

Prepared Testimony to the Subcommittee on Human Resources on
The Use of Technology to Better Target Benefits and Eliminate Waste, Fraud, and Abuse

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Executive Summary

Chairman Davis, Ranking Member Doggett, and members of the subcommittee, thank you for inviting me here today to discuss the use of technology to better target benefits and eliminate waste, fraud, and abuse. I am Campbell Pryde, President and CEO of XBRL US, a non-profit organization established to support the implementation of standardized business reporting within the public and private sectors by promoting XBRL adoption through marketplace collaboration.

I am here today to discuss how a standardized data tagging language can be used to create better analyses and increase efficiencies for business and government. My testimony will explain the importance of standards, how data tagging works, and will describe XML and of course, XBRL.

Data standards are critical to improve the efficiency and effectiveness of communicating and analyzing. The primary benefits of standards are comparability and compatibility of information.

Data standards were created for different purposes – some are extremely flexible, some are more restrictive. Many standards were created to solve a very specific need and others are very broad, and designed to handle lots of different situations. XML is one such very broad standard. Its flexibility makes it useful for lots of very different applications and it is widely used in the commercial marketplace. The flexibility of XML makes it ideal as the base for many other standards, including XHTML, RSS feeds, NIEM and XBRL (Extensible Business Reporting Language). That flexibility, however, makes it *less* suitable for the reporting of financial and performance-related data.

When choosing a standard, it is important to select one that best addresses the need at hand. XBRL was developed to specifically handle reporting of financial and performance-related information for business or government. My testimony today will discuss how XBRL is uniquely suited to reporting government financial and performance data and why it is a better option than just XML. It needs no further adaptation or development. Using XBRL to track, report, and evaluate the effectiveness of government

programs will ensure that government agencies, the public and others have access to the most timely, accurate data produced in an efficient and cost-effective manner.

The Importance of Standards

Standards are all around us and have developed as a means to reduce costs, improve communication, and encourage efficiency. Electrical plugs, shipping containers, units of measure, and TCP/IP, the Internet protocol that allows us to communicate over the World Wide Web, are commonly used standards that, whether we know it or not, we rely on every day.

Data standards are agreed upon definitions, formats and features of commonly used information. The key components of a data standard are descriptive names, definitions, and formatting rules. Data standards often include information describing procedures, implementation guidelines, and usage requirements.

Standards are important to the smooth functioning of our everyday lives because they allow for **compatibility** and **comparability**. For example, internet communication protocols or standards like TCP/IP have facilitated a massive increase in data communication because data is conveyed in a compatible way between computer systems. Compact discs and MP3 players are also good examples of the “compatibility” benefit of standards – the standardization of music file readers eliminates the need for multiple media programs and music players, which increases ease of use and portability of purchased music while at the same time reduces cost for consumers.

Standards also enable comparability. Units of measure, such as meters or feet, establish a normalized means of gauging size so that two items can be compared. Data standards are critical to enabling comparability. One such standard, e**X**tensible **B**usiness **R**eporting **L**anguage, or XBRL, is a language format used to report business and financial data electronically. Data formatted in XBRL has computer-readable descriptive information including labels, definitions and other characteristics such as ‘units’ or ‘currency’ embedded in the data. Taken collectively, this descriptive information gives the reader contextual information about each piece of data. With XBRL, data is no longer simply a block of text or a figure; its contents are readable, searchable, moveable, and extractable for easier analysis and reporting of information.

A financial statement formatted in XBRL also enables comparability among different company financials. This is because the terms and definitions used, e.g., Revenue, Earnings per Share, Cash, etc. have been previously agreed-upon so that multi-entity comparisons can be performed with ease, and with confidence in the data.

Data Standards

There are many types of data formats such as comma-separated values (CSV), a simple, plain-text file format widely used in consumer, business and scientific applications to move tabular data between programs. JavaScript Object Notation (JSON) is an open standard for human-readable data exchange which is used for serializing and transmitting data over a network, primarily between a server and a web application.

One of the more widely known data standards is Extensible Markup Language (XML) which is both human- and machine-readable and was created to structure, store and transmit data. XML allows you to define data in a standard format such as in an email:

`<email>`

`<to>joe.smith+xml.com </to>`

`<from>jane.doe@xbrl.us</from>`

`<subject>Reminder</subject>`

`<body>Meeting scheduled for 9am Wednesday.</body>`

`</email>`

XML is information wrapped in tags. The “tags” are the items contained inside angle brackets (<>) which tell the computer what the information means. The data itself sits between a set of angle brackets such as “joe.smith+xml.com”. The <to> tag tells the computer that the email message recipient is Joe Smith. XML’s tagging structure is extremely flexible and can be used for numerous applications that require information to be identified by a computer.

Because of this flexibility, XML can be used to capture information about almost anything and multiple versions of XML can be used to do exactly the same thing. For example, two government agencies, seeking to track and analyze performance measures on funds spent on their individual programs, could develop XML-based applications that rely on completely different software for collection, reporting and analysis. Each of the two agency applications could also use different definitions and labels to explain the same information, e.g., Program Costs. While each XML application technically may perform the required reporting, performance data from the two agencies would not be compatible, making it difficult, costly and time-consuming to compare program performance across agencies. A more standard language, such as XBRL, will facilitate collaboration between agencies to ensure that similar concepts are defined and handled the same way.

Organizations use XML to build proprietary data standards and applications every day. However, unless more than one party agrees to use a specific “version” of XML, it is not a standard and does not provide

the benefits of standards – comparability, consistency and cost reduction through the leveraging of the same software.

A set of agreed upon XML tags becomes incrementally more valuable when more people and organizations agree to use it and build applications around it. Many standards have evolved in this fashion - a group of people and organizations have agreed upon a defined set of XML tags and structure designed for a specific purpose which creates a more specific data standard. Below are a few examples:

- NIEM - National Information Exchange Markup, which offers a common vocabulary so information can be exchanged in a common language between government agencies.
- Extensible HyperText Markup Language (XHTML)– used to define the display of web pages, e.g., font, bolding, underline, etc.
- RSS – Real Simple Syndication – used to transmit a single feed of data, e.g., news, to multiple consumers.
- FIXML - Financial Information eXchange (FIX) Protocol – a messaging standard developed specifically for the real-time electronic exchange of securities transactions.

These standards were created to describe specific types of data because XML, while useful, is too broad and cannot accurately capture the structure and requirements of these particular data needs. For example, XHTML is a standard based on XML that is used to build web pages, defining web page text such as headings, paragraphs, lists and links, and includes design-related information such as font, bolding and underlining. If every user of XML was left on his or her own to define how content should be displayed on a website without the added structure provided by XHTML, the web would have ended up as a collection of incompatible pages requiring a multitude of browsers to navigate.

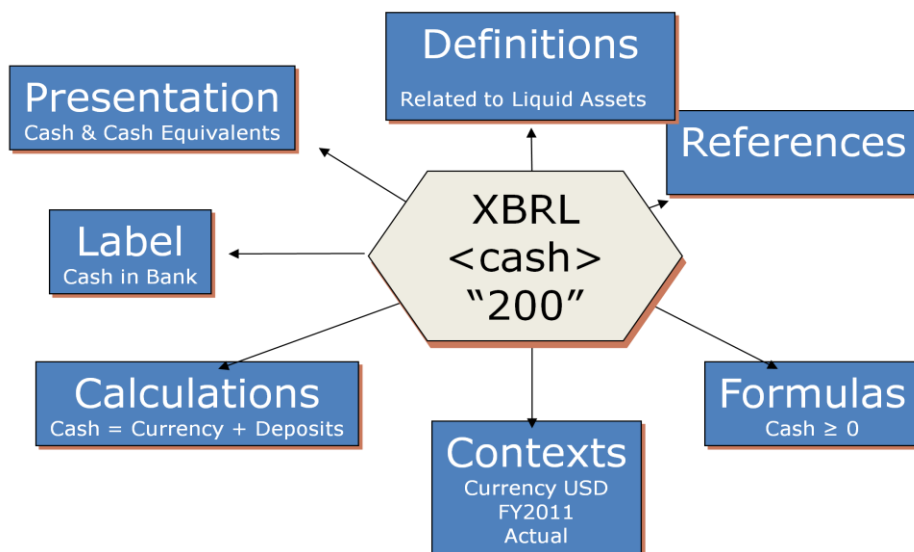
A Data Standard to Report Performance-Related and Financial Data

Reporting financial or performance-related information requires a standard, agreed-upon structure that defines how each element is related, and how the data is labeled and defined.

The XBRL standard was developed to incorporate this needed structure. It is based on XML but it adds further specification relevant to financial, accounting and performance-related data for business and government reporting. XBRL incorporates consistent methods to report durations, reporting entities, reporting balances, aggregation of amounts, disaggregation of amounts and the ability to represent how calculations should be performed.

The diagram below illustrates some of the additional structure defined in XBRL (and not in XML) that makes it uniquely suitable for financial data. Each reported item, such as Cash as described below, has associated context linked to it:

- Presentation – human-readable label
- Label – computer-readable label
- Definition – description
- Calculation – explains how this concept relates to other concepts
- Context – added parameters specific to the type of data reported, e.g., units, currency
- Formulas – used to validate values input and check for outliers
- References – points to other literature that can help define the data



This structure means that every XBRL application reports data the same way – without it, there would be no consistency, comparability or compatibility in the information reported. Relying on XML alone to report financial data would result in data being reported with differing structures, with each set of data requiring proprietary software to extract, report and analyze, and most importantly, would result in incomparable data.

Key Considerations in Government Performance and Financial Data Reporting

Currently there are several pieces of legislation under consideration which recommend the use of data standards for the reporting of performance-related and financial data. We believe that any data standard chosen for these purposes should meet these requirements:

Interoperable. Compatibility with existing standards allows market participants to leverage existing infrastructure and expertise.

Free and freely available. Non-proprietary, open standards will reduce the cost of implementation and ongoing maintenance, and will allow for continuous competition in the market for tools that create and analyze the data.

Broadly used. Use of a global standard with multiple, successful implementations will increase the potential to achieve the goals of any program. A broadly-used standard means that the software market for creation, reporting and analysis is well-developed, and government can leverage existing offerings as well as the technical expertise available.

Specific to the task at hand. Selecting a data standard that best fits the reporting of financial and performance-related data will increase ease of implementation and maintenance and ensure that multiple government reporting applications of financial data are compatible. XBRL was specifically designed to support the reporting of financial and performance-related data through its structure. Using a less specific standard, such as XML, would limit the ability of the final implementation to produce comparable data as too much latitude could be given in the data definition process. Without comparable, consistent data, the performance of government programs simply cannot be evaluated in an efficient, cost-effective manner.

Recommending XBRL for Financial and Performance-Related Data

We believe that XBRL best meets the requirements necessary to report government financial and performance data in an efficient, cost-effective manner. XBRL is a free, open standard, broadly used around the world and specific to the task of reporting financial and performance-related data.

XBRL is currently in use in the U.S. for the reporting of corporate financial statements, bank call reports, mutual funds and credit ratings. Over 8,000 public companies and 8,000 banking institutions use XBRL today to submit their financial statements to the U.S. Securities and Exchange Commission (SEC) and the Federal Financial Institutions Examination Council (FFIEC), respectively. XBRL is used in Australia for government reporting requirements under a framework called Standardized Business Reporting (SBR), an initiative to reduce the business-to-government reporting burden. This major government project

streamlines business-to-government reporting through SBR-enabled accounting/payroll software. An SBR program is also underway in the Netherlands.

Compatibility

XBRL unifies the manner in which information is reported, making it possible for all varieties of software to process the information. Before XBRL, financial reports were communicated in numerous formats such as plain text, CSV, HTML, PDF, Microsoft Word or Excel, and in various XML formats. The use of multiple formats made it difficult for different software tools to process and communicate financial information. A single standardized format resolves the complications for the processing of reported information. Requiring the use of XBRL technical specification means that software used to create, report or analyze information in XBRL format can work with any XBRL other application.

By implementing XBRL, one can expect a competitive market, resulting in better, faster, cheaper tools, driving down costs and increasing the efficiency of government reporting. Legislation that requires only the use of XML would result in government agencies building one-off data collection, reporting and analytical applications that are not compatible – that cannot leverage the same software tools, that use different labels and definitions to report the same concepts. Ultimately these applications will require proprietary software tools that will be unable to create consistent, comparable data to track and evaluate the performance of the agencies and their programs.

Comparability

XBRL provides a framework to define what is reported. This is essential for comparison of information. Consider the public company reporting example. Before XBRL, it was difficult to look at two different companies' financial reports and do a side-by-side comparison. Inconsistent definitions for the same reporting item made it difficult to do an apples-to-apples comparison. For example, one company may report total revenues as "Sales" while another reports revenues as "Revenues". XBRL provides the ability to define precise reporting terms that multiple companies can use while allowing the flexibility to create a human-readable label for these same reporting terms differently for each company, thus making it clear that "Sales" and "Revenues" are different labels for the same reporting term.

An XBRL implementation for government spending would start with the creation of an agreed-upon dictionary of financial or performance-related terms, such as Program Cost, Money Received, and Project Status. Once the terms have been set, with associated definitions, labels, units of measure, and other parameters, all parties creating and consuming the data will use the same underlying definitions to communicate information. The ambiguity of data is eliminated and all members of the supply chain have the confidence that they understand the definitions of the underlying data.

XBRL is an enabling technology, opening the door to better, free flowing financial reporting information. It provides the foundation for complex analytical applications. While XBRL allows for some flexibility, it has sufficient pre-defined structure such that when data is created in XBRL, it is automatically comparable.

What does XBRL Not Do?

XBRL was created specifically to structure, store and transmit financial and performance data; it is not designed to represent non-financial and non-performance related information such as biometric, chemical, genetic, medical, judicial and other information that needs to be structured, stored and transmitted by governments. Each of these data domains need to utilize domain specific standards already developed, or develop new ones where they are unavailable. A large number of these domains are already encompassed in the National Information Exchange Model (NIEM).

XBRL in Practice

Implementing XBRL for the reporting of financial or performance-related information requires the creation of an agreed-upon collection of reporting terms called a taxonomy. Concepts defined in a taxonomy can be seen as the fields in a form that government agencies collect such as Cash, Program Cost, Project Status, Contractor, or Subcontractor. Each item has a specific label, definition, formula, calculation, etc., and may be linked to other items in the taxonomy.

Stakeholders to the reporting process should be involved in taxonomy development and review. During that process, concepts are defined, computer- and human-readable labels are assigned, definitions for text strings, numeric values, units of measure, and other relevant context important to understanding the data are prescribed. XBRL expertise is also required to ensure that the proper technical specification is followed.

A taxonomy developed for one reporting need, e.g., program performance reporting in adoption-related services, could easily “borrow” common concepts used to report performance in programs designed to subsidize nursing homes. Concepts such as Cash, Cost, Status, Contractor, etc. would continue to be defined exactly the same way from program to program. Doing so would thereby reduce the development work needed, eliminate redundancy of common elements, and ultimately making program performance data for nursing home services and adoption services comparable and understandable across government entities and all end users of such information.

XBRL implementations, as with any reporting application, require ongoing support and maintenance which can be accomplished through regular review of the reported elements to ensure that required new elements are added, those no longer needed are removed, and definitions are revised as needed.

Conclusion

Data standards are a critical tool in efforts to cut costs, increase accuracy and timeliness, and improve efficiency in government programs, but it is important to require the use of a data standard that is specific to the needs at hand. Legislation that specifies only the use of a standard as broad and undefined as “XML” would open the door to the use of multiple reporting standards which would not meet the goal of reducing costs, or of enabling the tracking and comparison of government program performance. XML alone is not the answer and if anything, would result in each agency developing its

own costly, proprietary solution creating performance data that could not be compared with data from other agencies.

XBRL is uniquely capable of providing the standardization and structure needed for reporting of government financial and performance data. The XBRL standard needs no further adaptation or development. It was developed specifically for the reporting of financial and performance-related data, regardless of whether it is reported by business or by government. We strongly recommend specifying the use of XBRL to ensure that government programs can be accurately tracked, reported and analyzed in the most efficient and cost-effective manner possible.

About XBRL US

XBRL US, a nonprofit consortium, was established to facilitate the use and adoption of XBRL within the United States so that companies and governments can take advantage of the benefits of standardized business reporting. XBRL US has lent its expertise and vast network of other XBRL experts in work with government agencies and commercial entities to build taxonomies for the reporting of financial statement data, credit ratings, mutual fund information and securities data.

Thank you for the opportunity to provide this testimony today and note that XBRL US stands ready to provide its expertise and experience in XBRL development to any government standards initiative.