Using the Parsing Tool

Active Structure on
Training Wheels

Anti-Money Laundering and Counter-Terrorism Financing Act 2006

No. 169, 2006

Compilation No. 49

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Includes amendments up to:	Act No. 104, 2020
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Contents

The AML/CTF Act – it runs to 250 pages

A Sentence Can Run to 600 Words

designated agency means:

(a)	the Australian Crime Commission; or
(b)	ASIO; or
(c)	the Australian Commission for Law Enforcement Integrity; or
(d)	the Australian Competition and Consumer Commission; or
(f)	the Australian Federal Police; or
(g)	the Australian Prudential Regulation Authority; or
(ga)	ASIS; or
(gb)	AGO; or
(gc)	DIO; or
(gd)	ASD; or
(ge)	ONI; or
(gf)	the Australian Charities and Not-for-profits Commission; or
(h)	the Australian Securities and Investments Commission; or
(ha)	the Clean Energy Regulator; or
(hb)	the Attorney-General's Department; or
(i)	the Human Services Department; or
(k)	a Commonwealth Royal Commission whose terms of reference include inquiry into whether unlawful conduct (however described) has, or might have, occurred; or
(ka)	the Department of Foreign Affairs and Trade; or
(l)	the Immigration Department; or
(m)	IGIS; or
(n)	the Treasury Department; or
(o)	an authority or agency of the Commonwealth, where the authority or agency is specified in the regulations; or
(p)	the police force or police service of a State or the Northern Territory; or
(q)	the New South Wales Crime Commission; or
(r)	the Independent Commission Against Corruption of New South Wales; or
(s)	the Law Enforcement Conduct Commission of New South Wales; or
(sa)	the Independent Broad-based Anti-corruption Commission of Victoria; or
(t)	the Crime and Corruption Commission of Queensland; or
(u)	the Corruption and Crime Commission of Western Australia; or
(uaa)	the Independent Commissioner Against Corruption of South Australia; or
(ua)	the Integrity Commission of Tasmania; or

It would be useful
for an intelligent AML/CTF System
to know the Act in detail

Wordgroups

The text has a lot of multi-word objects, ranging from the simple

designated agency means:

      (a)   the Australian Crime Commission;

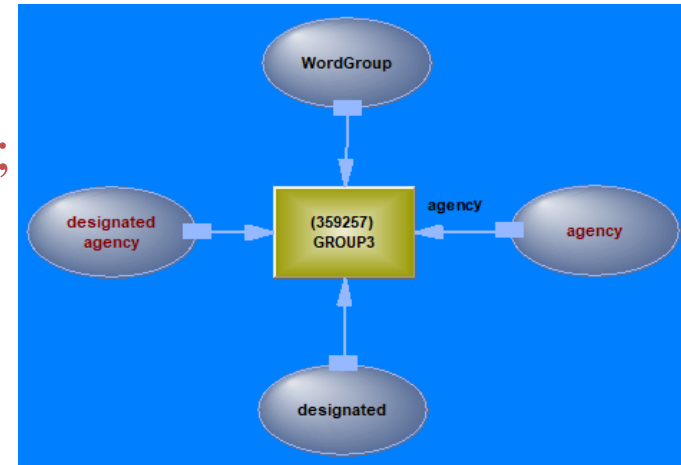to the more complicated

Suspicious matter reporting obligation

    (1)   A suspicious matter reporting obligation arises for a reporting entity in relation to a person (the *first person*) if, at a particular time (the *relevant time*):

to

multiple-institution person-to-person electronic funds transfer instruction

These are created using wordgroups -
groups of words that have a specific meaning.

Parsing Tool

This is a set of training wheels, needed while the system is learning how to handle multiple Parts of Speech (a word can be a noun, a verb, a preposition), multiple forms (a verb may have half a dozen forms – transitive, etc) and multiple definitions. We don't think about these things – it is all automatic – but the machine has to learn this – rather like a jigsaw puzzle, where the words can only fit together a certain way.

Let's Start Simple

The quick brown fox jumps over the lazy dog.

Edit	Update	Cancel	Parse

☑ Match wordgroups during parse | Scan Sentence for Wordgroups | Get Definition | Next Definition | Load Sentence... | Save Sentence | Dismiss

The window for parsing a sentence

First Pass Gives Us Possible Parts of Speech

Possible Parts of Speech

Shows state of all words in sentence – may be hundreds

BeginSentence The quick brown fox jumps over the lazy dog EndSentence

Edit   Update   Cancel   Parse

BeginSentence	The	quick	brown	fox	jumps	ove
POS	POS **DefiniteArticle**	POS Adjective Adverb Noun	POS Adjective Noun Verb	POS Noun Verb	POS Noun Verb	POS Adverb Noun Preposition PrepositionVerb
Subcategory	Subcategory	Subcategory	Subcategory	Subcategory	Subcategory	Subcategory
Source Definition	Source Definition **Sense 0 used to emphasi…**	Source Definition	Source Definition	Source Definition	Source Definition	Source Definiti

Starting to Apply Constraints

BeginSentence The quick brown fox jumps over the lazy dog EndSentence

Edit | Update | Cancel | Parse

BeginSentence	The	quick	brown	fox	jumps	ove
POS	POS **DefiniteArticle**	POS	POS **Adjective**	POS **Noun**	POS **Verb**	POS Adverb Noun Preposition PrepositionVerb
Subcategory	Subcategory	Subcategory	Subcategory	Subcategory	Subcategory IntransitiveVF TransitiveVF	Subcategory

quick POS: **Adjective**

brown POS: **Adjective**

Source	Definition
Source	Definition
Sense 0	**used to emphasi...**

quick:
Source	Definition
Sense 0	moving fast or doin...
Sub Se...	lasting or taking a s...
Sub Se...	happening with littl...
Sense 1	(of a person) prom...
Sense 2	(of a person's eye ...
Sense 3	(of a person's temp...

brown:
Source	Definition
Sense 0	of a color produced...
Sub Se...	(of bread) light bro...
Sense 1	(of a person) dark-...

fox:
Source	Definition
Sense 0	a carnivorous mam...
Sub Se...	the fur of a fox
Sense 1	a cunning or sly pe...

Source	Definition
Sense 0	moving fast or doing something in a short time
Sub Sense 0	lasting or taking a short time
Sub Sense 1	happening with little or no delay; prompt
Sense 1	(of a person) prompt to understand, think, or learn; intelligent
Sense 2	(of a person's eye or ear) keenly perceptive; alert
Sense 3	(of a person's temper) easily roused

☑ Match wordgroups during parse | Scan Sentence for Wordgroups | Get Definition | Dismiss

Selecting a definition
- These start off as strings from a dictionary.
- When selected, they also get built as structures

Verb forms – having different definitions

Grouping Words

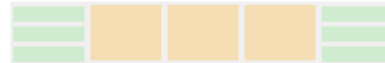The words that form a noun phrase are selected

Rolling Up a Phrase

BeginSentence The quick brown fox jumps over the lazy dog EndSentence

| Edit | Update |

BeginSentence	NounPhraseGroup	ActiveVerbPhrase	NounPhraseGroup	EndSentence
POS	The quick brown fox	jumps over	the lazy dog	POS
Subcategory				Subcategory
Source Definition				Source Definition

☑ Match wordgroups during parse   Scan Sentence for Wordgroups   Get Definition   Next Definition   Load Sentence...   Save Sentence

View at Document Level

Parsing Tool

HTML Input | Text Input | Sentence Parsing | Definition Parsing

transfer instruction.htm

[Open File...] [Save File...] [Analyse Content] [Parse Content]

[instruction]

POS
Noun

Subcategory

Source	Definition
✓ Sense 0	a direction or order
Sub Sen...	a code in a prog...
Sense 1	detailed informa...
Sense 2	a teaching process
✓ Sense 2	the process of r...

[Apply to all instances]

(ii) a bank; or
(iii) a building society; or
(iv) a credit union; or
(v) a person specified in the AML/CTF Rules;
            then:
(e) the instruction is a **Multiple-institution person-to-person electronic funds transfer instruction**; and
(f) if there are one or more persons interposed between the ordering institution and the beneficiary institution—disregard those interposed persons in working out the identities
            of the following:
(i) the payer;
(ii) the ordering institution;
(iii) the payee;
(iv) the beneficiary institution.

    Note: **Transfer** has an extended meaning—see section 5.

    Same-institution person-to-person electronic funds transfer instruction

(2) for the purposes of this Act, if:
(a) a person (the **payer**) instructs a person (the **ordering institution**) to transfer money controlled by the payer to a third person (the **payee**) on the basis that the transferred
            money will be made available to the payee by:
(i) being credited to an account held by the payee with the ordering institution; or
(ii) being paid to the payee by the ordering institution; and
(b) the transfer is to be carried out wholly or partly by means of one or more electronic communications; and
(c) the ordering institution is:
(i) an ADI; or
(ii) a bank; or
(iii) a building society; or
(iv) a credit union; or
(v) a person specified in the AML/CTF Rules;
            then:
(d) the instruction is a **Same-institution person-to-person electronic funds transfer instruction**; and
(e) for the purposes of the application of this Act to making the money available to the payee, the ordering institution may also be known as the **beneficiary institution**.

    Note: **Transfer** has an extended meaning—see section 5.

Every word and group of words
in the document is linked to a definition
in the document, or a definition for the word,
making it much easier to follow. and
providing machinery to observe its operation

[Options...]   [View Sentences] [Save Sentence]   [Dismiss]

System Resources

Dictionary: 45,000 words

Wordgroups: 15,000

Dictionary Definitions: 85,000 as built structure

Free Resources: 30 million network elements

Dictionary lookup for unknown words

Database for known objects – "Millie from Accounts"

Instructions in English to change internal workings

No Four Pieces Limit

Can it handle your problems?

Outrageous Claims

We are not going to make outrageous claims. What we will say is that an active structure approach, in today's increasingly complex and dynamic world, leaves data-based methods in the dust, where they belong.

We don't drive by only looking in the rear vision mirror, and neither should you.

Active Structure

by
Interactive Engineering