Report to Congress
on
Uniform Contract Writing System Requirements

Office of the Under Secretary of Defense
for Acquisition, Technology, and Logistics

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Introduction

Section 862 of the National Defense Authorization Act for Fiscal Year 2013 requires development and implementation of uniform standards and controls for contract writing systems, as well as systems that conform to those, as follows:

> (a) UNIFORM STANDARDS AND CONTROLS REQUIRED.—Not later than 180 days after the date of the enactment of this Act, the officials specified in subsection (b) shall—
>
> (1) establish uniform data standards, internal control requirements, independent verification and validation requirements, and business process rules for processing procurement requests, contracts, receipts, and invoices by the Department of Defense or other executive agencies, as applicable;
>
> (2) establish and maintain one or more approved electronic contract writing systems that conform with the standards, requirements, and rules established pursuant to paragraph (1); and
>
> (3) require the use of electronic contract writing systems approved in accordance with paragraph (2) for all contracts entered into by the Department of Defense or other executive agencies, as applicable.

Section 862 further requires that the Secretary of Defense report to Congress on the implementation of the section, specifically:

> (e) REPORTS.—Not later than 180 days after the date of the enactment of this Act, the officials specified in subsection (b) shall each submit to the appropriate committees of Congress a report on the implementation of the requirements of this section. Each report shall, at a minimum—
>
> (1) describe the standards, requirements, and rules established pursuant to subsection (a)(1);
>
> (2) identify the electronic contract writing systems approved pursuant to subsection (a)(2) and, if multiple systems are approved, explain why the use of such multiple systems is the most efficient and effective approach to meet the contract writing needs of the Federal Government; and
>
> (3) provide the schedule for phasing in the use of approved electronic contract writing systems in accordance with subsections (a)(3) and (d).

Background

The Department of Defense has developed its contract writing systems and standards through an evolutionary approach to take advantage of improvements in technology. Beginning in the early 1990s, existing standards were replaced with modern variable length standards. These were developed in concert with commercial industry pursuant to the Office of Management and Budget Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities." The Department partnered with other Federal Agencies and the American National Standards Institute (ANSI) to develop and publish standards for many basic contracting transactions, as well as for logistics

and other business processes. The Department's current systems and standards approach continues to rely on those standards, though additional capabilities have been added since 2007 to fill gaps found in implementation and address emerging needs. This approach enables standards application to both legacy and emerging systems. Use of these standards has enabled over 75 percent of contract data to flow electronically and over 85 percent of contracts to receive invoices and receiving reports electronically.

As the Department has implemented those standards and deployed the corresponding systems, revisions have been made to the Defense Federal Acquisition Regulation Supplement (DFARS) to ensure the business rules and internal control requirements of the business process and the system and data standards are in accord. Each of these has further been documented in the Business Enterprise Architecture, the current version of which is 10.0, delivered February 14, 2013 (http://dcmo.defense.gov/products-and-services/business-enterprise-architecture/10.0/classic/index.htm).

The Department relies on a data driven architecture. Monitoring systems to compliance with the standards in this architecture enables a system agnostic approach to managing procurement requests, contracts, receipts, and invoices. As a general rule, where the business transaction involves sharing data with industry or the public, the Department has followed the intent of the E-Government Act of 2002 (Public Law 107–347) by creating common data exchanges and a single face to industry independent of internal organizational alignment.

Standards

Procurement Requests

The Department of Defense Purchase Request Data Standard (PRDS) extensible markup language (XML) schema is posted at:

http://www.acq.osd.mil/dpap/pdi/eb/prds_data_standard.html.

Contracts

The Department of Defense Procurement Data Standard (PDS) XML schema is posted at:

http://www.acq.osd.mil/dpap/pdi/eb/procurement_data_standard.html.

Receipts

The Department uses the following ANSI data standards through its Wide Area WorkFlow (WAWF) system, which is used to meet the requirements of title 10, U.S.C., section 2227: 856 – Advance Shipment Notice, 857 – Combined Invoice and receiving Report, 527 – Receipt, and 861 – Acceptance. Guidance on the use of these standards is posted at:

https://wawf-gt.nit.disa.mil/xhtml/unauth/web/homepage/EdiGuides.xhtml.

Invoices

The Department uses the following ANSI data standards through WAWF: 810 – Invoice and 857 – Combined Invoice and receiving Report. Guidance on the use of these standards is posted at:

https://wawf-gt.nit.disa.mil/xhtml/unauth/web/homepage/EdiGuides.xhtml.

Requirements and Rules

The Department has instituted a variety of regulatory changes, system data validations, and data monitoring efforts to implement internal control requirements, independent verification and validation requirements, and business process rules. The regulatory changes consist of refinements to rules for document content and added requirements for document distribution. The latter ensures that actions are available for analysis in central repositories, can be distributed across the Department, and can be validated in central locations.

Regulatory Requirements and Rules

The Department has codified many data and process requirements in DFARS and the Department of Defense Federal Acquisition Regulation Supplement Procedures, Guidance, and Information (DFARS PGI). Most data and system requirements are found in Part 204, which addresses administrative issues. These include the requirement for the use of the Procurement Data Standard at DFARS PGI 204.201, line item numbering and content rules at DFARS 204.71, contract action numbering rules at DFARS 204.70, and contract action reporting rules at DFARS 204.6. Additional business rules, such as which contract clauses to use in each circumstance, are found throughout the Federal Acquisition Regulation (FAR) and DFARS.

System Controls and Edits

As part of its systems implementation, the Department is using software to create a common method of validating, implementing, and enforcing the business rules from FAR and DFARS. This consists of two capabilities. The first employs PDS and PRDS to enforce business rules on the data included in a contract and rules on the relationship between data elements. The second is a clause logic service that each contract writing system relies upon to determine which solicitation provisions and contract clauses are appropriate for each contract action.

Electronic Contract Writing Systems Approved

While the Department uses multiple contract writing systems for various business areas, as described below, it provides a single face to industry through the WAWF system, mentioned above, for delivery, acceptance, and invoicing. Likewise, the Electronic Document Access (EDA) system provides copies of contracts, contract data, and related documents to the contractor, government personnel, WAWF, and other systems. All contract writing systems are required to send contracts as both Portable Document Format and PDS XML to EDA.

Why the Use of Such Multiple Systems is the Most Efficient and Effective Approach

From 1995 to 2007, the Department developed and deployed the Standard Procurement System (SPS). Although SPS was widely adopted and achieved successes, there were places in the Department where systems had been developed earlier that offered efficiency advantages for those business subsectors. Two major categories of contracting that retained their earlier systems were major systems acquisition and spares procurement. Use of SPS for major weapon systems contracts has been less than optimal. In addition, SPS proved to be too cumbersome for the high volume contracting performed at inventory control points. At those locations, existing systems were highly integrated with the purchase request systems and enabled the contract specialist to write large numbers of simple contract actions quickly.

Thus, when it became apparent that the technological baseline for SPS, which predated the World Wide Web, would require replacement, the Department decided to move from a system centric approach to a standards centric approach. This approach treats contract writing as less of a stand-alone process than as part of an integrated data environment that encompasses the requirements development, logistics, and accounting processes. Rather than specify a single software solution, the standards based approach recognizes that a contract writing system that has been optimized for high volumes of simple contract actions cannot at the same time be optimal for writing and managing complex weapon systems contracts and that certain specialized business communities, such as telecommunications, may have requirements that are not easily optimized with the more general contracting areas.

In order to minimize variation in contracting and simplify the design and development process for the next generation of systems, the Department is developing common services to enable data and business rule validation, provide clause logic, and distribute data between contract writing systems and the associated accounting and logistics systems. Employing this modular plug and play approach simplifies system development and enables agencies to choose the best technical solution to their individual needs and business environments.

Approved Contract Writing Systems

DoD Components are currently engaged in analyses of alternatives for the next generation of contract writing systems. The result of that analysis will be a set of strategies for migration from the current legacy systems to a newer technical backbone designed to optimize use of the data standards, validation services, and clause logic service.

Conclusion

The Department believes that the standards and controls based approach described above is the best balance of efficiency and effectiveness for meeting its contract writing system requirements.