Procure-to-Pay (P2P)
Standard Operating
Procedures (SOP) for
Purchase Request
Creation and Funds
Certification
(“Handshake 1”)

June 29, 2021
# Table of Contents

**Table of Contents**

1. Purpose ........................................................................................................................................... 3
2. Background .................................................................................................................................... 3
3. Definitions ...................................................................................................................................... 5
4. Business Rules ............................................................................................................................. 6
5. Data ................................................................................................................................................ 6
   1. Purchase Request Data Standard ............................................................................................. 7
   2. Procurement Data Standard .................................................................................................... 7
   3. Uniform Contract Format ......................................................................................................... 8
6. Business Process Scenarios ......................................................................................................... 8
   1. One Organization with an integrated PR System and Accounting System ......................... 9
   2. One Organization with PR System and Accounting System ............................................... 10
   3. PR Initiated by a MIPR or other IGT .................................................................................... 11
4. Roles and Responsibilities ............................................................................................................. 11
5. PRDS Routing and Electronic Transactions ............................................................................... 12
6. Metrics ........................................................................................................................................... 13
Appendix A: References ..................................................................................................................... 14
1 Purpose

This document establishes the enterprise business rules and standard procedures for procurement and accounting activities (and their respective systems) to successfully create and record purchase requests and their associated funds commitments as a foundational step towards contract award. This data exchange, or handshake, is known as Handshake 1, and is an activity performed within the “Create Purchase Request” Procure-to-Pay (P2P) process as defined by the Business Enterprise Architecture (BEA). The BEA defines a variety of End-to-End (E2E) processes that guide and constrain implementation of interoperable defense business system solutions. The BEA also ensures that information technology investments are aligned with strategic business capabilities.

This SOP has been developed in collaboration with Department of Defense (DoD) Components to minimize the impact to current processes, while meeting accountability requirements, achieving efficiencies, reducing costs, improving overall operations, supporting end to end business processes/activities, supporting transparency requirements, and maximizing compliance with established policies for both the procurement and financial management communities.

The rules for data exchanges apply to all systems, both new and vulnerable systems (formerly referred to as legacy systems). The P2P Process Advocates Working Group (P2PPAWG) recognizes that some vulnerable systems do not plan to build to electronic data exchanges prior to the planned sunset of a system. Regardless of sunset date, all systems in this end-to-end process are expected to have the capability to conduct these handshakes, even if the procedures are manual. If a system cannot or does not plan to be capable of processing electronic handshakes by October 2022, a waiver granted by the co-chairs of the P2PPAWG will be required¹.

DoD Components should note that the contents of this document do not replace any guidance contained within the Federal Acquisition Regulations (FAR), or the associated policy contained within the DoD Financial Management Regulation (FMR) and Defense Federal Acquisition Regulation Supplement (DFARS). Should conflicts exist between this document and any formal policy documents, the FAR, DFARS, and FMR are the prevailing government regulations.

2 Background

The DoD must provide visibility and traceability throughout its business processes and spending while conducting that business efficiently and effectively. Those processes that involve multiple functional communities provide the additional challenge of maintaining interoperability between diverse Defense stakeholders and their specific IT environments. In addition, the procurement and financial management communities manage both vulnerable and target systems environments that have varying levels of adaptability.

The overarching objectives of this effort are to:

¹ The waiver request template and instructions can be found at https://www.acq.osd.mil/dpap/pdi/p2p/p2phandshakes.html.
• Reduce or eliminate unmatched financial transactions within the DoD enterprise P2P end-to-end process
• Achieve traceability and therefore efficiencies in the P2P process therefore reducing operating costs;
• Comply with the Federal Funding Accountability and Transparency Act (FFATA) as modified by the Digital Accountability and Transparency Act;\(^2\)
• Support DoD Financial Improvement and Audit Remediation (FIAR) goals in support of compliance with the Chief Financial Officer’s Act;\(^3\)

The focus of this SOP is the business process used in Handshake 1. Handshake 1 is defined as:

The development of and receipt by the Contract Writing System of an appropriately-formatted electronic Purchase Request (PR). This process includes the performance of a commitment and certification of funds against a PR in the accounting system and all data needed for a procurement-ready requirement.

In this process, the purchase request (PR) is created, funds are certified, committed, and added to the PR, and the PR is routed to the Contracting Activity. The objectives cited above will be achieved by instituting a standard set of minimum data elements and business rules, as well as identifying roles and responsibilities of Accounting Activities and Contracting Activities or systems in executing Handshake 1. These data standards and standard processes are intended to ensure the following outcomes:

• Achieve alignment between PRs and funding sources to enable enterprise-level traceability and transparency of both requirements data and accounting data.
• Provide globally-unique identification of requiring, funding, and paying organizations.
• Ensure the certification of funds for appropriate time, purpose, and amount prior to award.
• Provide the ability to consistently trace PR line items through to contract line items.
• Ensure PRs contain the line item and funding data needed to satisfy the Accounting Activities’ and Contracting Activities’ fiduciary and contract responsibilities.
• Ensure that PR data received by contracting will be accurate, timely, and actionable through the use of DoD enterprise standards.
• Enable proper payment and financial accounting of line item deliveries.
• Create efficiencies through the exchange of standard data.
• Provide traceability through to the contracting process to enable the validation of performance back to funded requirement.

The P2PPAWG requires that all organizations institute an automated capability to perform the following:

\(^3\) Specifically, ensuring the proper accounting treatment is applied to contracts with financing, per the DPAP memorandum issued 27 February 2015, “Accounting and Reporting Contract Finance Payments.”
• Generate Request
• Perform Funds Certification
• Record Commitment
• Route to Contracting or Awarding Organization

For greater context of the Procure-to-Pay process, the “Procure-to-Pay Requirements Overview for Data Exchanges (“Handshakes” 1-9)” can be found at the Defense Pricing & Contracting website: https://www.acq.osd.mil/dpap/policy/policyvault/USA000646-20-DPC.pdf.

3 Definitions

For purposes of this document, the following definitions will apply:

• **ACRN** is the Accounting Classification Reference Number. It is any combination of a two-position alpha/numeric code used as a method of relating the single accounting classification citation to detailed line item information.

• **Purchase Request (PR)** is the set of data that indicates the requirement – WHAT is needed, inclusive of the funding information.

• **PR Number** is a globally-unique number that identifies a Purchase Request. This number, created upon initial creation of PR data on a discrete transaction, does not change throughout that PR’s life cycle.

• **Purchase Request Line Items** identify the supplies or services to be acquired as separately identified line items and, as needed, subline items. Line items are established to define deliverables or organize information about deliverables. Each line item describes characteristics for the item purchased, e.g., pricing, delivery, and funding information.

• **Purchase Request Data Standard (PRDS)** is a system-agnostic data standard that provides the structure for the all-inclusive data set for the PR.

• **Commitment** identifies the funds that are being administratively reserved for the requirement. This may be identified by the PR number or by a Commitment Identification Number (CIN), according to the needs of the accounting system.

• **Contract** is the procurement instrument by which the PR is fulfilled; it is a mutually binding legal relationship between the government and a non-government entity to provide supplies or services.

• **Military Interdepartmental Purchase Request (MIPR)** is a method for transferring funds from one military organization to another to procure services, supplies, or equipment for the requiring service. A MIPR is processed on DD Form 448 and may be accepted on a direct citation or reimbursable basis. MIPRs may also be processed on a Federal 7600B form (order), which is linked to a parent 7600A (agreement) form.

---

4 See Volume 3, Chapter 8 of the DoD Financial Management Regulation
5 See Federal Acquisition Regulations (FAR) Part 2
6 See Defense Federal Acquisition Regulation Supplement (DFARS) Section 253.208
4 Business Rules

The following Business Rules must be followed for DoD PRs.

1. Electronic purchase requests must follow the Purchase Request Data Standard (PRDS), as required in DFARS Procedures, Guidance, and Information (PGI) 211.70.

2. PR numbers must be globally unique. Follow the format outlined in DFARS PGI 211.70 as operationalized by the PRDS.

3. Contract writing systems must ingest the full PRDS transaction, including requirement and funding information (to include Standard Line of Accounting).

4. Traceability must be maintained between the contracting action and the Purchase Request. To accomplish this, PR identifier(s) must be carried on the resulting contract action.
   a. All funded and unfunded PRs that result in a contract action shall be recorded on the resulting contract action. If the PR has more than one line item or more than one line of accounting, PR and PR Line Item shall be recorded as reference data on the contract line item. Otherwise, the PR number can be carried at the contract header.
   b. If the contract action was initiated without a formal PR (e.g. via an email or other artifact), information about the initiation event may be captured on the contract in a miscellaneous text field.

5. Traceability to the original PR number shall always be maintained. If multiple systems are used to develop a single PR, traceability to those documents may be accomplished:
   a. Either by carrying the original PR number through all involved systems OR
   b. By maintaining a crosswalk between the multiple PR numbers and ensuring that the final PR document submitted to contracting is uniquely identified by only one PR number.

6. PRs must be created using the PRDS (see the next section for details) no later than October 2022.

5 Data

The Office of the Secretary of Defense, Acquisition and Sustainment (OSD(A&S)) Defense Pricing and Contracting Directorate (DPC), in collaboration with the Office of the Secretary of Defense (Comptroller) Enterprise Data and Business Performance (EDBP) office has developed the Purchase Request Data Standard (PRDS)\(^8\) as a system-agnostic data model using common language and business

rules to support all types of requirements reporting. This establishes accurate and standard structured data in PRs as the source of critical data used in contract solicitation and award.

The PRDS is provided in eXtensible Markup Language (XML) schema format and can be viewed at http://www.acq.osd.mil/dpap/pdi/eb/prds_data_standard.html. It contains fields that cover both the requirement and its funding. Depending on the organization’s system environment, the elements of the PRDS may come from just one system or may come from multiple systems. However, the transaction that goes to the contract writing system must be complete PRDS, with, at minimum, all data elements required by the schema.

1. Purchase Request Data Standard

In the Purchase Request Data Standard, the following fields must be used to provide traceability:

<table>
<thead>
<tr>
<th>Identifier</th>
<th>XML Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Request Number</td>
<td>ProcurementInstrumentHeader/PurchaseRequestIdentifier (select the appropriate format)</td>
</tr>
<tr>
<td>Purchase Request Line Item Number</td>
<td>PurchaseRequestLineItems/LineItems/LineItemIdentifier (select the appropriate format)</td>
</tr>
<tr>
<td>Commitment Number</td>
<td>PurchaseRequestLineItems/LineItems/LineItemAmounts/ItemCommittedAmount/AccountingReferenceNumber/CommitmentIdentificationNumber (optional)</td>
</tr>
<tr>
<td>MIPR Number</td>
<td>Depending on data flow this may be the actual PR number. If the PR was triggered by a MIPR, use PurchaseRequestLineItems/LineItems/ReferenceNumber/ReferenceDescription (select “Military Interdepartmental Purchase Request (MIPR) Number” from the enumerations list) (as applicable)</td>
</tr>
<tr>
<td>Standard Line of Accounting</td>
<td>ProcurementInstrumentHeader/ProcurementInstrumentAmounts/CommittedAmounts/LoaDetails/Blob</td>
</tr>
</tbody>
</table>

2. Procurement Data Standard

In the Procurement Data Standard, the following fields must be captured on the contract to provide traceability back to the PR:

<table>
<thead>
<tr>
<th>Identifier</th>
<th>XML Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Instrument Identifier (aka Contract Number)</td>
<td>ProcurementInstrumentHeader/ProcurementInstrumentIdentifier (select the appropriate format)</td>
</tr>
<tr>
<td>Purchase Request Number</td>
<td>In PDS 2.6 and earlier, use: &lt;ContractLineItems/LineItems/ReferenceNumber/ReferenceDescription&gt; (select “Purchase Requisition Number” from the enumerations list)</td>
</tr>
<tr>
<td></td>
<td>In PDS 2.6.1 and later, use: &lt;ContractLineItems/LineItems/ReferenceNumber/PurchaseRequestDetails/PurchaseRequisitionNumber&gt;</td>
</tr>
</tbody>
</table>

9 As required in DFARS PGI 211.7001 and EDBP Memo “Use of the Purchase Request Data Standard for Spend Traceability” dated March 19, 2021.

10 See CMO/CFO Memo “Department of Defense Standard Line of Accounting/Accounting Classification” dated September 14, 2012, for guidance on how to format SLOA in electronic transactions.
### 3. Uniform Contract Format

In the form SF-33, which uses Uniform Contract Format, the PR Number should be placed in Block 6.

![Figure 13. Uniform Contract Format](image)

### 6 Business Process Scenarios

The following section provides a series of scenarios that each represent a different system/data environment. The following questions may assist you in selecting the scenario relevant to your organization.
1. One Organization with an integrated PR System and Accounting System

Figure 1 provides a basic business process.

The PR is created and identified as “W912KH1912345678.” In this case, the PR system and the accounting system are fully integrated, such that the PR is created with funding on it, and there is only one number identifying the PR and its associated commitment. The PR data is sent to Contracting Activity using the Purchase Request Data Standard. The contract is created, and the PR number is shown as a reference number on the contract.

If the Accounting System uses a CIN to identify the commitment, that element will also be passed in the PRDS and cited on the contract in addition to the PR (as shown in Figure 2). This is true for any scenario.
2. One Organization with PR System and Accounting System

In this case, the organization is creating a PR for their own contracting organization, but it requires the input of both a PR system and an accounting system.

Here, the PR system generates a requirement in the PRDS format, and identifies it with the number “W912KH1912345678.” This PR has all the requirements information it needs except funding information, so the PR system sends a transaction to the accounting system to request funding information (Step 1).

This transaction would be all of the PRDS data that exists at this phase. The accounting system decides what subset of that information is necessary to store when making the commitment.

The accounting system in this case uses a distinct number (“APR678910”) to identify the commitment. It records the PR number, creates its own identifier, performs funds certification, and sends funding document (including accounting classification citation data and its own ID number) to PR system (Step 2).

Now the PR system has everything it needs for a complete PRDS transaction. The PR system records funding document number and adds the single accounting classification citation to the PR package (Step 3). The PR system then sends the complete (i.e. funds committed) PR to the contract writing system (Step 4).

The contract writing system (Step 5) receives the PR data and uses it to pre-populate the contract as appropriate. It records the PR number in the PR field on the contract and the accounting system number in the CIN field as the keys to link the PR System data and accounting system data to the contract.

In this scenario it has been assumed that the PR system would be the one to forward the entire PRDS transaction to the CWS. However, if the accounting system is capable of transmitting full PRDS, the transaction can come from there. This requires that the accounting system can ingest and transmit the PRDS data it received from the PR system in Step 1.
3. PR Initiated by a MIPR or other IGT

In this scenario, the requiring organization is creating a MIPR\(^\text{11}\) or other intragovernmental order (e.g. 7600B or G-Invoicing order) to a servicing/performing agency that will put it on contract. Figure 4 shows the most basic scenario, that is, one contract fulfilling one MIPR/requirements package.

First, the requiring organization’s PR System generates a funded MIPR and sends the package to the servicing organization (Step 1). Either the PRDS or the Federal Intragovernmental Data Standard\(^\text{12}\) data formats are acceptable at this step. The servicing organization then creates its own PR to trigger the contract writing process (Step 2). This could be done out of a separate PR system or as part of a process internal to the CWS. The CWS records both the PR number and the requiring organization’s MIPR number as a key to link the forthcoming contract to both the PR and the original MIPR (Step 3).

This scenario would work similarly when an internal government requisition triggers the contract action. In that case, PDS also has a space to capture Requisition Document Number on the contract.

4 Roles and Responsibilities

Requiring/Funding Activity:

- Generate PRs that structure requirements and funding sources using line items, and contain sufficient detail to ensure that a contracting officer can accurately generate a contract award to ensure funds support deliverables.
- Utilize the DFARS-required PR number format\(^\text{13}\) such that the PR number is recognizable, unique, and traceable through contract execution. System-specific identifiers may be used, but must be mapped to the enterprise-unique format.
- Document the business need in PRDS format as per DFARS PGI 211.7001.

\(^{11}\) While the original purpose of a MIPR was to support coordinated acquisitions between Department of Defense Components (see DFARS 208.70), its usage has become common between DoD entities and non-DoD federal agencies.

\(^{12}\) See https://fiscal.treasury.gov/g-invoice/resources.html#standards.

\(^{13}\) See PGI 211.70 and 253.208-1.
• Work with the Accounting Activity to identify and commit funds for the PR as needed, and include funding information in the PRDS.
• Coordinate with the Contracting Activity prior to submission of the PR.
• Coordinate with the Accounting Activity and Contracting Activity regarding changes to PR structure and funding prior to award.

Accounting Activity:
• Review and approve PRs that structure requirements and funding sources using line items.
  o Line items must contain sufficient detail to ensure that the accounting classification citations are appropriately associated with the discrete goods or services in the proposed contract.
  o Ensure that items with separate funding are identified on separate line items as required by federal acquisition and financial management policy. (reference FAR 4.1003 and FAR 4.1005-1)
• At time of funding commitment, verify funds availability and suitability for intended purpose (i.e. time, purpose, and amount).\(^{14}\)
• Upon certification of funds for a PR, record required commitment data elements in the relevant accounting system. Capture PR number, PRLIN, and ACRN, and associate those identifiers to the commitment of funds in the accounting system.

Contracting Activity:
• Receive PRDS transactions and create relevant contract actions as required.
• Capture the PR number and PRLIN and document them on the contract in the PDS format.
• Ensure traceability from PR to contract line items by recording appropriate PR, PR line item, and accounting classification citation (FAR 4.1003(c)) in the procurement systems and PDS in accordance with DFARS 204.71.

5 PRDS Routing and Electronic Transactions

The PRDS is used to meet the requirements of DFARS PGI 211.7001 for PR distribution. PRDS schema and business rules define the minimum required data for a PRDS transaction.

PR-generating systems must have the capability to translate native formats both to and from the PRDS XML structured data. All PRDS transactions must be routed through the DoD GEX; PR-generating systems must be able to route PRDS transactions to any financial accounting and contract writing systems used by Accounting Activities and Contracting Activities internal or external to DoD. All financial accounting and contract writing systems must be able to accept PRDS XML structured data transmitted by the GEX.

In situations where Handshake 2 can be performed internally in a single system environment, the GEX need not be used. However, such systems must still demonstrate traceability of PRs through to contracts and report metrics. Note that single system environments must still be able to interface with external systems via the GEX to accomplish Handshake 1 with external organizations. The P2PPAWG also\(^{14}\)

---

\(^{14}\) See FMR Volume 5, Chapter 5, 050303 and FMR Volume 14, Chapter 2, 020401.B.3 and 020401.B.4
recognizes that some Services or Components have, or will have, alternative enterprise service buses to accomplish Handshake 1. These alternatives to the GEX may be approved if they can 1) demonstrate traceability of PRs to contracts, 2) report metrics, and 3) interface with the GEX to electronically accommodate external transactions.

If the PR and the contract are both being created by the same system, the GEX may be used for validation and reporting of PRDS transactions, but is not required for routing.

6 Metrics

Metrics to measure an organization’s compliance with the standard operating procedures described in this document must by necessity measure each side of each electronic transaction, or handshake. The metrics detailed below are designed to recognize that progress to achieve the objectives in this SOP will be incremental and that in a mixed vulnerablelegacy/new environment not all success will be synchronous.

Handshake 1 Metrics:

a) Percent of PR-writing systems sending PRDS-formatted PRs.
b) Percent of accounting systems capturing PR number and PRLIN in the standard DoD format and are associating it with their commitments.
c) Percent of contract writing systems capable of ingesting PRDS transactions.
d) Percent of contract writing systems adding PRDS PR number and PRLIN on their PDS transactions.
e) Percent of PRDS transactions that pass PRDS validations at GEX.
f) Percent of Handshake 2 PDS transactions routed through GEX that correctly include PR number and PRLIN.
Appendix A: References

The following Federal and Defense policies are relevant to the traceability of PRs.

- DFARS PGI 211.70 – Purchase Requests
- DoD FMR Volume 3 Chapter 8 0802 – Commitments
- DPAP/DCFO Joint Memo: P2P Requirements Overview for Data Exchanges (“Handshakes 1, 2, 3, & 4) – February 5, 2016 (see https://www.acq.osd.mil/dpap/pdi/docs/P2P_handshake_requirements_overview.pdf)
- “Business Rules for Department of Defense Purchase Requests” (December 20, 2018) and the associated memo. (see https://www.acq.osd.mil/dpap/pdi/eb/docs/PRDS_Implementation_and_Business_Rules_20181220.pdf)
- Revised DFARS PGI 204.7103(d) – Line Item Elements
- CMO/CFO Memo “Department of Defense Standard Line of Accounting/Accounting Classification” dated September 14, 2012
- EDBP Memo “Use of the Purchase Request Data Standard for Spend Traceability” dated March 19, 2021
- Federal Funding Accountability and Transparency Act (FFATA) as modified by the Digital Accountability and Transparency Act (DATA Act)
- Standards for Internal Control in the Federal Government issued by the U.S. Government Accountability Office (GAO) on September 2014, GAO-14-704G
- OMB Circular No. A-123
- Federal Financial Management Improvement Act (FFMIA) of 1996
- Volume 3, Chapter 8 of the DoD Financial Management Regulation
- Federal Acquisition Regulations (FAR) Part 2 - Definitions
- DFARS Section 253.208 – MIPR Usage
- Treasury Financial Manual (TFM) Volume 1, Part 2, Chapter 4700, Appendix 8
- Defense Procurement Memo “Publication of a Purchase Request Data Standard” May 18, 2010
- DFARS PGI 211.7001 – Use of PRDS
- CMO/CFO Memo “Department of Defense Standard Line of Accounting/Accounting Classification” September 14, 2012
- DFARS 208.70 – MIPR Usage
- FMR Volume 5, Chapter 5, 050303 and FMR Volume 14, Chapter 2, 020401.B.3 and 020401.B.4
- FAR 4.1003 and FAR 4.1005 – Line Item Structure