XBRL Guidance and Taxonomy Development Handbook Public Review

January 14, 2020



### Agenda

Mission of XBRL International and XBRL US	Campbell Pryde, President and CEO, XBRL US John Turner, CEO, XBRL International
Importance of Guidance Now	Michelle Savage, VP, Communication, XBRL US
Review of Guidance Materials	Scott Theis, Chairman, XBRL US Domain Steering Committee (DSC), and CEO, Novaworks LLC John Turner, XBRL International
Next Steps	



#### Mission of XBRL International and XBRL US

XBRL International:

XBRL US:

Our purpose is to improve the accountability and transparency of business performance globally, by providing the open data exchange standard for business performance.

Our mission is to support the implementation of XBRL business reporting standards through the development of taxonomies for use by U.S. public and private sectors, with a goal of interoperability between sectors, and by promoting XBRL adoption through marketplace collaboration.



# Standards Development Materials

- <u>Guidance articles (XBRL International)</u>
  - In-depth topical content for developers

Format

- Deep dive articles on specific topics, e.g., "designing a list of allowed values", "multilingual language", "Formula Rules tutorial".
- Some content open to public, some available for members only

#### • <u>Taxonomy Development Handbook (XBRL US)</u>

(and supporting materials: Style Guide, Approval Metrics)

- Education and training for those new to XBRL
  - Take the mystery and complexity out of taxonomy development
  - Encourage creation of new taxonomies
  - Get regulators engaged
- Make taxonomy development and implementation easy (or as easy as possible)
- Ensure good quality taxonomies and data

#### Format

- Sequential walk-through of the process to build a good quality taxonomy
- Open to the public



# Why now?

- Global activities
  - European Securities Markets Authority (ESMA)
- U.S. government activities
  - Open Government Data Act
  - President's Management Agenda
  - GREAT Act
  - Financial Transparency Act
  - FERC standards development
  - State-level adoption
  - More SEC use of standards



#### Collaboration

- Ensure consistent content
- Jointly reference both sets of guidance
- (TDH) Link to freely available content; refer to member-only content

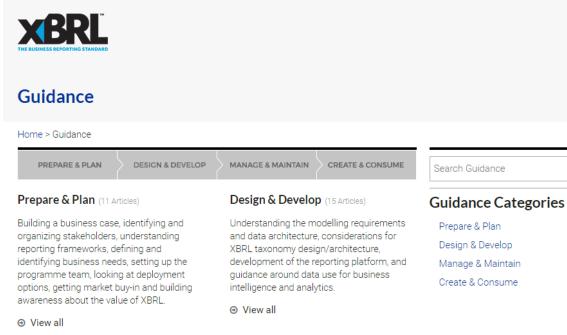


#### XBRL International Guidance

Governance	Range of Topics
<ul> <li>Produced by taskforces led by volunteers</li> <li>Reviewed by the XII's Best Practices Board</li> <li>Supported by XII staff</li> <li>Subject to External Review</li> </ul>	<ul> <li>Taxonomy architecture</li> <li>XBRL program implementation</li> <li>Technical specification explanations/tutorials for business users</li> <li>Case studies</li> </ul>
XII	Guidance
Nature	Access
<ul> <li>Not normative</li> <li>XBRL project agnostic</li> </ul>	<ul> <li>Available on Guidance section of XBRL.org</li> <li>Generally "Member Only" access</li> </ul>
	, , ,



#### XBRL International Guidance



#### Manage & Maintain (3 Articles)

Knowledge transfer and readiness, programme monitoring, communications to stakeholders, training and stakeholder support, XBRL change management, and adopting market changes.

O View all

Create & Consume (4 Articles)

Guidance around creation and filing of reports/instances, creating and maintaining the filing environment, and consuming XBRL structured data.

O View all

LOGIN

Find a topic by browsing the project life-cycle or use the simple search text box



## Explainer Guide for Creating an iXBRL Report

- XII's <u>iXBRL guide</u>
  - explains transforming the human-readable view into the format required for XBRL
  - provides examples to demonstrate specific iXBRL features along with technical tagging details.
- A useful resource for anyone involved with iXBRL report creation.



#### XBRL or iXBRL? Make the right choice!

- One of the key decisions for data collectors when planning to implement or upgrade their XBRL platform.
- The <u>XII guidance</u> helps in choosing the right solution.
- The guidance discusses the characteristics of open and closed reporting, and how they match the features offered by iXBRL and XBRL.



## Filing Rules guidance

- Filing rules are crucial for reporting program as they define the specific technical requirements of the filing system.
  - XII guidance on preparing and publishing filing rules explains
    - the need for filing rules in an XBRL program,
    - provides a list of common classes of filing
    - provides recommendations on how to publish filing rules consistently.
  - XII's <u>Checklist for XBRL report filing rules</u>
    - describes filing rules for different categories,
      - such as those related to submission, use of Inline XBRL, report contents and built-in dimensions.
    - provides examples of the types of rule that should not be included within filing rules.



#### **XBRL Formula Tutorial**

- XBRL Formulas ability to embed sophisticated business rules for validation into a taxonomy.
- <u>XBRL Formula tutorial</u> walks through the implementation of many common types.
- Uses a new prototype text-based version of the formula language known as "XF".
  - XF much easier to read and write.
  - Same functionality as the existing syntax for XBRL formula.



### Few other XII Guidance

#### XII Glossary terms

Defines terms for concepts that are commonly referenced when discussing XBRL and electronic business reporting implementations.

#### Anchoring extensions

When and how to anchor entity-specific concepts to ESEF taxonomy concepts. Taxonomy Publication and accompanying Documentation

Describes best practices for publishing XBRL taxonomies, focusing on the guidance information that should be provided as part of a taxonomy package.

#### <u>Standard Labels,</u> <u>Label Roles</u> and <u>Multi-</u> <u>Lingual Label</u>

Guidance covering usage and creation of standard label other label roles and multi-lingual labels.



### XBRL US Taxonomy Development Materials

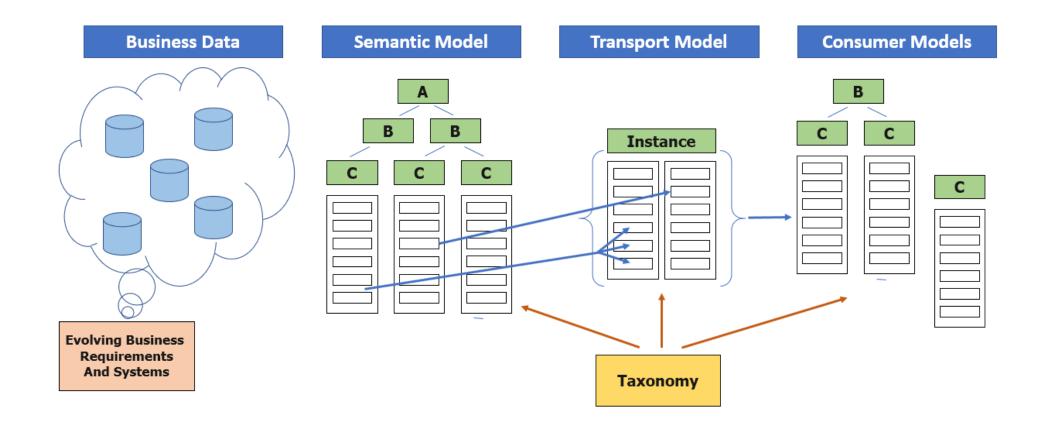
Materials:

- Style Guide, September 2017
- Taxonomy Approval Metrics & Process, May 2018
- Taxonomy Development Handbook (TDH):

"... a comprehensive guide that directs regulators, industry experts, and businesses through a practical, consistent roadmap to building high quality data standards using XBRL."



#### Scenario





#### Purpose

- To promote the implementation of XBRL as a structured data format throughout the US
- To provide the basic tools and understanding to potential developers
- To make is as easy as possible for developers to source materials for taxonomy development



#### Audience

- This document is written as an introduction to XBRL, it's structure, capabilities and application to projects
- We expect readers to be SMEs, analysts, developers and a general cross section of those that might involved in the decision process and eventual development of a private or public taxonomy
- Compliance and specification aspects of development are left to supporting documents from XII and XBRL US



#### What it is NOT

- This is not meant as a specification or reference
- We specifically avoid the use of "SHOULD" or "MUST" etc. (as specified by RFC-2119)
- Information within the document references published standards from XII and XBRL US



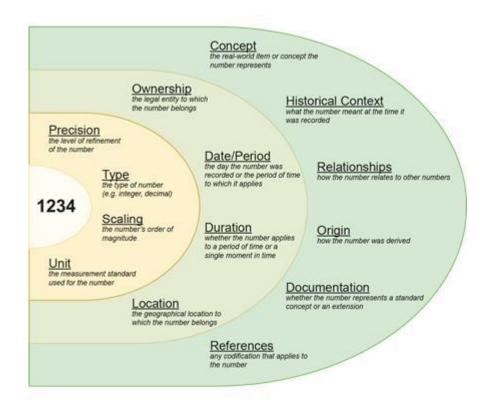
#### Breakdown

- Introduction to XBRL
- Discussion of how to frame a project to develop a taxonomy
- Step-by-step on how to use Excel and Arelle to create a taxonomy set
- Documentation breakdown including outline documents to assist developers
- Methods of implementing and governing a taxonomy
- Success Stories



### Chapter 1 — Introduction

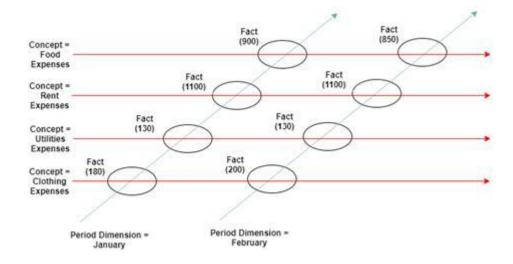
- A synopsis of the Taxonomy Development Handbook and XBRL
- A brief background about XBRL, including a high-level overview of how it represents data
- A brief discussion of XBRL's history and proliferation as a reporting standard
- An overview of the Handbook's chapters and the specifications it references





### Chapter 2 — An Introduction to XBRL

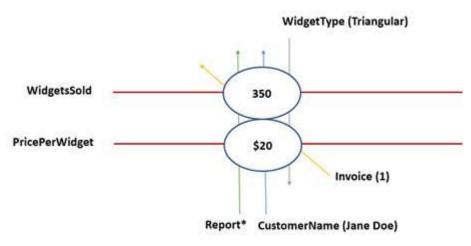
- An overview of XBRL as a transport data model
- An in-depth discussion of the basic constructs of XBRL, including:
  - Facts
  - Concepts
  - Core Dimensions
  - Taxonomy-defined Dimensions
- An overview of the basic constructs of an XBRL taxonomy, including:
  - Schema files
  - Linkbases





## Chapter 3 — Structuring Data

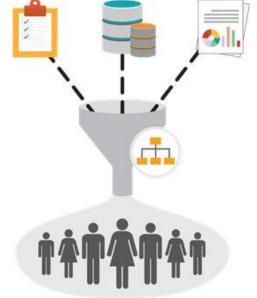
- Illustrates a sample dataset: widget sales
- Defines a relational data model, including:
  - Independent dimensions
  - Dependent dimensions
  - Data point relationships (one-to-one, one-to-many, etc.)
  - Maintaining data point uniqueness
- Explores XBRL constructs to represent that model
  - Concepts and other core dimensions
  - Taxonomy-defined dimensions (explicit vs. typed)
  - Hierarchical relationships (presentations, linkbases)





# Chapter 4 — Assessing Overall Project Scope

- Defining project goals and determining requirements for taxonomy
  - Functional vs. non-functional
  - Regulatory
  - Use cases for both preparers and consumers
- Engaging necessary stakeholders
- Determining necessary resources (software development, personnel, etc.) and how the taxonomy will build upon or fit into pre-existing systems
- Developing governance structures and rubrics for success





# Chapter 5 — Building a Transport Data Model

- Translating functional and non-functional requirements into a minimum data set
- The stages of data model development: conceptual data model -> logical data model -> physical data model
- Apply data model development steps to widget example (Chapter 3) to build widget taxonomy, including:
  - Deciding on relationships between data points
  - Developing concepts and data types
  - Deciding between explicit and typed taxonomy-defined dimensions



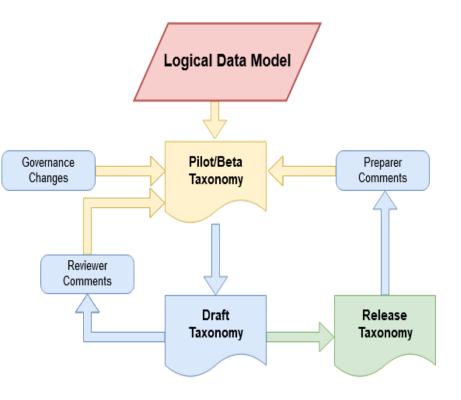
# Chapter 5 — Building a Transport Data Model *(continued)*

- Development choices
  - Transport format (XML, Inline XBRL, JSON, CSV)
  - Preparer extensibility and its impact on report comparability
  - Report display methods
- Validation
  - Basic validation provided by the XBRL format
  - Validation added through custom software solutions
  - Industry or regulatory requirements



### Chapter 6 — The Mechanics of Taxonomy Development

- The workflow of taxonomy development
- Using a spreadsheet and Arelle to develop the taxonomy files
  - Concepts sheet lists concepts and their properties
  - Discoverable Taxonomy Set (DTS) sheet lists properties of the taxonomy itself, including linkbase relationships
- Use Arelle's "Load from Excel" plug-in to convert the spreadsheet into taxonomy schema (.xsd) and linkbase (.xml) files





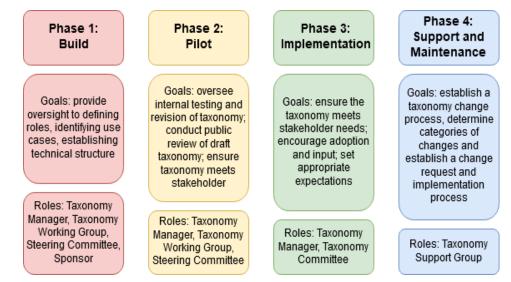
### Chapter 7 — Documenting a Taxonomy

- Discussion of the basic types of taxonomy documentation
- *Taxonomy Guide* explains the taxonomy and its design choices in detail. Audience: taxonomy managers, software developers
- *Preparer Guide* explains how to create robust XBRL reports using the taxonomy. Audience: report preparers
- Consumer Guide explains how to extract data from the taxonomy data model to analyze it in various popular use cases. Audience: analysts, regulators, various data consumers
- Templates available for download from XBRL US



### Chapter 8 — Taxonomy Governance

- Governance required to maintain and update a dynamic taxonomy
  - Phase 1 Taxonomy development and Build (TDH focuses on this step)
  - Phase 2 Pilot Stage, where taxonomy is thoroughly tested and reviewed publicly as necessary. Data quality committees can be formed
  - Phase 3 Implementation, where the finished taxonomy is released for use. Supporting systems must be implemented as needed
  - Phase 4 Support and Maintenance, where necessary changes and updates are implemented





#### Chapter 9 — Success Stories

- Thoroughly investigate numerous success stories and example development choices
- Banking in the US closed reporting regime
- Business to Government Reporting streamlining regulatory requirements
- WIP Reporting for Surety Underwriting industry-led standards development
- Public Company Reporting in the US regulatory sponsor support and maintenance





#### Appendices — XBRL Information

- Appendix A XBRL and XML Supporting Information A collection of technical information to aid in understanding and using XBRL.
- Appendix B Taxonomy Creation Checklist A basic checklist of "to do" items for creating a taxonomy.
- Appendix C Taxonomy White Paper Outline and Template Information to aid in the creation of a project "white paper" to aid in the process of developing a taxonomy.



### Appendices — Aiding in Documentation

- Appendix D XBRL Overview Template An example XBRL Overview section to be included in taxonomy documentation.
- Appendix E Taxonomy Guide Outline and Template
   An outline for a consolidated Taxonomy Guide to be used by users of a taxonomy including preparers, consumers and software developers.
- Appendix F Preparer Guide Outline and Template
   An outline for a separate Preparer Guide aimed to aid preparers in using the
   developed taxonomy.
- Appendix G Data Consumer Guide Outline and Template
   An outline for a separate Data Consumer Guide aimed to demonstrate to data
   consumers how the information in the taxonomy can be applied to common
   use cases.



#### Appendices — Taxonomy Approval

• Appendix H — XBRL US Taxonomy Approval Metrics Information as to how a taxonomy can be reviewed and approved by XBRL US.



### Appendices — General Stuff

Appendix I — Intellectual Property Status

An overview of Intellectual Property considerations and a sample IP statement.

• Appendix J — Document Revision Status

A discussion of the status of the Taxonomy Development Handbook, including pertinent revisions.

• Appendix K — Revisions and Public Comments

A discussion of public comments and the relevant revisions.



#### What can Members Do?

- Does this document achieve its goals? If not, why?
- If you read this without knowledge of XBRL, do you think it provides enough information to get started?
- Are there technical issues or inconsistencies?
- Is it too big? Too small?
- Obviously, bad language, typos...



#### What We Are Doing in the Interim

- Work on language and conforming graphics
- Appendix A needs to be completed
- Working with XII to harmonize content



#### How to Make Comments

#### **XBRL US**

Home > XBRL References >

#### XBRL Taxonomy Development Handbook

#### in Share 🎔 Tweet 😯 Share 0

The Taxonomy Development Handbook (TDH) is a comprehensive guide that directs regulators, industry experts, and businesses through a practical, consistent roadmap to building high quality data standards using XBRL.

Taxonomy Development Handbook (PDF) 🗗 published Nov '19

This draft release was developed by the XBRL US Domain Steering Committee (DSC) for a **60-day public review period that ends on January 20, 2020**. The DSC requests comments about the following:

- Areas/topics that were not included but should be added to the document
- Suggested revisions or corrections to the content
- Suggested clarifications

1

2

3

When commenting, please indicate the numbered section of the document to which your comment pertains.

Domain Steering Committee

A Guide for XBRL Taxonomy Developers

#### Public Comment Draft #1 (November 2019)

#### Table Contents

3	Structuring Data	34	8 Taxonomy Governance	105	
	2.4 The Taxonomy	27	7.6 Updates and Release Notes	104	
	2.3 Machine-readability	26	7.5 The Data Consumer Guide	100	
	2.2 How Does XBRL Represent Data?	14	7.4 The Preparer Guide	95	
	2.1 eXtensible Business Reporting Language	10	7.3 The Taxonomy Guide	91	
2	An Introduction to XBRL	10	7.2 The Taxonomy White Paper	91	
	1.4 What Is in this Document	7	7.1 How to Use This Chapter	90	
	1.3 XBRL: the eXtensible Business Reporting Language	3	7 Documenting a Taxonomy	89	
	1.2 XBRL US and Its Mission	2	6.5 Guidance	88	
	1.1 Overview	1	6.4 The Importance of Public Exposure	88	
1	Introduction	1	6.3 Using Arelle	86	



#### How to Make Comments

#### Leave a Reply

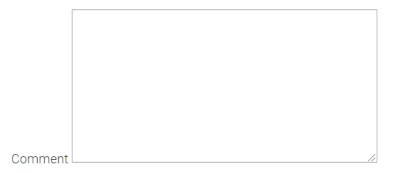
Logged in as Michelle Savage. Log out?

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Choose File No file chosen



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Post Comment



# How can members and other stakeholders help?

- Public (members/non-members):
  - Participate in the TDH public review Identify areas/topics that should be added, suggest revisions, corrections, clarifications
- Members
  - Participate in the public review
  - Provide input to the XII guidance
  - Join an XII or XBRL US working group XBRL US DSC, XII standards working group
- (Members of XBRL US are also members of XBRL International and can fully participate within either or both organizations)



#### Next steps

- TDH Public Review closes February 21, 2020 (extended)
- Expect final materials to be published in first half of 2020



# Questions?

