Model Systems

Interpreting Regulation: Snippets from a Methodology

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EDM Council / OMG Finance Domain Task Force
Monthly Status Update Call

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Introduction

- A few examples to illustrate a practical methodology for interpretation of regulation, being developed by:
 - GRCTC, Cork
 - Model Systems
 - Business Semantics Ltd
- The focus is on developing business language representations that are:
 - Unambiguous and consistent
 - Semantically coherent
 - Sufficiently formal to be managed and validated with computer-based tools
 - Traceable back to the source text of regulations
- The target audience is SMEs

SBVR work products

Terminological Dictionary (Vocabulary)

Noun Concepts
Verb Concepts
Definitional Rules
Advices of Possibility

Rulebook

Behavioral Rules
Advices of Permission

Definitional Rules

- True by definition
- Cannot be 'broken'

Behavioral Rules

- Govern activity
- Can be violated
- Need an enforcement regime

Snippets

- Who enforces?
- Remove complementary qualifications
- Remove lists of examples
- "Tie up loose ends"
- Create composite concepts

Who enforces?

31 CFR §1022.380 (e) Consequences of failing to comply with 31 U.S.C. 5330 or the regulations thereunder

"It is unlawful to do business without complying with 31 U.S.C. 5330 and this section. Narrative – can be ignored (or added as comment)

A failure to comply with the requirements of 31 U.S.C. 5330 or this section includes the filing of false or materially incomplete information in connection with the registration of a money services business.

Any person who fails to comply with any requirement of 31 U.S.C. 5330 or this section shall be liable for a civil penalty of \$5,000 for each violation.

Each day a violation of 31 U.S.C. 5330 or this section continues constitutes a separate violation.

In addition, under 31 U.S.C. 5320, the Secretary of the Treasury may bring a civil action to enjoin the violation."

Rules – for FinCEN.

For a regulated business, this is just advice

Definitions – can be incorporated into the vocabulary

Remove complementary qualifications

31 CFR §1010.100 (m) Currency

"The coin and paper money of the United States or of any other country that is designated as legal tender and that circulates and is customarily used and accepted as a medium of exchange in the country of issuance. Currency includes U.S. silver certificates, U.S. notes and Federal Reserve notes. Currency also includes official foreign bank notes that are customarily used and accepted as a medium of exchange in a foreign country."

currency

Definition: coin and paper money of a country that is designated as legal

tender in the country and that circulates and is customarily used and accepted as a medium of exchange in the country

Example: Coin and paper money of the United States, U.S. silver

certificates, U.S. notes and Federal Reserve notes.

Example: Official foreign bank notes that are customarily used and

accepted as a medium of exchange in a foreign country.

Remove lists of examples

31 CFR §1010.350 (c)(1) Bank Account

"The term "bank account" means a savings deposit, demand deposit, checking, or any other account maintained with a person engaged in the business of banking"

bank account

Definition: account that is maintained with a person that is engaged

in the business of banking

savings deposit account

Concept Type: <u>implicitly-understood concept</u>

General Concept: <u>bank account</u>

:demand deposit account

Concept Type: <u>implicitly-understood concept</u>

General Concept: bank account

checking account

Concept Type: <u>implicitly-understood concept</u>

General Concept: <u>bank account</u>

Styled in this way if the terms are needed formally in other entries

'Implicitly-understood' means that the everyday meaning of the term is accepted

"Tie up loose ends"

31 CFR §1010.100 (ff)(4) Provider of prepaid access

"(i) In general. A provider of prepaid access is the participant within a prepaid program that agrees to serve as the principal conduit for access to information from its fellow program participants. The participants in each prepaid access program must determine a single participant within the prepaid program to serve as the provider of prepaid access."

prepaid program

Synonym <u>prepaid access program</u>

participant is in prepaid program

Synonymous Form: participant is within prepaid program

Resolving ambiguity, selecting preferred terminology

provider of prepaid access

Definition: participant that is in a prepaid program and agrees to

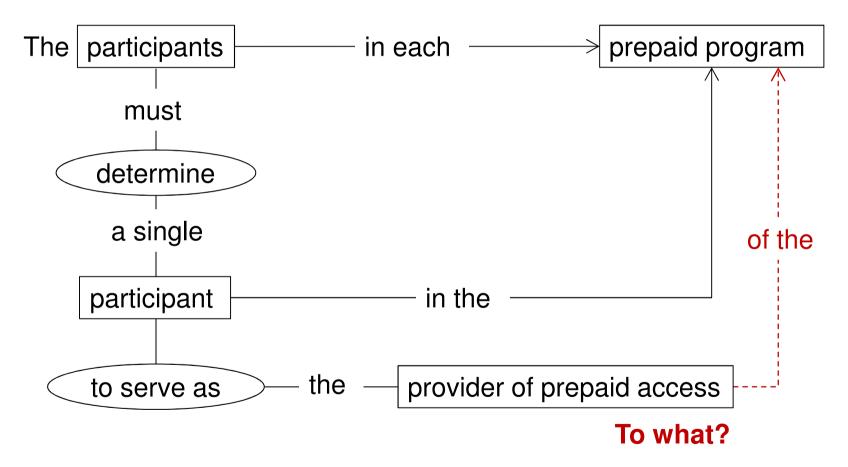
serve as the principal conduit for access to information from program participants that are in the prepaid program

The <u>participants</u> that are in each <u>prepaid program</u> must determine exactly one <u>participant</u> that is in the <u>prepaid program</u> as the <u>provider of prepaid access</u> of the <u>prepaid program</u>.

For compliance testing, this rule is independent of other rules

Sentence Diagramming

A technique from high school English grammar



See Clause 9 (Logical Formulation of Semantics) of the SBVR specification

Create Composite Concepts

31 CFR §1010.100 (t) Financial institution

Each agent, agency, branch, or office within the United States of any person doing business, whether or not on a regular basis or as an organized business concern, in one or more of the capacities listed below:

. . .

financial institution

Definition: agent agency or branch or office) that is within the United

States and is of a person that is doing business ...

The group of four concepts is used in the same way in several different places in 31 CFR (8 times in §1010.100). They can be grouped into a composite.

agent agency branch or office

Definition: <u>agent or agency or branch or office</u>

financial institution

Definition: agent agency branch or office that is within the United States

and is of a person that is doing business ...

This reflects typical use of language - and simplifies the syntax of definitions and rules

SBVR Tools

- Designs for Management[™]
 - http://www.designsformanagement.com
- Three tools:
 - Smart Glossary™ (vocabulary)
 - Clear Guidance™ (behavioral rules)
 - Smart Documentation™ (HTML source editing)
- Three ways to input SBVR content:
 - MS Word template
 - Forms-based direct editing
 - Source text editing

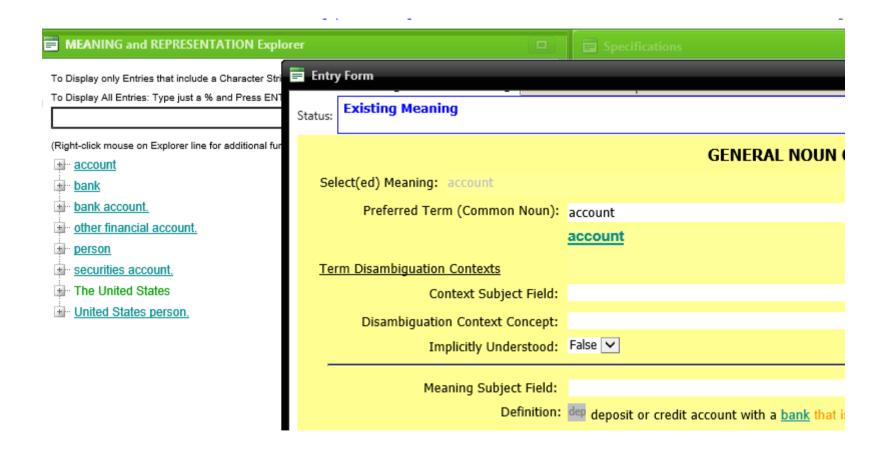
Word Template

Includes styles for SBVR elements

SBVR Necessity	П		SAR-MSB	
SBVR Note	T	-	Definition:	report that is submitted by a money
SBVR Possibility	T	-	Domition.	transactions or suspicious travelers
SBVR Reference Scheme	T	_		transactions
SBVR Referenced Vocabulary	T	6	OAD MOD Farm	
SBVR See	T		SAR-MSB Form	
SBVR Source	T		Definition:	form for a money services business
SBVR Speech Community	T	-		check or suspicious money transfer
SBVR Statement	T	-	Synonym:	Suspicious Activity Report by Money
SBVR Subject Field	T	1 1 7	Synonym:	FinCEN 109
SBVR Supporting Verb Conce	T .			
SBVR Synonym	T	12 -	Note:	SAR-MSB forms are submitted via Fine
SBVR Synonymous Form	T		Source:	FinCEN Definitions http://www.fincen.
SBVR Synonymous Stmt	¶	-	suspicious transaction	
SBVR URI	T	- II	Definition:	transaction that a money services b
SBVR Verb Symbol	<u>па</u>		Delimitori.	funds <i>derived</i> from illegal activity.
SBVR Vocabulary Name	<u>па</u>	41		idida delived from illegal activity.

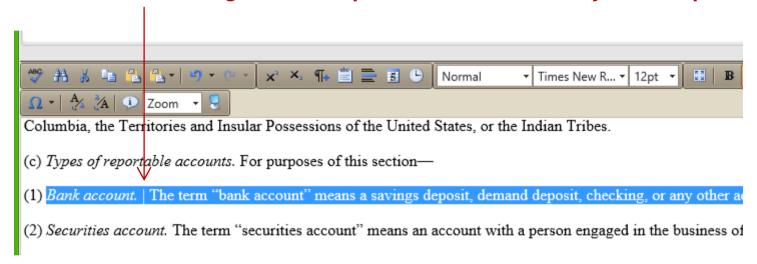
Edit from source text off-line and import

Editing directly via forms



HTML Editor

This '|' character separates a term and its definition (the selected text) in the source document. A right-mouse option will create an entry in the repository



The definition can be edited in the HTML source or in the forms-based editors (or both)

Summary

- We have seen a few examples to give the flavor of a practical methodology for interpretation of regulation
- Methodology is still in development
- The focus is on creating interpretations in businessfriendly (if sometimes slightly stilted) English:
 - Acceptable to SMEs
 - Traceable back to the source regulatory text
 - With rules that can be tested independently of each other
- Rules in SBVR are declarative:
 - Define the states a business should be in, rather than being parts of processes – i.e. not production rules)
 - Good for compliance testing

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