Dimensions 1.0 Specification

Frequently Asked Questions

On 18 September 2006, the International Steering Committee of XBRL International approved the release of the Dimensions 1.0 Specification as a RECOMMENDATION. The purpose of this document[1] is to provide a high level overview regarding the business rationale of the Dimensional Taxonomies Specification.

Q. What is a dimensional taxonomy?

A. Most of the taxonomies that had been seen prior to the creation of this specification were "uni-dimensional" in the sense that they were typically hierarchical lists of financial reporting concepts (technically called "elements"). Dimensional taxonomies have an intrinsically broader scope and are typically used to define, for each business reporting concept, different "dimensions". These dimensions represent hierarchies of a range of information, such as geographic regions, industries, business segments, etc. A "dimension", according to the "Dimensional Taxonomy Requirements" document, represents each of the "*different aspects by which a fact may be characterised. A dimension is a (possibly empty or possibly infinite) set of members. A typical example of a dimension is the "product" dimension that identifies for a concept (e.g., Sales) each one of the possible products about which this fact can be expressed*". A dimensional taxonomy is something that leverages the taxonomy building tools and other XBRL-specific tools in the market, and all of the conventions that have been established for references, multilingual labels, presentation, and so on.

Q. What problems do dimensional taxonomies solve?

A. They (1) make taxonomies more modular, more reusable, easier to maintain, and (2) make XBRL taxonomies more useful for anyone who is an "active consumer", that is, a producer of XBRL instances who has the power to compel instance creators to conform to their taxonomy. As an example of case (1), a well known software firm once reported revenue by region, today by business segment. If that firm had represented revenue in each region in the primary taxonomy, then they would continually add more elements under revenue. Today this issue is addressed by using "tuples" to define terms that are naturally organised as a two-dimensional table. But tuples force the taxonomy builder to make decisions about how things should be nested, that can't possibly be appropriate for all the range of uses that are envisioned for taxonomies to serve. So, that is how they contribute to modularity, reusability, and maintainability. As an example of case (2), there is a defined way in XBRL to organise facts in instances, called "segments" and "scenarios". But there is no way within XBRL for a taxonomy author to say anything at all about what should and could be included in segments and scenarios. Dimensional taxonomies provide such a way as well. They therefore provide a solution to both problems (1) and (2).

---

[1] Many thanks to Walter Hamscher, John Turner and Michael Ohata for their valuable input.

Q. Why has the dimensional taxonomy been created only recently, especially for COREP and not as part of the base specification?

A. The capability has always been latent in XBRL 2.1, and had been shown on a small scale since early 2002, but formalising the ideas into a specification and ensuring interoperability is a significant task. In January 2005, European banking supervisors (CEBS) launched a formal consultation on a common reporting framework (COREP, for COmmon REPorting) that credit institutions and investment firms can use to report their solvency ratios. Common reporting also makes it easier for supervisors to co-operate and exchange information as it helps to reduce differences in implementation and contribute to a more level playing field across Europe.

As groups operating on a cross-border basis within the Single Market are currently required to prepare and submit supervisory reports using different national formats and different technology platforms, the adoption of a common technical protocol (XBRL) recommended by CEBS allows institutions to take full advantage of the common reporting framework.

The COREP framework is characterised by an information data model necessarily based on a dimensional taxonomy structure. No other group of XBRL users had such clearly articulated requirements before and so it was not incorporated into the base specification. In the meantime, many other players have realised that dimensional taxonomies could be of great help for them and have decided to consider using dimensional taxonomies to enhance their XBRL projects.

Q. Is this a change in the XBRL 2.1 Specification?

A. No. The dimensional taxonomy specification is a modular extension to the XBRL 2.1, Specification. Its architecture is such that compliance to its requirements also conforms to the base specification. XBRL documents with dimensional information may be processed without error by any processor that is capable of correctly processing XBRL artefacts, even if those processors are unaware of this modular extension. It is also designed to make maximum use of components of the XBRL 2.1, Specification in its components so as to require a minimum amount of retooling of applications in order to be implemented.

Q. Who should I contact if I want further explanations?

A. Feel free to contact the authors

- Ignacio Hernández-Ros (ihr@xbrl.org)
- Hugh Wallis (hughwallis@xbrl.org)

or the contributors

- David vun Kannon (david.k.vun.kannon@us.pwc.com)
- Walter Hamscher (walter@hamscher.com)
- Charles Hoffman (charleshoffman@olywa.net)