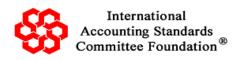
# Interoperable Taxonomy Architecture

A joint initiative from IASCF, Japan FSA, US SEC together with the European Commission



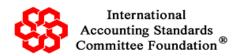






## Agenda

- General Introduction
- Technical Aspects
- Domain Aspects
- ITA Guide
- Q&A



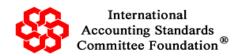






## Why we are here

- Collectively IFRS, US and Japanese GAAP are used by 85% of worldwide market capitalisation
- We have a responsibility to ensure the cross-border interoperability of corporate reporting
- XBRL is gaining acceptance but differences in taxonomy architecture could slow implementation
- Software vendors develop applications that would gain in effectiveness if based on a single XBRL Taxonomy architecture









## Background: Expected Issues

There are significant risks and potential costs if the several taxonomies have little or no interoperability...

<u>Stakeholder</u> <u>Risk</u>

Preparers

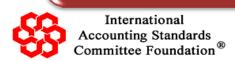
- Heterogeneous platforms and software
- Heterogeneous filing formats

Regulators

- Less efficient multi-GAAP reporting mechanisms
- Software vendors dependency

Investors & Analysts

- Uneasy data insert in analytical tools
- Comparability

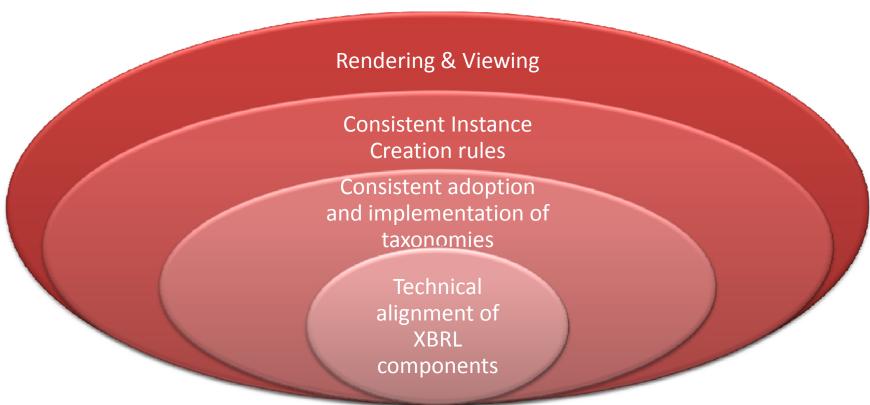


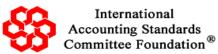






#### Goal: Create Interoperable Architecture





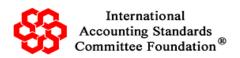






#### **Project Team**

- Senior Executives and Technical Staff from Japan, US and EU
- Meeting in face-to-face or by conference call every month
- Communication with XBRL Int'l members







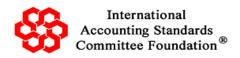


#### **Process Overview**

Identify Compare Evaluate Recommend

#### **Topics**

- Technical Alignment
- Domain Alignment
- Guideline Alignment



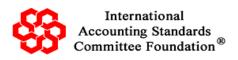






#### **Current Status**

- Technical Alignment
  - Tables modeling
  - Reuse of linkbases and Extended Link Roles (ELRs)
  - Use of definition linkbase
  - Custom roles and arcroles
- Domain Alignment
  - Input values
  - Concept definition
  - Usage of label roles
  - Presentation linkbase
- ITA Guide
  - Labels
  - Data types
  - Global dimensions
  - FRTA waivers
  - **—** ...



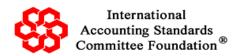






#### Next Steps

- Deliverables
  - ITA Guide
  - TCF
- Decisions to move forward
  - Japan FSA
  - US SEC
  - IASC Foundation



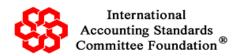






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## Technical Alignment

#### Topics

- Physical definition
- Table modelling
- Schema
- Presentation linkbase
- Calculation linkbase
- Definition linkbase
- Label linkbase
- Reference linkbase
- Dimensions
- New technologies



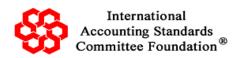






## **Examples of Current Findings**

- Tables modelling
- Reuse of linkbases and Extended Link Roles (ELRs)
- Use of definition linkbase
- Custom roles and arcroles





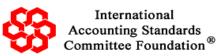




## **Tables Modeling**

How to model a table such as Statement of changes in equity or Reconciliations in property, plant and equipment?

IFRS	US GAAP	EDINET
Intersection tables with double Extended Link Roles (ELR) in presentation and/or calculation linkbase.	Dimensional tables with primary items for categories of changes and dimensions for classes of accounting items.	Intersection tables with single ELR in presentation linkbase and double ELR in calculation linkbase.
Table with 10 classes and 10 categories => 100 concepts and 100 entry points	Table with 10 classes and 10 categories => 20 concepts and 100 entry points	Table with 10 classes and 10 categories => 100 concepts and 100 entry points
Differentiation of credit/debit, instant/duration on cell level.	Differentiation of credit/debit, instant/duration on column/row level.	Differentiation of credit/debit, instant/duration on cell level.
Additional class introduces up to 10 concepts.	Additional class introduces 1 concept.	Additional class introduces up to 10 concepts.





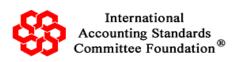




# Reuse of Linkbases and Extended Link Roles (ELRs)

How to build an entity specific taxonomy extensions balance sheet?

IFRS	US GAAP	EDINET
Reuse existing linkbase hierarchies and ELR for balance sheet OR create your own hierarchy in your own ELR.	Create your own hierarchy in your own ELR.	Reuse existing linkbase hierarchies and ELR for balance sheet.
Choice for reporting entities.	More flexibility for preparers.	No need to recreate ELR because there are legal formats
Choice for reporting entities.	Visualisation and search for statements (ELRs) across entities more difficult.	Higher standardisation, easier search and comparisons of statements (ELRs) across entities.





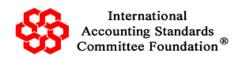




#### Use of Definition Linkbase

Is definition linkbase used in dimensional, non-dimensional or both situations?

IFRS	US GAAP	EDINET
For hierarchies of primary items, dimensions and domain members.	For hierarchies of primary items, dimensions and domain members as well as hypercubes connecting primary items with domain members.	Non-dimensional use only
Definition linkbase for primary items is reflecting presentation linkbase.	All definition linkbases are aligned with presentation linkbases.	Provides semantic relationship between accounts including CP elements.
Scenario is used as container for dimensional information in instance documents.	Segment is used as container for dimensional information in instance documents.	No dimensions are used.





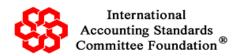




#### **Custom Roles and Arcroles**

Are similar custom roles and arcroles used to express the same semantics?

	IFRS	US GAAP	EDINET
Negated label roles	Custom IFRS negated label roles set to express flip of the sign in the visualization of instance data as well as flip of the label. Used in taxonomy.	Custom US GAAP (LRR) negated label role to express flip of the sign in the visualization of instance data as well as flip of the label. Use indicated for extensions.	No need for negated label. Only use PositiveOrNegative label for label flipping (no sign flip).
Total and net labels	Net label to express netting of concepts in presentation linkbase.	Total or standard label used for netting of concepts.	Standard label used for netting of concepts
Deprecated labels	No use of deprecated labels.	US GAAP custom (LRR) deprecated label.	No use of deprecated labels.



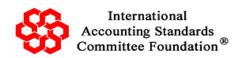






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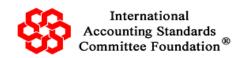






## Major Current Findings

- Input values
- Concept definition
- Usage of label roles
- Presentation linkbase









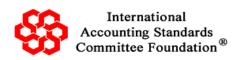
## Input Values

Between three taxonomies, some elements which have same accounting meaning have different input values. (positive or negative)

#### [Background]

The difference of input values is caused by the difference of concept definition policies and other circumstances as follows;

- Elements in Statement of cash flows mean "cash flow amount" or "cash flow effect"? (same issue in Statement of changes in equity)
- Fact should basically have positive value? or instance value should faithfully reflect presented value?
- Based on form oriented disclosure rules or not
- To adopt dimension table or not



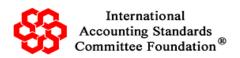






#### Ex.1 "Purchase of PP&E" (Statement of cash flows)

	IFRS	US GAAP	EDINET
Balance attribute	Credit	Credit	- (Debit)
Weight	-1	+1 (-1)	+1
	•   •	gated (+)	(-)
Visualized value	_abel La	abel (-)	(-)
Description	Fact means cash flow amount (positive value).  By using negated label, input value is sign-flipped for visualization.	Fact means cash flow amount (positive value).  By using negated label, input value is sign-flipped for visualization.	Fact means cash flow effect (negative value in case of cash out flow).  Instance value faithfully reflects presented value.  Formats are defined by disclosure regulations.





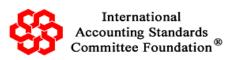




#### Ex.2 "Treasury stock"

IFRS		US G	SAAP	EDINET
	BS & SS	BS	SS (Dimension)	BS & SS
Balance attribute	Debit	Debit		Credit
Weight (relation to equity)	-1	-1		+1
in pat value	gated (+) Negated Label	(+)	(-)	(-)
Visualized value	(-)	(-)	(-)	(-)
	Fact basically has positive value.	Fact basically ha	s positive value.	Instance value faithfully reflects presented value.
Description	By using negated label, input value is sign-flipped for visualization.	By using negated label, input value is sign-flipped for visualization. (BS)  Equity class in SS is domain member in dimension table.		Formats are defined by disclosure regulations.

BS: Balance sheet (Statement of financial position) SS: Statement of changes in equity





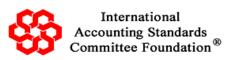




## **Concept Definition**

How to define/explain concept of each element?

IFRS	US GAAP	EDINET
Strictly provided via reference link to at least one IFRS standard. No use of documentation label to provide a definition or meaning as this is the task of a standard setter body (IASB). For extenders of IFRS taxonomy it is recommended to provided a common practice reference or non-authoritative literature reference. If no reference is available or suitable the extender should provide a definition with the definition label to give the reason why the concept was introduced.	Elements are defined in the documentation label, and reference link.	Explanation/definition of each concept is mainly described in definition link, verbose role in label link and reference link. Definition link means concept tree (current EDINET taxonomy doesn't adopt dimension). Verbose role includes standard role and additional information such as section of financial statement and industry. Documentation role has same value as verbose role.







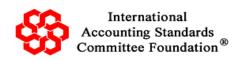


## Usage of Label Roles

How to use each label role? Especially what does standard role mean?

Ex. "Net cash provided by (used in) operating activities" (abstract) – Statement of cash flows

Label role	IFRS	US GAAP	EDINET
Standard	Cash flows from (used in) operating activities [abstract]	Net Cash Provided by (Used in) Operating Activities [Abstract]	Net cash provided by (used in) operating activities
Verbose	- (*)	-	Net cash provided by (used in) operating activities-abstract
Documentation	-	The net cash from (used in) all of the entity's operating activities, including those of discontinued operations, of the reporting entity. Operating activities include all transactions and events that are not defined as investing or financing activities. Operating activities generally involve producing and delivering goods and providing services. Cash flows from operating activities are generally the cash effects of transactions and other events that enter into the determination of net income.	Net cash provided by (used in) operating activities-abstract
Alternative	Cash flows from (used in) operating activities (*)	-	-





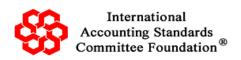




#### **Presentation Linkbase**

What does presentation link mean?

IFRS	US GAAP	EDINET
Represents the disclosure requirement of IFRS and a visual filter to represent the relationships between the elements. The corresponding calculation linkbase shall reflect the presentation hierarchy. For IFRS taxonomy the presentation linkbase shall follow a hierarchy mechanism that can be processed by processor for consistency.	To arrange the elements similar to a published financial statement, to facilitate locating the elements.  To group similar elements.  To indicate levels of detail in Disclosures.	To mean formats in disclosure regulations with additional considering about actual disclosure.  Does not include common practice elements.  (Definition link includes all elements.)



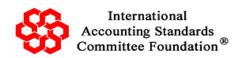






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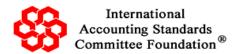






#### Labels

- Alternative label
- Tagging guidance label
- Negated/negative/positive label
- Deprecated label
- Net label
- Label override
- ...



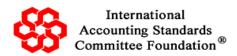






#### Data Types

- Percent
- PerShare
- Domain Member
- Area
- Volume
- Mass
- Energy
- Power
- Length
- Text Block
- ...



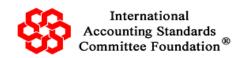






#### **Global Dimensions**

- Restatements
- Issue date
- Accounting regime
- Legal entity





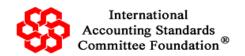




#### **FRTA Waivers**

- Balance attribute on monetary concepts
- Dimensions break FRTA rules
- Prefix length
- Namespace URI structure

• ...



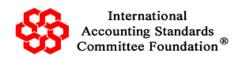






## **Special Values**

- Material
- Non-material
- Nil
- Not nil



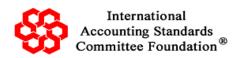






#### **Dimensions**

- Equivalence
  - Members on multiple axes
  - Flipping signs
  - Elements represented in two or more dimensional intersections
- Exclusions



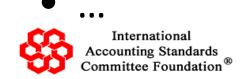






## Other Topics

- Identification of components of financial statements
- Parts for reference file
- Control objectives
- Definition linkbase for class properties
- Temporal values for period types/duration
- Incomplete breakdowns









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