

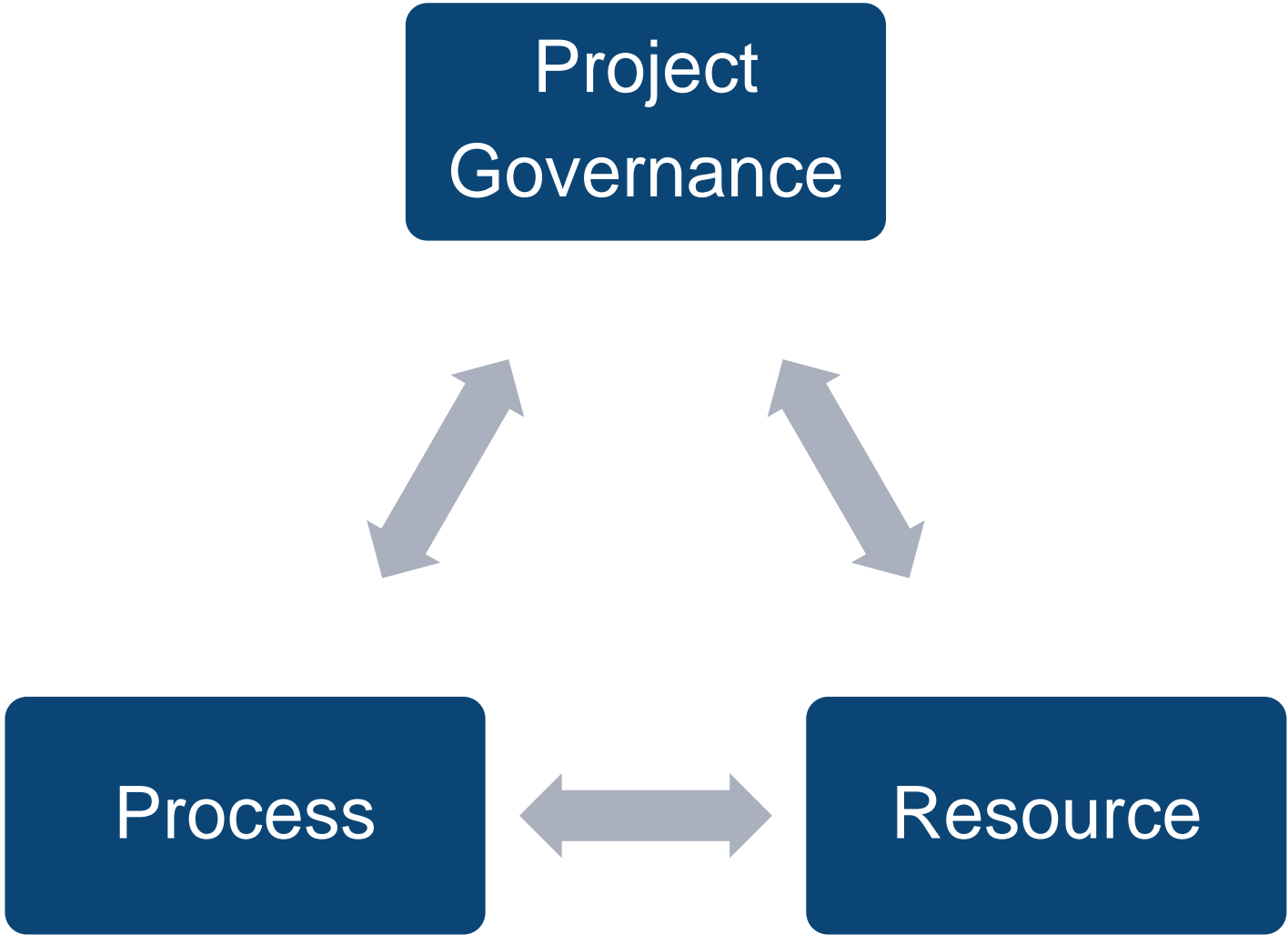
Quality Control in Taxonomy Development

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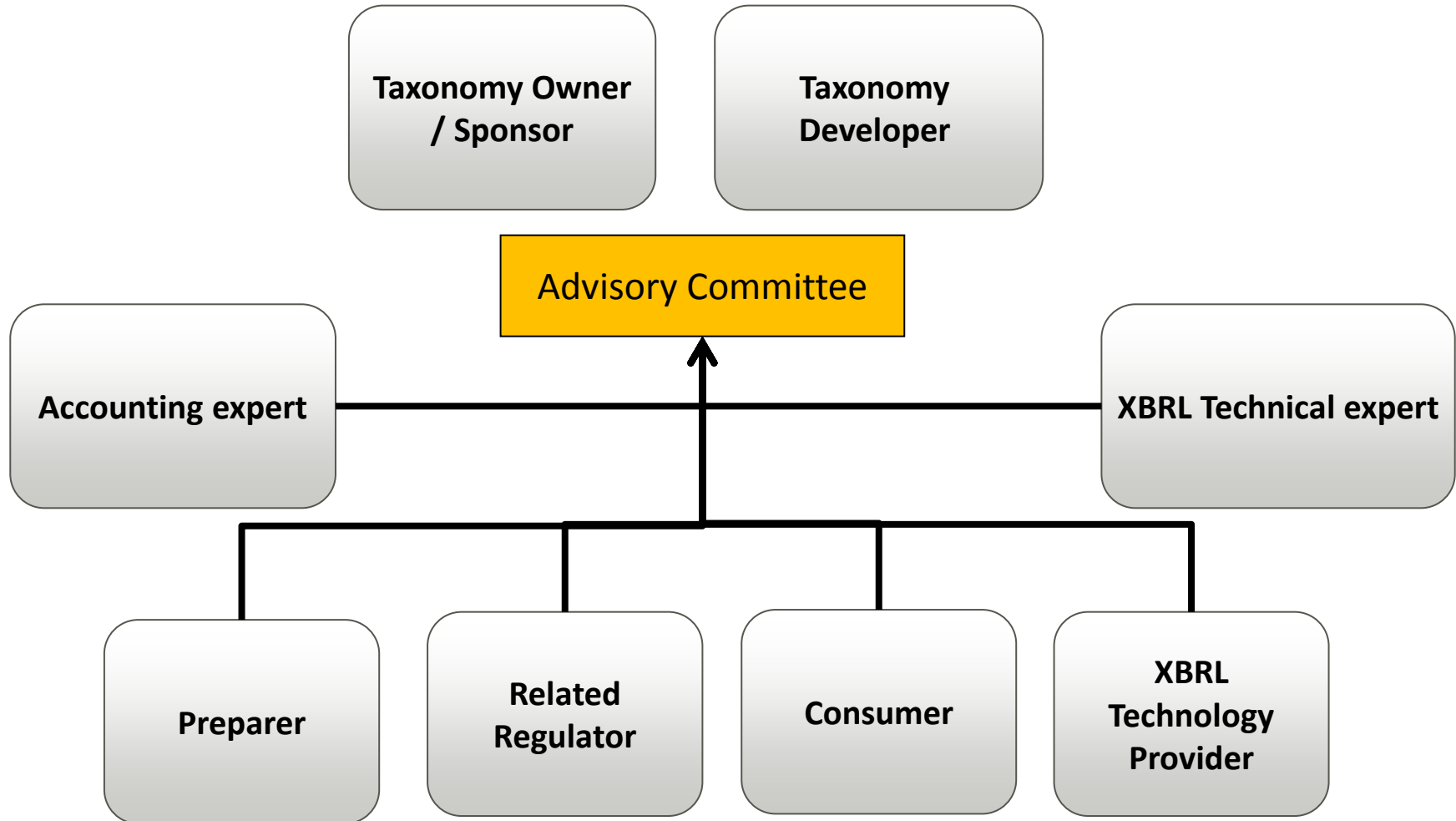
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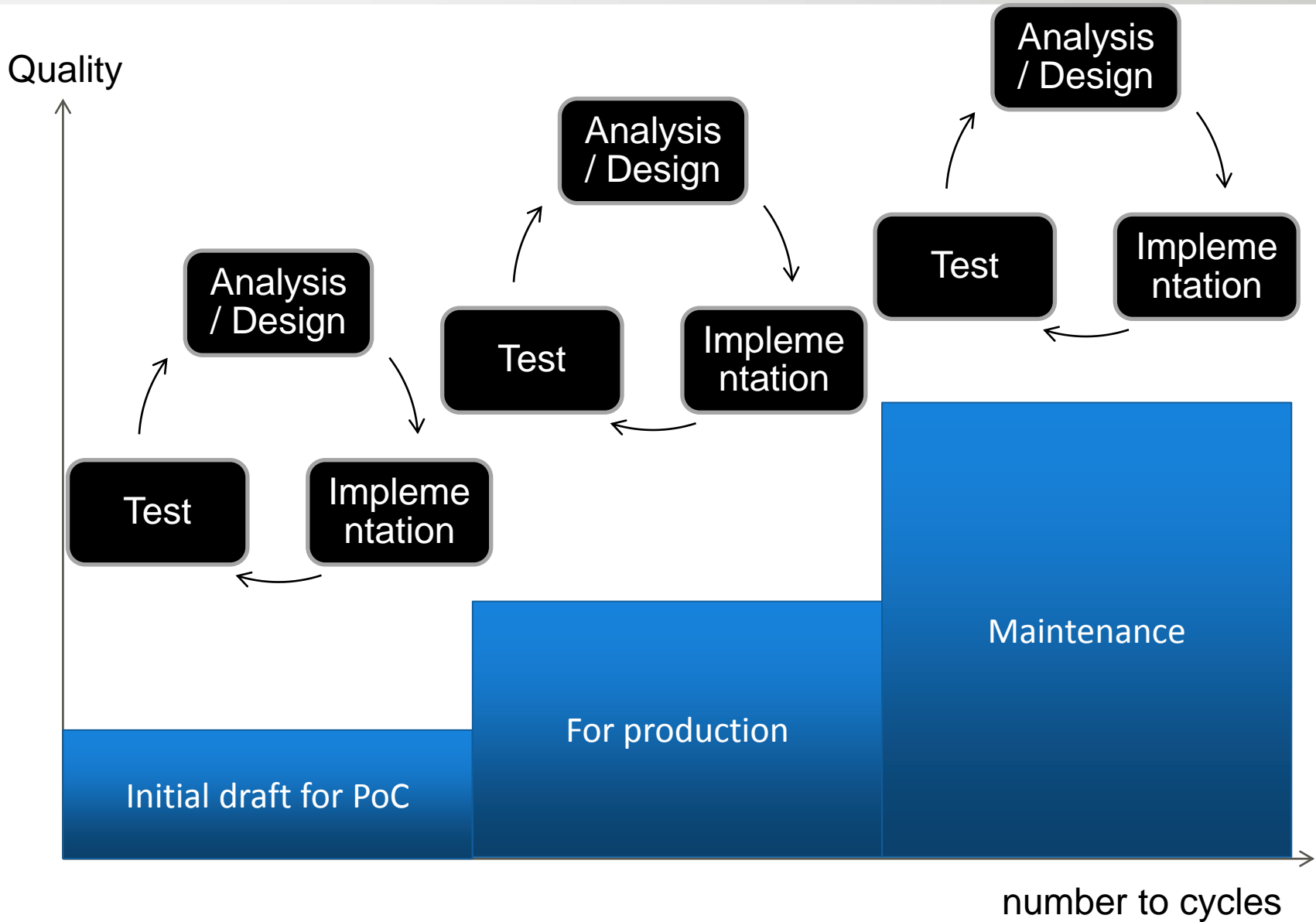


Project Governance - Structure

High quality taxonomy needs to be based on clear governance structure. Recently, it is usual to organize advisory committee to check its taxonomy as expert review through entire taxonomy development process.



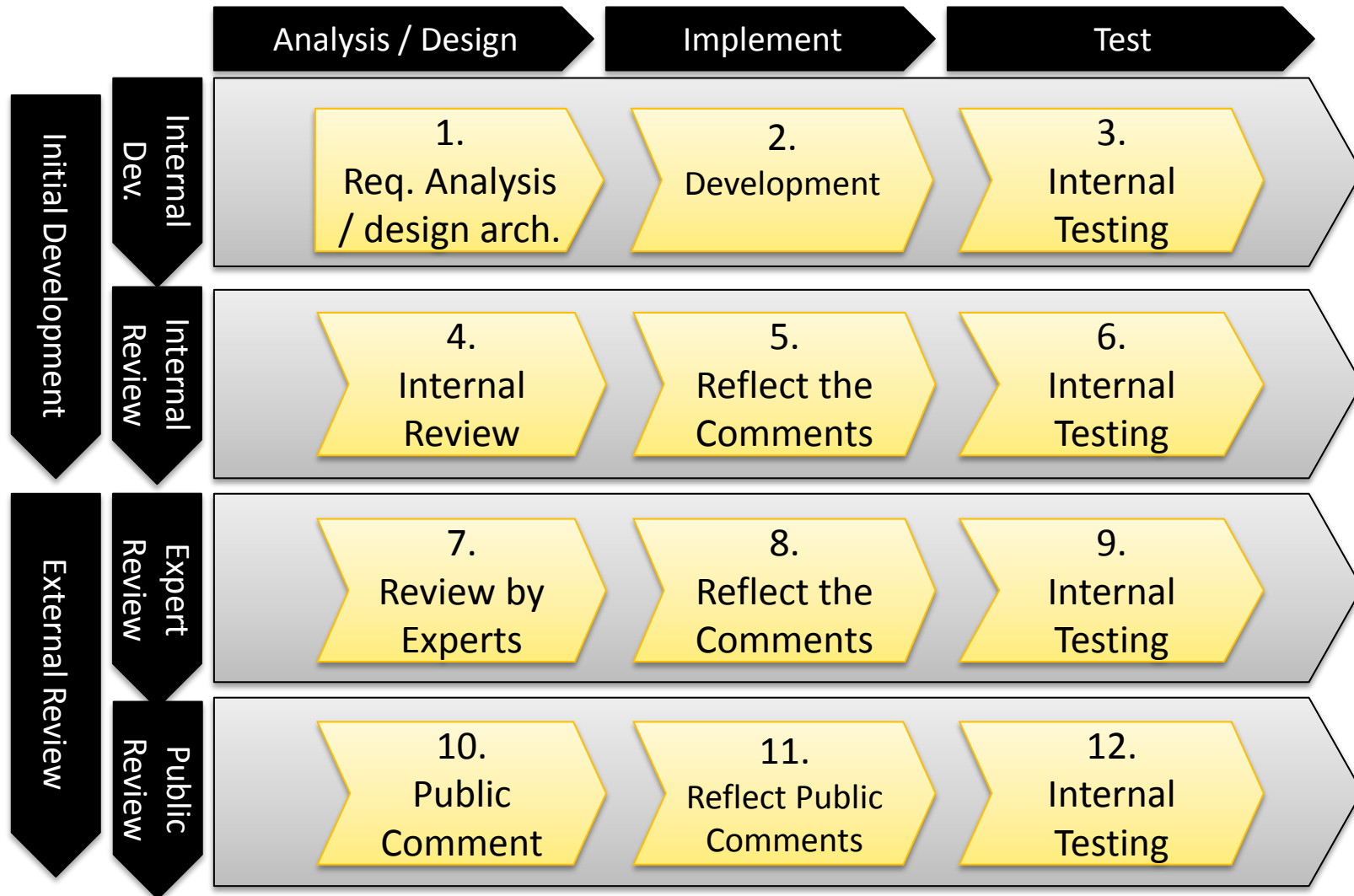
Process - Spiral approach



Process:

Taxonomy Development Process in Each Cycle

As varieties of stake holders are involved in taxonomy development, review and testing processes are absolutely necessary for the taxonomy publication.



- At least 2 different subject matter expert groups work together to make high quality taxonomy:
 - Domain
 - XBRL Technical
- Resource can be hired both internal and external:
 - DIY approach
 - Outsourcing approach

Design Architecture

Points of consideration for taxonomy design

Note: These considerations must be discussed with client at architecture design phase.

#	Point of consideration	P	R	C	S
1	Understandability	X			
2	Able to create XBRL document by end of reporting deadline	X			
3	Compliance with existing disclosure rules and practices		X		
4	Comparability among different companies			X	
5	Interoperability with other taxonomy in the same reporting category			X	
6	Compliance with existing technical specifications				X
7	Able to develop software for creating, storing, searching and consuming				X
8	Stability of architecture		X		
9	Minimize the cost for taxonomy development and maintenance		X		

P: Preparer, R: Regulator, C: Consumer, S: Software / Technology provider

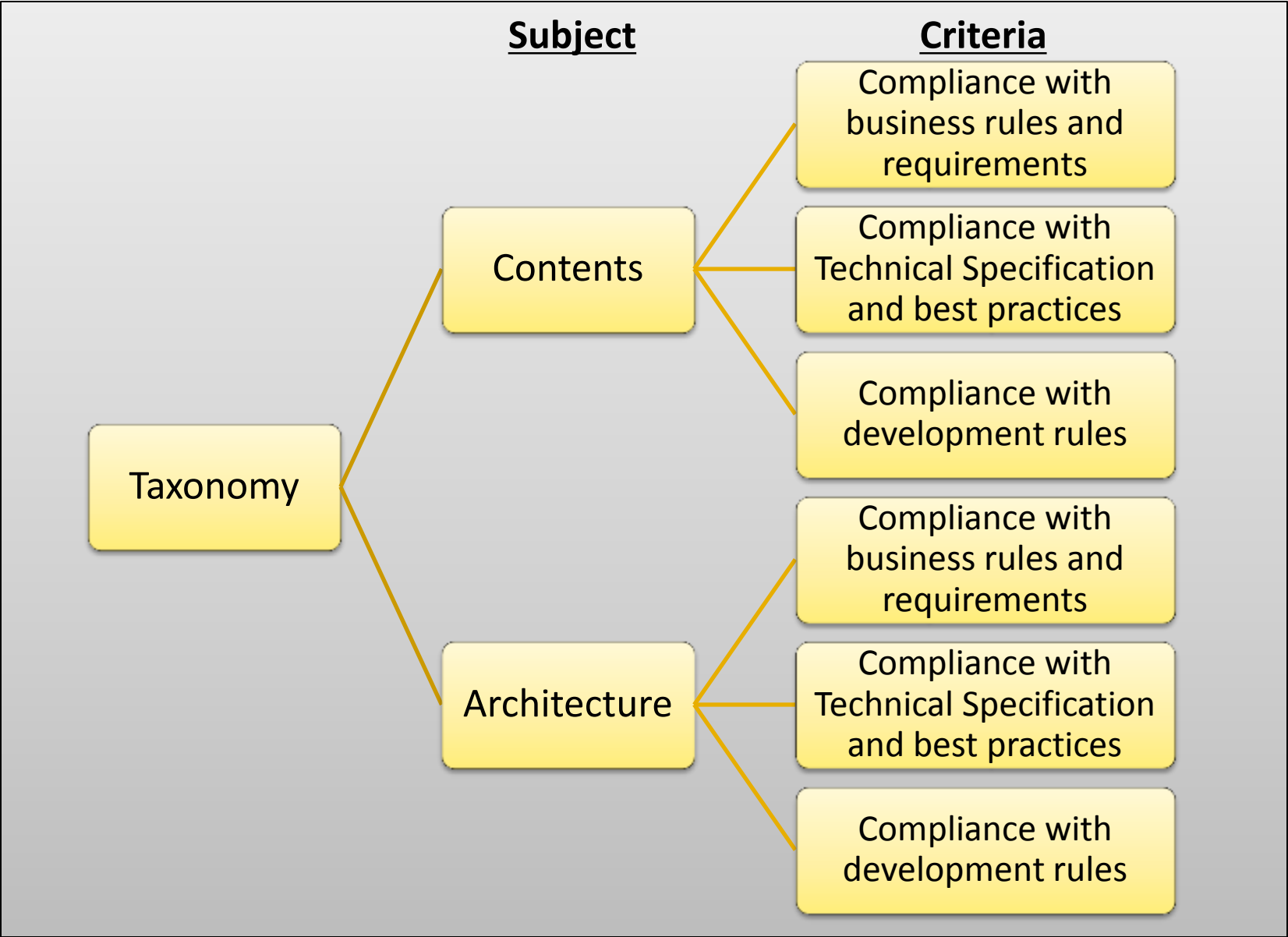
Examples for the assertion (case in Japan)

#	Title	Description
1	Change from consolidated to non-consolidated	In case a consolidated company changes to non-consolidated company(or from non-consolidated to consolidated). Consolidated: Consolidated financial statement and parent company's financial statement need to be reported in the same filing.
2	Consolidated: IFRS Non-consolidated : Japan standard	In case the reporting standard differs between consolidated and non-consolidated.
3	Series Funds	In case multiple financial statements needs to be reported in 1 filings.
4	Descript in multiple languages	In case financial statements of foreign companies needs to be reported in Japanese and its company's main language.

#	Name of document	Description
1	Taxonomy architecture guide	Document that introduce why and what model / approach are selected
2	Naming rule & Style guide	Naming rules for files and XBRL components (ELR, Element, Dimensions, unit, codes...)

Internal Testing

Subject & Each Quality Criteria



Quality Criteria & underlying Rules and Standards

Compliance with business rules and requirements

Rules and standards

Common practice

Disclosure patterns

Compliance with Technical Specification and best practices

XBRL 2.1

(FRTA)

Other rules and best practices

Compliance with development rules

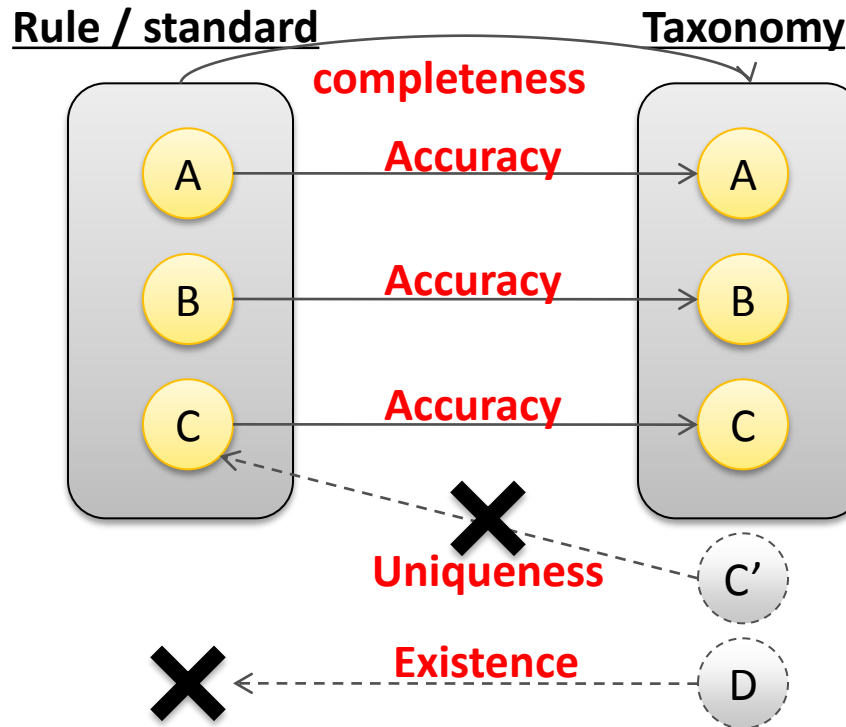
Naming rules

Style Guide

Architecture Guide

Assertions for Compliance with business and development rules and requirements

Assertions	Description
Accuracy	All concepts, its attributes and relationships in taxonomy must be accurate.
Completeness	All required concepts and relationship must be defined
Existence	No concepts and relationship allow based on “ab esse” rules
Uniqueness	All required concept must be unique, no duplication



Taxonomy quality check list (generic)

#	Control Objective (Domain Level) (en)	Component		Assertion			Relevant XBRL Components
		C & A	R	A	C	E/U	
1	Line item name must be complied with rules / standards	x		x			Element, Label
2	All line items which is defined by rules and standards must be contained	x			x		Element, Label
3	All CP line items which is complied by extracting rules must be contained	x			x		Element, Label
4	No line item which is not complied with rules / standards is not contained	x				x	Element
5	No duplicate line item is contained	x				x	Element
6	"duplicate line item" is indicated, in case of there is "explicit" duplicate line items		x			x	definisition
7	There are proper references from each individual line item which is defined by rules/standards to authoritative reference	x		x			Element, Reference
8	All line items which is defined by rules/standards have proper authoritative reference	x			x		Element, Reference
9	There is no redundant / excess reference and no reference to fictitious rules / standards	x				x	Element, Reference
10	There is no reference for CP and asserted line items.	x				x	Element, Reference
11	Type (or restriction) of input value is set properly	x		x			Element, Content Model (,Formula Linkbase)
12	Type (or restriction) of input value is set for all line items	x			x		Element, Content Model (,Formula Linkbase)
13	There is no redundant / excess type (or restriction) of input value	x				x	Element, Content Model (,Formula Linkbase)

Taxonomy quality check list (sample)

Taxonomy Quality Check List and Statement		Testing Period: 2011/03/10 - 2011/03/18		Filename to be tested																		
Test Specification											Result of testing											
Category	Quality Criteria	No.	Control Objectives	Risk	XBRL Component	Criterion		type of			Assertion			Auto/Manual	Professional Judgment	Special Remarks	Date of testing	Person in charge	time for working (min)	# of errors	Description	
						No.	Procedure	Tools and queries	Add	Change	Delete	A	C									E / U
Concepts	Consistency with business rules		Line item name must be complied with rules / standards	Be inputted wrong value if the line item is displayed with wrong label	Element, Label	1	Comparing 2 versions taxonomies with XWand Diff. Make sure newly added element names and Japanese Labels are identical with Request for Changing.	XWand DIFF	X			X			Manual (手動)	O	Make sure standard and verbose label	3-10	MK	40	6	need to
						2	Comparing 2 versions taxonomies with XWand Diff. Make sure newly added element names and English Labels are identical with Request for Changing.	XWand DIFF	X			X			Manual (手動)	X	perform with procedure #1	3-10	MK	5	0	no error
						3	Comparing 2 versions taxonomies with XWand Diff. Make sure period attribute for newly added element are identical with Request for Changing.	XWand DIFF	X			X			Manual (手動)	X		3-10	MK	5	11	change for 11 e
						4	Comparing 2 versions taxonomies with XWand Diff. Make sure modified element names and Japanese Labels are identical with Request for Changing.	XWand DIFF		X		X			Manual (手動)	X	Make sure standard and verbose label	3-10	MK	5	0	no error
						5	Comparing 2 versions taxonomies with XWand Diff. Make sure modified element names and English Labels are identical with Request for Changing.	XWand DIFF		X		X			Manual (手動)	X	Make sure standard and verbose label	3-10	MK	5	0	no error

Review

3 levels of reviews

Generally, the process of taxonomy development for accounting standard have “internal review” by accounting standard board, and “external review” (contains of “expert review” and “public review”). The following are their objectives and rolls.

Internal review

Standard board members who establish the accounting standard validate the taxonomy from the points of assertions.

Expert review

In expert review process, receiving comments with no bias is important. Therefore, experts with no conflict in interest is preferable.

Public review

In public review process, it eliminates the disturbed factor of availability of XBRL documents through receiving comments from varieties of stake holders before publication. Please note that reviewers tend to strongly bias their comments.

Review aims at enhancement of reliability of the taxonomy quality through reviews from variety points of view by technical and domain experts with open process. Especially, external review is a necessary step to receive the endorsement from the third person

Essential qualification of the external reviewers

#	Qualification	Description
1	Expertise in domain	Those who have expertise in related domain.
2	Expertise in technology	Those who have expertise in XBRL technology and experience of taxonomy development.

Points of the review

#	Subject	Description
1	Arch.	Validation of the developer's assumption(form of Linkbases, for instance)
2		Compliance of latest technologies
3	Contents	Validation of Items of common practices and their parent-child relationships.
4	Supportive documents	Definiteness of explanation of the supportive documents such as architecture files, guidelines etc. (prevent the documents from being misread.

Japan FSA:EDINET (Electronic Disclosure for Investor's NETwork) system launched in 2001.
The introduction of XBRL starts in 2008.



EDINET Advancement Council

In 2004, EDINET Advancement Council was established.

The members were...

- Industry and others.
- CPA
- analysts
- stock exchanges

Pilot Program

Two Pilot Programs were held in January and July in 2007

The 2nd one was to facilitate the introduction of full-fledged XBRL and the number of participants were 1200 companies.


Deliverables (other than taxonomy)

Supportive documents

#	Name of document	Description
1	Taxonomy architecture guide	Document that introduce why and what model / approach are selected
2	Naming rule guide	Naming rules for files and XBRL components (ELR, Element, Dimensions, unit, codes...)
3	Sample instance documents	Sample instance document to help understand XBRL to stakeholders
4	Corporate extension taxonomy development guidance	Guidance for preparers to introduce how to create corporate extension taxonomy
5	Instance document creation guidance	Guidance for preparers to introduce how to create instance document
6	Filing rule / validation manual	Guidance for preparers to introduce filing rules and set of validation

Supportive documents (cont'd)

#	Name of document	Description
7	Taxonomy quality check list	Check list for quality of the taxonomy
8	Reviewer's guide	Check list for quality of the taxonomy
9	OPTIONAL: Taxonomy Comparison Framework	Document that is the result of comparison with other taxonomy in the same subject matter.



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