

**DATA REFORM FOR PROCUREMENT REPORTING:  
CAN WE STREAMLINE COMPLIANCE WHILE ENHANCING ACCOUNTABILITY?**

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**I. Introduction**

On June 26, 1974, a cashier in a supermarket in Troy, Ohio, scanned the world's first commercial Universal Product Code symbol.<sup>1</sup> The UPC, a standard electronic identifier for consumer products, transformed the retail industry. For the first time, retailers could electronically track every purchase and respond instantly and scientifically to changes in demand.

In March 1989, Timothy Berners-Lee, a British physicist working at the European Organization for Nuclear Research (CERN), wrote a memo proposing that CERN set up hypertext links within its electronically stored research documents.<sup>2</sup> Berners-Lee invented a standardized system of electronic tags to direct the hyperlinks from one research document to another, and eventually to specify the documents' format and structure. Berners-Lee named his system HyperText Markup Language. HTML turned the Internet, which until the 1990s relied on menu-based navigation, into an indispensable mass medium and communication tool.

Through the following decades, the private sector developed and exploited many electronic identification codes and markup languages. The financial and technology industries led the way. For instance, in the 1960s and 1970s banks and brokers adopted identification codes for shares of stock so that trades could be cleared and settled without exchanging millions of paper stock certificates.<sup>3</sup> In the 2000s the Really Simple Syndication/Rich Site Summary (RSS) format, a machine-readable language based on electronic tags, allowed software to automatically read frequently updated Internet content and gave birth to the blogosphere.<sup>4</sup>

Wherever these technologies were adopted, they allowed data to flow from one user to another more easily. They eliminated manual transcription; they enabled big-picture analysis, and they sparked further innovation. Identification codes identify individual pieces of data; markup languages explain how individual pieces are related to one another. Together, standardized identification codes and standardized markup languages

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<sup>1</sup> See, e.g., Mary Belis, *Bar Codes*, <http://inventors.about.com/od/bstartinventions/a/Bar-Codes.htm> (last visited July 4, 2012).

<sup>2</sup> Timothy Berners-Lee, *Information Management: A Proposal*, March 1989, May 1990, available at <http://www.w3.org/History/1989/proposal.html>.

<sup>3</sup> See Matthew Bastian, CUSIP Global Services, *Developing New Standards to Meet Market Needs*, May 2012, available at [https://www.cusip.com/pdf/CGS\\_StandardsWhitepaper\\_FINAL.pdf](https://www.cusip.com/pdf/CGS_StandardsWhitepaper_FINAL.pdf).

<sup>4</sup> See Web Design Library, *A Brief History of RSS*, June 26, 2008, available at <http://www.webdesign.org/site-maintenance/rss/a-brief-history-of-rss.15330.html>.

make data *transparent*. The underlying information becomes immediately accessible and useful to everyone, without any need to translate.

In a TED talk in February 2009, Timothy Berners-Lee described data standardization as the next logical step in the development of the Internet.<sup>5</sup> Berners-Lee explained that standardized means of identifying items of Internet data, and defining their relationships, would be as transformative as his original invention of HTML proved to be.

Governments have lagged behind the private sector in pursuing data transparency, and the U.S. government is no exception. For instance, the many federal agencies that regulate private companies use many different electronic codes to identify them.<sup>6</sup> Meanwhile, studies show that separate agencies often collect overlapping information from contractors, grantees, state governments, and regulated companies. For instance, one study revealed that two-thirds of the information collected by the Bureau of Economic Analysis is also collected by the Securities and Exchange Commission.<sup>7</sup> But because regulatory agencies use incompatible markup languages for the information they collect from regulated entities – or, sometimes, no markup language at all, but just plain text or paper – these wasteful redundancies have never been corrected. The information contained in these overlapping filings must be submitted many times over and cannot easily be searched or analyzed.

In recent years, the U.S. government and other governments have begun to move toward data transparency by pursuing standardized identification codes and markup languages. For governments and the public, these initiatives promise new, more effective ways of managing spending, enforcing laws and regulations, and ensuring accountability to voters and taxpayers. For regulated entities, grantees, and contractors, they promise more efficient compliance and disclosure.

On June 13, 2011, Rep. Darrell Issa (R-CA) introduced the Digital Accountability and Transparency Act, or DATA Act,<sup>8</sup> which is intended to bring data transparency to the manner in which federal spending is reported – including the details of federal grants, loans, and contracts. Sen. Mark Warner (D-VA) introduced companion legislation in the Senate a few days later.<sup>9</sup> The bill was favorably reported by the House Committee on Oversight and Government Reform on October 25, 2011.<sup>10</sup> On April 25, 2012, after

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<sup>5</sup> Timothy Berners-Lee, speech: “Tim Berners-Lee on the Next Web,” TED: IDEAS WORTH SPREADING, February 2009, [http://www.ted.com/talks/tim\\_berniers\\_lee\\_on\\_the\\_next\\_web.html](http://www.ted.com/talks/tim_berniers_lee_on_the_next_web.html).

<sup>6</sup> See, e.g., Sunlight Foundation, *Existing Identifier Systems*, <http://sunlightfoundation.com/sixdegrees/existing-identifiers/> (accessed July 4, 2012) (“Sunlight Identifiers Page”).

<sup>7</sup> See XBRL US, *Better Data for Better Decisions: Standards to Improve Corporate Government Reporting*, Oct. 11, 2011, available at <http://xbrl.us/learn/documents/betterreporting.pdf>.

<sup>8</sup> 112<sup>th</sup> Congress: H.R. 2146, introduced June 13, 2011, available at [http://thomas.loc.gov/home/gpoxmlc112/h2146\\_ih.xml](http://thomas.loc.gov/home/gpoxmlc112/h2146_ih.xml) (“DATA Act House Introduced Version”).

<sup>9</sup> 112<sup>th</sup> Congress: S. 1222, introduced June 16, 2011, available at [http://thomas.loc.gov/home/gpoxmlc112/s1222\\_is.xml](http://thomas.loc.gov/home/gpoxmlc112/s1222_is.xml) (“DATA Act Senate Introduced Version”).

<sup>10</sup> 112<sup>th</sup> Congress, H.R. 2146, reported Oct. 25, 2011, available at [http://thomas.loc.gov/home/gpoxmlc112/h2146\\_rh.xml](http://thomas.loc.gov/home/gpoxmlc112/h2146_rh.xml) (“DATA Act House Reported Version”); House Report 112-260, Oct. 25, 2011, available at <http://www.gpo.gov/fdsys/pkg/CRPT-112hrpt260/pdf/CRPT-112hrpt260.pdf>.

significant amendment on the floor the House passed it unanimously.<sup>11</sup> As of July 3, 2012, the bill awaited further action by the Senate.

Section II of this paper briefly describes the current data landscape of U.S. federal spending, assistance, and procurement, points out the government's failure, thus far, to adopt consistent identification codes and markup languages, and describes the consequences of that failure. Section III describes the DATA Act as passed by the House of Representatives and explains how data transparency in federal spending could simultaneously improve enforcement and streamline compliance. Section IV puts the DATA Act in context by surveying notable data transparency initiatives in the U.S. and elsewhere. Section V concludes.

## **II. Federal Spending: Current Landscape**

The federal government has failed to adopt standardized identification codes and markup languages for reports on its own spending, financial assistance, and procurement. This failure hampers oversight and enforcement efforts because existing data compilations do not provide accurate, complete, searchable data. It also saddles recipients of federal grants and contracts with unnecessary compliance expenses. However, the stimulus recipient reporting requirement and accountability database introduced by the American Recovery and Reinvestment Act provide a model for data transparency by imposing standardized identification codes and a tagging structure on such data for the first time.

### **A. Federal Spending Lacks Data Transparency**

The federal government currently tracks its spending, financial assistance, and procurement using a mishmash of disparate systems. Federal agencies submit financial transaction data to the Department of the Treasury; Treasury also processes disbursements for most federal agencies. Agencies also report budgetary actions to the Office of Management and Budget; grants to the Census Bureau, which maintains the Federal Assistance Awards Data System (FAADS); and contracts to the General Services Administration, which maintains the Federal Procurement Data System (FPDS). The GSA also maintains the USASpending.gov website, which combines grants data from the FAADS and contracts data from the FPDS for publication, and the Catalog of Federal Domestic Assistance (CFDA), which publishes sum totals of each grant program's awards. Meanwhile, recipients of federal grants, loans, and contracts must submit financial and other information to the agency providing funding; subaward data to the GSA's FFATA Subaward Reporting System (FSRS); and reports on stimulus grants, loans, and contracts to the Recovery Accountability and Transparency Board ("Recovery Board").

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<sup>11</sup> 112<sup>th</sup> Congress, H.R. 2146, passed House of Representatives April 25, 2011, *available at* [http://thomas.loc.gov/home/gpoxmlc112/h2146\\_eh.xml](http://thomas.loc.gov/home/gpoxmlc112/h2146_eh.xml) ("DATA Act House Passed Version"); 158 Cong. Rec. H2082 *et seq.* (April 25, 2011), *available at* <http://www.gpo.gov/fdsys/pkg/CREC-2012-04-25/pdf/CREC-2012-04-25-pt1-PgH2082-3.pdf>.

These systems and entities use incompatible identification codes and markup languages. For example, the Department of the Treasury and the Office of Management and Budget use competing, incompatible codes to identify the federal agencies and their subdivisions and bureaus.<sup>12</sup> Similarly, there is no single identifier for federal awards.<sup>13</sup> Meanwhile, some of these systems express their underlying data models using a markup language, but none does so in a manner that is compatible with the others.

The lack of data transparency in federal spending, assistance, and procurement impedes the government's efforts to ensure internal and external accountability. It also imposes overlapping and burdensome reporting requirements on recipients of federal loans, grants, and contracts.

## **B. Lack of Data Transparency Impedes Accountability**

**Inaccurate or Missing Data.** Without common identification codes or markup languages, there is no automatic way to check any federal spending reporting system against others for accuracy. As a result, inaccuracies and omissions go unnoticed and uncorrected. For example, a study by the Sunlight Foundation determined that USASpending.gov's information on federal grant awards was only accurate for one-third of all federal programs.<sup>14</sup> Due to the lack of standardization, the Sunlight Foundation had to perform laborious conversions to compare USASpending.gov's grants data against the CFDA's program-by-program totals.<sup>15</sup> Without automatic verification, USASpending.gov has suffered high-profile failures. For example, the controversial Solyndra loan guarantee was never reported to the FAADS by the Department of Energy, and therefore it does not appear in USASpending.gov.<sup>16</sup> This omission went unnoticed until Solyndra's costly bankruptcy.

**Incomplete Data.** No federal system offers both enterprise-wide view of federal spending and also transaction-level detail. For example, the consolidated federal financial statements published by the Department of the Treasury reflect broad trends but do not permit users to view the individual transactions driving those trends. Moreover, no federal system offers details on both external assistance and procurement spending and also internal expenditures. For instance, USASpending.gov is a source for information on grants and contracts but lacks any data on agencies' spending on salaries, supplies, facilities, materials, and other expenses.

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<sup>12</sup> See Office of Management and Budget, Circular No. A-11 Revised, Aug. 18, 2011, at Appendix C, available at [http://www.whitehouse.gov/omb/circulars\\_a11\\_current\\_year\\_a11\\_toc](http://www.whitehouse.gov/omb/circulars_a11_current_year_a11_toc).

<sup>13</sup> See Recovery Accountability and Transparency Board, *Solutions for Accountability and Transparency: Uniform Governmentwide Award ID Number*, Aug. 17, 2010, available at <http://www.recovery.gov/About/Documents/WhitePaperonStandardizedGovernmentwideAwardID.pdf>.

<sup>14</sup> Sunlight Foundation, <http://ClearSpending.com> (accessed July 4, 2012).

<sup>15</sup> See Sunlight Foundation, *Clearspending Methodology*, <http://sunlightfoundation.com/clearspending/methodology/> (accessed July 4, 2012).

<sup>16</sup> See Kaitlin Lee, Sunlight Foundation blog post, *Solyndra Loan Guarantee Data Not in USASpending.gov*, Sept. 15, 2011. Solyndra reported its loan guarantee to the Recovery Board, as it was required to do under the American Recovery and Reinvestment Act. *See id.* However, since USASpending.gov and Recovery.gov use incompatible identification codes and markup languages, there is no way to check either compilation against the other.

**Lack of Searchability.** Since there are no accepted, consistent identifiers and standards for federal spending information, USASpending.gov and the other existing compilations are not fully searchable. There is no way to view all of the spending associated with a particular program, office, grantee, contractor, or budget function - because all of these concepts are expressed differently from agency to agency (and even within agencies).<sup>17</sup>

Without accurate, complete, searchable spending data, federal efforts to address waste and fraud, manage spending, and report basic facts to citizens and taxpayers fall short.

### **C. Lack of Data Transparency Imposes an Unnecessary Compliance Burden**

Recipients of federal grants and contracts are already reporting to many different databases and portals throughout the federal government. These reporting streams, including agency-specific portals, the Federal Subaward Reporting System, the Recovery Board, and contract-specific data calls, often require recipients to submit the same (or similar) information more than once, to multiple federal entities.

### **D. Recovery Act Demonstrates Advantages of Data Transparency for Federal Spending**

In February 2009, Congress passed the American Recovery and Reinvestment Act (“Recovery Act”),<sup>18</sup> which required 28 federal agencies to spend hundreds of billions of dollars to stabilize the economy. The law includes a new quarterly accountability reporting requirement for recipients of stimulus-funded grants, loans, and contracts.<sup>19</sup> To oversee the program, Congress established the Recovery Accountability and Transparency Board (“Recovery Board”).<sup>20</sup> President Obama appointed Earl Devaney, the inspector general of the Department of the Interior, to lead the Recovery Board.<sup>21</sup>

The Recovery Act required the Recovery Board to set up a website, later named Recovery.gov, to provide designated details about every stimulus grant and contract.<sup>22</sup> Each of the 28 separate agencies that would spend stimulus money was already reporting all of its grants and contracts to the government-wide databases identified *supra*. But the Recovery Board concluded that it could not derive accurate, searchable data from the

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<sup>17</sup> For instance, a search for the top 100 recipients of transportation grants in 2011 displays New Jersey's department of transportation twice - once for \$656 million in grants and once for \$145 million in grants. Even worse, a search for the top 100 recipients of Housing and Urban Development grants in 2010 turns up the New York City housing authority in the top eight - three separate times. Hudson Hollister, Data Transparency Coalition blog post, *OMB should reconsider its opposition to the DATA Act. Here's why.*, June 14, 2012, <http://datacoalition.blogspot.com/2012/06/omb-should-reconsider-its-opposition-to.html>.

<sup>18</sup> American Recovery and Reinvestment Act of 2009, Pub. L. 111-5 (Feb. 17, 2009), available at <http://www.gpo.gov/fdsys/pkg/PLAW-111publ5/pdf/PLAW-111publ5.pdf> (“Recovery Act”).

<sup>19</sup> *Id.* § 1512.

<sup>20</sup> *Id.* §§ 1521-30.

<sup>21</sup> See The White House, press release, *Vice President Biden to Oversee the Implementation of the Recovery Act's Provisions*, Feb. 23, 2009, available at [http://www.whitehouse.gov/the\\_press\\_office/Vice-President-Biden-to-Oversee-the-Administrations-implementation-of-the-Recovery](http://www.whitehouse.gov/the_press_office/Vice-President-Biden-to-Oversee-the-Administrations-implementation-of-the-Recovery).

<sup>22</sup> Recovery Act, *supra* note 18, § 1526.

existing reporting systems. The Board chose instead to use stimulus grantees' and contractors' stimulus reports to create a new accountability database from scratch.

The Recovery Board standardized the electronic structure of the recipient reports so that they contained the same basic categories, regardless of which of the 28 agencies had spent the money. The Board also established stimulus-wide identification codes for grants and contracts.

Thanks to its standardized structure, Recovery.gov's data is accurate. Some recipients' business software can prepare the quarterly reports automatically, minimizing human error.<sup>23</sup> Thanks to its consistent identifiers, the platform easily detects situations where multiple agencies fund one recipient and displays relationships between different recipients. As a result, the Recovery Board's database of stimulus grants and contracts is more useful for oversight than other federal compilations. As of the Recovery Board's March 31, 2012, status report, inspectors general using Recovery.gov's data had opened more than 1,800 investigations of questionable recipients, recovered \$20 million from them, and prevented \$29 million from being paid out at all.<sup>24</sup> Media, watchdog groups, and citizens mined the data to break stories, craft policy arguments for and against the stimulus, and keep tabs on local projects.

### **III. DATA Act Brings Data Transparency to Federal Spending**

In order to bring data transparency to federal spending, assistance, and procurement, DATA Act<sup>25</sup> introduces government-wide recipient reporting; requires federal agencies to report all obligations and disbursements; requires the department of the Treasury to report all expenditures; establishes a single web-based transparency portal to publish all three categories of spending information; and imposes consistent data identification codes and markup languages. Data transparency will enhance accountability through the publication of federal spending data that is accurate, complete, and searchable. Data transparency will streamline compliance by allowing recipients to submit information to a single portal instead of to dozens of separate systems.

#### **A. Essential Provisions**

**Recipient reporting.** The DATA Act requires all recipients of federal grants, loans, payments, and contracts to report at least quarterly on their receipt and use of federal funds.<sup>26</sup> This recipient reporting requirement is modeled closely on the Recovery Act's

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<sup>23</sup> One vendor's software automatically extracts stimulus award data from recipients' and subrecipients' existing financial systems and prepares Recovery Act reports for approval and submission, requiring less than five minutes of reporting time for subrecipients' staff and minimal reporting time for prime recipients'. Level One Technologies, *Parrascope.com: Automating DATA Act Reporting*, June 25, 2012 (on file with author).

<sup>24</sup> Recovery Accountability and Transparency Board, Status Report, March 31, 2012 (Excel file), available at <http://www.recovery.gov/About/board/Pages/Reports.aspx>.

<sup>25</sup> Unless otherwise indicated, all references to the DATA Act in this section are references to the DATA Act House Passed Version, note 11, *supra*.

<sup>26</sup> *Id.* § 101 at new 31 U.S.C. § 3602, as added by the DATA Act.

recipient reporting requirement, with some notable differences: it does not include a requirement to report jobs saved or retained<sup>27</sup>; contemplates that only one federal entity will issue rules and guidance to recipients to direct their compliance,<sup>28</sup> and provides for the possibility of “continuous or automatic” reporting in the future.<sup>29</sup>

**Agency reporting.** The DATA Act requires each executive-branch federal agency to report all of its “obligations and disbursements” to the web-based transparency portal discussed *infra*.<sup>30</sup> The agency reporting requirement provides that agencies, to the extent practicable, should be allowed to comply by submitting the same information that they are already submitting to other government-wide reporting systems.<sup>31</sup>

**Treasury reporting.** The DATA Act requires the Department of the Treasury to report all disbursements to the web-based transparency portal discussed *infra*.<sup>32</sup>

**FAST Commission.** The DATA Act establishes the Federal Accountability and Spending Transparency Commission (“FAST Commission”) to administer the recipient, agency, and Treasury reporting requirements, impose consistent data identification codes and markup languages, and maintain the web-based transparency portal discussed *infra*.<sup>33</sup> The FAST Commission will be a five-member commission, independent and bipartisan; the provisions establishing it are modeled on the law governing the Commodity Futures Trading Commission.<sup>34</sup> Unlike the Recovery Board, the FAST Commission will have no investigative or audit authority; however, it is empowered to assist inspectors general in conducting their own investigations and audits.<sup>35</sup>

**Data identification codes.** The DATA Act requires the FAST Commission to designate consistent data identification codes for such common concepts as agency, department, program, award, and recipient.<sup>36</sup> Once the FAST Commission has designated a particular code, recipients, agencies, and the Department of the Treasury must use it in their reports.<sup>37</sup>

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<sup>27</sup> Compare Data Act House Passed Version, note 11, *supra*, § 101 at new 31 U.S.C. § 3602 (no jobs reporting requirement) with Recovery Act, note 18, *supra*, § 1512 (c)(3)(D) (jobs created/saved reporting requirement).

<sup>28</sup> Compare Data Act House Passed Version, note 11, *supra*, § 101 at new 31 U.S.C. § 3602 (d) (providing for the new Federal Accountability and Spending Transparency Commission – a single entity – to issue guidance on compliance with reporting requirement) with Recovery Act, note 18, *supra*, § 1512 (g) (dividing responsibility for guidance between OMB and funding agencies).

<sup>29</sup> DATA Act House Passed Version, note 11, *supra*, § 101 at new 31 U.S.C. § 3602 (b)(1)(C).

<sup>30</sup> *Id.* at new 31 U.S.C. § 3603.

<sup>31</sup> *Id.* at new 31 U.S.C. § 3603 (b)(2)(D).

<sup>32</sup> *Id.* at new 31 U.S.C. § 3604.

<sup>33</sup> *Id.* Title II.

<sup>34</sup> Commodity Futures Trading Commission Act of 1974, Pub. L. 93-463 (Oct. 24, 1974).

<sup>35</sup> Compare DATA Act House Passed Version, note 11, *supra*, § 201 at new 31 U.S.C. § 3624 (a)-(c) (conferring on FAST Commission the power to conduct analyses and reviews, but not investigations or audits), with Recovery Act, note 18, *supra*, § 1524 (b) (conferring audit power on Recovery Board).

<sup>36</sup> DATA Act House Passed Version, note 11, *supra*, § 101 at new 31 U.S.C. § 3611 (a).

<sup>37</sup> *Id.* § 101 at new 31 U.S.C. §§ 3602 (b)(3), 3603 (b)(3), 3604 (b)(3).

**Data markup languages.** The DATA Act requires the FAST Commission to designate consistent markup languages for the three reporting streams established under the bill (reports by recipients, agencies, and Treasury).<sup>38</sup> The DATA Act requires recipients, agencies, and the Department of the Treasury to use the markup languages designated by the FAST Commission for their reporting.

**Web-based transparency portal.** The DATA Act amends the Federal Funding Accountability and Transparency Act of 2006 (“FFATA”)<sup>39</sup> to convert the existing federal spending transparency website, USASpending.gov, into a comprehensive web-based transparency portal that will contain recipient-reported, agency-reported, and Treasury-reported spending information and cover both external assistance and procurement and also internal expenses.<sup>40</sup> Under FFATA, the Office of Management and Budget is responsible to administer USASpending.gov; the DATA Act’s amendments to FFATA replace OMB with the FAST Commission.<sup>41</sup> The former Catalog of Federal Domestic Assistance and Consolidated Federal Funds Report are eliminated by the DATA Act, which provides that the new web-based transparency portal must provide to the public the same information as those systems.<sup>42</sup>

**Reporting consolidation.** The DATA Act requires all executive agencies to adopt the same identification codes and markup languages as those designated by the FAST Commission for their own agency-specific reporting requirements.<sup>43</sup> The DATA Act also forcibly consolidates assistance and procurement reporting by requiring agencies, within three years, to identify data elements that they are receiving directly from recipients that are also being reported to the FAST Commission, stop requesting those data elements directly from recipients, and rely instead on the FAST Commission’s data.<sup>44</sup>

## **B. DATA Act Enhances Internal and External Accountability**

By improving the accuracy, completeness, and searchability of published federal spending information, the DATA Act will enhance the accountability of agencies and recipients for the spending of taxpayer funds. A wide variety of users will benefit from improved accuracy, completeness, and searchability, including agency managers seeking to husband resources, Congressional committees making oversight and appropriations decisions, inspectors general and law enforcement hunting fraud and waste, watchdog groups focusing on the impacts of federal programs, and citizens seeking to understand how tax money is spent.

**Accuracy.** By combining recipient reports, agency reports, and Treasury reports on the same platform, encoded using the same identification codes and markup languages, the DATA Act allows these three categories of reported data to be checked against one

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<sup>38</sup> *Id.* § 101 at new 31 U.S.C. § 3611 (b).

<sup>39</sup> Pub. L. 109-282 (Sept. 26, 2006).

<sup>40</sup> DATA Act House Passed Version, note 11, *supra*, § 103 (amending FFATA).

<sup>41</sup> *Id.* § 103; *see also id.* § 104(b).

<sup>42</sup> *Id.* §§ 304-05.

<sup>43</sup> *Id.* § 101 at new 31 U.S.C. § 3614(e).

<sup>44</sup> *Id.* § 101 at new 31 U.S.C. § 3615(b).

another automatically. For example, had the DATA Act been in effect when Solyndra's loan guarantee was awarded, and (as actually happened) Solyndra reported correctly on the loan guarantee's existence but the Department of Energy did not, the agency's failure to report would have been automatically detected and flagged.

**Completeness.** The DATA Act establishes, for the first time, a spending transparency platform that will carry both external and internal spending data and cover the entire federal government.<sup>45</sup> For the first time, an inspector general, Congressional appropriator, or concerned citizen will be able to view *all* the spending, for a particular period, associated with a particular program or department. Comprehensive views will put grants, contracts, and internal expenditures into their proper context.

**Searchability.** Consistent data identifiers will permit users to search for a particular grantee or contractor's data, government-wide, without manually combining data from different systems or different DUNS listings. Consistent data identifiers will also permit pattern-recognition software to discern relationships between entities.

### C. DATA Act Allows Agencies and Vendors to Streamline Compliance

Through its reporting consolidation provisions, the DATA Act will alleviate, for grantees and contractors, the burden of reporting similar or identical information to multiple systems. First, as agencies' adoption of the same data identification codes and markup languages as the FAST Commission<sup>46</sup> will facilitate the development of reporting software to automatically import required data from recipients' accounting systems and relay the data, after verification and certification, to the agencies requesting it. Second, the DATA Act's reporting consolidation provision<sup>47</sup> will ensure that no data element requested by the FAST Commission is requested a second time by any agency. These provisions will force agencies, the White House, and the FAST Commission to collaboratively define an agreed data structure for recipient reporting and express it through common data identification codes and markup languages.

The effective implementation of the DATA Act will also require support and engagement from the highest levels of the executive branch. On the same day as the DATA Act was introduced, President Obama established the Government Accountability and Transparency Board (GAT Board), an advisory panel charged with recommending ways to expand the Recovery Board's accountability system to cover all federal awards.<sup>48</sup> The GAT Board produced its first report in December 2011.<sup>49</sup> The report's recommendations

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<sup>45</sup> Although the DATA Act's recipient and agency reporting requirements apply only to the executive branch, its Treasury reporting requirement covers disbursements by all three branches. *Id.* § 101 at new 31 U.S.C. § 3604 (a).

<sup>46</sup> *Id.* § 101 at new 31 U.S.C. § 3614(e).

<sup>47</sup> *Id.* § 101 at new 31 U.S.C. § 3615(b).

<sup>48</sup> Executive Order 13576, *Delivering an Efficient, Effective, and Accountable Government*, June 13, 2011, available at <http://www.whitehouse.gov/the-press-office/2011/06/13/executive-order-delivering-efficient-effective-and-accountable-governmen>.

<sup>49</sup> Government Accountability and Transparency Board, *Report and Recommendations to the President*, Dec. 14, 2011, available at

mirror the provisions of the DATA Act: consolidate the reporting of federal spending and establish common identification codes.<sup>50</sup>

Passed, signed, and effectively implemented, the DATA Act could transform federal spending, assistance, and procurement in ways that benefit all stakeholders.

#### **IV. Current Data Transparency Initiatives Provide Context for DATA Act**

The DATA Act is the first legislative effort to bring data transparency – defined as consistency in identification codes and markup languages – to the information the U.S. government compiles regarding its own spending, assistance, and procurement. The DATA Act builds, however, on current data transparency initiatives in regulatory and other contexts, both in the United States and elsewhere. Each of these current initiatives promises to improve accountability and streamline compliance in ways specific to its application.

##### **A. SEC Adopts XBRL for Public Company Financial Statements**

In 2009, the U.S. Securities and Exchange Commission promulgated new rules that require each public corporation to submit financial statements encoded in the eXtensible Business Reporting Language (XBRL).<sup>51</sup> The SEC developed an XBRL taxonomy that expresses the elements of financial statements in U.S. GAAP and defines the relationships between those elements.<sup>52</sup> For instance, a corporate income statement encoded in XBRL defines each category of revenue as a component of total revenue. The SEC phased in its XBRL reporting requirement, starting with the largest companies in 2009 and extending to all public corporations in 2011.<sup>53</sup> The XBRL reporting requirement promises to allow financial analysts to acquire corporate performance data much more cheaply, facilitating analyst coverage of a wider range of companies, and to improve the efficiency of the U.S. capital markets. Meanwhile, the SEC has invested in electronic analysis software to automatically detect mistakes and fraud in corporate filings.<sup>54</sup>

The XBRL reporting requirement does not extend to all information filed with the SEC. For example, companies' executive compensation disclosures and director listings are not tagged. Moreover, companies still must submit their regular plain-text financial statements along with the XBRL-formatted one. In other words, the SEC has not

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<http://www.federaltransparency.gov/about/Documents/GAT%20Board%20December%202011%20Report%20and%20Recommendations%20-%20FINAL.pdf>.

<sup>50</sup> *Id.*

<sup>51</sup> Securities and Exchange Commission, Release No. 33-9002, *Interactive Data to Improve Financial Reporting*, Jan. 30, 2009, available at <http://sec.gov/rules/final/2009/33-9002.pdf> (“SEC XBRL Release”).

<sup>52</sup> See Securities and Exchange Commission, *Office of Interactive Disclosure: History*, <http://www.sec.gov/spotlight/xbrl/oid-history.shtml> (accessed July 4, 2012).

<sup>53</sup> SEC XBRL Release, *supra* note 14.

<sup>54</sup> See, e.g., Fujitsu, press release, “U.S. Securities and Exchange Commission Chooses Fujitsu to Provide XBRL Processing Software Solution,” Oct. 18, 2010, available at <http://solutions.us.fujitsu.com/www/content/news/newsdetail.php?nf=10674285.nitf>.

converted its whole corporate securities disclosure system to an electronic format, but has instead added an electronic disclosure requirement atop existing plain-text disclosures. Vendors have offered software products that prepare XBRL-formatted financial statements cheaply, but unless the SEC converts its whole corporate securities disclosure system from plain-text to electronic, companies will continue to experience the XBRL reporting requirement as an added burden, rather than an opportunity to make their SEC compliance processes more efficient through automation.<sup>55</sup>

The success of the XBRL reporting requirement is also hampered by the absence of consistent data identification codes. The SEC uses several different numbering systems to identify companies and their securities offerings, and these numbering systems are incompatible with the ones used by other agencies, which means that XBRL data compilations cannot easily be matched with non-SEC data.<sup>56</sup> Nevertheless, the SEC's adoption of XBRL, out of all U.S. data transparency initiatives, has attracted the most interest from private-sector aggregators and analyzers.

## **B. FFIEC Adopts XBRL for Banks' Call Reports**

In 2005, the Federal Financial Institutions Examination Council, the interagency body that coordinates the federal examination of financial institutions,<sup>57</sup> began requiring banks to submit their call reports in XBRL.<sup>58</sup> This switch dramatically reduced error rates and preparation time.<sup>59</sup>

## **C. European Parliament Proposes XBRL-driven Reporting for All Companies**

As of July 2012, the European Parliament is considering significant data transparency proposals for the financial statements of European companies. The Parliament's Committee on Legal Affairs is simultaneously working on a revision of the EU's 2004 transparency directive, which covers disclosure requirements for exchange-listed companies,<sup>60</sup> and on a proposed European Union accounting directive for non-listed

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<sup>55</sup> See, e.g., Financial Executives International, comment letter, Nov. 4, 2011, available at [http://xbrl.org/sites/xbrl.org/files/imce/fei\\_tagging.htm](http://xbrl.org/sites/xbrl.org/files/imce/fei_tagging.htm), at recommendation no. 4 (recommending that the SEC explore ways to allow companies to submit a single filing incorporating XBRL tags, rather than requiring companies to simultaneously submit a plain-text filing and an XBRL file).

<sup>56</sup> See Sunlight Identifiers Page, *supra* note 8.

<sup>57</sup> The FFIEC includes the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the National Credit Union Administrator, the Office of the Comptroller of the Currency, and the Consumer Financial Protection Bureau.

<sup>58</sup> Federal Financial Institutions Examination Council, *Central Data Repository*, <http://www.ffiec.gov/find/callreportdata.htm> (accessed July 4, 2012).

<sup>59</sup> See Federal Financial Institutions Examination Council, *Improved Business Process through XBRL: A Use Case for Business Reporting*, Feb. 2006, available at <http://www.xbrl.org/us/us/FFIEC%20White%20Paper%2002Feb2006.pdf>.

<sup>60</sup> Directive 2004/109/EC of the European Parliament and of the Council, Dec. 15, 2004, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:390:0038:0057:EN:PDF>; Proposal for a Directive of the European Parliament and of the Council amending Directive 2004/109/EC on the harmonization of transparency requirements in relation to information about issuers whose securities are admitted to trading on a regulated market and Commission Directive 2007/14/EC, Oct. 25, 2011, available

companies.<sup>61</sup> MEP Alexandra Thein introduced amendments to both directives that would require all financial statements – for listed and non-listed companies alike – to be encoded in XBRL.<sup>62</sup> A final vote by the European Parliament on both directives is expected in September 2012.

#### **D. G20 Endorses a Global Legal Entity Identifier**

On June 19, 2012, at their Los Cabos summit, the leaders of the G20 endorsed<sup>63</sup> the proposal of the global Financial Stability Board to create the Legal Entity Identifier (LEI), a single, globally recognized electronic code that will identify parties to financial transactions.<sup>64</sup> The G20 called for the LEI system to be launched by March 2013.<sup>65</sup>

Under the Dodd-Frank financial regulatory reform act, the Office of Financial Research (OFR) of the U.S. Department of the Treasury is responsible to standardize data collected by financial agencies.<sup>66</sup> The OFR is also empowered to issue rules requiring U.S. financial regulatory agencies to adopt data standards. The OFR has made clear its intention to embrace the LEI and require other agencies to adopt it for their own systems.<sup>67</sup>

The U.S. government uses a variety of incompatible codes to identify the entities that it regulates and does business with. The SEC uses the Central Index Key (CIK) to identify individuals and companies submitting securities disclosures; federal procurement offices use the DUNS number to keep track of contractors; and the IRS uses the Employer

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at [http://ec.europa.eu/internal\\_market/securities/docs/transparency/modifying-proposal/20111025-provisional-proposal\\_en.pdf](http://ec.europa.eu/internal_market/securities/docs/transparency/modifying-proposal/20111025-provisional-proposal_en.pdf).

<sup>61</sup> Proposal for a Directive of the European Parliament and of the Council on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, Oct. 25, 2011, available at

[http://ec.europa.eu/internal\\_market/accounting/docs/sme\\_accounting/review\\_directives/20111025-legislative-proposal\\_en.pdf](http://ec.europa.eu/internal_market/accounting/docs/sme_accounting/review_directives/20111025-legislative-proposal_en.pdf).

<sup>62</sup> European Parliament Committee on Legal Affairs, Amendments 21-66 on the proposal for a directive of the European Parliament and the Council amending Directive 2004/109/EC, *etc.*, May 9, 2012, available at [http://www.europarl.europa.eu/meetdocs/2009\\_2014/documents/juri/am/901/901355/901355en.pdf](http://www.europarl.europa.eu/meetdocs/2009_2014/documents/juri/am/901/901355/901355en.pdf), at amendments 32, 42 (proposed amendments to transparency directive); European Parliament Committee on Legal Affairs, Amendments 101-267 on the proposal for a directive of the European Parliament and of the Council on the annual financial statements, *etc.*, May 9, 2012, available at [http://www.europarl.europa.eu/meetdocs/2009\\_2014/documents/juri/am/901/901349/901349en.pdf](http://www.europarl.europa.eu/meetdocs/2009_2014/documents/juri/am/901/901349/901349en.pdf), at amendments 102, 125 (proposed amendments to accounting directive).

<sup>63</sup> G20 Leaders Declaration, June 19 2012, available at <http://www.whitehouse.gov/the-press-office/2012/06/19/g20-leaders-declaration>.

<sup>64</sup> Financial Stability Board, *A Global Legal Entity Identifier for Financial Markets*, June 8, 2012, available at [http://www.financialstabilityboard.org/publications/r\\_120608.pdf](http://www.financialstabilityboard.org/publications/r_120608.pdf).

<sup>65</sup> G20 Leaders Declaration, *supra* note 60.

<sup>66</sup> Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, Pub. L. 111-203 (July 21, 2012), § 153(a)(2).

<sup>67</sup> See Dessa Glasser, U.S. Department of the Treasury, blog post, *Milestone Reached for the Global Initiative to Establish a Legal Entity Identifier*, June 1, 2012, <http://www.treasury.gov/connect/blog/Pages/Milestone-Reached-for-the-Global-Initiative-to-Establish-a-Legal-Entity-Identifier-LEI.aspx>.

Identification Number (EIN) for taxpaying businesses.<sup>68</sup> If regulatory agencies require businesses to include their LEIs in regulatory filings, the consequences for government-wide enforcement will be profound. Market analysis tools could instantly ingest all of a company's filings - whether with the SEC, the EPA, the FEC, the Fed, procurement authorities, or state agencies - to evaluate potential investments or suss out competitors' weaknesses.

### **E. National Information Exchange Model Standardizes Government-to-Government Exchanges**

The Departments of Justice, Homeland Security, and Health and Human Services fund a program called the National Information Exchange Model (NIEM).<sup>69</sup> NIEM staff members assist federal, state, local, and tribal entities in developing standardized data identifiers for information that must be exchanged among different government units. "NIEM" refers both to the sets of identifiers that are developed with the program's assistance and to the collaborative development process that the program recommends. NIEM has been used to achieve standardized identifiers for many types of government data, including biometrics, emergency management, law enforcement, welfare, immigration, and intelligence.<sup>70</sup> Outside the government agencies that use NIEM identifiers and the federal IT contractors whose products exchange NIEM-formatted data, the program is little known.<sup>71</sup> However, the program has improved efficiency for many government functions to which its identifiers have been applied.

### **F. Australia, the Netherlands, and the UK Pursue Standard Business Reporting**

Standard Business Reporting (SBR) refers to the idea that regulatory agencies should work together to standardize the data elements that they require companies to report or file, allowing the companies to submit each piece of information just once, rather than several times to multiple agencies. Though unknown in the United States, SBR is being implemented in Australia, the Netherlands, and (more modestly) in the UK.<sup>72</sup> Australia's project, which began in 2008, has cost the government approximately \$170 million but is expected to save the government \$500 million per year – excluding savings to Australian companies.<sup>73</sup>

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<sup>68</sup> See Sunlight Foundation, *Existing Identifier Systems*, *supra* note 6.

<sup>69</sup> See <http://niem.gov> (accessed July 4, 2012).

<sup>70</sup> See <https://www.niem.gov/fordomains/Pages/for-domains.aspx> (accessed July 4, 2012).

<sup>71</sup> NIEM identification codes are mostly used for the exchange of information between government entities, rather than for information submitted by regulated entities, grantees, or contractors.

<sup>72</sup> See An Australian Government Initiative: Standard Business Reporting, <http://www.sbr.gov.au/> (accessed July 4, 2012); Standard Business Reporting Program (Netherlands), <http://www.sbr-nl.nl/english/> (accessed July 4, 2012); HM Revenue and Customs, Company accounts joint filing service, <http://www.hmrc.gov.uk/ct/ct-online/file-return/joint-filing.htm> (accessed July 4, 2012).

<sup>73</sup> Productivity Commission of the Australian Government, *Impacts of COAG Reforms: Business Regulation and VET*, May 15, 2012, ch. 6, available at [http://www.pc.gov.au/data/assets/pdf\\_file/0005/116726/07-coag-reform-regulation-chapter6.pdf](http://www.pc.gov.au/data/assets/pdf_file/0005/116726/07-coag-reform-regulation-chapter6.pdf).

Regulatory reporting redundancy - situations where more than one government agency requires a company (or other regulated entity) to report the same information - imposes enormous compliance costs on the U.S. economy. A study commissioned by XBRL US, a Coalition member, showed that in ten forms being submitted to the Bureau of Economic Analysis, Census Bureau, and Federal Reserve, nearly three-quarters of the data was also being reported, separately, to the Securities and Exchange Commission.<sup>74</sup> Yet preparing and submitting these redundant BEA, Census, and Fed forms cost just one company more than 5,000 worker-hours per year.<sup>75</sup>

## V. Conclusion

For the DATA Act and other data transparency initiatives to be effectively implemented, the federal government, recipients, and the technology industry must collaborate to build new electronic reporting systems and eliminate superfluous ones. The technology industry laid the groundwork for this collaboration in April 2012 with the launch of the Data Transparency Coalition, a trade association calling for the adoption of consistent data identification codes and markup languages for all data the federal government generates and collects.<sup>76</sup> Through lobbying, public advocacy, and demonstration projects, the Coalition will highlight the potential of data transparency for enhanced accountability and compliance efficiency.

Through the collaboration and persistent effort of all stakeholders, the U.S. government can follow the trail blazed by the UPC, HTML, and other private-sector advances to achieve better accountability and streamline compliance through technological innovation.

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<sup>74</sup> XBRL US, *Better Data for Better Decisions: Standards to Improve Corporate Government Reporting*, *supra* note 7, at 10.

<sup>75</sup> *Id.*

<sup>76</sup> Data Transparency Coalition, press release, *Data Transparency Coalition Launches as First Private Sector Group Advocating for Federal Data Transparency – Including the DATA Act and Other Initiatives*, April 16, 2012, available at <http://datacoalition.com/files/DTC-Launch-Release.pdf>.