

<b>Comments Template on EIOPA-CP-11-002 Technical Consultation on the Solvency II XBRL Taxonomy</b>	
Company name:	Business Reporting – Advisory Group spolka z ograniczona odpowiedzialnoscia spolka komandytowa
Disclosure of comments:	EIOPA will make all comments available on its website, except where respondents specifically request that their comments remain confidential.  Please indicate if your comments on this consultation should be treated as confidential, by deleting the word Public in the column to the right and by inserting the word Confidential.
Please follow the instructions for filling in the template:	<ul style="list-style-type: none"> <li>⇒ <b>Do not change the numbering</b> in column “Reference”.</li> <li>⇒ Please fill in your comment in the relevant row. If you have <u>no comment</u> on a paragraph, keep the row <u>empty</u>.</li> <li>⇒ Our IT tool does not allow processing of comments which do not refer to the specific paragraph numbers below. <ul style="list-style-type: none"> <li>○ If your comment refers to multiple paragraphs, please insert your comment at the first relevant paragraph and mention in your comment to which other paragraphs this also applies.</li> <li>○ If your comment refers to sub-bullets/sub-paragraphs, please indicate this in the comment itself.</li> </ul> </li> </ul> <p><b>Please send the completed template to <a href="mailto:consultation.taxonomy-201107@eiopa.europa.eu">consultation.taxonomy-201107@eiopa.europa.eu</a>, in MSWord Format, (our IT tool does not allow processing of any other formats).</b></p> <p>The paragraph numbers below correspond to the document: <i>EIOPA-CP-11-002_Introduction_Taxonomy_Consultation.doc</i></p>
<b>Reference</b>	<b>Comment</b>
General Comment	<p>We would like to take this opportunity to congratulate EIOPA on their decision of application of XBRL for supervisory reporting of insurance entities in the European Union.</p> <p>We strongly believe that use of the XBRL standard will significantly enhance data quality and supervisory processes efficiency, which will benefit both regulators and the market.</p>
10.	The Business Reporting Advisory Group (BR-AG) is a professional consulting and advisory company with over six years of proven excellence in supporting governments, institutions and businesses exploit innovative internal and external electronic business reporting solutions. BR-AG key competencies include data modelling, eXtensible Business Reporting Language (XBRL) implementations, electronic reporting technologies, business reporting supply chain architecture based on a variety of data exchange formats. The BR-AG team members gathered their knowledge and experience by supporting and leading multiple XBRL projects in over 25 countries worldwide.

**Comments Template on EIOPA-CP-11-002  
Technical Consultation on the Solvency II XBRL Taxonomy**

BR-AG experience relevant to the consultation embraces:

- development of XBRL taxonomies and advisory services on implementation of XBRL for insurance supervision purposes:
  - data model (according to the Data Points Model methodology) and XBRL taxonomies for Solvency II reporting scope and templates for the Bermuda Monetary Authority,
  - IFRS XBRL Taxonomy extension for insurance sector for the Bermuda Monetary Authority
- advisory services on implementation of XBRL and development of data models and XBRL taxonomies and for banking supervision purposes:
  - European Banking Authority XBRL Operational Network (FINREP and COREP data model and taxonomy, application of XBRL Formula application and rendering (“tables”) linkbase solution)
  - advisory on implementation, taxonomy and extension taxonomy development for: the National Bank of Poland, the National Bank of Austria, the central bank of the Federal Republic of Germany, the National Bank of Spain, the Bank of Indonesia, the Central Bank of Iraq, the Banking, Insurance and Pension Funds Supervisor in Peru.

11.

**Response:**

The Sample Taxonomy complies with the XBRL 2.1 Specification and XBRL Dimensions 1.0 Specification. With regard to alignment with commonly agreed best practices we have compared the Sample Taxonomy with similar applications. One comparison was the Eurofiling initiative which defines supervisory reporting taxonomies for credit institutions and investment firms according to COREP (Basel II), as well as other reporting taxonomies. As a result we confirm that the architecture and design of the Sample Taxonomy is aligned in many aspects with the current COREP taxonomy. It does not however follow the new candidate recommendation for improved data modelling and data centric design of taxonomies (i.e. COREP 2012).

**Explanation:**

**Compliance with XBRL specifications**

We have tested the Sample Taxonomy with XBRL validators and basing on the results which indicated no errors or warnings we can confirm its technical compliance with the XBRL Specification 2.1 (dated 2003-12-31 with corrected errata of 2008-07-02) and the XBRL Dimensions 1.0 specification (dated 2006-09-18 with corrected errata of 2009-09-07).

The Sample Taxonomy doesn't contain formulas therefore it is unlikely to have been tested for validity with XBRL Formula 1.0 Specification suite dated 2009-06-22.

**Comments Template on EIOPA-CP-11-002  
Technical Consultation on the Solvency II XBRL Taxonomy**

No custom linking components were found therefore validation against XBRL Generic Links 1.0 specification may not have been performed either.

However the Sample Taxonomy contains however definition of additional to standard XBRL 2.1 and XBRL Dimensions 1.0 metadata which is two custom arcsroles: "total-detail" and "including-included" to be applied on the calculation link. Neither of tthese arcsroleswas actually used in the Sample Taxonomy. Explanation of their application could not have been found in the Solvency II Taxonomy technical description either.

The Sample Taxonomy defines and applies a custom role type on label resources that is used to assign codes pointing to templates and pseudo-cell identification to the declared items.

**Alignment with the commonly agreed best practices**

With regard to following the commonly agreed best practices, it is important to remember that XBRL standard is a generic framework that enables definition of dictionaries of business terms and subsequent exchange of data in numerous reporting scenarios.

Due to significant differences of requirements between various XBRL implementations (which are mostly project and subject specific) there is no set of commonly agreed best practices for general application of XBRL.

However, a number of projects with a specific orientation and subject focus have emerged that have aligned the design and architecture of XBRL taxonomies (and as a result the content of instance documents) to set of developed practices such as:

- SBR (Standard Business Reporting) for a comprehensive B2G and C2G data exchange and pan-government harmonization of information requirements,
- ITA (Interoperable Taxonomy Architecture) initiative for alignment of reporting of financial statements and related notes according to IFRSs, US-GAAP, UK-GAAP, Japanese-GAAP and other local accounting regulations and practices,
- Eurofiling project for supervisory reporting of credit institutions and investment firms according to the COREP (Basel Accord), the FINREP (IFRSs for financial sector), European Central Banks statistics and other related domains.

Out of these most important initiatives and XBRL implementations the Eurofiling project appears to be the closest in terms of scope and application to the EIOPA Solvency II supervisory reporting. In fact, the analysis comparing the reporting requirements according to COREP, FINREP, ECB statistic with the EIOPA Solvency II templates (QRT) and guidelines (LOGs) performed for this consultation based on the Eurofiling data models, taxonomies and best practices. The result of this examination was identification of a significant overlap between these components in a number of areas including not only the character, purpose, scope and definitions of the exchanged data but also the types of entities, both filers and supervisors, involved in this process. Therefore the Eurofiling approach to data modelling and taxonomy architecture has been selected as a benchmark for potential investigation of alignment of the Sample Taxonomy with commonly agreed best practices.

**Comments Template on EIOPA-CP-11-002  
Technical Consultation on the Solvency II XBRL Taxonomy**

Based on our analysis of the Sample Taxonomy we confirm that it follows the modelling of the current version of the Eurofiling COREP taxonomy. Even though the arrangement of COREP templates and QRT is different, the Sample Taxonomy applies similar rules for distinction between primary items, dimensions and domain members. It also follows the COREP taxonomy modularization in files:

- dimension taxonomies (one for each dimension for further reuse in templates),
- primary taxonomies (one for each template),
- template taxonomies (one for each template).

The differences between the current COREP and the Sample Taxonomy include element naming convention, representation of data in presentation and definition linkbases, custom types of labels (in both taxonomies) and the fact that the Sample Taxonomy is missing references to underlying regulations and guidelines.

The current COREP taxonomy has been applied and successfully implemented in a number of EU countries by banking sector supervisors (financial supervision agencies and central banks).

Nevertheless, the Eurofiling project team members (XBRL Operational Network of the European Banking Authority in collaboration with XBRL Europe, as well as stakeholders such as banks, solutions providers, academics and individuals) have been investigating alternative modelling approaches for improving the usability and maintenance of XBRL taxonomies. This examination has been performed according to a set of principles which are aimed at the simplification of the reporting process, stability of the deliverables, consistency of the represented meta data and improved maintainability.

Additionally, a number of issues were identified in the existing COREP taxonomies during the process of updating the COREP for new information requirements of the third Capital Requirements Directive (CRD3). The existing COREP taxonomies as you may recall are similar in design and architecture to the Sample Taxonomy. The issues identified were mostly related to the manner of representation of the metadata from templates in the existing taxonomies. The approach for data modelling applied in the current COREP (and apparently also in the Sample Taxonomy for QRTs) aims to organize the data basing on views of the underlying templates. In case of COREP and CRD3-related updates such modelling appeared to be highly ineffective from the maintenance point of view. Not only was the number of modifications, that needed to be made on the taxonomy level, much higher than the amount of changes introduced by the new set of COREP templates and guidelines. Also, the changes in the taxonomy have little correlation with previous versions and these correlations are very rarely directly communicated by the taxonomy model. As a result the effort and workload needed to shift between the versions of the taxonomies is high.

Solutions to these issues have been developed and currently being tested by the Eurofiling project is a taxonomy whose content and architecture resembles the underlying information requirements treated as a framework rather than trying to resemble individual templates in separation. This approach is currently investigated and analysed before it becomes the

**Comments Template on EIOPA-CP-11-002  
Technical Consultation on the Solvency II XBRL Taxonomy**

common practice for the next releases of the Eurofiling deliverables. Importantly, this change in the approach has been also very positively welcomed by the business users and experts defining the templates, who are currently actively involved in development of the data model (abridge between the regulations and their technical representation in the form of XBRL taxonomy). More information about this approach can be found on the [www.eurofiling.info](http://www.eurofiling.info) website.

This approach was also used by the Bermuda Monetary Authority (BMA) for the Solvency II XBRL taxonomy. The proof of concept of presenting this approach and covering the same scope as the Sample Taxonomy together with the explanatory documentation is available here: <http://rain.bma.bm/taxonomy.aspx>.

11.1.

**Response:**

The Sample Taxonomy exploits different technology aspects for representation of the Solvency II information requirements. However we are proposing some areas where application of certain technical constructs could be improved or replaced with more efficient solutions.

**Explanation:**

The Sample Taxonomy uses a number of the XBRL technology aspects in order to resemble the information requirements defined in the QRT. It contains definition of business concepts, labels in English language and for particular applications (e.g. codes), presentation linkbase indicating hierarchical dependencies between primary items and definition linkbase, which assigns primary items with applicable dimensions through a number of 'all' and 'not All' hypercubes. In order to indicate potential fields of improvement of use of technological aspects below we provide a list of the arguable approaches in the Sample Taxonomy design.

**Consistent application of dimensions**

The Sample Taxonomy applies a number of explicit and typed dimensions that facilitate data modelling. This mechanism however appears not to be applied consistently. For example information related to lines of business in the template BS\_C1 is included as components of primary items identification, e.g. "Technical provisions for health similar to non-life, (...)", "Health similar to non-life, Reinsurance recoverables, (...)"). The same kind of information in the TP\_NL\_E3 template is reflected using dimension members, e.g. "Lines of business for non-SLT health", "Lines of business for life obligations", etc. Such modelling result in the risk of reporting of duplicated facts with possibly different values, redundancies in the taxonomy content (unnecessary code affecting performance and size) as well as logical contradictions in the model (requesting mutually exclusive data). Another example of inconsistent application of dimensions in the Sample Taxonomy is modelling of information related to currencies. In the TP\_NL\_E3 template this metadata is reflected as a typed dimension with domain restricted to three capital letters while in AS\_D1 a primary item is used with similarly customized data type. Interestingly, according to the Solvency II Taxonomy technical description document the AS\_D1 template shall actually use dimension for "country of custody for assets" (see par.14).

**Comments Template on EIOPA-CP-11-002  
Technical Consultation on the Solvency II XBRL Taxonomy**

Our assumption is that such issues arose as a consequence of the design of Sample Taxonomy basing on templates rather than comprehensive analysis of the underlying data model.

**Restricting expected values using XML Schema data types validation**

The above analysis of inconsistent application of dimensional breakdowns leads to another issue which is restricting expected values of primary items or typed domains basing on constraining data types of items. In a number of XBRL implementation projects worldwide XML schema validation is replaced by the formula linkbase validation which is much more flexible and lowers the impact of potential changes in taxonomies. For example any change in the enumeration lists applied for items defined in AS\_D1 results in the need of creation of new items and subsequent remappings to and from the taxonomy. Application of formula linkbase makes it also possible to define meaningful error messages for any issues resulting from improper values filed for such items.

**Browsing of taxonomy content split between presentation and definition linkbases**

Another risk identified in the Sample Taxonomy relates to presenting information requirements in both presentation linkbase and definition linkbase. The aim of the presentation linkbase is to facilitate browsing of the taxonomy content based on hierarchical relations between items and their split in sets (e.g. according to templates). Definition linkbase enables linking of primary items with applicable dimensional breakdowns indicating reportable combinations. Such dualism results from the evolution of the XBRL standard and periodical increase of its functionality, as well as representation of these new features on syntactical level as described by XBRL specifications (which aim is to maintain backwards comparability). Given the technology constrains it is recommended to use only the definition linkbase that may serve both purposes: presentation of the taxonomy content (single point of taxonomy content discovery) and imposing constraints on the reportable data. Additionally, such modelling allows mitigating the risk of inconsistencies and differences between presentation and definition linkbases content that may confuse taxonomy users.

**Reuse of domains (members) between dimensions**

There appears to be additional potential for improving the Sample Taxonomy modelling by reusing domain members between different dimensions. For example "Development year" and "Expected inflation years" dimensions refer to members identifying future years. These members could be defined under a single domain and subsequently reused between these two dimensions, which shall reduce the redundancy of metadata definitions. Similar approach is recommended for "Run off" and "Historical inflation years" dimension that currently refer to two separately defined sets of past years that could be unified into a single domain. In fact, the Solvency II Taxonomy technical description document already envisaged such possibility for example for "country of custody for assets" (AS\_D1) and "country of localization of risk for technical provisions" (TP\_NL\_E1). We recommend its application also for all other similar cases.

**References to underlying regulations**

**Comments Template on EIOPA-CP-11-002  
Technical Consultation on the Solvency II XBRL Taxonomy**

It is also highly recommended that the concepts defined in the taxonomy are linked to applicable references in guidelines (LOGs), standards and other legal acts regulating the Solvency II framework. The Sample Taxonomy does not contain any references which hinders understanding of its content by users and thus proper tagging or mapping of items. Moreover the Solvency II Taxonomy technical description document does not mention any plans of including references in the next releases or the final version.

As a result, the Sample Taxonomy defines information (e.g. the "Periodicity" dimension or restrictions of expected values for AS\_D1 items) for which we could not identify any definition for application in the underlying information requirements (QRTs and LOGs).

**Mathematical and logical dependencies between concepts**

In order to improve data quality, as well as provide additional important metadata, which is documentation of mathematical and logical dependencies between concepts, it is recommended that the Solvency II taxonomy contains formula linkbase as part of its content. Such plans are described in the Solvency II Taxonomy technical description however no sample for evaluation was found in the Sample Taxonomy. We recommend that the set of rules defined in the final version is as comprehensive as possible and exploits the potential of other functionalities supporting formula linkbase such as error messaging.

**Taxonomy modularization**

The Sample Taxonomy follows the modularization approach as described in the non-normative introduction to the XBRL Dimensions 1.0 specification, dividing taxonomy into three main building blocks:

- primary items dictionaries (defined for each template separately),
- dimensional breakdowns (each breakdown results in a separate taxonomy),
- template taxonomies (combining primary items with applicable dimensional breakdowns for each template).

Such modularization has been also adopted by the current COREP taxonomy with additional level of common primary items shared by the entire framework or by certain set of templates dedicated to report a certain type of risk. Although successful in implementation and used across Europe, such modularization occurred to be impractical from the maintenance point of view. Splitting definitions of items between different schema files and defining them under template specific namespaces hinders reusability of concepts in multiple places of the framework information requirements.

According to the Solvency II Taxonomy technical description: "a template may use primary items defined in the template and / or primary items defined in other templates". Similarly it states that "some dimensions may share some values, e.g.: 'country of custody for assets' (AS\_D1), 'country of localization of risk for technical provisions' (TP\_NL\_E1)". However, from

**Comments Template on EIOPA-CP-11-002  
Technical Consultation on the Solvency II XBRL Taxonomy**

the provided Sample Taxonomy it is hard to deduct how the final taxonomy will cope on the technical level with common terms that are shared between a number of templates. An additional concern arises from the fact that no example of such sharing of definitions was provided in the Sample Taxonomy as a proof of concept. In particular, it is worth to explain in the supporting documentation on what decision an item shared between templates was originally defined in one template or another. More importantly, this explanation shall address the situations, when together with future releases of changed QRT (updated versions), one or more items are moved between templates (in particular split and merge of entire templates). Creating of the completely new set of items causes maintenance issues, while keeping the existing structures would make taxonomy unclear and confusing for users.

From the experience of the Eurofiling project that shared similar challenges related to taxonomy modularization, it is recommended that primary items and reused domains (sets of members) are defined under a single namespace irrespective from their placement in templates. The XML "include" mechanism shall allow for modularization of the taxonomy on the level of files. Such approach shall facilitate maintenance, when views (templates) change as the result of moving of content from one template to another. Lastly such approach increases internal consistency of the taxonomy.

11.1.1.	<p><b>Response:</b></p> <p>Hierarchical organization of data in the BS_C1 template appears to be a result of certain assumption taken for modelling of this particular template, rather than the consequence of consistent representation of data across the framework. We recommend applying coherent approach for identification of metadata in the entire framework instead of basing modelling decisions on the shape and content of each template in separation.</p> <p><b>Explanation:</b></p> <p>Data organization of the BS_C1 as a hierarchy appear to be based on the assumption taken by the Sample Taxonomy developers to represent this particular template content, rather than a consequence of a consistent data modelling of the entire set of Solvency II QRT. From the data model perspective, a balance sheet represents the dimensional space of aggregates from detailing tables. Moreover, a number of possible disaggregations are already included in the content of the BS_C1 itself. For example a breakdown into "Technical provisions" = "TP calculated as a whole" + "Best Estimate" + "Risk margin" or similar types of assets such as "Property, plant and equipment" that are reported under different portfolios as "investment" or for "own use". Similarly, "Solvency II value" and "Statutory accounts valuation basis" could be treated as a breakdown instead of a flat hierarchy and subsequently applied for other items like "Property, plant and equipment". As a consequence, without modifying the general definitions of terms, the dimension would inform solely on the change of the underlying valuation methodologies. Moreover, such modelling approach shall enable also identification of the exact standards or regulations used for statutory accounts valuation (such as IFRSs or local GAAPs). Although such information is not directly requested by the QRT or supporting guidelines (LOGs), it shall significantly increase usability of data for analysis</p>
---------	--



**Comments Template on EIOPA-CP-11-002  
Technical Consultation on the Solvency II XBRL Taxonomy**

	<p>due to increase in comparability of data.</p> <p>Applying a single hierarchy causes more difficulties to explicitly identify and communicate the information carried by concepts. For example, "Any other assets not elsewhere shown, Solvency II value, Balance sheet" must be interpreted in the context of a twelve other items in the hierarchy, which very often relate to radically different viewpoints or properties. Additionally, it appears to be in contradiction to the rules described in the Solvency II Taxonomy technical description documentation stating that "each data element must stay meaningful outside of its context", which in this case is all other items participating in the particular set of relationships.</p> <p>Organizing this data as a set of consistent breakdowns makes the taxonomy more explicit and self-explanatory, enables reuse of coherent structures across the templates indicating internal relations throughout the framework and allows discovering inconsistencies in the model (QRT and LOGs) itself. The latter advantage have been discovered while analysing templates for the Eurofiling information requirements (FINREP and COREP), where a comprehensive data model supported clarification of a number of issues and potential questions from filers, resulting from implicit information hidden in the templates.</p>
11.1.2.	<p><b>Response:</b></p> <p>Our comments on the basis and consequences of organization of items as a detailed list are similar to our opinions expressed on hierarchical data organizations in section 11.1.1.</p> <p><b>Explanation:</b></p> <p>Similarly to hierarchical arrangement applied for BS_C1, the detail list used for representation of AS_D1 appears to be the result of the attempt for data organization according to the legacy format of QRT rather than analysis of the underlying data for all templates simultaneously.</p> <p>Our suggested approach for modelling of this template shall start with the process of normalization of the AS_D1 template in order to identify functional relationships between the concepts (e.g. "Issuer sector" is a property of the issuer and not an instrument). According to the currently applied modelling, it is possible to report inconsistent data, for example identify the same issuer with different sectors or countries for each reported instrument. Rearrangement of this template into a number of related components (sub-templates) and use of foreign keys for their linking shall minimize the risk of misuse and increase data quality.</p> <p>Additionally, there are a number of cases where the restriction of expected values for concepts (data types of items) is not directly defined in QRT or LOGs (e.g. the limitation of characters for "Issuer name, Investments data" or "Security title, Investments data").</p>
11.1.3.	<p><b>Response:</b></p>

**Comments Template on EIOPA-CP-11-002  
Technical Consultation on the Solvency II XBRL Taxonomy**

Organization of data in TP\_NL\_E3 in form of breakdowns appears to be valid. There are however two breakdowns missing comparing to the content of TP\_NL\_E3.

**Explanation:**

In general, we agree with the arrangement of the TP\_NL\_E3 template data as a number of breakdowns. However, there are other Solvency II templates, much more complex in terms of application of dimension, that could be used as the proof-of-concept representation of dimensional data organization (e.g. TP\_F1).

We have also identified some possible minor inconsistencies between the TP\_NL\_E3 template and its representation in the Sample Taxonomy. Comparing to the QRT, the Sample Taxonomy appears to be missing two characteristics: "Methodologies used for provisions" and "Tail factor used" (indicated in an upper part of the template in QRT).

11.2.

**Response:**

Data classification, naming and arrangement are candidates for improvement if the Solvency II XBRL taxonomy is modelled according to data-centric rather than report-centric approach.

**Explanation:**

As described in our response to question 11 on alignment with common practices, we recommend changing the manner, in which the Sample Taxonomy classifies and arranges the data. Instead of trying to resemble the shape of QRT, we recommend that the taxonomy model is based on a thorough template-independent analysis of information requirements and their division into logical components for further, consistent application. Current classification and arrangements results in a taxonomy that does not explicitly reflect the model and may lead to maintenance issues as described in our responses to the previous questions.

We have also identified potential risks in the applied naming convention on elements which in our opinion is very template-specific. For example, for identification of primary items, the sample taxonomy uses codes as element names, that are the same as the cell identification used in the QRT and LOGs documents. This rule is generally followed in the Sample Taxonomy apart from these situations where the LOGs identify a number of ranges instead of a single cell or a set of cells (e.g. triangle data in TP\_NL\_E3) or no name is given in LOGs (e.g. XX3 for "Inflation rate, Historic, Endogenous inflation, Percentage"). According to the Solvency II Taxonomy description document the "codes associated with primary items are fixed (they will not change across versions of the taxonomy)". This may lead to confusions of taxonomy users when in the future versions of the EIOPA taxonomies the codes from QRTs and LOGs mismatch the names assigned in the taxonomy. Element names of dimensions on the other hand resemble English labels which is somehow inconsistent with the applied naming convention

**Comments Template on EIOPA-CP-11-002  
Technical Consultation on the Solvency II XBRL Taxonomy**

for primary items. Similar risks were identified for element id's which on primary items include identification of the template followed by the camel case concatenated representation of the English label. In terms of element naming convention for primary items, dimensions and domain members we recommend to use codes associated with no or little meaning. Similar approach is currently investigated and tested by the Eurofiling project. In this approach names of primary items consist of two letters and a number: the letters identify element's data and period type and the figure is a differentiating sequential number. Such naming convention facilitates taxonomy maintenance (change of elements' names occurs only when there is a significant modification on IT side required). Similarly, in Eurofiling taxonomies, names of domain members and dimensions have no linkage with any particular language, which is in line with the pan-European application of the EIOPA Solvency II taxonomy.

With regard to the naming convention we also recommend to make definitions of roleTypes used on extended links more user friendly. Currently they use camel case concatenation writing style that hinders readability. It also mixes between English and French words. For allowing multilingual representation of the ELRs we recommend to use generic labels mechanism.

12. **Response:**  
Compliance, implementation and maintenance time and cost (one-off and on-going) can be reduces if taxonomy model reflects the internal design of filers' data storage systems.

**Explanation:**  
In order to comply with Solvency II reporting requirements filers must first prepare their systems for storing (basing on their business operations) and being able to extract required data. Databases or warehouses are usually modelled as a set of dimensional cubes that facilitate storage and querying of data. Results of such queries are static or dynamic views, which may for instance resemble the QRT. Our experience from a number of XBRL implementation projects worldwide leads to the conclusion that is it easier to extract the data to and from XBRL taxonomy if its model resembles the breakdowns defined in filers systems, rather than the views required and imposed by supervisors. The advantage of the data centric based taxonomy is even more evident in case of changes to the taxonomy. Modifications of templates often result in fundamentally different views while the underlying model is relatively stable (the breakdowns remain the same). Compliance, implementation and maintenance costs are lower if taxonomy follows the model, in which filers store their data – that is according to breakdowns that reflect their business operations that are stable in time.

12.1.

**Comments Template on EIOPA-CP-11-002  
Technical Consultation on the Solvency II XBRL Taxonomy**

12.2.	
12.3.	
13.1.	<p><b>Response:</b> Taxonomy stability can be significantly improved through application of data-centric rather than view- or template-centric approach. This shall reduce on-going costs of assuring taxonomy alignment with changing business environment (revisions of the Solvency II and new versions of QRT and LOGs).</p> <p><b>Explanation:</b> Taxonomy stability depends on the changes in the underlying regulations. However, certain taxonomy modelling techniques may increase taxonomy stability perceived as amount of work required to make all necessary adjustments on the filers and receivers side in order to comply with the new versions of taxonomies. An example of such approach is Data Points Modelling where the representation is data not view oriented (views change much more frequently than the underlying consistently modelled meta data).</p>
13.2.	<p><b>Response:</b> Response to question provided in point 13.1.</p> <p><b>Explanation:</b> As already indicated in responses to previous questions we have detected that prevailing part of information in the Sample Taxonomy is template specific rather than applicable to the entire model. This makes the taxonomy less flexible for further amendments of underlying regulations. Especially in case of so called hierarchical organization of data resulting from the templates (for example BS_C1), even insignificant and minor changes to the QRT and LOGs may result in significant workload related to taxonomy update (definition of new items with no correlation to previous versions, rearranging the existing structures, etc) and its implementation (adjustment of systems and remappings to and from the taxonomy)</p>
13.3.	
14.	
15.	
16.	
18.	<b>Response:</b>

**Comments Template on EIOPA-CP-11-002  
Technical Consultation on the Solvency II XBRL Taxonomy**

	<p>We believe that typed dimension is the right solution for the TP_NL_E3 template, especially when there is a clear potential for simultaneous use of explicit dimensions, which eliminates application of tuples that are not efficient in combination of dimensions (XLink versus complex nested structures).</p> <p><b>Explanation:</b></p> <p>As described in our response to 11.1.2 we recommend rearrangement of data modelling for template TP_NL_E3 in order to produce a set of functionally dependent normalized templates. Having just a single artificial identifier of a row may result in filing of inconsistent data. Additionally, in order to improve comparability of data we recommend using explicit dimensions instead of restriction of data types on primary items or typed dimensions. There is also a potential overlap between some information expressed using CIC codes and primary items, dimensions and domain members used across the taxonomy (e.g. type of instruments in BS_C1: like equity or investment funds and CIC codes showing similar information).</p>
19.	<p><b>Response:</b></p> <p>We agree with the proposed URI base for namespaces and roleTypes.</p> <p><b>Explanation:</b></p> <p>According to the Sample Taxonomy and its technical description the base URI is <a href="http://www.europa.eiopa.eu/pr/">http://www.europa.eiopa.eu/pr/</a>, which is different to the one on which opinion is sought in this consultation. Nevertheless, in order to reduce the size of the taxonomy we recommend making the URI base short but meaningful. Therefore we recommend to remove the "/fr" or "/pr" component (representing probably application of the taxonomy for "financial reporting" or "prudential reporting" domain respectively) of the base URI necessary, unless EIOPA aims to expand application of XBRL for exchange of other types of information, in which case it may be needed to distinguish Solvency II from other planned dictionaries.</p> <p>We also support the approach for not including dates as components of the namespaces, which facilitates maintenance and reduces the need of potential remappings resulting from releases of new versions of taxonomies.</p>
20.	<p><b>Response:</b></p> <p>We agree with the approach for assigning different types of labels (standard, verbose, code) for items. We recommend following the IFRS taxonomy labelling style guide.</p> <p><b>Explanation:</b></p> <p>According to the content of the Sample Taxonomy and Solvency II Taxonomy technical description, each primary item definition links to at least three kind of labels:</p>

**Comments Template on EIOPA-CP-11-002  
Technical Consultation on the Solvency II XBRL Taxonomy**

- standard label: template independent, making each data element meaningful outside of its context (e.g. placement in a hierarchy),
- verbose label: template specific (including identification of the template in which it is applied as the last component of the label after coma)
- code label (template identification followed by the pseudo-cell code derived from the QRT and LOGs).

Dimension items and domain members link to standard and code labels.

We agree with the general approach of labelling items (primary items, dimension and domain members) independent of their context. This should not however result in including nesting and hierarchical dependencies in labels. For example, a label: "Assets, Biological assets" includes redundant information. To express its meaning it is sufficient to describe such item as "Biological assets". We recommend following the labelling convention as described in the IFRS taxonomy guide (<http://www.ifrs.org/XBRL/Resources/IFRS+Taxonomy+Guide.htm>).

It is also challenging to deduct from the Sample Taxonomy and the Solvency II taxonomy technical description what is the planned approach for handling labels of items which content is possibly the same but labels vary between templates, e.g. gross claims paid.

We also encourage consistent use of round brackets for communicating the opposite values e.g. "Profit (loss)". Therefore we propose to change the notation of qualifiers for dimensions, first level abstracts in templates or domain to square brackets (e.g. "(...) [Dimension]", "(...) [Template]", "(...) [Domain]").

21.

**Response:**

We agree with application of the processing instruction as a mechanism for identification and differentiation between the taxonomy versions. Such approach is not only more powerful than dates on namespaces (e.g. it allows for classification of changes and assessment of their impact on the implementation matters such as remappings) but also facilitates maintenance (no need for taxonomy URIs mapping).

It is recommended that the Solvency II supporting documentation describes the rules for classification of changes and their impact on changes of the sequential numbers.

**Explanation:**

The three-level sequential version indication is a reasonable approach that has been already applied in COREP and FINREP taxonomies as well as the Danish GAAP taxonomy. However, we recommend that the Solvency II Taxonomy supporting documentation describes the rules of classifying changes into different levels of significance (i.e. what kind of modifications

**Comments Template on EIOPA-CP-11-002  
Technical Consultation on the Solvency II XBRL Taxonomy**

on the taxonomy level impact the version change on first, second and third level). We advise to refer to the above mentioned projects that already apply this approach ([http://www.eurofiling.info/finrepTaxonomy/taxonomy/EFTA\\_20091217.pdf](http://www.eurofiling.info/finrepTaxonomy/taxonomy/EFTA_20091217.pdf) p. 13-14, [http://www.eogs.dk/graphics/ny%20eogs/love%20og%20regler/Regnskaber/%C5rsrapport/Dokumentation%20til%20taxonomi%20\(ENG%20ver\).pdf](http://www.eogs.dk/graphics/ny%20eogs/love%20og%20regler/Regnskaber/%C5rsrapport/Dokumentation%20til%20taxonomi%20(ENG%20ver).pdf) p. 29).