Reference	Comment
General Comment	
10.	PwC is recognised globally as a leader in the XBRL community with a wealth of proven experience. This experience ranges from taxonomy development and project implementation to regulatory filing through XBRL and iXBRL. In particular, we have significant experience in the development of insurance-related XBRL taxonomies. The UK firms' XBRL services team is currently a leading provider of iXBRL managed tagging services as part of the recent HM Revenue & Customs mandate, the largest such mandate in the world.
	PwC are also a significant provider of services to the insurance industry, offering specialty services in Regulatory/Governance, Actuarial, Financial Reporting, Project Management, Risk and Data. We are also a market leader in the provision of Solvency II partnering, with a dedicated global Solvency II network to provide the very latest advice on current issues and debates.
11.	The taxonomy itself can only ever be one element of best practice in XBRL. Viewed in isolation, and based the limited set of template taxonomies provided, we have no particular concerns with the approach being taken.
	We note that in general, conformance to the XBRL specification and technical best practices falls within the remit of the technology provider(s), or supplier(s).
	We also note, however, that in order for a high quality taxonomy implementation to be successful, the following features need to be in place:
	 Experienced project managers; Skilled taxonomy development personnel;
	 An implementation timetable that is achievable, but which also generates a sense of measured urgency; The evaluation and agreement of technical requirements to ensure completeness and technical validity; An overarching communication plan, which includes strong lines of communication with software developers who will make use of the taxonomy within their applications; Continuous liaison with both information preparers and users of the taxonomy; and A robust process for change management.
11.1.	The extent to which the sample taxonomy appropriately maps technology aspects of data to business aspects of data is
11.1.	dependent on the envisaged use of the information collected through the taxonomy. Accordingly, the liaison with the users of the XBRL tagged data will be particularly important here.

11.1.1.	
11.1.2.	
11.1.3.	
11.2.	
12.	We expect that costs will arise at a regulatory level, software development level and at a preparer level. We would expect costs incurred at the software development level to be passed on to preparers along with an element of profit.
	In our experience, the greater the size of the taxonomy, the greater the cost of compliance for reporting entities. As this consultation paper relates to a sample of the Solvency II reporting requirements, it is not clear to us how large the full taxonomy is expected to be.
	It is likely, however, that the data required for Solvency II reporting will not be generated from a single system within the reporting entities, but will be compiled manually, based on the output of a range of systems. In addition to the time and effort taken to compile the data, it is expected that in the initial years this will require a manual tagging approach, either in-house or outsourced. This is likely to be an additional incremental cost on top of current planned costs for insurers. In addition to this, the information required for Solvency II reporting is more expansive and diverse than for current XBRL regulatory requirements, such as the filing of financial statements. Therefore, costs are likely to be higher than the current costs for financial statement tagging. As an indication, we have seen costs vary from $\pounds 2,000$ to $\pounds 200,000$, depending on the size and complexity of the entity.
	Although it still relatively early, experiences in the United Kingdom suggest that the use of iXBRL (as opposed to XBRL) as the format for submissions offers the significant benefit of combining the presentation layer with the reported data in a single file. This may be an effective way to reduce implementation costs, whilst maintaining the information content of a submission.
	Regulators will experience significant costs throughout the development and implementation phases of the taxonomy. During the taxonomy's development, costs associated with the use of subject matter experts in the areas of insurance, XBRL and project management will likely be incurred. There will also be a change management process that regulators will need to undertake in order to properly transition to electronic filing. In addition to this, data processing, and business intelligence costs can be expected for both EIOPA and each of the member state regulators.
12.1.	
12.2.	
12.3.	
13.1.	Regulators will experience additional ongoing maintenance costs post introduction. Ongoing costs will include the

	provision of guidance and support to both software developers and preparers, particularly during year one. Costs will also be incurred through the continuous maintenance of the taxonomy in line with changing standards and user
	feedback. Experience has shown that the cost and effort involved in establishing taxonomies are greater in the first three to five years of implementation than over the subsequent maintenance phase.
	In our view, a successful implementation will involve having a team at the regulatory level which is responsible for the development and ongoing maintenance of the taxonomy, the liaising with software developers and preparers, and the continuous monitoring of the implementation in practice.
	Whilst taxonomy governance may not require a dedicated team, we have observed that successful implementation involves having high quality personnel with clear lines of responsibility.
13.2.	
13.3.	
14.	We would expect that discussions with various software suppliers and preparers would help to illuminate the type and likelihood of additional costs.
15.	Any changes to the Solvency II standard following implementation will also need to be reflected in the taxonomy. This results in a potential time-lag between the change in standard and the update to the taxonomy. This will need to be appropriately managed by the taxonomy owners and software vendors through versioning and other communication methods.
	We are aware of a regulator who embarked on a taxonomy implementation and changed technology vendor midway through their project. This underlines to us the need for particular care in the selection of technology vendors.
	Software support for multiple languages will increase complexity and cost, providing a risk that requires appropriate management.
	It is also likely that preparers of information will find the first year of implementation relatively challenging. Therefore, consideration should be given to the stringency of the electronic validation process. Other regulators, such as the Securities & Exchange Commission in the US and HM Revenue & Customs in the UK, have found that a phased implementation helps both the regulator and preparers. Adequate support and guidance will also be a necessary requirement in assisting users through this period.
16.	

18.	You may wish to consider an approach where each dimension stands alone, but where all are required to uniquely identify the underlying asset. This approach could minimise the additional burden placed on preparers to provide their business data in a format which does not mirror the structure of their existing data sources. Such an approach may also provide flexibility for users of the XBRL tagged data.
19.	
20.	The technical description document refers to labels being "automatically constructed, using the hierarchy of labels, bottom-up, from the label associated with the cell to the label associated with the template". We note that deriving the label of an item directly from the template on which it appears may unnecessarily constrain the item, complicating harmonisation across individual templates. We suggest that EIOPA assess the need to identify primary items by their location, or template. In our experience, if an item can be uniquely and adequately described without referring to the template, there should be no reason to include such information.
21.	