

14 August 2009

J. Louis Matherne, CPA  
Director, XBRL Services  
Clarity Systems

RE: Request for Information - Extending the Use of Dimensions in the IFRS Taxonomy

To the IASC Foundation,

I am pleased to have the opportunity to comment on your "Request for Information" regarding Extending the Use of Dimensions in the IFRS Taxonomy.

*While I serve as Director, XBRL Services for Clarity Systems, the comments herein reflect my personal views.*

I have had the good fortune to be engaged in XBRL from its very inception in 1998 with leadership in the early days through the present – both as part of the Securities and Exchange Commission's XBRL project team that developed the US GAAP taxonomy that is currently in use for SEC filings as well as working closely with Clarity System's software development team, and our SEC filer clients coaching them through their XBRL implementations using Clarity FSR. My experience provides an informed and well rounded view of the issues.

**In response to this request, comments should be submitted as replies to the following question:**

Which of the listed options (L1a, L1b, L2) should be implemented for the architecture of the IFRS Taxonomy architecture concerning dimensions? Please note that more than one option may be selected. Please provide the reason for your decision as well your assessment of the benefits and costs of the selected option(s).

### **Extending the Use of Dimensions in the IFRS Taxonomy**

I support **Option L1b** – Dimensions for intersection tables, which should also encompass Option L1a – Dimensions for lists-oriented disclosures.

Option L2 – Dimensional distinctions for major statements, has theoretical merit but warrants further study and supporting examples/use cases given the dramatic impact it would have on taxonomy modeling and financial statement presentation. There are a multitude of attributes that can be defined dimensionally and I encourage the IASC Foundation to continue collaborating on this idea as a participant in the Interoperable Taxonomy Architecture project.

## Rationale

Financial and business information exists in a multi-dimensional world and is one very large hypercube. Using methods that are not designed to accommodate multi-dimensional information is inefficient and does not maximize results.

Modeling multi-dimensional information in XBRL was introduced with the Dimensions 1.0 specification in 2006 and initial implementation in the COREP project. However, it has taken awhile for its use to expand much beyond this initial use given its perceived complexity. However, today, there are almost 300 hypercubes (tables) in the XBRL US US-GAAP taxonomies and more are likely to be created as we come to recognize that most of the reported information exists in one large hypercube.

## Benefits

Using XBRL Dimensions dramatically simplifies the modeling of multi-dimensional information. Absent this modeling approach, it requires the taxonomy builder and user to fold dimensions into each other. It's much as if you only had a single column to work with using your favorite spreadsheet tool – everything would have to be listed in the single column (a single dimension). Instead of being able to model a simple table that includes the x axis (A, B, C) by y axis (1, 2, 3) as we do today in a spreadsheet, imagine having to put all that information in a single column.

With XBRL Dimensions we define a matrix that includes the potential of the complete range of values (A1:C3) but we only define the x and y axis.

Without XBRL Dimensions the taxonomy modeler must anticipate all data points along this x and y axis and define them as:

A1, A2, A3, B1, B2, B3, C1, C2, C3.

... and if we need to add another axis (z), multiple the above by 3.

With dimensions this can be modeled very efficiently and simply by defining the table axis and its member elements. The user will then populate it with the necessary values.

XBRL tool vendors have responded to this market requirement, largely driven by the SEC filer requirement to support XBRL Dimensions, and I believe it is safe to say that all the major vendors now effectively support XBRL Dimensions.

## Costs

While conceptualizing the XBRL Dimension that goes into a taxonomy is simpler than the alternative, it presents a few unique modeling and use challenges. Specifically:

- There can be overlap of “data points” that exist in the dimension and also exist elsewhere in the taxonomy but there is no agreed upon mechanism to explicitly associate these “data points” or remove the redundancy. The values effectively exist twice in the XBRL instance document.
- Dimensions don’t support calculations across the ‘contexts’ – typically the x axis. It’s natural to expect a calculation across the dimension columns (e.g., product revenues A, B, and C = total product revenues) but it can’t be done with XBRL Dimensions and the current specification. (This is in fact a broader limitation across the XBRL specification and possibly the formula spec will resolve this).
- Upon initial use of an existing dimension, it is not always apparent to a user which line items in a dimension should be used as the data points in the dimension matrix often have labels that are some combination of the x and y axis labels. Just as the RFI suggests by “Loss of cell control” that we lose control over the attributes of a single cell, it becomes important for the user to recognize that a reported value is defined by the combination of at least two elements (a primary and at least a secondary).

Even with these limitations, which I expect will be resolved through use, the XBRL Dimension is a far better mechanism for modeling multi-dimensional information. XBRL presentation and calculation modeling has achieved a remarkable degree of stability but is seriously limited when it comes to modeling multi-dimensional information. It’s like a spreadsheet limited to a single column.

Please contact me at the email address or phone number provided in my signature line if you have any questions.

Best regards,



**J. Louis Matherne, CPA**

Director - XBRL Services, Clarity Systems | [LMatherne@ClaritySystems.com](mailto:LMatherne@ClaritySystems.com) | 203-536-4390 | [www.ClaritySystems.com](http://www.ClaritySystems.com)

## About Clarity Systems

Clarity Systems delivers software solutions to the Office of Finance. Clarity Systems software helps large and mid-market organizations around the world improve their budgeting, planning, consolidations, scorecarding and management reporting processes, and also automates their external reporting processes to support the production of regulatory and statutory reports. Clarity Systems unified applications help CFOs reduce risk while simultaneously improving operational efficiency. For more information, please visit Clarity Systems website at [www.claritysystems.com](http://www.claritysystems.com).

## About Louis Matherne

As Director, XBRL Services, Mr. Matherne is responsible for providing XBRL leadership and subject matter expertise to Clarity Systems' clients as well as sales and product development teams. Prior to joining Clarity Systems, Louis was a member of the Securities and Exchange Commission's XBRL project team that developed the US GAAP taxonomy. Prior to joining the SEC, Louis was a Director with the American Institute of CPAs, most recently as Director XBRL. In that capacity, Louis also served as the Founding President of XBRL International.

Mr. Matherne has been deeply involved with XBRL from its inception in 1999 and has been referred to as one of the Founding Fathers of XBRL.