products* or *geography*. A geographic location could not be included as a type of product and vice versa. The opposite of Mutually Exclusive.

¹While not prohibited by XBRL specifications, limitations in the GAAP Taxonomy publishing script do not permit multiple Dimension-Domain relationships for each dimension.

3. Purpose

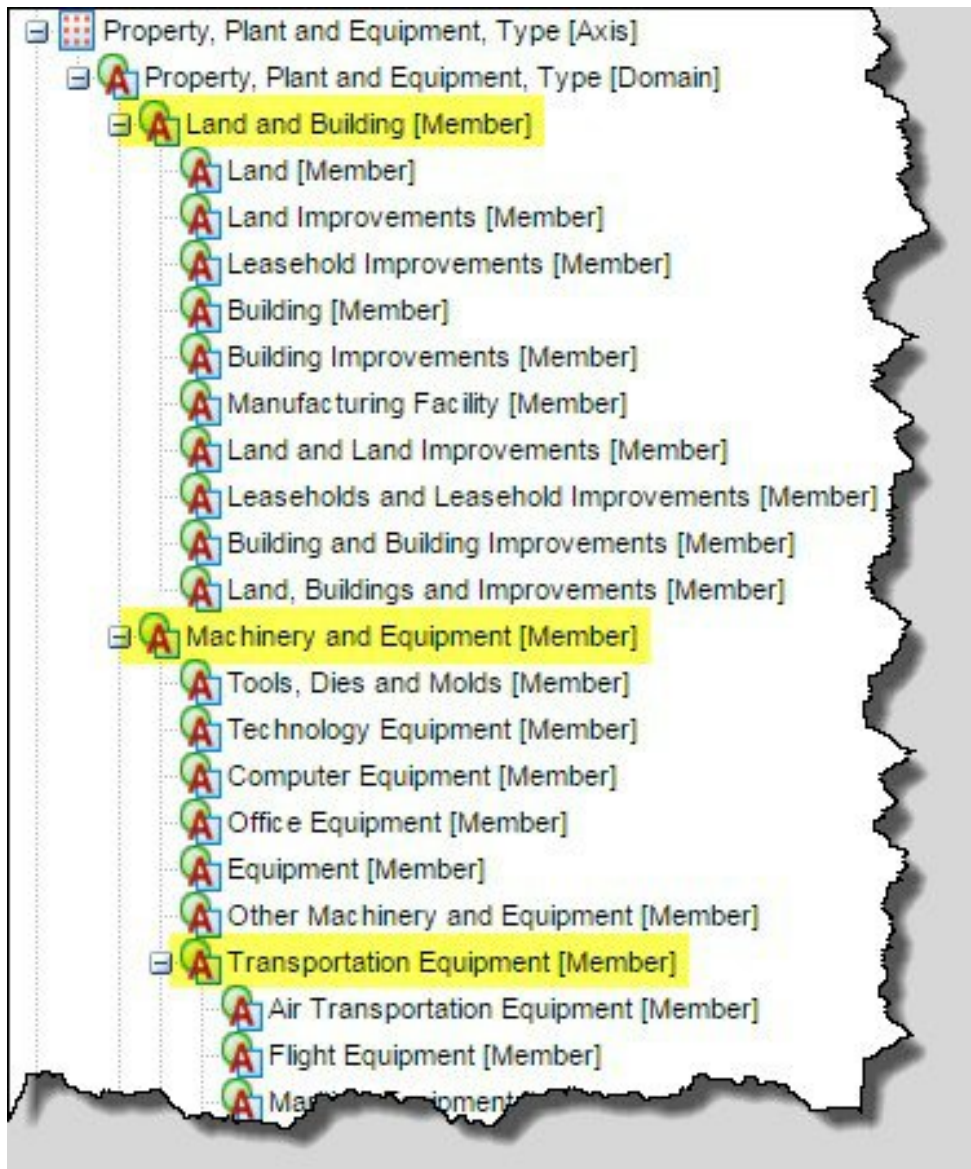
This Guide focuses only on the decision to model the Domain-Member Structure as either a Distinct Domain or a Hierarchical Domain and assumes that the decision to model using dimensional modeling has already been made. There are other modeling decisions related to dimensional modeling that are not addressed in this guide.

4. Examples

The following are examples to illustrate the two different choices in dimensional modeling. Both structures are appropriate for use in the Taxonomy.

4.1 Hierarchical Domain

Property, Plant and Equipment dimensional modeling:



Highlighted in yellow are higher level concepts than the listed children. For example, *land improvements* is a more precise concept than *land and building*. It would not be considered optimal, however, to model different Domains for each of the Members highlighted because it is unlikely that there would be a scenario in which a fact requires the intersection of more than one Member from each of the Domains. Such dimensional modeling would not be considered Orthogonal to each other. The Members are Mutually Exclusive. For example, it is highly unlikely that a fact would be classified as *land* and *office equipment*.

4.2 Distinct Domain

Derivative disclosure dimensional modeling:



The four dimensional modeling structures are Orthogonal to each other; an *interest rate contract* may be a *swap* or an *option*, it may be *exchange traded* or *exchange cleared*, it may be *designated as a hedge* or *not*, and so forth. Applying any one of the attributes from the Domains above does not affect the application of an attribute from one of the other Domains; that is, they are not Mutually Exclusive.

Alternatively, modeling the above as a Hierarchical Domain would cause the creation of exponentially more Members to accommodate the variability in the underlying disclosed information and would be much more difficult to ensure that every combination of attributes is provided for in the hierarchy.

5. Criteria for Modeling Dimensions

The following criteria are for deciding whether to model as a Hierarchical Domain or Distinct Domain.

5.1 Criterion 1

Do the Members exist in a single location in the Domain or are they required in multiple locations in the hierarchy?

Using the *property, plant and equipment* example from section 4.1, *office equipment* would never be considered as a type of *land and building*. Therefore, the Member representing the concept is only required at a single location in the Domain.

Considerations: When there is a need to associate an element with two or more different Members of the same Domain, it is necessary to contain the Members in Distinct Domains because the Dimension-Member pair can only be used against a single fact and primary line item in which everything else is held constant for the context; that is, there is only one fact per line item and unique context.

See Appendix 1: "Legal Entity [Axis]" dimensional modeling

5.2 Criterion 2

Will it ever be necessary to use multiple Members of a Domain on the same fact?

It is not syntactically possible to include two Members from the same dimension in the reported context.

Considerations: *Yes* is an indication that two or more Domains would be comingled.

See Appendix 2: Interest rate types

5.3 Criterion 3

Does the Dimension documentation label encompass all the Members of the Domain?

Members should only be added to a dimension in which the Members represent a property consistent with the dimension. For example, if a Member is not described by or encompassed within the definition of the dimension, then it should not be added to the Domain.

Considerations: Do not combine definitions in documentation label. A cost/benefit analysis should be performed for proposed modifications.

See Appendix 3: Fair Value Hierarchy

5.4 Criterion 4

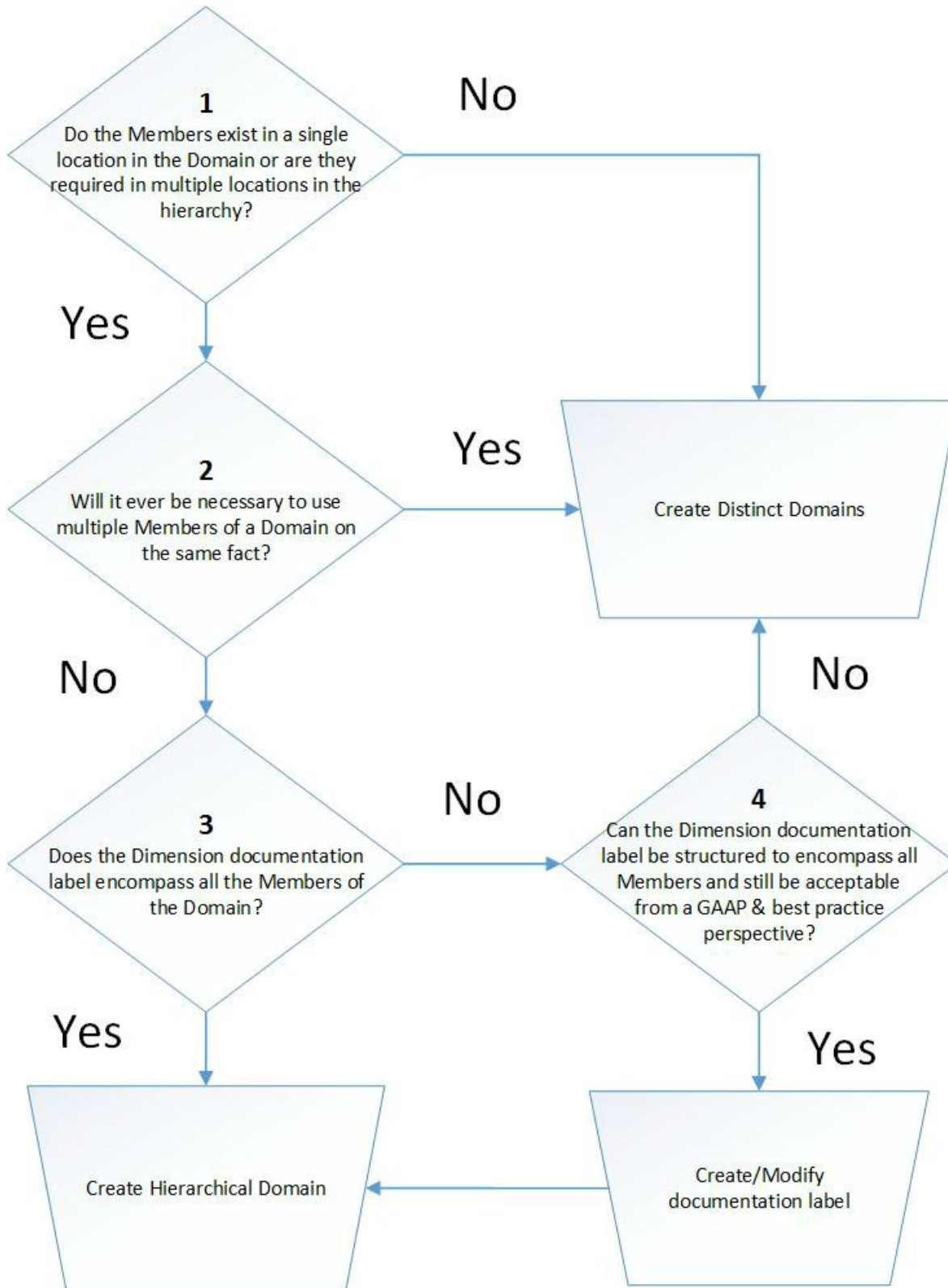
Can the Dimension documentation label be structured to encompass all Members and still be acceptable from a GAAP & best practice perspective?

If the expansion of the definition of the dimension to include all Members would be in conflict with the definition of the concept per GAAP, it should not be modified.

Considerations: See Appendix 3 for an example in which the documentation label cannot be rewritten to encompass all of the Members because the definition will be in conflict with GAAP.

See Appendix 3: Fair Value Hierarchy

6. Decision Tree



7. Appendix

7.1 Appendix 1

“Legal Entity [Axis]” dimensional modeling is currently used for multiple purposes that may conflict in certain situations. Here is an example:

ABC Company										
Assets	Legal Entity One					Legal Entity Two				
	Parent Issuer	Subsidiary	Guarantor	Eliminations	Consolidated	Parent Issuer	Subsidiary	Guarantor	Eliminations	Consolidated
		Issuer	Subsidiaries				Issuer	Subsidiaries		
Cash	5	-	8	-	13	4	1	7	-	12
Receivables	3	4	6	(4)	9	2	3	5	(3)	7
Inventory	-	-	1	-	1	-	-	3	-	3
PP&E	-	-	4	-	4	-	-	6	-	6
Total Assets	8	4	19	(4)	27	6	4	21	(3)	28

For the above example, “Legal Entity [Axis]” is needed for identifying the two disclosed legal entities and for the consolidating schedule. Structuring the modeling as a Hierarchical Domain, as shown below, syntactically does not work in XBRL:



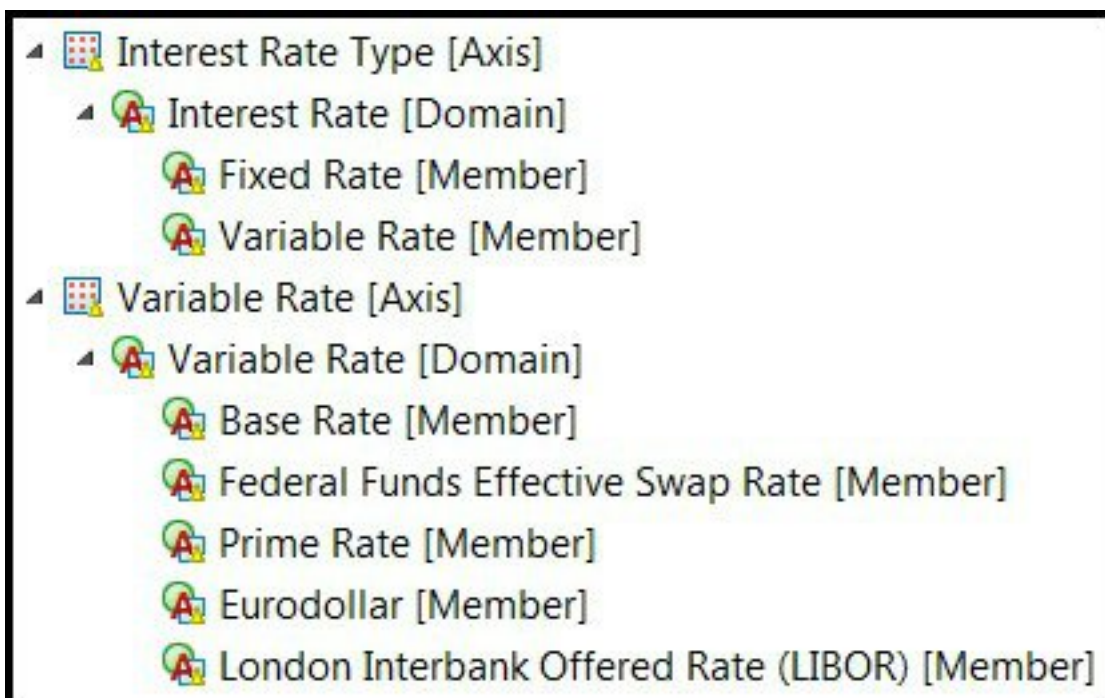
Instead, two Distinct Domain structures with separate dimensions are needed in this scenario, modeled following this construct:



An example in which the Members exist in a single location in the Domain is in section 4.1.

7.2 Appendix 2

Debt disclosures often provide information on the interest rates, whether the rate is fixed or variable. Variable rates of interest reset periodically according to a quoted reference rate, such as the *prime rate*. Modeling two Distinct Domain structures, as shown below, is not the optimal modeling structure:



The two dimensional structures are not orthogonal because *Fixed Rate [Member]* could not intersect with any of the variable reference rates. Instead, modeling as a Hierarchical Domain structure, as shown below, is determined to be the optimal modeling structure:

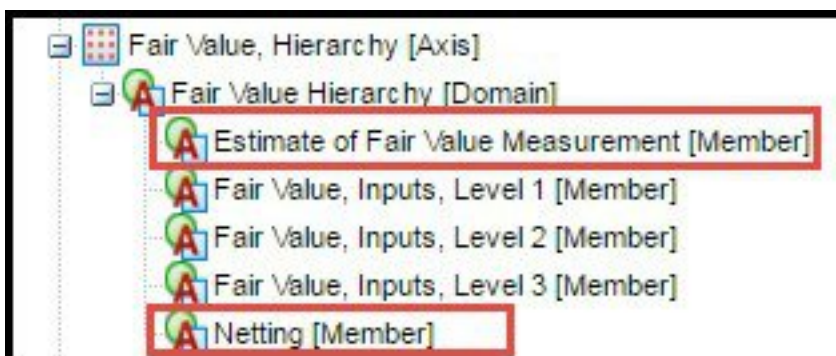


Any of the variable reference rates are by definition variable rates, and therefore, that attribute is inherent in the Members and is excluded from being classified as a *fixed rate*. The Members only exist in a single location in the hierarchy.

Example 4.2 illustrates when a Distinct Domain model is necessary because multiple Members are applied to a fact.

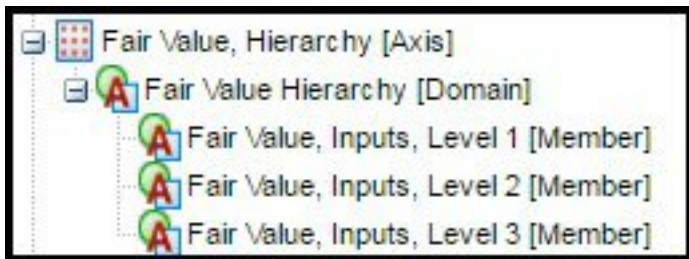
7.3 Appendix 3

For the 2013 Taxonomy and earlier versions, “Fair Value, Hierarchy [Axis]” was structured as follows:



The definition of the dimension is: *Information by level within the fair value hierarchy*. The two domainItemTypes highlighted with red boxes are not levels within the fair value hierarchy, as defined by GAAP.

Because the definition of the dimension could not be rewritten to encompass all of the Members, the dimensional modeling structure was adjusted as follows for the 2014 Taxonomy:



An example in which the Dimension documentation label encompasses all of the Members of the Domain is in section 4.1.