

## **XBRL US and XBRL International Response to Treasury RFI**

November 25, 2014

We appreciate the opportunity to reply to the US Treasury's Request for Comment regarding data standards. XBRL US is the not-for-profit standards organization for XBRL reporting in the United States. Our mission is to encourage the use of public business information in a standardized format, and of XBRL as a technology to improve reporting between business, government and the public. XBRL is a technology standard that is used around the world for the reporting of financial and other business data by public companies, government agencies and bank institutions.

XBRL US is the US jurisdiction of a global organization, XBRL International, which is responsible for maintaining the XBRL technical specification, and which has over 600 member organizations located in 36 countries.

XBRL US was awarded the contract to build out the original US GAAP Taxonomy that is currently being used by over 9,000 public companies to report their financial statement information to the Securities and Exchange Commission (SEC) every quarter. A taxonomy is a digital dictionary of concepts that reflect needed reporting terms for a specific situation such as US GAAP, corporate actions messaging or government program reporting. The taxonomy contains the concepts, and their definitions. When the taxonomy is used, the reporting entity uses the concepts within the taxonomy and inputs their own facts with associated time period, units, etc. to define the situation. Examples of reporting situations include an annual financial statement, performance reporting for a specific government program or a new government award.

The SEC also awarded XBRL US contracts to develop XBRL taxonomies for mutual fund and credit rating agency reporting. We have also worked with the financial services industry to develop a taxonomy for corporate actions reporting.

We wholeheartedly support the effort underway within Treasury and the Office of Management and Budget to establish government-wide, nonproprietary data standards for business reporting. Standards for government performance reporting can result in much more reliable, consistent and timely data. As we know from our work, better, more timely data will allow agencies and the Administration to set policy more effectively, direct funds towards the most productive programs, and eliminate waste and fraud. Standards will help the American taxpayer understand how their dollars are spent.

The XBRL standard fits the requirements of the DATA Act as outlined in the final bill:

DATA Act Requirements for the data standard chosen <sup>1</sup>	The XBRL Standard
"(b) REQUIREMENTS - The data standards established under subsection (a) shall, to the extent reasonable and practicable -  (1) incorporate widely accepted common data elements, such as those developed and maintained by  (A) an international voluntary consensus standards body;	XBRL is a technology standard, originally developed in 1999, that is managed by XBRL International, a global, voluntary, member-driven organization. The standard is in use today worldwide for reporting by government, securities, banking and other businesses.
	Standards development is carried out using best practices for consortia, with openness, fairness and consensus the underlying principles that govern this formal process.
"(B) Federal agencies with authority over contracting and financial assistance."	The XBRL standard is used within the US for reporting to the FFIEC by bank institutions and to the SEC for US GAAP financial statements by public companies. Elements created for US GAAP reporting of financial statement data as well as reporting entity identifier data can be leveraged for use in government reporting as well, ensuring interoperability of data sets.
"(C) accounting standards organizations;	The XBRL standard for US GAAP reporting is maintained by the Financial Accounting Standards Board (FASB), the standard setter for US accounting practices. International accounting frameworks are developed by a wide range of authoritative bodies, including the International Accounting Standards Board (IASB) for the IFRS standards.
"(2) incorporate a widely accepted, nonproprietary, searchable, platform- independent computer-readable format;	XBRL is an open, non-proprietary standard which makes data computer-readable. XBRL is platform-independent and because of its widespread use in the US, has spawned a competitive marketplace of software tools for data creation, extraction, distribution and analysis, ensuring the lowest possible costs and easy access to all stakeholders.
"(3) include unique identifiers for Federal awards and entities receiving Federal awards that can be consistently applied Government-wide;	
"(4) be consistent with and implement applicable accounting principles;	XBRL is used in conjunction with other accepted, widely used data standards such as US GAAP, ISO 20022, and other GAAP standards throughout the world. In the US, the XBRL US GAAP

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<sup>&</sup>lt;sup>1</sup> Public Law 113-101, DIGITAL ACCOUNTABILITY AND TRANSPARENCY ACT OF 2014, May 9, 2014, pp. 4-5, <a href="http://www.gpo.gov/fdsys/pkg/PLAW-113publ101/pdf/PLAW-113publ101.pdf">http://www.gpo.gov/fdsys/pkg/PLAW-113publ101/pdf/PLAW-113publ101.pdf</a>,

	Taxonomy is maintained by the Financial Accounting Standards Board (FASB), the standard-setter for US GAAP.
"(5) be capable of being continually upgraded as necessary;	The standard created for government reporting will be developed through the taxonomy (digital dictionary) of terms. Just as the XBRL standard is continuously upgraded and expanded upon to support reporting programs, a government taxonomy can be revised to reflect the latest reporting requirements. Changing requirements will drive changes in a new release of the taxonomy and when published, the taxonomy itself is the most effective means to convey changes in accounting standards.
"(6) produce consistent and comparable data, including across program activities;	XBRL leverages the tagging capabilities of XML and adds structure specific to financial and performance data reporting such as a consistent method to convey financial tables and other structure inherent to this kind of data. This structure ensures that all XBRL-enabled software that is compliant with the XBRL specification will work with any XBRL taxonomy or XBRL instance document <sup>2</sup> , driving a competitive marketplace for tools.
"(7) establish a standard method of conveying the reporting period, reporting entity, unit of measure, and other associated attributes;	To manage financial data, XBRL has established definitive mechanisms to handle time period, reporting entity, units of measure, degrees of accuracy and other critical features of financial and performance data. This structure ensures that data can be consumed consistently and comparably. The XBRL specification enables the definition of additional attributes associated with any fact value.

Should XBRL be chosen as the standard for government reporting through the DATA Act, XBRL US has the experience and expertise to provide assistance to US Treasury and OMB in their development efforts. Such assistance could include:

- acting in an advisory capacity during the development and implementation phase, reviewing taxonomy prototypes, software tool development, sample instance documents, extracted data; providing guidance on development of validation methods and on the XBRL specification
- developing and implementing education/training program to agencies

This paper will address the specific questions asked in Treasury's Request for Comment.

<sup>&</sup>lt;sup>2</sup> XBRL instance refers to a document for a specific reporting situation, such as a quarterly financial statement for a public company or a performance report for a government program, that is formatted in XBRL.

Please describe or provide examples of data standards on data exchange that could ensure the data is "open." Open in this context means anyone can access, use, or re-use posted information, including the public, Federal agencies, local and state governments, academia, media, industry, standard-setting bodies, transparency groups, on a worldwide scale.

Extensible Business Reporting Language (XBRL) is currently used in the U.S. markets for the reporting of bank financials (submitted to the FDIC) and public company financial statement data (reported to the SEC). The XBRL standard is a free and open standard, therefore there are no licensing fees associated with the use of the technology standard. However, the availability of data or taxonomies produced in an XBRL format is dependent on the wishes of the party responsible for collecting the information. XBRL International actively encourages the collectors of data to make the data collected and taxonomies produced freely available but this is not a condition of using the XBRL standard. Around the world there are many implementations of XBRL, some which do not publish the data collected and a number that do. Notable examples where XBRL data is freely and publicly available outside the United States include the UK Customs House, National Bank of Belgium, Danish Business Authority, Chilean Securities Regulator, Spanish Business Register, and the Japan Financial Services Agency.

XBRL taxonomies produced by XBRL US are publicly available, and place no restrictions on incorporation of the taxonomy into other documents, in whole or in part. Taxonomies published by XBRL US can be copied, published and distributed without restriction of any kind, provided that a copyright notice is included. The restrictions placed on a taxonomy are dependent on the creator of the taxonomy. The XBRL International taxonomy recognition process requires that any taxonomies recognized by XBRL International are provided without licence fees or similar restrictions in accordance with the Intellectual Property policy of XBRL International<sup>3</sup>.

As an open standard, the XBRL-formatted data produced and the underlying taxonomy used to create the XBRL data, are widely available to the public, royalty-free and available to any user at the cost of extracting the data. An open standard means that the data can be used in any XBRL-enabled software, which ensures that there is a competitive marketplace for creation, extraction, analysis and reporting tools. This competition encourages lower costs, innovation and improvements without sacrificing the underlying availability of data. As noted by the SEC in their final ruling requiring XBRL by all public companies, "...the availability of interactive data in Commission filings will allow investors to avoid additional costs associated with third party sources."

Financial statement data from the FDIC and SEC implementations is actively used by: journalists performing research; businesses to conduct peer analysis or in research for their own disclosures, and; by analysts and investors comparing companies or performing single company analysis for investment purposes. The data is also used by regulators including the FDIC, the Financial Accounting Standards

<sup>&</sup>lt;sup>3</sup> XBRL International Intellectual Property Policy <a href="http://www.xbrl.org/Legal2/XBRL-IP-Policy-2003-04-25.pdf">http://www.xbrl.org/Legal2/XBRL-IP-Policy-2003-04-25.pdf</a>

<sup>&</sup>lt;sup>4</sup> US Securities and Exchange Commission, *Interactive Data to Improve Financial Reporting*, p. 9, http://www.sec.gov/rules/final/2009/33-9002.pdf

Board (FASB), the Public Company Accounting Oversight Board (PCAOB) and the SEC. All of the data produced under these two programs is freely available and allows redistribution and publication by any user of the data without restriction.

What are examples of data standards on data exchange that could ensure that "availability" goals are met? "Availability" in this context means free access to the data standard, both during development, at final stage, and for translations. Availability is assurance that core technologies can be implemented royalty-free.

The XBRL specification is an open standard that can be prepared, copied, published and distributed without restriction of any kind. XBRL International maintains a clear policy on intellectual property (IP)<sup>5</sup> that must be signed by all members of any working group. The policy states that members may freely submit their ideas to the working group and have the option of removing their own IP prior to final recommendation. However, once the final recommendation is made, any and all IP contributed by the working group becomes the property of XBRL International and is part of the free and open standard. This requirement ensures that any standards developed are free of any intellectual property claims so software developers can use the specification to build tools that are interoperable with no licence fees. This removes barriers to entry and makes it significantly easier to build tools.

The availability of the XBRL specification without restriction makes it particularly appealing to governments and regulators who want to collect and distribute information without incurring licence fees or risking future increases in licence fees. The use of proprietary standards in government reporting has many unforeseen circumstances affecting downstream users of government data as they would also incur licensing fees to use the data.

Having the IP freely available helps to spur growth in applications that create, distribute or consume the data. Good examples of this are the Standard Business Reporting (SBR) programs in the Netherlands <sup>6</sup> and in Australia<sup>7</sup>. These separate programs are designed to reduce red tape and costs in the reporting of data from government to government, government to the public and ultimately from business to government. To reach the goal of reducing costs, employing an open standard such as XBRL was an essential ingredient. XBRL-enabled software tools can be adapted to produce and consume data from any taxonomy built using the XBRL specification.

In Australia, all entities reporting to government agencies must do so in a standardized way. For example, the Australian Prudential Regulation Authority (APRA) requires XBRL for insurance, pension and bank financial data; XBRL is currently voluntary for tax reporting to the Australian Tax Office with an estimated 20-50% of submissions in XBRL today.

<sup>&</sup>lt;sup>5</sup> *Id.* 

<sup>&</sup>lt;sup>6</sup> Standard Business Reporting, the Netherlands, http://www.sbr-nl.nl/english/

<sup>&</sup>lt;sup>7</sup> Standard Business Reporting, Australia, <a href="http://www.sbr.gov.au/">http://www.sbr.gov.au/</a>

The SBR program in the Netherlands is similarly structured. For example, public and private businesses report financial statements in XBRL to the Chamber of Commerce on a voluntary basis; mandatory reporting will begin phasing in next year with a plan for all companies to report in XBRL by January 2017.

Because the IP is free and available to everyone, over 50 products are currently included in the SBR-enabled Products Registry, which was established by the dutch government so that businesses and agencies could select from one of the many offerings available. The growing number of choices ensures that costs are driven down for all stakeholders in the SBR supply chain. In contrast, the use of a proprietary technology or application would likely mean that government agencies are restricted to working with a single or limited number of vendors.

C. What are examples of data standards on data exchange that could ensure the data provides efficient "business reach" to foster private sector innovation? "Business reach" refers to the global reach of the business community with either local or global integration opportunities. The end points of business reach are regional (business integration remains a regional area of opportunity) or international (business integration has the potential for direct links to the international community).

A data standard chosen for government reporting must be able to connect with entities doing business with government both locally and globally. Interoperability is critical to ensure the cost-effective, efficient flow of information. XBRL is a standard widely used around the world by government agencies and by businesses. In the US, because of the SEC and FDIC implementations referenced earlier, thousands of companies already use XBRL for filing purposes. Today over 9,000 public companies in the US submit their financials in XBRL format. Accounting teams within these companies are intimately familiar with XBRL submissions. Should DATA Act requirements eventually include contractor data submissions to government, public companies will already be well up the learning curve with XBRL.

The objective of the DATA Act is to ensure that awards data is easily available to other agencies but also to the constituencies that want to analyze government performance such as corporations, watchdog groups and the American public. As a widely used standard, many XBRL tools are already available for extraction and analysis, ensuring that stakeholders and others interested in government data can easily access the data required without the need for additional software.

Because XBRL is a standard, businesses can then build other products on the data available or improve the efficiency of their existing business processes. A recent example of this is ING bank which will start to offer discounts on loan and credit applications for its Small and Medium sized Enterprise customers in the Netherlands that provide XBRL versions of financial statements through the Dutch SBR platform. Retail banks like ING can make use of these capabilities to become informed about its customer's financial profile in a more streamlined, less costly process.

<sup>&</sup>lt;sup>8</sup> Standard Business Reporting, An Australian Government Initiative, How to Get SBR, http://www.sbr.gov.au/business/how-to-get-sbr

<sup>&</sup>lt;sup>9</sup> ING Loan Applications in XBRL https://www.ing.nl/nieuws/nieuws\_en\_persberichten/2014/10/Digitaal\_aanleveren\_jaarcijfers\_mkb\_ook\_bij\_ing\_de\_norm.aspx?first\_visit=true

Please describe or provide examples of data standards on data exchange that could ensure the implementation of appropriate "validation" processes. "Validation" in this context means an ongoing process for validation and integration. Validation has spectrum end points that are rules-based or document-based. Rules-based refers to business rules of the data standard which are interwoven into the fabric of the standard output and standard governance body. Document-based end points are business rules separately stored and not entirely contained within the standard output or standard governance body.

Standards enable checking and validating of data which is critical to ensuring that requirements are satisfied, data produced is consistent and that the creation process is efficient. Rules can be created to test for syntactical problems that are "Rules based" within the filing or to test the business domain logic of the data that is "Document-based" once it has been reported.

The General Accounting Office (GAO), in their study on Data Transparency<sup>10</sup> published June 2014, found that the most significant issues in government awards data in USASpending.gov were inconsistencies, inaccuracies and time delays. Validation rules can be used to reduce inconsistencies and inaccuracies by giving the reporting entity the tools to catch errors and make corrections before submission to Treasury and the Office of Management and Budget.

For example, if the data is submitted in XBRL format, agencies can check that it is syntactically correct. This means that the file is appropriately formed and complies with the rules of the XBRL standard, e.g., fields used are permitted by the standard, values comply with those defined by the standard (a date reported is an actual date, monetary concepts do not contain text). Any data collection effort must ensure that these basic validation routines are in place and that the data submitted complies with the standard.

The second layer of validation that XBRL supports is validating that the semantics "Document-based" of the data reported are correct. These are synonymous with edit checks in traditional data collection systems but can change based on the data entered and are specific to the information being reported. These rules will usually be included with a specific taxonomy or can be developed independently of the definers of the XBRL Taxonomy. These "semantic checks" ensure that the data makes sense. XBRL provides standardized rule sets such as XBRL formula<sup>11</sup> or proprietary XBRL rules languages can also be developed in programming languages like Java and Python. These languages can define semantic and syntactical rules in such a way that they can be run against an XBRL document to highlight any issues. In addition, syntax validation is included as part of the XBRL standard to ensure that syntax problems in the filing are addressed. <sup>12</sup>

<sup>&</sup>lt;sup>10</sup> http://www.gao.gov/assets/670/664536.pdf

<sup>&</sup>lt;sup>11</sup> Details of the XBRL formula syntax are available at <a href="http://specifications.xbrl.org/spec-group-index-formula.html">http://specifications.xbrl.org/spec-group-index-formula.html</a>

<sup>&</sup>lt;sup>12</sup> Validation is included as a component of the XBRL specification <a href="http://www.xbrl.org/specification/formula/rec-2009-06-22/formula-rec-2009-06-22.html">http://www.xbrl.org/specification/formula/rec-2009-06-22/formula-rec-2009-06-22.html</a>

These rules languages can be used to check for conditions such as:

- values given the wrong sign, positive or negative
- values that are mandatory to reporting requirements but are missing
- values that must be reported if another value is reported
- values that do not maintain a required mathematical relationship with other reported values
- incorrect reporting periods
- mutually exclusive values that are reported together
- use of elements that have been deprecated and are no longer supported
- large variances in values between reporting periods
- use of invalid agency identifiers

Developing these rulesets requires an understanding of the underlying data being reported and the technology standard used to report it. Rules created by the Treasury Office should be shared among individual agencies and other submitters of data so that all reporting entities are working off the same standardized set of rules. Rules specific to an individual agency can be added to reflect unique reporting needs. Once the final agreed-upon ruleset is established, it can be deployed to a rules engine which can take a data submission and identify any problems in the agency submission. The agency submitting the data then has an opportunity to correct errors prior to final submission. The rules can also be used to analyze agency data submitted to determine if inconsistencies are being transmitted. This data can be analyzed and potentially used to make adjustments to the taxonomy and to the guidance and training provided to reporting agencies.

Validation rules are used today for SEC XBRL reporting in US GAAP. Public companies have three different forms of automated validation that they can use. The two most commonly used are called "SEC Validation" and "XBRL Technical Validation". The former checks that the XBRL document for a specific reporting situation, e.g., ABC Company's 10-K report, follows syntactical rules established by the SEC<sup>13</sup> both for the data inside the report and for the document itself. The latter was referenced earlier as the syntax "rules-based" validation that is part of the XBRL technical specification; this checks inside the XBRL document to ensure that it is following the current XBRL technical specification. Both rulesets are typically incorporated into most services and tools for XBRL creation and therefore, are very easy to run to determine if any mistakes have been made. In addition to these validations a number of third parties have developed additional validation rules that identify situations where the XBRL document created does not adhere to the structure, definitions and intent of the US GAAP Taxonomy.

Validations of these forms can be successfully employed for government reporting implementations as well and can be an important tool to help reporting entities submit consistent, comparable data, efficiently and effectively.

<sup>&</sup>lt;sup>13</sup> US Securities and Exchange Commission, EDGAR Filer Manual, Volume II, Section 6 <a href="http://www.sec.gov/info/edgar/edgarfm-vol2-v28.pdf">http://www.sec.gov/info/edgar/edgarfm-vol2-v28.pdf</a>

Please describe or provide examples of data standards on data exchange that could ensure appropriate "extensibility." "Extensibility" in this context is defined as functionality for flexibility (maintenance) of future modification to the data standard. The end points of the spectrum for these criteria are flexible and rigid. Flexible references extensibility and implementation ease whereas rigid relates to the pliability of the construction and rules integration.

The "X" in XBRL stands for extensible. XBRL at its heart is intended to be extensible for both an XBRL taxonomy and data reported using XBRL. This extensibility is intended to serve two requirements: 1) to allow for the continuing growth and change necessitated by changes in reporting requirements, and 2) to allow individual reporting entities to report information that is unique to their organization and that has not been included in the standard set of concepts/terms available to use in the standard.

The former comes into play during the support and maintenance program which occurs when a new release of the taxonomy must be revised to reflect changes in reporting needs. The XBRL standard differs from a traditional XML structure in that all concepts defined in an XBRL taxonomy are not ordered in a tree in the schema. This means XBRL concepts do not derive any meaning from their position in an XML structure. However relationships between concepts are still defined in XBRL. The relationship between these concepts is defined in a graph which in XBRL is called a linkbase. The relationships between each concept can be redefined by adding new relationships or removing outdated relationships. This means the same taxonomy can be used by many different users by changing the relationships between concepts.

For example the presentation of the concepts can be changed by changing the presentation graph or linkbase. This means for a particular user of the taxonomy there may be a presentation graph that is specific to grant recipients. Grants recipients, in the process of creating XBRL-formatted data about their grant, would then only see those concepts in the taxonomy that are specific to them. A contractor may have their own graph which means they only see the concepts in the taxonomy that are specific to them. In this way the different linkbases can be used like a filter to see only the relevant concepts contained in the underlying taxonomy. A taxonomy creator or downstream user of the taxonomy can extend the taxonomy by adding their own graph without changing the meaning of data that has already been submitted or the underlying concepts. In the SEC filing program for example the FASB provides different presentation linkbases for different industries so they only see those concepts that are specific to their industry. In addition, companies filing with the SEC provide their own graphs or linkbases which show only the presentation and calculation relationships between the relevant concepts they are reporting.

In another example of extensibility, the taxonomy created for corporate actions messages includes "sets" of data requirements for over 50 separate actions, e.g., dividend announcement, merger, stock split. When a reporting entity accesses the taxonomy, they select from a list of actions and are presented with only the data items needed for that action. For a dividend announcement, they may be presented with 10 concepts; a merger may require many more. Thus, the taxonomy author can update the taxonomy with revised requirements and is assured that the reporting entity will see the concepts they need to report.

This extensibility means the view of the taxonomy can change without impacting backward compatibility of data and allows users to easily switch from one taxonomy release to another without the need to perform re-mapping exercises every time the taxonomy changes. The US GAAP taxonomy has changed six times since the SEC program began and over 6,000 public companies have switched from one taxonomy to another at least 3 times. All of these companies have been able to switch to new taxonomies with a minimum of effort.

In the SEC filing program each publication release of the taxonomy is a separate taxonomy but the concept names remain constant from version to version. Because the meaning of each concept remains constant over time users can analyze time series data that has been prepared using various taxonomies.

In addition to extending linkbases, reporters of data can be permitted to define new concepts that allows reporting entities to report concepts that are either unique to them or that were not contemplated in the standard taxonomy. This allows this information to be captured and to indicate that the extended concept was not included in the standard. If implemented correctly the ability to create extensions allows the administrator of the data collection program to use extensions as a feedback loop. The FASB for example looks at extensions made by filers to determine if the taxonomy is complete or if defined concepts need clarification so that they are used instead of an extension. Given that these extended concepts can be linked to other concepts through a linkbase a user of the data can at least analyze data that would not have been available otherwise. Without extensions reporters will often put unique data into uncategorized categories like "Other".

The level of XBRL extensibility used depends on the objectives of the data collection administrator. For this reason significant time needs to be spent evaluating the nature of the data reported, the structure of the proposed taxonomy, the frequency of data collection, the frequency of taxonomy change and the sophistication of the reporting community. The adoption of the XBRL standard across the world has various implementations which range from no extensions being permitted to unlimited extensions allowed.

When reporting requirements for a particular government form change, these changes can be easily conveyed to reporting agencies by making adjustments to the taxonomy which then filter down through the software employed to submit information. For example, the US GAAP Taxonomy for public company financial reporting is updated each year with a new release containing the latest elements. The SEC specifies which taxonomy release is allowed and public companies report based on the current approved version.

<u>Please describe or provide examples of data standards on data exchange that could ensure Ease of Implementation.</u> Ease of Implementation refers to integration and interoperability within a given environment. The related end points are <u>simple</u> (easily integrates into environment) or <u>difficult</u> (integration into environment necessitates extra steps).

Selecting the appropriate standard for a given reporting need that will ensure ease of implementation means considering what data must be reported, how that data is structured, how frequently reporting requirements change, and how the data will be consumed.

For example, XML is a widely used standard that allows individual items to be "tagged". XML is very flexible, but by itself lacks the standardized components needed for business reporting and financial data. When XBRL was first conceived, the tagging capabilities of XML were identified as an important feature needed to establish a standard for business reporting. XBRL was developed by taking XML and adding the standardization of financial statement features such as the use of tables, time periods, units and accuracy in thousands, millions etc. Without these features as part of the standard, creators of business and financial statement data would have too much flexibility to indicate time period, currency used, degree of accuracy, etc. The resulting data would have been inconsistent and unusable. XBRL takes XML and adds the kind of structure necessary for financial reporting data. That kind of structure is critical to ease of implementation. The standard chosen must reflect the reporting requirements and most importantly, it must reflect the downstream needs of the data consumers. Obtaining upfront buyin and feedback from the ultimate users of the data is critical to a successful program.

The implementation of any standard into a given environment requires significant upfront work to ensure that down the road, reporting entities can create data easily that is consistent, comparable, timely and functional. To be successful requires that the following implementation steps:

- Establish development plan and governance structure that includes the roles of Taxonomy
  Manager (individual responsible for managing the day-to-day change management process),
  Taxonomy Sponsor (the regulator or recognized standard setter for the program), and
  Taxonomy Working Group (representing all stakeholders to the project, approves day-to-day
  changes).
- 2. Identify stakeholders to the program including creators of information, aggregators and distributors of information, data consumers, and software/tool providers.
- 3. Develop core content with subject matter and technical experts which requires identifying and documenting reporting requirements; determining features of all reporting concepts, e.g., name, definition, defined units, interaction with other concepts; and documenting requirements in taxonomy framework. Creators of data and users of data must be engaged. Further engagement of stakeholder groups to expand the feedback received from all members of the reporting supply chain.
- 4. Test the taxonomy including creating sample documents and engaging software providers to consume them.
- 5. Conduct Public Review of the taxonomy which involves developing communications/outreach program to engage stakeholders at a broader level; publishing draft version of taxonomy; researching, tracking and documenting taxonomy changes through comment tracking system; reviewing and documenting requirements to improve consistency, eliminate redundancy and ambiguities; identifying and documenting requirements for changes in underlying standards and regulation.
- 6. Close public review and incorporate changes.
- 7. Publish taxonomy release along with clear, consistent guidance for reporting entities.

8. Develop and implement support and maintenance plan.

How would the data standards examples or descriptions on data exchange you provided in A-F above, if implemented, benefit or add value to your constituent group or pertinent stakeholders?

Because XBRL is uniquely suited to business and financial information, and can report both numeric and text data, it would also be well suited to reporting government awards information. Data in XBRL format becomes computer-readable and therefore more timely and functional. A proper implementation of XBRL requires all stakeholders to be involved and to reach a consensus on the definitions and attributes of data reported. For government reporting, that includes contractors, agencies, information intermediaries and consumers of the data (agencies, watchdog groups, the American taxpayer, the media, policy makers). Establishing that initial agreed-upon set of terms, following the appropriate implementation as noted in prior question, ensures that all parties to the process are aware of the definitions and literally "speak the same language" in data reported. Providing proper ongoing training, clear and unambiguous guidance and validation for data, further ensures that each stakeholder benefits:

- Reporting entities can streamline their reporting process, reducing workload and costs
- Data intermediaries have a clear roadmap on how to extract and database the content and can work with any one of a number of XBRL-enabled software tools/apps that can be adapted to this taxonomy; ultimate benefit is cost and time savings because data will be computer-readable
- Data consumers (American public, watchdog groups, government agencies, businesses, policy makers) will be able to extract data directly from the government web site using XBRL-enabled applications or can access commercially available government databases; either method will result in data that is significantly more timely and less costly

What use cases would you anticipate or envision for information with data structured in accordance with established data standards on data exchange?

Any reporting needs that are handled today with current systems and processes can be handled on a more timely basis and with greater granularity (detail) in data reported. Virtual "real-time tracking" of programs would be made possible with XBRL because data is extractable by any tool or software within minutes of submission by the reporting entity. Examples of possible use cases include:

- Searching for cost and progress data for specific programs
- Identifying expenditures made by individual agencies
- Tracking awards made to contractors and the performance of those contractors

XBRL is used in numerous reporting domains today around the world – analysts conduct time series analysis and company comparisons using XBRL data; the FDIC extracts banking institution financial data; governments collect tax information and banks review XBRL-formatted credit information.

What impact would established and implemented data standards on data exchange have on you, your business, constituent group or pertinent stakeholders, and investments[?

Implementing the XBRL standard in government reporting will enable the availability of more timely, functional, cheaper and potentially more accurate government data for American taxpayers, government agencies, watchdog groups, Congress and the administration. Many members of XBRL US

are software and tool providers that have XBRL-enabled applications that can be adapted to a government reporting taxonomy to provide agency data. Improved government data will facilitate greater competition for government contracts, reduce costs and streamline processes for government agencies and ultimately for those working with them.

What other criteria should be considered by Treasury and OMB in establishing the data standards on data exchange?

Developing the standard is important but just as critical is the guidance provided to reporting entities and ongoing oversight of the program through active, regular review of data produced and feedback to agencies reporting. Without oversight and monitoring, combined with clear training and guidance, no standards implementation can be successful. This was clearly identified in the GAO study referenced earlier where agencies did not have guidance and no one was actively monitoring the data provided.