

Cambridge Centre for Risk Studies
Risk Management Solutions Inc.

Consultation Document: Phase Two v0.5

Global Exposure Accumulation
and Clash (GEAC) Project

MULTI-LINE INSURANCE
EXPOSURE DATA SCHEME

Phase Two: Agriculture; Trade
Credit; Surety; Specialized
Underwriting Classes; Life and
Health

Consultation Document: v0.5

Centre for
Risk Studies



UNIVERSITY OF
CAMBRIDGE
Judge Business School



Multi-Line Insurance Exposure Data Schema: Phase Two

Consultation Document v0.5

Part A: Overview and Progress

A Standardised Multi-Line Insurance Exposure Data Schema

Cambridge Centre for Risk Studies (CCRS) and Risk Management Solutions (RMS) are coordinating the development of a data schema to capture insured exposure in the main lines of insurance business.

1.1 Aims and Objectives

The project will develop an open source multi-line data schema to capture the most significant lines of insurance across all geographical markets. The data standard will be agnostic to the platform on which it is implemented.

The proposed schema will provide a standard minimum set of exposure data fields that will enable insurance industry participants, both insurers and reinsurers, to:

- a) Provide a more comprehensive and standardised framework for monitoring and reporting exposure enterprise-wide and function as a system of record, for risk managers, brokers, consultants, and analysts;
- b) Improve interchanges of data between market players to refine transferring of risk to reinsurers and other risk partners, reporting to regulators, and exchanging information for risk co-share, delegated authority, and bordereau activities;
- c) Apply accumulation risk model scenarios for classes of business that currently have less well-developed models available for them;
- d) Support clash model analysis for scenarios that impact multiple lines of insurance;
- e) Enable a new generation of models and risk analytics as well as expand the scope of potential risk management applications.

The schema will aid in the development of a more unified industry through increasing the capability for dialogue and cross communication.

Version 0.5 Consultation

This document requests feedback on the structure and key components of a proposed exposure data schema for the Phase Two classes of insurance business:

- 2.1 Agriculture
- 2.2 Trade Credit
- 2.3 Surety
- 2.4 Specialized Underwriting Classes
- 2.5 Life and Health (Group and Individual)

This is the fourth consultation document and proposes a version 0.5 structure of the Phase Two classes of insurance for the exposure data schema. Through this document, we intend to solicit feedback from the insurance community and continue the dialogue in the schema's ongoing development and validation. We will connect with subject matter experts over the coming weeks to further develop and expand the schema. We propose to use the same schema structure as was used during Phase One and anticipate the consultation process to closely mirror the activities of this prior stage.

We are grateful for your feedback and recommendations, and ask that completed consultation documents be submitted to Kayla Strong (k.strong@jbs.cam.ac.uk) by January 30th, 2018.

The schema structure for Phase One classes of insurance starts on page 8 of this document.

1.2 Consultation Document Process

Version 0.1: Principles and Prioritisation

The first stage of the project involved setting out the key principles and prioritisation of the classes of business for development of the schema. The version 0.1 consultation document, available for download [here](#), describes the objectives of the project, provides an overview of current market practice, reviews the wide range of existing and proprietary data schemas for different classes of insurance that are currently available and how a data schema can incorporate existing standards and current practice, and proposes a set of principles to be observed when designing the schema.

The v0.1 round of consultation is now closed and we greatly appreciate the feedback that we received and gratefully acknowledge the time and contributions from the various companies and individuals who worked with us to refine the objectives. We also thank those who attended the workshops and participated in telephone interviews.

We incorporated the views and feedback from the v0.1 consultation into the planning, phasing, and structure of the proposed data schema.

Version 0.5: Outline Structure and Key Components

Version 0.5 of the proposed data schema provides an outline structure for each class of business and defines the main categories of exposure data for each class of insurance. We define these as 'dictionaries' – lists of categories that can be applied to accounts to describe and classify pertinent information for accumulation purposes. In version 0.5 we seek to identify all the dictionaries required, but do not attempt to define all the content of each of these dictionaries – i.e. the fields and categorisation, lists of asset types, or attributes of the exposures and coverages. This work is completed in version 0.9.

Version 0.9 Detailed Structure

Version 0.9 uses the data structure agreed after the version 0.5 consultation to propose the detailed content of a minimum data requirement specification for that class. This involves identifying for the contents of each dictionary in the schema for that class of insurance: i.e. a full listing of all the categories of sub-types of insurance, coverages, insured assets, and their attributes, which will include the listing of data fields and recommended values for each.

Version 1.0 Complete Schema

The feedback from the consultation of version 0.9 is consolidated into a final consensus and published as a version 1.0 complete minimum data standard for each class of insurance.

Version 1.0 consists of complete listings of field values, reference tables, and definitions.

We expect there to be future versions of the schema for each class of insurance business, versions 2 and beyond, that could add greater detail and granularity, evolve or extend the schema. At present, however, we propose to develop a minimum data requirement for exposure monitoring and accumulation risk management across many classes of insurance. We prioritise breadth (i.e. developing a standard and unified view across multiple classes of insurance business) over depth (i.e. the level of detail required to capture a particular class of insurance).

2 Phasing of the Schema Development

The development of the exposure data schema is proceeding in phases:

Phase One

- 1.1 Casualty Liability
- 1.2 Marine
- 1.3 Energy
- 1.4 Aviation

Phase Two

- 2.1 Agriculture
- 2.2 Trade Credit
- 2.3 Surety
- 2.4 Specialized Underwriting Classes
- 2.5 Life and Health (Group and Individual)

Phase Three

- 3.1 Political & Security Risk
- 3.2 Annuities and Pensions (Group and Individual)
- 3.3 Personal Accident
- 3.4 Auto Insurance (Commercial and Personal lines)
- 3.5 Other Commercial and Personal Non-Life Lines

2.1 Classes of Insurance with Existing Data Schemas

Existing data schemas already exist for other classes of insurance that are in use and widely adopted. A complete data schema for all classes of insurance will include these existing exposure types. These schemas will not be further refined or published as part of this project, but we recommend using existing current practice for:

- Commercial Property
- Homeowner Property
- Cyber Insurance
- Workers Compensation

Principles

The following principles, agreed during the v0.1 consultation and afterwards, have guided the development of this exposure data schema. They are described in further detail in the v0.1, available [here](#).

- 1) Exposure and Accumulation Focus
- 2) As Simple as Possible
- 3) Make the Schema Hierarchical and Extensible
- 4) Asset Descriptions Combined with Insurance Coverage
- 5) Make the Data Schema Compatible with Other Standards as Far as Possible

3 Structure of Exposure Data Schemas

The schema proposes a set of information that can be applied to an individual policy. A policy is an insurance contract with an insured, either an organisation or an individual. An insured may represent an 'account' to an insurance practitioner, and an account may consist of several policies, possibly in different classes of insurance.

A policy may have additional schedules attached to it, such as lists of the assets or risk objects (such as people or products) that are being insured under that policy. The schema proposes a minimum set of attributes for each of the assets or risk objects on the schedule.

The schema for each class of business includes of a number of 'dictionaries', or lists of defined categories that can be applied to account holder, policy, asset or risk object details to describe and classify information about them for accumulation purposes. These dictionaries are defined in the schema structures for each class of insurance.

3.1 Information about the Insured (Account Holder)

The account holder is identified and categorised with other high-level information that is relevant to exposure management, such as the types of the activities and operations of the account holder.

The information about the insured is standard across all classes of insurance.

For some classes of insurance, such as casualty liability, the characteristics of the insured organisation are the key determinants of the exposure, so in these classes there is a more extensive set of information required on the attributes of the insured.

3.2 Policy Contractual and Financial Structure

Contract information about the policy is captured, including financial structure, dates of coverage inception and expiration, and the legal jurisdiction in which claims or disputes are settled.

The policy-level financial structure requires information on policy total limit, deductible, co-share and attachment point.

Information on total limit is essential for exposure management. Financial structures for insurance policies can be complex. The data schema provides the capability for defining financial terms in addition to a policy total limit, deductible, co-share and attachment point to any grouping and permutations of individual items on asset types, asset attributes, or locations.

3.3 Type of Insurance

[Dictionary List]

Each policy is characterised by the type of insurance business within the class of insurance, sometimes referred to as a "line" of insurance business, although the term "line" is sometimes applied to the whole class of insurance. Insurance type is provided as a standardised list of categories, as a dictionary (i.e. a list of agreed types) for each class of insurance. Insurance type is the accepted segmentation of the market into the range of insurance products offered to cover particular sets of assets and insurance needs with appropriate coverages. These products are often written using common contractual templates that are typically modified and customised for specific client needs. The potential for the schema to identify the contractual template used is discussed below.

3.4 Schedule of Insured Assets

The policy can include one or more schedules of assets ('risk objects') being insured under this policy. A schedule is a listing of individual assets. In some cases, only the largest assets will be individually listed on a schedule with all other unlisted assets covered in aggregate under the policy total. The more that individual assets can be specified, the more exposure can be managed with accuracy and confidence. The schema supports the market practice of having assets being described both as schedules of individual assets and aggregate cover for unlisted assets.

For each item in the schedule, the schema provides the capability to assign the following information.

A) Type of Asset

[Dictionary List - Specific to Class of Insurance or Type of Insurance]

A categorisation of the individual asset on the schedule from an agreed list of types. The proposed schema dictionary provides a hierarchical system of categorising the assets typically covered in the insurance type. We try to limit the dictionary to a maximum of 10 categories in the highest level of categorisation, with each of these categories potentially able to be further divided into 10 sub-categories. For the schema version 1.0 we propose

to keep this categorisation as simple as possible and to limit the categorisation to a maximum of these 100 subdivisions wherever possible, only using a third layer of categorisation of type of asset where absolutely necessary.

B) Attributes of Asset

[Dictionary List - Specific to a Particular Type of Asset]

Each type of asset has a relevant listing of one or more standard attributes that have major exposure implications, and for which exposure managers might want to analyse and review their portfolio of insured assets. We try to limit the number of attributes for each type of asset to a maximum of 10.

Attributes can be numerical metrics, open or free text fields, or descriptive categories. Where an attribute is a descriptive field, we provide an agreed dictionary list of the options for the description categories. For version 1.0 we propose to limit the number of categories to a maximum of 10 categories in the highest level of categorisation, with the potential to further divide each category of asset attribute into 10 sub-categories in future versions of the schema.

C) Location of Asset

Fixed Location Geocoding

For individual assets that are in fixed locations, the physical location is a key attribute in determining its exposure to geospatial hazards and assists in exposure accumulation analysis and modelling of geographical perils. The schema captures the latitude and longitude coordinate of the geographical centroid of the asset, together with an assessment of the precision of that locator. The exposure data schema encourages the capture of geographical location information with as high accuracy as possible, using geocoding to the best precision available. Where geocoding is derived from address interpretation, for example knowing that the asset is within an administrative region, the centroid of the administrative region can be used. This location will be independent of the insured's location, which will be captured within the "Information about the Insured" Dictionary (5.1). These dual locations support the exposure modelling of assets, while also preserving the insured's legal jurisdiction.

3.5 Coverage and Compensation Types

For each individual asset on a schedule, or for the aggregate of all other assets, the schema identifies the financial sub-limits and terms by Coverage or Compensation Types, for example physical damage, third party liability, business interruption. These are defined as an agreed dictionary list for each class of insurance.

3.6 Inclusions and Exclusions

The schema provides an ability to include a full depiction of the causes of loss that are included in the coverage and excluded from it, as a schedule of inclusions and exclusions. Market practice is either the provision of All Risks coverage, sometimes accompanied by exclusion clauses for certain causes of loss (and write-backs where exclusions are reinstated), or the provision of Named Peril coverage, with an explicit contractual listing of specific causes of loss that are covered. There will be space provided within the schema where both the inclusions and exclusions can be listed, if needed.

Each type of insurance is often written using common contractual templates that are typically modified and customised for specific client needs. Different contractual templates are across the market, typically with US and European markets using different wording structures. We will provide a space where these wordings can be listed, referencing the insurer's specific amendments as needed.

Examples of contractual wording templates include:

- LMA 3030 (Terrorism Insurance Physical Loss or Physical Damage Wording)
- CL380 (Institute Cyber Attack Exclusion Clause)
- LMA5287 (Property & Plant Testing & Commissioning Clause)

- LMA5203 (Limited Nuclear Risk Exclusion Clause)
- NMA 464 (War and Civil War Exclusions Clause)

Part B: Schema Structure for Phase Two Classes of Business

This section describes the outline structure and key components of the exposure data schema for the following classes of insurance business:

- Agriculture
- Trade Credit
- Surety
- Specialty
- Life and Health

Please review and comment on the proposed structure and where possible, propose content for the various dictionaries required.

A) Information about the Insured (Account Holder)

Information about the insured will be collected at a primary level, which various policies and lines of insurance can reference. We suggest that the information is desirable but not essential, and will be filled in as available. Additional user defined fields are available to account for specific organisational requirements.

Table 1: Information about the insured example schema columns.

a) Name (Common)	
b) Full Legal Name	
c) Organisation Identifier Coding Information (DUNS Number)	
d) Unique identified (Insurance Organisation Specific)	
e) Size of company: Annual revenue	
f) Size of company: Total number of employees	
g) Size of company: Total Payroll	
h) Size of company: Annual Turnover	
i) Activity/Business Sector of Company, NAICS Code	i. 2012 Code
	ii. 2017 Code
j) Insurance Aggregation Business Sectors	
k) Location	i. Street Address
	ii. City
	iii. State/County/Province
	iv. Country
	v. Zip/Postal Code
	vi. Longitude and Latitude or Location Wkt
	vii. Legal Jurisdiction
l) Currency Units	i. Currency Date

A) Please comment on the proposed information about the insured, outlined above.

B) Policy Level Exposure Capture

The schema proposes a set of information that will be applied to each individual policy. A policy is an insurance contract with an insured. For commercial lines, the insured is an organisation. An insured may represent an 'account' to an insurance practitioner, and an account may consist of several policies.

The following information is proposed for each policy. The information is desirable but not essential, and will be filled in as available. Additional user defined fields are available to account for organisational specific requirements.

Table 2: Information about the policy example schema columns.

a) Policy Number	
b) Office	
c) Division	
d) Insurance Product Name	
e) Class of Business	
f) Currency	i. Currency Date
g) Claims Occurrence	i. Claims Made
	ii. Occurrence
	iii. Occurrence Notified
h) Claims Trigger Pathway	i. Causation
	ii. Opening of a Construction Site
	iii. Manifestation
i) Financial Attributes	i. Total Insured Value
	ii. Policy Co-share Percent
	iii. Policy Attachment Point
	iv. Policy Self Insured Retention (SIR)
	v. Policy Deductible
	vi. Total Policy Limit
	vii. Policy Exposure (calculated field based on values above)
j) Currency Units	
k) Inception Date	
l) Expiration Date	
m) Cedent Name ¹	
n) Location	i. Street Address
	ii. City
	iii. State/County/Province
	iv. Country
	v. Postal Code
o) Peril(s)	

¹ Only where applicable.

p) Inclusions Listing	i. LMA Wording
	ii. Peril Listing
q) Exclusions Listing	i. LMA Wording
	ii. Peril Listing
r) Terms and conditions	
s) Blanket coverage details	(text field)

B) Please comment on the proposed information about the insured, outlined above.

Agriculture Insurance

Agriculture insurance provides coverage for farming and agricultural activities and assets. A large category of the insurance cover relates to crop insurance, which protects clients from loss of crops (crop yield insurance) or loss of revenue (crop revenue insurance). Other areas of coverage include agricultural vehicles, livestock, and agricultural specific property.

3.7 Types of Insurance within Agriculture

[Dictionary: Agriculture – Types of Insurance]

We propose to categorise each agriculture insurance policy by the common types of agricultural insurance in the market. The dictionary of types of agriculture insurance will consist of primary categories which can be subdivided into secondary categories where appropriate (and third levels of categories if essential).

A suggested listing of primary, secondary and tertiary level types of agriculture insurance commonly offered within the agricultural market is:

Table 3: Proposed types of insurance within agriculture.

a) Crop Insurance	i. Indemnity-Based Crop Insurance	1. Multiple Peril Crop Insurance
		2. Named Peril Crop Insurance
	ii. Index Based Crop Insurance	1. Area Yield Index Insurance
		2. Weather Index Insurance
b) Livestock Insurance	i. Livestock Mortality Insurance	
c) Blood Stock		
d) Aquaculture		
e) Forestry		
f) Greenhouse		
g) Agricultural Equipment		

C) Please comment on the proposed types of agriculture insurance, outlined above.

3.8 Asset Types Covered by Agriculture Insurance

[Dictionary: Agriculture – Asset Types]

Assets typically covered in Agriculture insurance can be broadly categorised as:

Table 3: Proposed agriculture asset categories

a) Crops
b) Animals
c) Agricultural Vehicles
d) Brush

Each of these is further categorised as a sub-list, defined in the asset type dictionary. For example, the types of asset type (a), crops, can be categorised as:

Table 4: Proposed agriculture asset sub listing (Example: Crops)

a) Crops	i. Food Crops
	ii. Industrial Crops
	iii. Food Adjuncts

D) Please comment on the proposed asset types covered by agriculture insurance and provide further information on the sub-lists for asset types if possible.

3.9 Asset Attributes

[Schedule: Agriculture – Asset Attributes]

For each of these asset types there are related attributes or details which need to be collected. Attributes can be General Attributes and Asset Specific Attributes. General attributes are details needed for all asset types, while asset specific attributes are unique to the asset. An example of this is attributes that should be collected for crop assets. Asset attributes will be defined for each asset type in the Phase 2 v0.9 document.

Table 5: Proposed Agriculture asset attributes, general and specific (Example: Crop)

Attributes: General	Attributes: Agriculture, Crops
Farm Type	Intended Acres
	Name of Crop
	Total Insured Value
	Crop Protection in Place
	Crop Year
	Coverage Level

- E) Please comment on the proposed asset attributes outlined. We are actively looking to increase our asset attributes schedule, and would appreciate feedback on agricultural asset attributes typically collected within your organisation.**

3.10 Fixed Locations, Jurisdictions, and Geographical Area of Operation

[Dictionary: Agriculture – Fixed Locations, Jurisdictions, and Geographical Area of Operation]

Fixed assets, such as farms or equipment, can be individually located by latitude and longitude coordinates or a geospatial object to provide geo-referencing for risk analysis and exposure management. When considering index based crop insurance, the associated area boundaries can be added as an additional geospatial object.

When considering mobile assets, such as livestock or aquaculture, location can be selected by the operational centre's location, or the location of the asset manager.

- F) Please comment on capturing agricultural asset location information by using fixed location of operational centre or asset manager. Is there additional location information typically captured within agricultural claims? What type of additional location information is needed for index based crop insurance?**

3.11 Coverage Types

[Dictionary: Agriculture – Coverage Types]

The primary types of coverage that apply in the policy include the following, defined in the coverage type dictionary:

Table 6: Proposed agriculture coverage types

a) Physical Damage	
b) Business Interruption	
c) Liability	i. Workers Compensation

- G) Please comment on the coverage types proposed. Do these align with your interpretation of agricultural insurance coverage types?**

Trade Credit

Trade credit insurance is a form of business insurance which provides coverage against the risk of not being paid for goods or services sold by the insured. This non-payment can be due to either commercial or political risks. Trade credit is applicable to all sizes of businesses and is seen internationally in the business community. In addition to providing financial insurance, trade credit insurance can also provide risk management services through various market monitoring initiatives. Trade credit operates differently than some of the other forms of insurance seen within the project, due to the various actors involved. As a result, trade credit has a variation of the structure described in the introduction.

3.12 Information about the Insured (Account Holder)

When considering the insured, or account holder of the policy, insurers and reinsurers may have varying information about them. This will continue to be recorded in the primary/general section, described in part (A). We recognise that not all fields can be filled, but suggest to simply fill as much as available.

3.13 Information about the Counterparty (Buyer, Obligor)

The counterparty is the buyer in the trade credit relationship, and requires similar details as the insured, with some small adjustments. We propose the information needed is captured within table 1, with the following additional details

Table 7: Proposed information about the counterparty

a) Limits Granted	
b) Payment Term (Duration in Days)	i. Minimum Reporting Period
	ii. Maximum Reporting Period
	iii. Average Reporting Period

H) Please comment on the proposed information about the counterparty. Is there information which should be added or removed?

3.14 Types of Trade Credit Insurance

[Dictionary: Trade Credit – Types of Insurance]

We propose to categorise the trade credit insurance policy by the common types of insurance in the credit market. The dictionary of types of trade credit insurance will consist of primary categories which can be sub-divided into secondary categories where appropriate (and third levels of categories if essential).

A suggested listing of primary types of trade credit insurance commonly offered within the insurance market is:

Table 8: Proposed primary trade credit insurance types

a) Single Buyer
b) Export
c) Multinational
d) Political Risk
e) Excess of Loss
f) Receivable Management (Subcontracting)

The subcategories of this dictionary will be expanded and defined leading to Phase Two v0.9.

I) Please comment on the proposed types of trade credit insurance. Are there additional types of insurance which should be added?

3.15 Asset Types Covered by Trade Credit

[Dictionary: Trade Credit – Asset Types]

Within trade credit insurance, the asset can be considered the cash flow or agreement. This is described as the accounts receivable or the debt between the business and client. This is listed below.

Table 9: Proposed trade credit asset types, accounts receivable

a) Accounts Receivable	i. Receivable Pools
	ii. Liquid Assets

J) Please comment on the asset types covered by trade credit insurance. Are their additional asset types which should be included?

3.16 Asset Attributes

[Dictionary: Trade Credit – Asset Attributes]

We propose that the Accounts Receivable is the insured asset within Trade Credit insurance. We suggest the following information is required pertaining to the receivable.

Table 10: Proposed accounts receivable asset attributes

a) Contract Expiration
b) Total Insured Value
c) Term (Days)
d) Credit Rating
e) Provisions

K) Please comment on the asset attributes proposed for accounts receivable. What additional information is required?

Surety

Surety (or Surety Bonds) are a unique category within the insurance industry, as they are not a form of insurance, but instead a bond, handled within the insurance market. The insurer acts as a surety to guarantee the obligee (the recipient of an obligation) that the principal (the primary party who will perform the task) can complete the task as agreed within the contract. Surety bonds remove a degree of uncertainty and risk within commercial financial contracts.

Surety operates differently than insurance, with different actors, partnerships, and structures. As a result, surety has a variation of the structure described in the introduction.

3.17 Information about Contractor (also known as Principal/Obligor)

Surety bonds require information about the contractor, or principal whose work is being guaranteed. We propose the information needed is captured within Table 1, except for credit rating which would be captured in addition. There will be the opportunity to hold multiple credit ratings in a schedule, and will not be limited to one value.

L) Please comment on the information about contractor. What additional information is required?

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3.18 Types Surety Bonds

[Dictionary: Surety – Types of Surety Bonds]

We propose to categorise each surety bond by the common types of bonds within the market. The dictionary of types of surety bonds will consist of primary categories which can be divided into secondary categories where appropriate (and third levels of categories if essential).

A suggested listing of primary types of surety bonds commonly offered within the insurance market is:

Table 11: Proposed primary surety bond types

a) Construction
b) Private/Public Projects
c) Tax Bonds
d) Judicial Bonds
e) Financial Guarantee
f) Mortgage

These bonds can be further divided into subcategories. For example, see construction, below.

Table 12: Proposed surety bond subtypes (Example: Construction)

a) Construction	i. Bid Bond
	ii. Performance Bond
	iii. Advance Payment Bond
	iv. Maintenance Bond

The subcategories of this dictionary will be expanded and defined leading to Phase Two v0.9.

M) Please comment on the types of surety bonds. Are there additional types which should be considered?

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3.19 Bond Attributes

[Dictionary: Surety – Bond Attribute]

There are three primary dynamic factors which play into a bond agreement. These can be broadly categorised as (1) the principal's task, (2) the principal, and (3) the obligee. The principal's information is collected initially within the schema (see section 3.1). We propose that additional information must be collected about the principal's task and obligee. The dictionaries for each are outlined below.

Table 13: Proposed surety bond attributes (Principal's Task and Obligee)

Attributes: Principal's Task		Attributes: Obligee	
Duration (Days)		Name (Common)	

Projected Completion Date		Full Legal Name	
Total Value		Organisation Identifier Coding Information	
Total Insured Value		Unique identified (Insurance Organisation Specific)	
Contact Personal		Size of company: Annual revenue	
Bond Value		Size of company: Total number of employees	
Location of project	Street Address	Activity/Business Sector of Company, NAICS Code	2012 Code
	City		2017 Code
	State/County/Province		Parent Organisation
	Country	Centre for Risk Studies Industry Class	
	Postal Code	Location	Street Address
Project name			City
Project type			State/County/Province
			Country
			Postal Code
		Credit Rating ²	

N) Please comment on the proposed surety bond attributes. Are there additional attributes which should be considered?

Specialized Underwriting Classes (Specialty Insurance)

The specialty market is broad term that varies significantly across different insurance organisations. The term typically refers to insurance lines that require a “specialist” to underwrite and continue to adapt to the increasingly diverse market. After speaking with various industry stake holders, we recognised that most specialty insurance types of insurance (such as agriculture, aviation, marine or energy) are represented amongst other schemas within this project. Due to the distribution of the speciality lines, we propose to redesign this section as a “Specialized underwriting classes”, and design it as a default option for lines which do not fit elsewhere within the schema. Examples of these lines may include satellite coverage, event cancellation, or contingency coverages. Lines stipulated in this section will be user defined and are likely to include policies which are specific to that organisation.

Considering this outlook, the schema will provide the structure to be filled, but the dictionaries will not be populated. The schema will not be applicable to industry wide schemas or discussions, but can be added when considering internal exposure.

3.20 Types of Specialized Underwriting Classes

[Dictionary: Specialized Underwriting Classes – Types of Insurance]

² There will be the opportunity to hold multiple credit ratings, which will not be limited to one value.

This dictionary will include the type of insurance, or the name which would be used when describing the policy sort. Broad categories will be listed, and can be further categorised into a subsection and a sub-subsection. To ensure simplicity is preserved, we encourage keeping only two layers of categorisations where possible. An example of the structure is outlined below.

Table 14: Types of specialty insurance

a. Insurance Type A	i. Sub Insurance Type A.1	
	ii. Sub Insurance Type A.2	
	iii. Sub Insurance Type A.3	Further Sub Insurance Type A.3.a
b. Insurance Type B	i. Sub Insurance Type B.1	
c. Insurance Type C		

3.21 Asset Types Covered by Specialized Underwriting Classes

[Dictionary: Specialized Underwriting Classes – Asset Types]

This dictionary will include the asset or risk object types covered by the specialized underwriting class, or the risk objects the policy applies to. Broad categories will be listed, and can be further categorised into a subsection and a sub-subsection. To ensure simplicity is preserved, we encourage keeping only two layers of categorisations where possible. An example of the structure is outlined below. There are general location and people schedules that are used by multiple classes of businesses and could be used for this class as well.

Table 15: Specialty asset types

a. Asset A	i. Sub Asset A.1	
	ii. Sub Asset A.2	
	iii. Sub Asset A.3	1. Further Sub Asset A.3.a
b. Asset B	i. Sub Asset B.1	
c. Asset C		

3.22 Attributes of the Insured Assets by Type

[Dictionary: Specialized Underwriting Classes – Asset Attributes]

This dictionary will provide the relevant attributes or information for each asset type outlined in 3.2. This should highlight the necessary information which is required to make informed exposure conclusions and recommendations.

Table 16: Specialty asset attributes

Attributes: Asset A	Attributes: Asset B
Attribute 1	Attribute 1
Attribute 2	Attribute 2
Attribute 3	Attribute 3

3.23 Locations, Jurisdictions, and Geographical Area of Operation

[Dictionary: Specialized Underwriting Classes – Fixed Locations]

Location should be captured at the insured (account holder), policy, and asset level. Depending on the type of insurance, these can either be in the same location, or at different locations. By capturing all three, the legal jurisdiction, spatial exposure, and asset distribution can all be understood and reflected. The asset location can be difficult to calculate, and how it is captured can be unique to different lines of insurance.

3.24 Coverage or Compensation Types

[Dictionary: Specialized Underwriting Classes – Coverage Types]

This dictionary will list the primary types of coverage that apply in the policy. To date, these have typically included:

Table 17: Specialty coverage or compensation types

a) Physical Damage	
b) Business Interruption	
c) Liability	i. Workers Compensation

These should be adapted and updated to best suit the line of insurance.

O) Please comment on the proposed specialized underwriting class framework. Is additional clarification or fields required for its feasibility?

Life and Health

Life insurance is protection against financial loss which would result following the insured's death. The named beneficiary receives a pay-out following the death in exchange for the premium payments made by the insured. Comparatively, health insurance is insurance taken out to cover the cost of medical care during the insured's life. There are vast geographical differences within the health insurance market, largely dependent on the role of the state in the coverage process. Within this schema, we aim to keep the design broad enough to be accepted internationally. Country specific additions are encouraged.

3.25 Types of Life and Health Insurance Coverage

[Dictionary: Political Security – Types of Life and Health Insurance Coverage]

We propose to categorise each policy by the common types of insurance in the market. The dictionary will consist of primary categories which can be sub-divided into secondary categories where appropriate (and third levels of categories if essential).

A suggested listing of primary and secondary level types of life and health insurance commonly offered is:

Table 18: Proposed types of life and health insurance coverage

a) Life	i. Personal	1. Term	a) Mortality
			b) Critical Illness (Stand Alone)
			c) Accelerated Critical Illness
			d) Additional Critical Illness
			a) Mortality

		2. Whole Life	b) Critical Illness (Stand Alone)
		3. Universal	c) Accelerated Critical Illness
			d) Additional Critical Illness
	ii. Group	1. Term	
b) Health	i. Individual		
	ii. Group		
c) Accident	i. Accidental Death and Dismemberment (AD&D)		
	ii. Long Term Disability		
	iii. Travel		
	iv. Hospital Cover		

P) Please comment on the proposed types of life and health insurance. Are there additional types which should be considered?

3.26 Types of Health Insurance Policies

[Dictionary: Health and Life – Types of Health Insurance Policies]

We understand that there are various types of health insurance policies, specific to country and region. We hope to include a general listing of policies used within some key insurance markets, organised by country. An example of these listings is provided below, with a proposed mapping of American health insurance policies.

Table 19: Proposed types of American health insurance policies

a) Managed Care (CCP)	i. Exclusive Provider Organisation (EPO)	
	ii. Health Maintenance Organisation (HMO)	
	iii. Preferred Provider Organisation (PPO)	
b) Consumer-driven health care	i. Flexible Spending Account (FSA)	
	ii. Health Reimbursement Account	
	iii. Health Savings Account (HSA)	1. High Deductible Health Plan (HDHP)
		2. Medical Saving Account (MSA)
	iv. Private Fee for Service (PFFS)	

Q) Please comment on the use of health insurance policies within insurance exposure calculations. What level of detail is typically reflected within your records? Is there a similar list for other national healthcare policies?

3.27 Attributes Collected About the Insured

[Dictionary: Life and Health – Insured Attributes]

A sample listing of attributes collected about the insured, specific to insurance type. These tables are currently only applicable to three coverage types, but will be expanded within the v0.9 document to include each type of life and health insurance coverage (see section 5.1 for complete listing).

Table 20: Personal life attributes

a) Gender			
b) Date of Birth			
c) Age			
d) Address			
e) Profession/Occupation			
f) Socioeconomic band			
g) Consumer classification ³			
h) Policy Type	Single/Joint 1 st Death/Joint 2 nd Death		
i) Benefit type			
j) Currency			
k) Sum Assured Amount			
l) Health Rating Class	i. Medically Underwritten	1. Standard	
		2. Rated	A. Addition to Age
			B. Multiplier to Mortality Rate
	ii. Preferred Insurance Rating		C. Add to Qx
		1. Tobacco	
		2. Non-Tobacco	
		3. Standard	
		4. Preferred	
		5. Super Preferred	
m) Distribution Channel	i. IFA		
	ii. Tide Agent		
	iii. Direct Marketing		

³ We are currently researching various consumer classification systems, and intend to list these in Phase Two v0.9. We understand examples of these include CACI ACRON and Experian's Mosaic. If you are aware of or use different classification systems, we would appreciate their inclusion in your feedback.

	iv. Bank Assurance		
	v. Online		
	vi. Other		
n) Postal Code			

Table 21: Group life attributes

a) Gender			
b) Date of Birth			
c) Age			
d) Address of Employer			
e) Sum Assured Amount			
f) Health Rating Class	i. Medically Underwritten	1. Standard	
		2. Rated	A. Addition to Age
			B. Multiplier to Mortality Rate
			C. Add to Qx
	ii. Preferred Insurance Rating	1. Tobacco	
		2. Non-Tobacco	
		3. Standard	
		4. Preferred	
		5. Super Preferred	
g) Workplace address	i. Street Address		
	ii. City		
	iii. State/County/Province		
	iv. Country		
	v. Postal Code		
h) Occupation			
i) Occupation Category			

Table 22: Individual Health Attributes

a) Gender	
b) Date of Birth	
c) Age	

d) Address	
e) Sum Assured Amount	
f) Health Rating Class	i. Tobacco
	ii. Non-Tobacco
	iii. Standard
	iv. Preferred
	v. Super Preferred

R) Please comment on the proposed attributes collected about the insured. Is there information which should be added or changed?

3.1 Locations, Jurisdictions, and Geographical Area of Operation

[Dictionary: Life and Health – Fixed Locations]

When considering the location, jurisdictions and geographical area of operation, we propose that the insured's personal address is used as a default where available. When considering group policies, we propose the use of the employer's (or issuing party's) address. We suggest capturing the address of the insured party's employer as well as the address of the account holder on the policy, as these might differ.

S) Please comment on how life and health policy locations are considered. Is there a common alternative to employer's address or issuing party's address being used as a location indicator?

Feedback

Thank you for taking part in the Phase 2 version 0.5 consultation for the development of a multi-line insurance data schema.

We will credit the individuals and organisations who have assisted in the development of the schema in the final publication. If you are comfortable with being credited, please provide your name, job title and organisation, and list any colleagues who assisted and who should be credited.

T) Please list the names, job titles, and organisation of people who helped with responses to this consultation.

Please email your completed consultation document by January 30th, 2018 to:

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