



PROCURE-TO-PAY

TRAINING SYMPOSIUM 2019

Orlando

Navigating PRDS and PDS

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What are the Procurement Data Standards?

- Defense Pricing and Contracting has established Procurement Data Standards
- These standards are system-agnostic data models using a common language (XML) and business rules to support all types of requirements reporting.
- They establish a standard business process and data set for transmission of data between systems.
- These standards support the traceability and transparency of contract expenditures by allowing the Department of Defense to properly link requirements to commitments and through to contracts and their obligations, and any subsequent procurement actions and payments.
- This enables more accurate order fulfillment and promotes greater auditability in the Department.

What are the Procurement Data Standards (cont'd)?

- The Purchase Request Data Standard establishes a standard business process and data set for exchanging PRs.
 - It was first published in 2010, and is now on Version 3.0.
 - PRDS supports the traceability and transparency of contract expenditures by allowing the Department of Defense to properly link requirements, as documented in purchase requests (PRs), to their commitments and through to any subsequent procurement actions and payments.
- Procurement Data Standard establishes a standard business process and data set for contracts.
 - It was first published in 2010, and is now on Version 2.6. All versions are retired except for 2.5.1 and 2.6.
 - PDS establishes an enforceable standard for contracts that has reduced contract deficiencies and provided greater visibility of contract data in the Department.

What are the Procurement Data Standards (cont'd)?

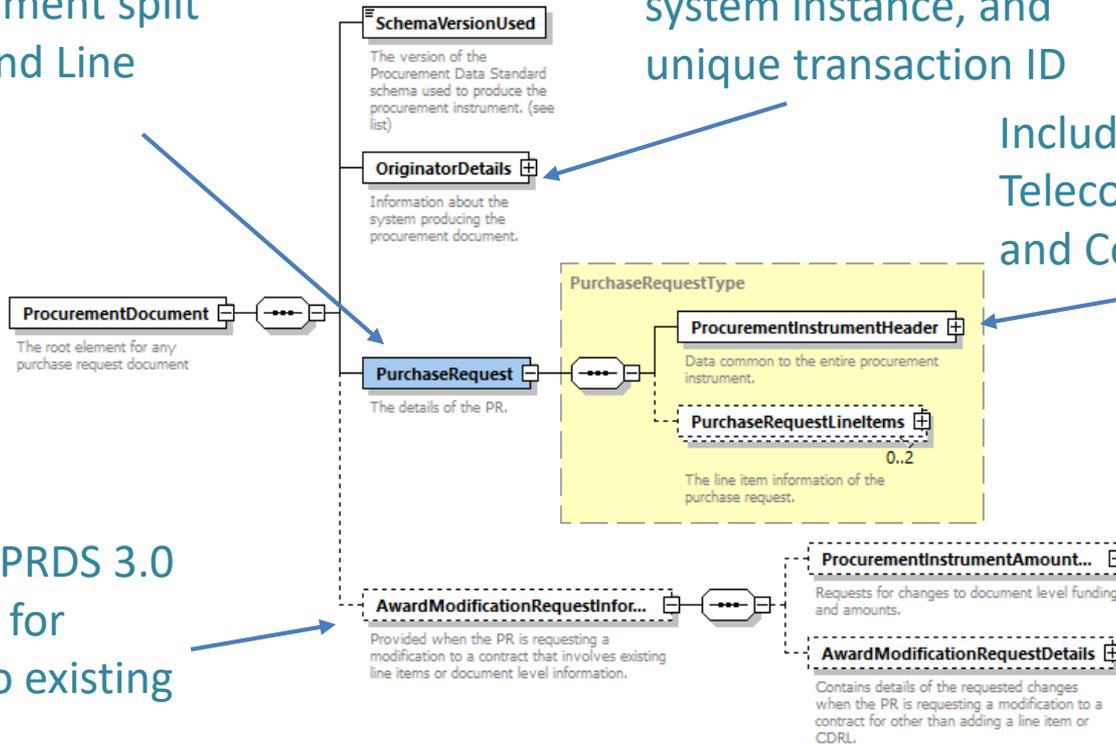
- Also encompasses standard Validation Responses
 - Funds Certification Results
 - Document validation results
 - SF-44

PRDS Sections

Main PR Document split into Header and Line Item Sections

Identifies sending system, system instance, and unique transaction ID

Includes sections for IGT, Telecommunications, and Construction

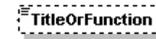


New Section in PRDS 3.0 allows requests for modifications to existing contracts

Understanding the Schema



- Solid Box denotes a mandatory element or section.
- $x-\infty$: Must provide 'x' or more instances of the element or section. In this case, one instance is required. More may be provided.
- $\{ \}$: Denotes that this is a section not an element. If absent, denotes that the item is an element that can be populated with data.
- "ContactMethod": XML Tag Name of the section.



- Dotted Box denotes an optional element or section.
- Only one instance of the element or section allowed (0-∞, 1-∞, etc. missing).
- This is an element that can contain data, not a section since $\{ \}$ is missing.
- "TitleOrFunction": XML Tag Name of the element.

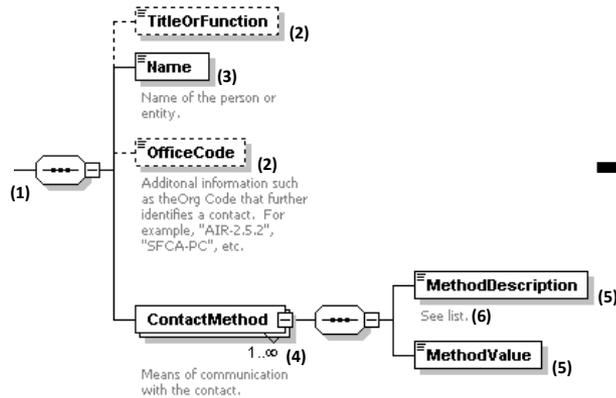


- Sequence.
- Elements and sections following the sequence must be provided in the order shown.



- Choice
- Only one of the Elements and sections following the sequence may be provided.

Understanding the Schema

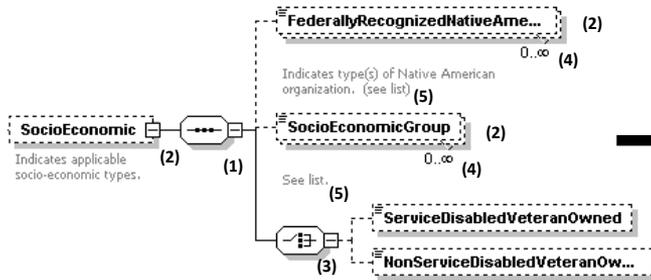


Sample XML snippet:

```
<Contact>
  <TitleOrFunction>Contracting Officer</TitleOrFunction>
  <Name>Joseph Smith</Name>
  <ContactMethod>
    <MethodDescription>Email</MethodDescription>
    <MethodValue>JSmith@anywhere.mil</MethodValue>
  </ContactMethod>
  <ContactMethod>
    <MethodDescription>Telephone</MethodDescription>
    <MethodValue>540-329-0110 x231</MethodValue>
  </ContactMethod>
</Contact>
```

1. Sequence of 3 elements and 1 section.
2. Optional data elements “TitleOrFunction” and “OfficeCode”.
3. Mandatory data element “Name”.
4. 1-∞: Must provide one or more instances of the “ContactMethod” section.
5. For each “ContactMethod” section, the data elements “MethodDescription” and “MethodValue” are required.
6. When the phrase “See list.” or “(see list)” is at the end of a data element’s description, there is an enumeration list (pick list) of acceptable values.

Understanding the Schema



Sample XML snippet:

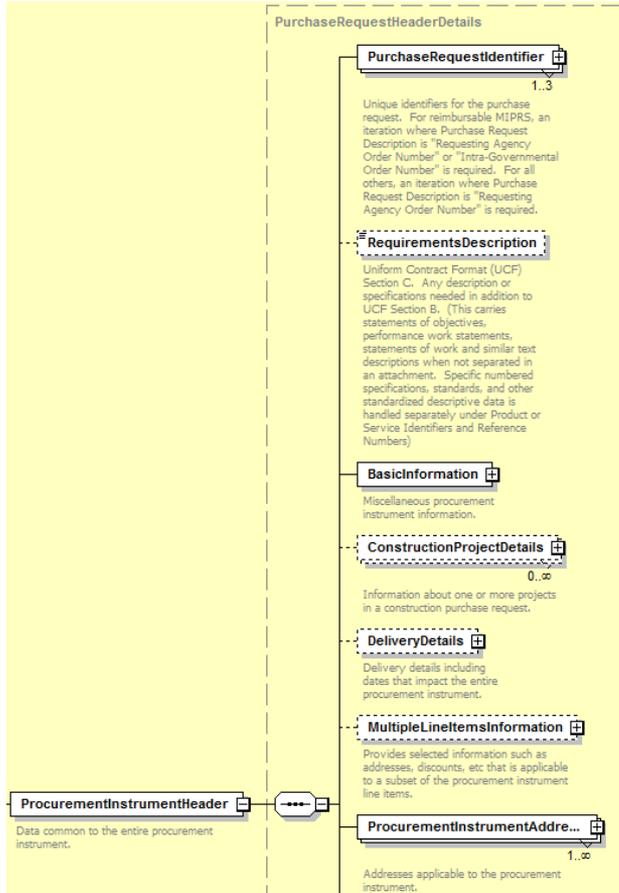
```
<SocioEconomic>  
  <SocioEconomicGroup>Labor Surplus Area Firm</SocioEconomicGroup>  
  <SocioEconomicGroup>Women Owned Business</SocioEconomicGroup>  
  <ServiceDisabledVeteranOwned>Yes</ServiceDisabledVeteranOwned>  
</SocioEconomic>
```

1. Sequence of 3 elements.
2. Optional Section "SocioEconomic". Optional data elements "FederallyRecognizedNativeAmerican", "SocioEconomicGroup"
3. Choice of two elements. Since the individual elements are optional, don't have to choose either. If they were mandatory (closed box), would have to choose one.
4. 0-∞: May provide one or more instances of the "FederallyRecognizedNativeAmericanEntity" and "SocioEconomicGroup" elements.
5. When the phrase "See list." or "(see list)" is at the end of a data element's description, there is an enumeration list (pick list) of acceptable values.

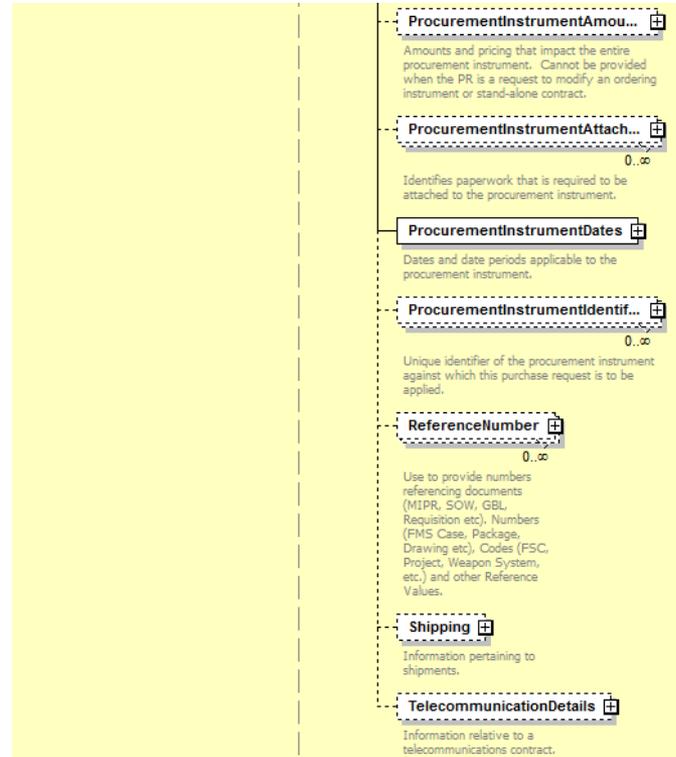
Design Principles

- Eliminate free form text whenever possible
- Ensure contract structure captured
- Reuse element structures instead of redefining (i.e. Address, Clause Information)
 - Reused elements defined by context.
- When possible, enforce business rules in schema
- Break data into lowest possible elements (i.e. Procurement Instrument Number, Line Item Number)
- Use words in lieu of codes wherever possible to avoid disambiguation issues
- Where applicable, base enumeration lists on standards (e.g. Currency: ISO 4217)

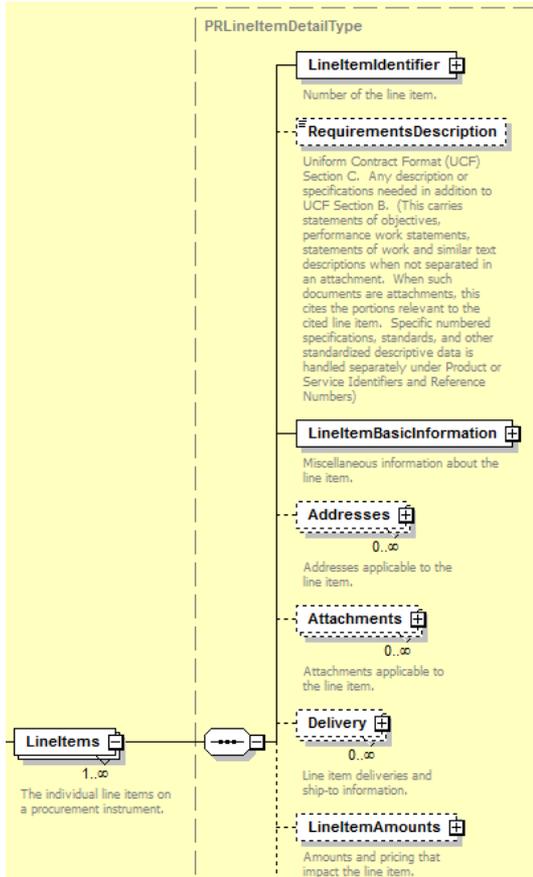
PRDS – Document Level



PRDS Header cont.



PRDS – Line Level

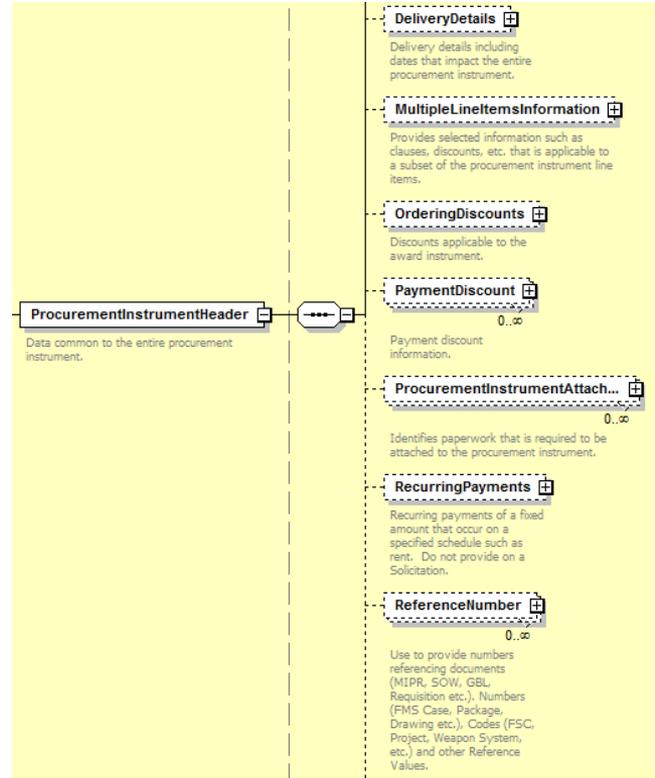
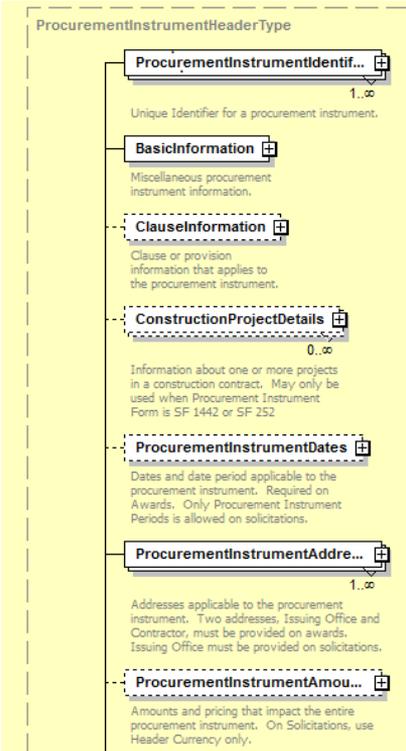


PRDS Line cont.

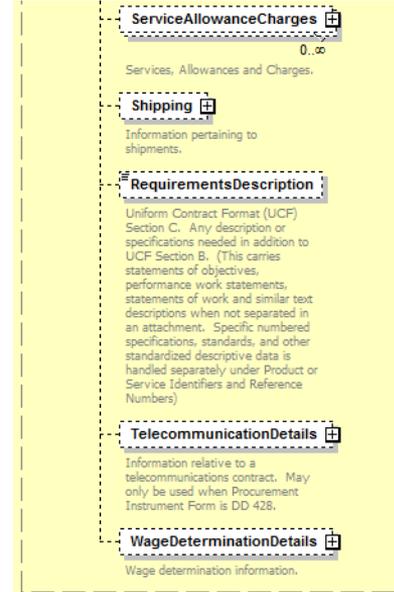


PDS – Award Document Level

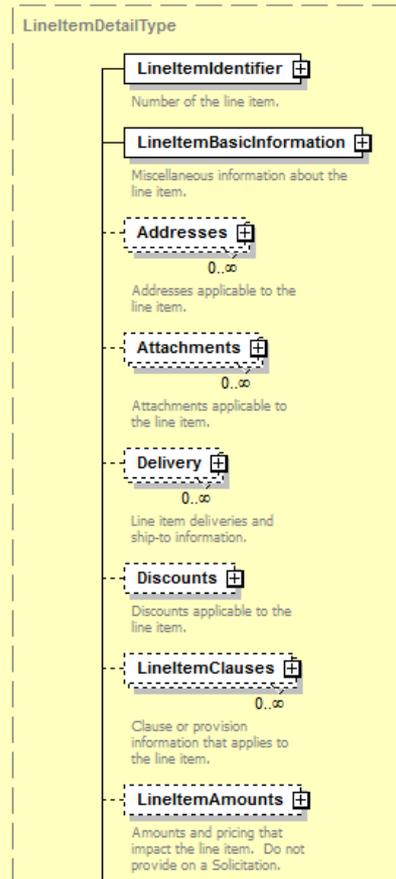
PDS Header cont.



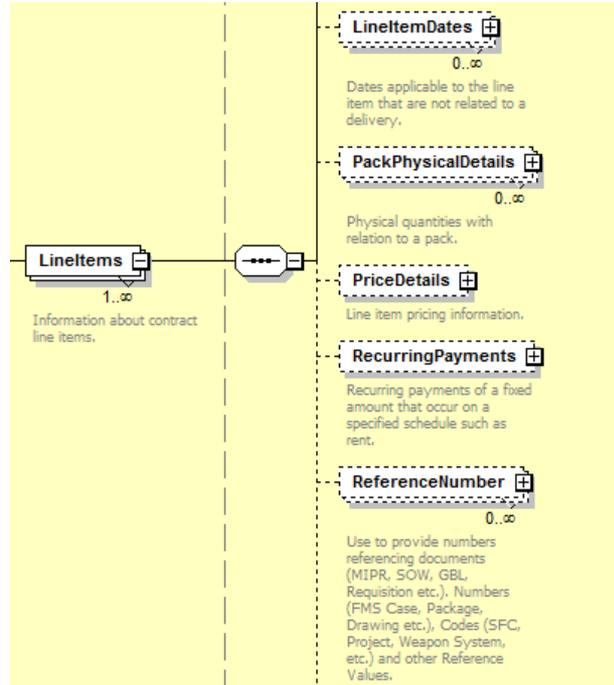
PDS Header cont.



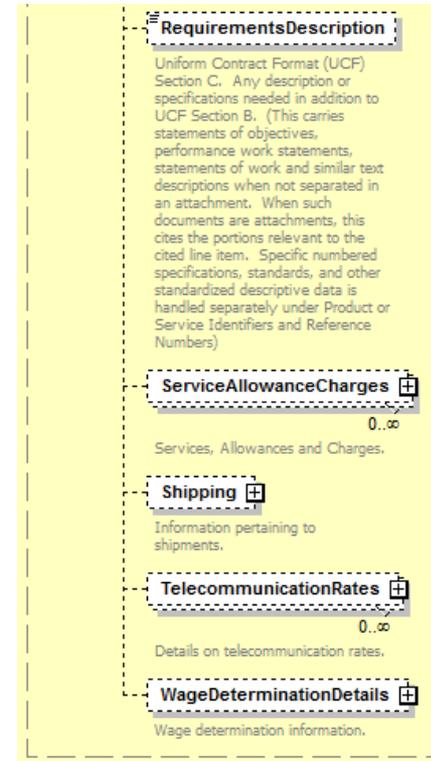
PDS – Award Line Level



PDS Line cont.

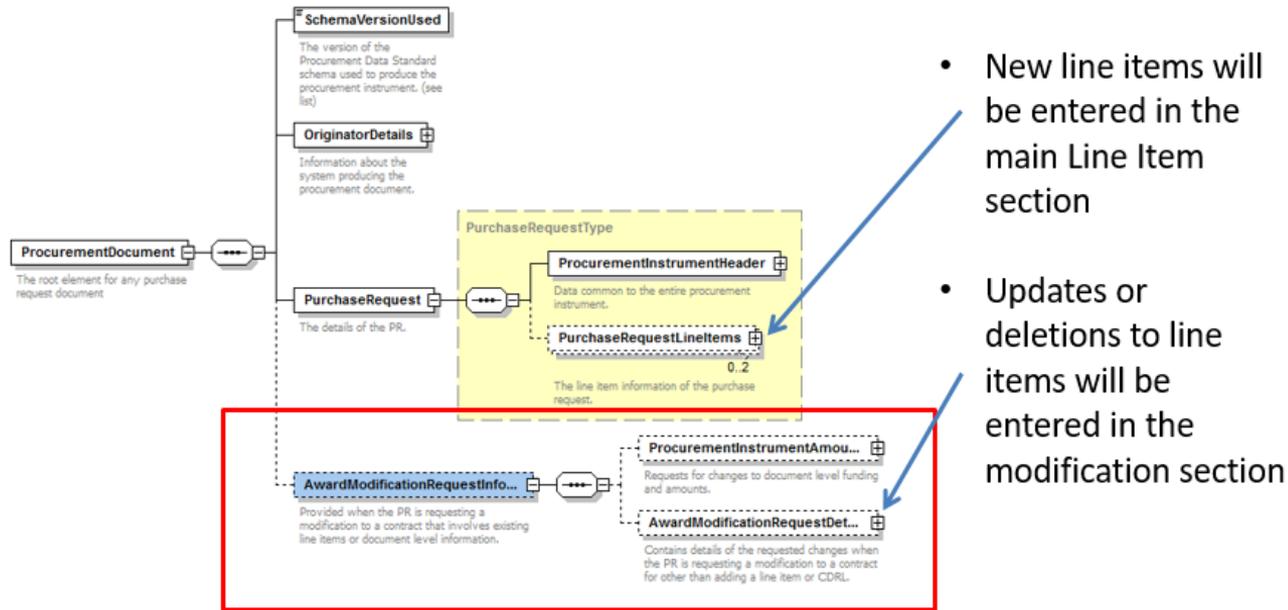


PDS Line cont.



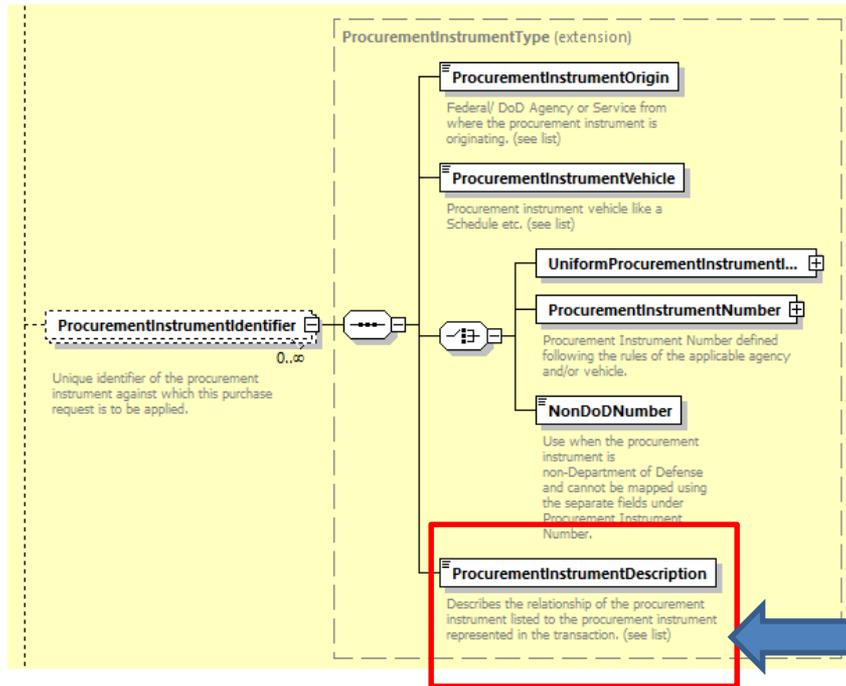
Requests for Modifications to Contracts

PRDS Version 3.0 added a section to allow for requests for Modifications against existing contracts. <AwardModificationRequestInformation>



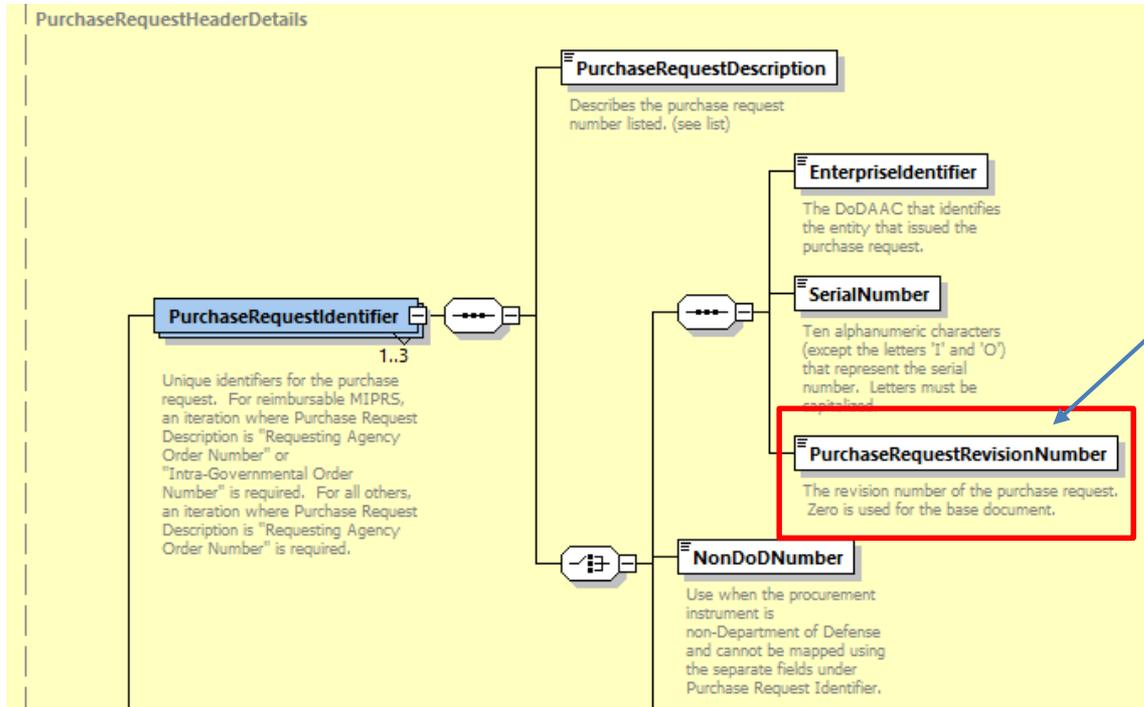
Requests for Modifications to Contracts Cont'd

PRDS Version 3.0 added a section to allow for requests for Modifications against existing contracts. <AwardModificationRequestInformation>



Description should be: "Contract Being Modified – Award"

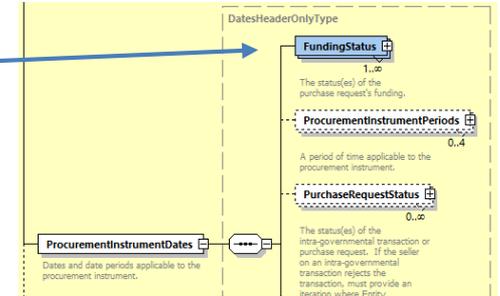
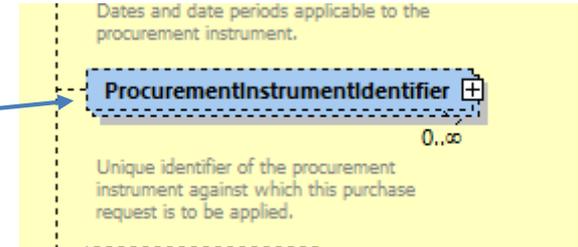
...vs. Amendments to the PR



Add a `<PurchaseRequestRevisionNumber>` to indicate an amendment to the PR. Then use all other elements act as if it's a new PR (creates a conformed copy).

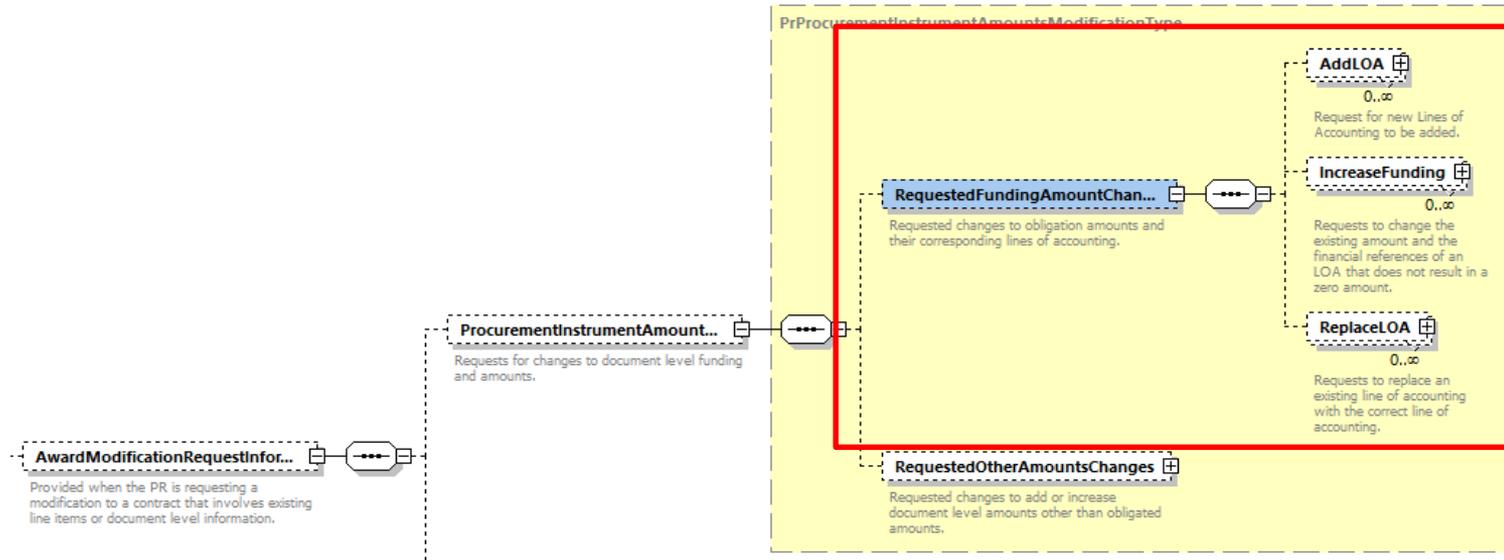
Requesting a new funded line item

- ProcurementDocument/PurchaseRequest/ProcurementInstrumentHeader/ProcurementInstrumentIdentifier. Include the existing contract number here. Make sure the description is "Contract being Modified - Award".
- ProcurementInstrumentDates/FundingStatus. This is a required field; choose the funding status that applies to the requested new funded line item. ("Certified," "Awaiting Certification," or "Planning")
- The new line item is placed in <Purchase Request/ Purchase Request Line Items>.
- The updated funding is placed in <Award Modification Request Information/ Procurement Instrument Amount Requests>. Funding change requests at the header level are always provided in this section. (See next slide)

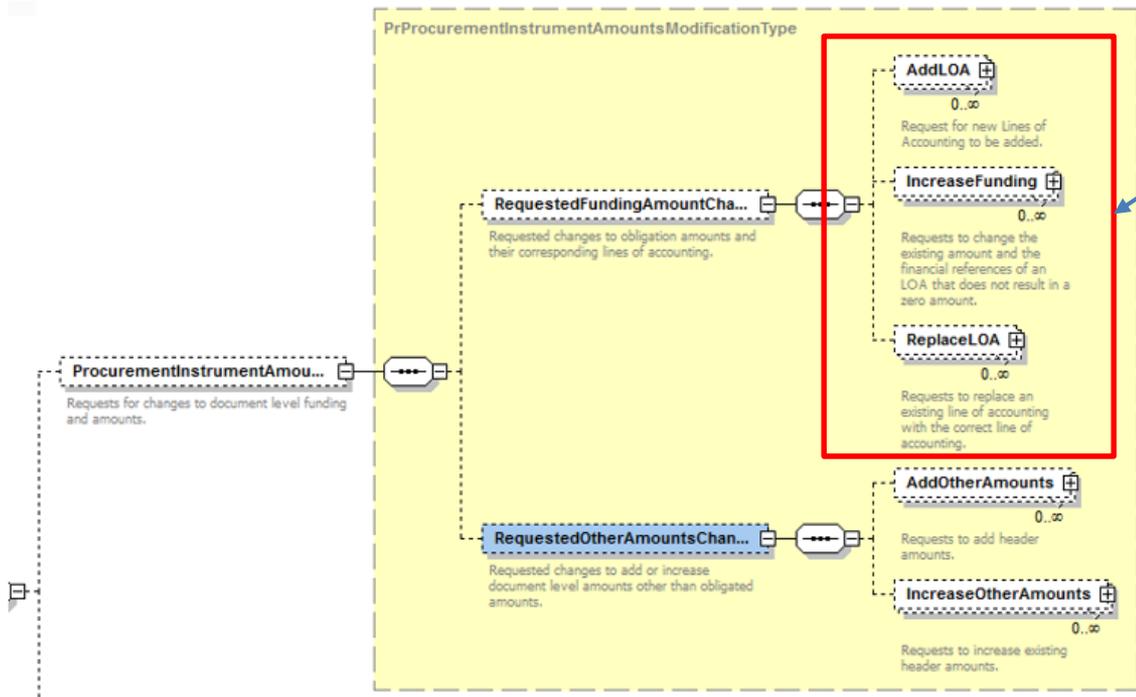


Requesting a new funded line item cont'd

- To request a modification to the funding at the header level, you must provide <Award Modification Request Information/ Procurement Instrument Amount Requests>.



Requesting a new funded line item cont'd

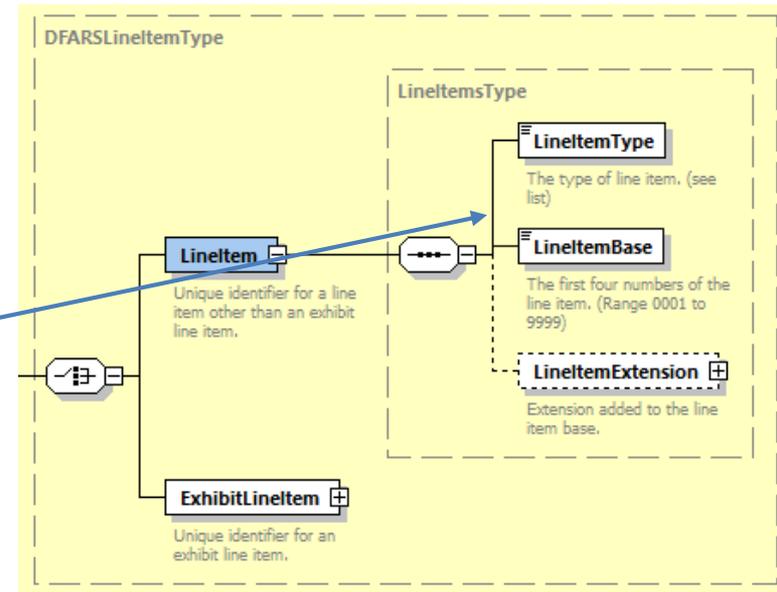
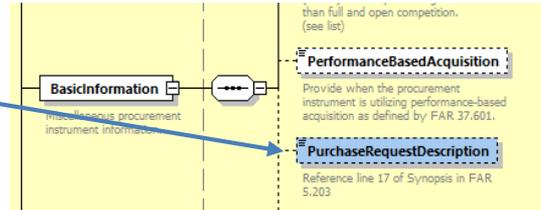


- RequestedFundingAmountChanges should be used. But which subsection is dependent on how the funding is changing.

- <Purchase Request/ Procurement Instrument Header/ Procurement Instrument Amounts> subsections <Committed Amounts>, <Other Amounts>, and <Servicing Reimbursable Authority Amounts> cannot be provided. These are not used when the PR is a request to modify an ordering instrument or stand-alone contract.

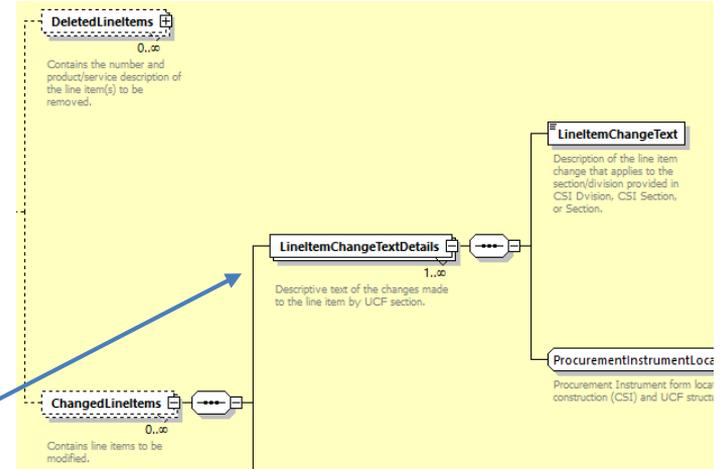
Cancelling a Line Item Off an Existing Contract

- <PurchaseRequestDescription> should be descriptive of the change, e.g. “Cancel Line Item 0002 for [Contract number]”
- <Funding Status> is not required
- ProcurementDocument/PurchaseRequest/ProcurementInstrumentHeader/ProcurementInstrumentIdentifier. Include the existing contract number here. Make sure the description is "Contract being Modified - Award".
- AwardModificationRequestDetails/ContractLineItems/LineItems/DeletedLineItems/DFARS/LineItem “Type” and “Base” are required.
- Within DeletedLineItems, <ProductServiceDescription> is also required. This serves as a check that the correct line item is being deleted.



Changing the PoP on an Existing Contract

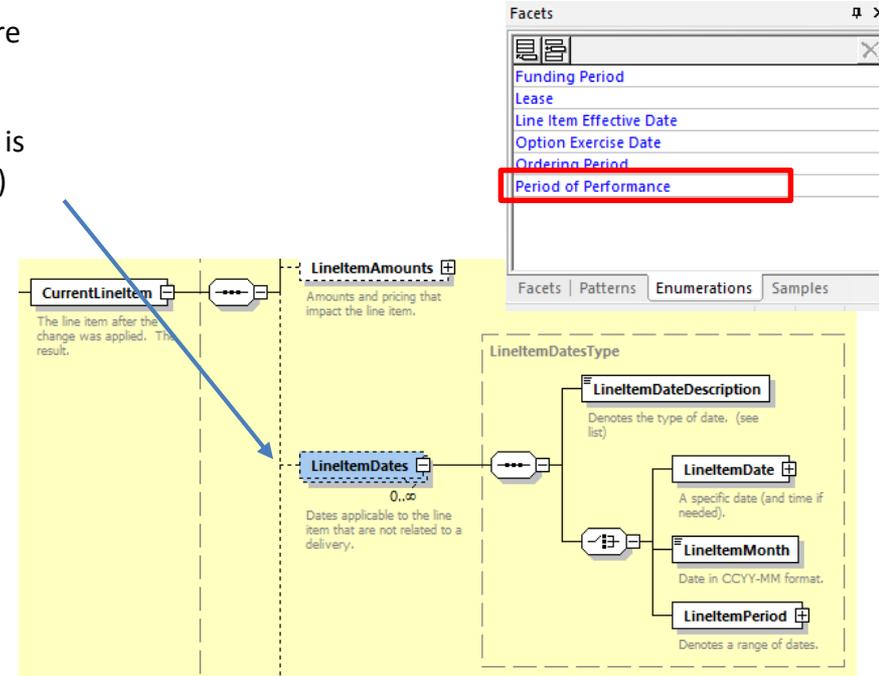
- <PurchaseRequestDescription> should be descriptive of the change, e.g. "Change Period of Performance for [Contract number]"
- <Funding Status> is not required
- ProcurementDocument/PurchaseRequest/ProcurementInstrumentHeader/ProcurementInstrumentIdentifier. Include the existing contract number here. Make sure the description is "Contract being Modified - Award".
- AwardModificationRequestDetails/ContractLineItems/LineItems/ChangedLineItems/LineItemChangeTextDetails/LineItemChangeText for a description of the change, e.g. "Change PoP for CLIN 0001."



Changing the PoP on an Existing Contract cont'd

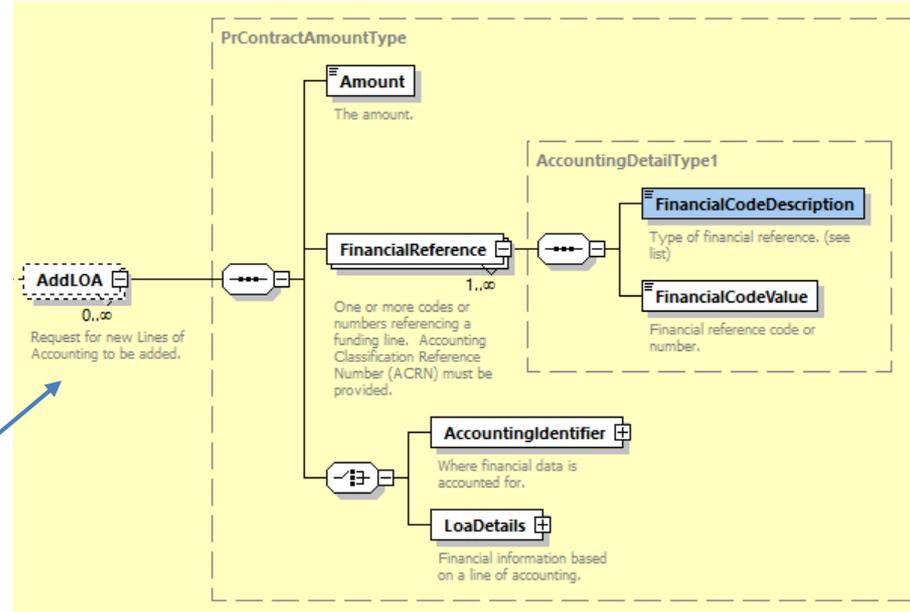
- In ChangedLineItems/CurrentLineItems, identify the line item you are changing in the LineItemIdentifier section.
- Then select the place for the change you want (in this case, the PoP is in LineItemDates <LineItemDateDescription> and <LineItemPeriod>) and put the new value in.

```
<AwardModificationRequestInformation>
  <AwardModificationRequestDetails>
    <ContractLineItems>
      <LineItems>
        <ChangedLineItems>
          <LineItemChangeTextDetails>
            <LineItemChangeText>Change PoP for CLIN 0001</LineItemChangeText>
            <Section>F</Section>
          </LineItemChangeTextDetails>
          <CurrentLineItem>
            <LineItemIdentifier>
              <DFARS>
                <LineItem>
                  <LineItemType>CLIN</LineItemType>
                  <LineItemBase>0001</LineItemBase>
                </LineItem>
              </DFARS>
            </LineItemIdentifier>
            <LineItemBasicInformation>
              <OptionLineItem>false</OptionLineItem>
              <ProductServicesOrdered>
                <ItemUIDRequired>false</ItemUIDRequired>
                <ProductServiceDescription>Services Jan 2017 - Nov 2017</ProductServiceDescription>
                <Quantity>1</Quantity>
                <UnitOfMeasure>Each</UnitOfMeasure>
              </ProductServicesOrdered>
            </LineItemBasicInformation>
            <LineItemDates>
              <LineItemDateDescription>Period of Performance</LineItemDateDescription>
              <LineItemPeriod>
                <PeriodStart>
                  <DateElement>2017-01-01</DateElement>
                </PeriodStart>
                <PeriodEnd>
                  <DateElement>2017-11-30</DateElement>
                </PeriodEnd>
              </LineItemPeriod>
            </LineItemDates>
          </CurrentLineItem>
        </ChangedLineItems>
      </LineItems>
    </ContractLineItems>
  </AwardModificationRequestDetails>
</AwardModificationRequestInformation>
```



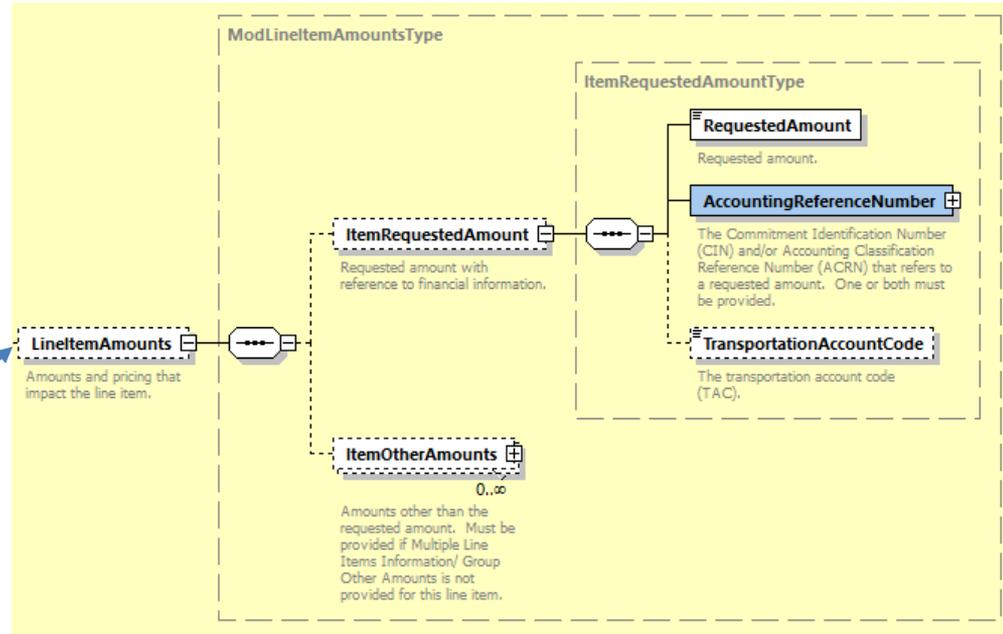
Exercise Option with New LOA

- <PurchaseRequestDescription> should be descriptive of the change, e.g. "Exercise Option and Add Funds for [Contract number]"
- ProcurementDocument/PurchaseRequest/ProcurementInstrumentHeader/ProcurementInstrumentIdentifier. Include the existing contract number here. Make sure the description is "Contract being Modified - Award".
- AwardModificationRequestInformation/ProcurementInstrumentAmounts/RequestedFundingAmountChanges/AddLOA – here, add total (header) amount of additional funding, the suggested ACRN (for the contract – but remember this is just a request – it may change), and the LOA Details (blob).



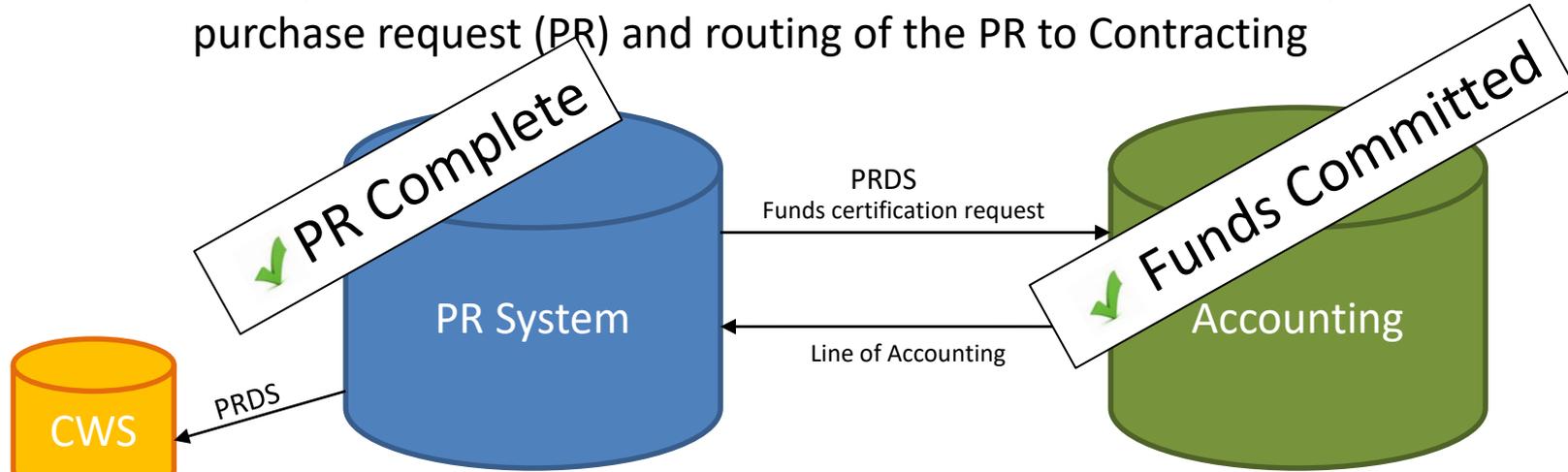
Exercise Option with New Funds

- In ChangedLineItems/CurrentLineItems, identify the line item you are changing in the LineItemIdentifier section.
- AwardModificationRequestDetails/ContractLineItems/LineItems/ChangedLineItems/LineItemChangeText Details/LineItemChangeText for a description of the change, e.g. "Exercise CLIN 0004."
- Then add the funds to the line item(s) as required using AwardModificationRequestDetails/ContractLineItems/LineItems/ChangedLineItems/LineItemAmounts.
- Other required line item fields (like <ProductServicesOrdered>) will be required.



What is Handshake 1?

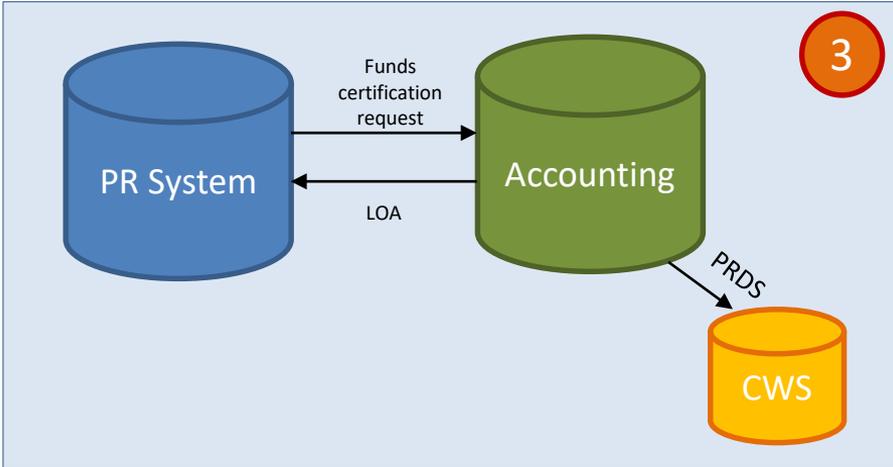
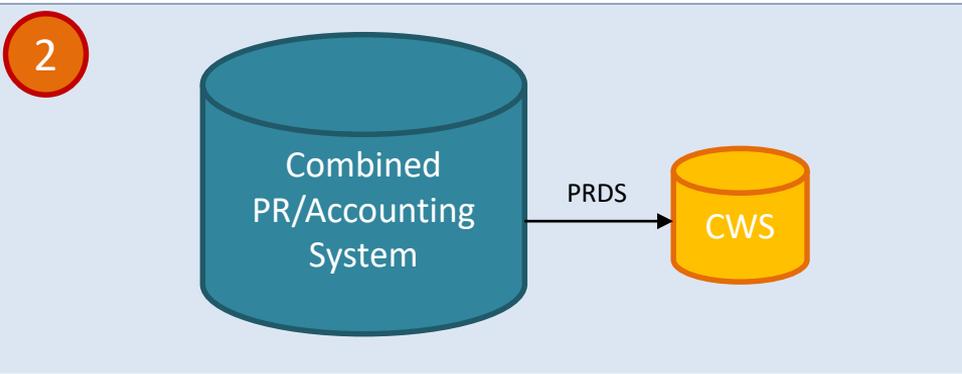
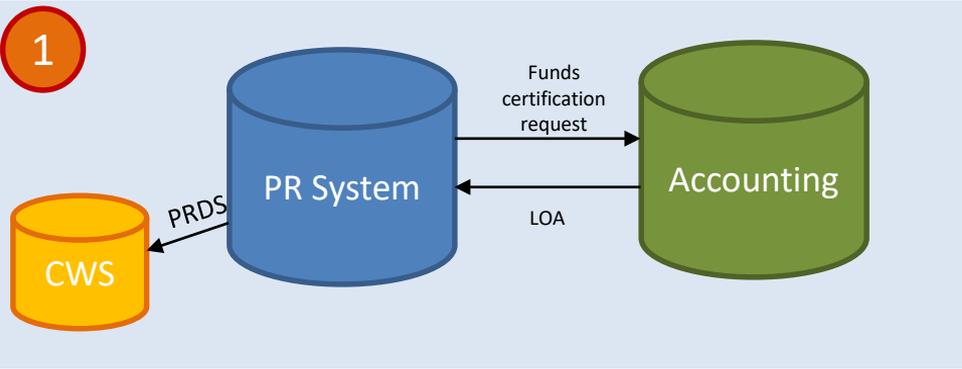
Certify Funds Handshake: The commitment of funds to complete a funded purchase request (PR) and routing of the PR to Contracting



PR is created to represent the requirement. Request for funds is sent. When LOA is returned, it is added to the PR and sent to contracting.

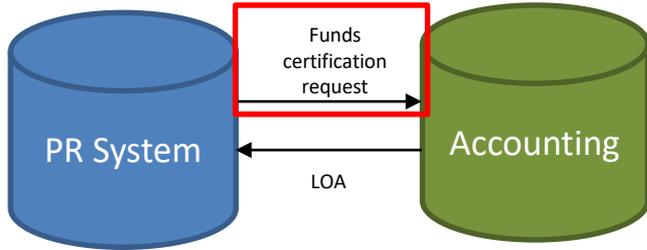
Accounting determines appropriate funds and completes an administrative reservation (commitment) of those funds.

HS 1 Alternatives



1. PR System calls out to Accounting to get LOA, then sends full PRDS to Contracting
2. ERP creates full PR with funding and sends to Contracting
3. Accounting collects full PR data, adds funding data, and sends full PRDS to Contracting

PRDS Elements



The image shows a screenshot of a software interface. On the left, a yellow panel displays document metadata with the following elements:

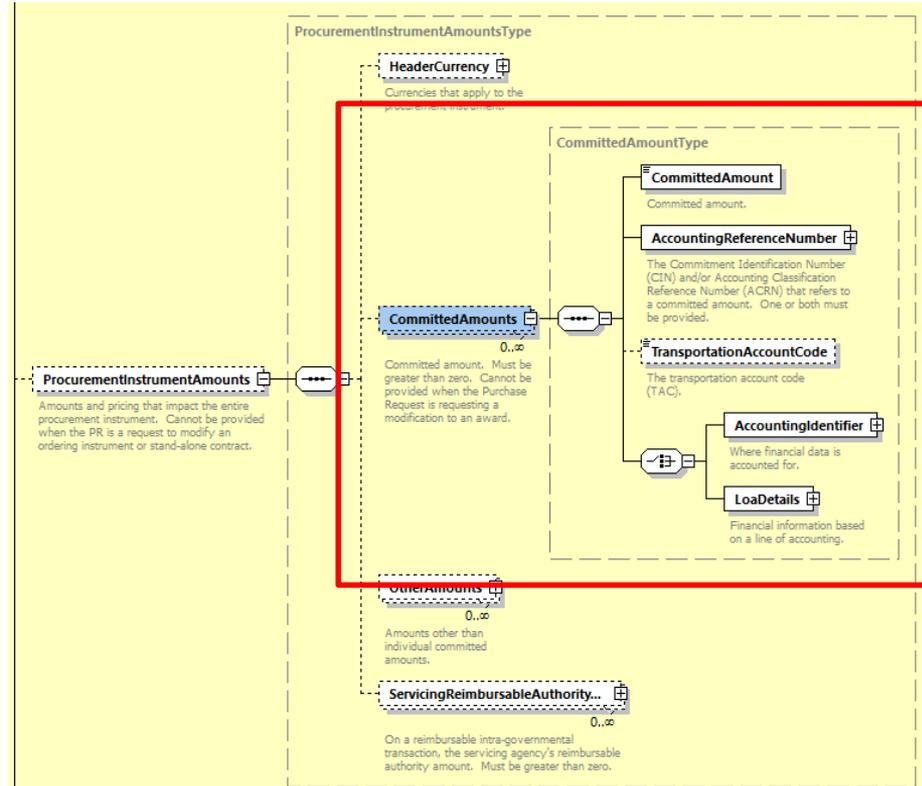
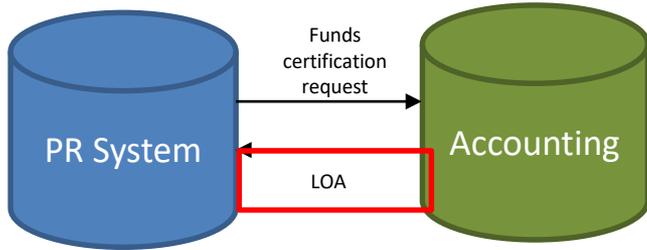
- DocumentPurpose**: The purpose of the procurement instrument. (see list)
- MissionImpact**: States whether the purchase request is critical, essential, or enhancing.
- NotFullOpenCompetition**: Competition in Contracting Act (CICA) authority for using other than full and open competition. (see list)
- PerformanceBase**: Provide when the procurement instrument is utilizing p...
- Basicinformation**: Miscellaneous procurement instrument information.

On the right, a window titled "Facets" is open, showing a list of items:

- Funds Certification Request** (highlighted with a red box)
- Original
- Retransmission
- Transfer
- Validation Test

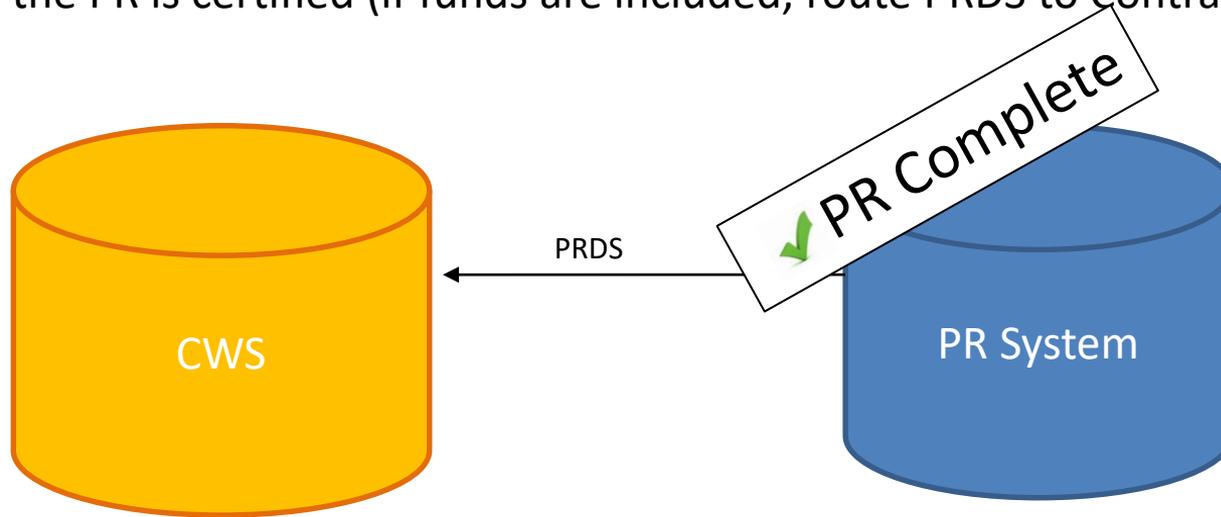
The "Facets" window has tabs for "Facets", "Patterns", "Enumerations", and "Samples".

PRDS Elements



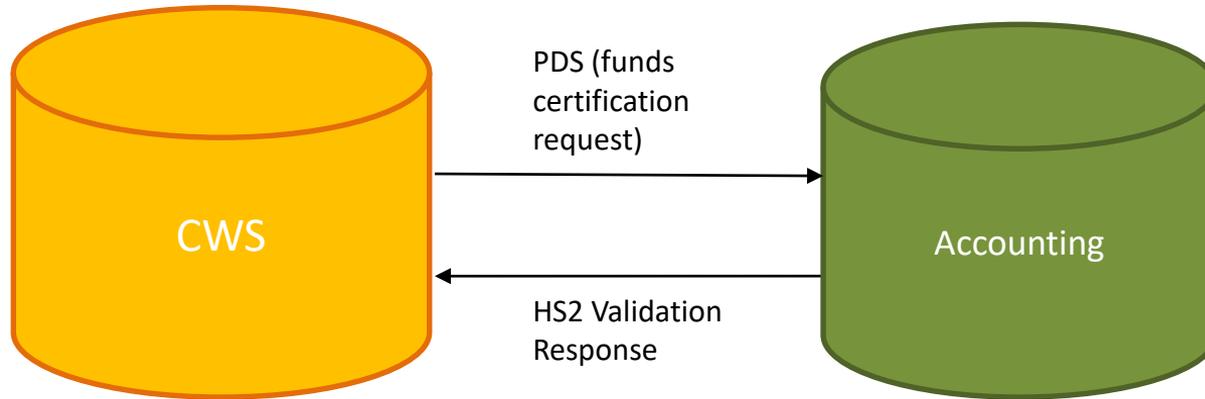
Certified PR

Once the PR is certified (if funds are included, route PRDS to Contracting



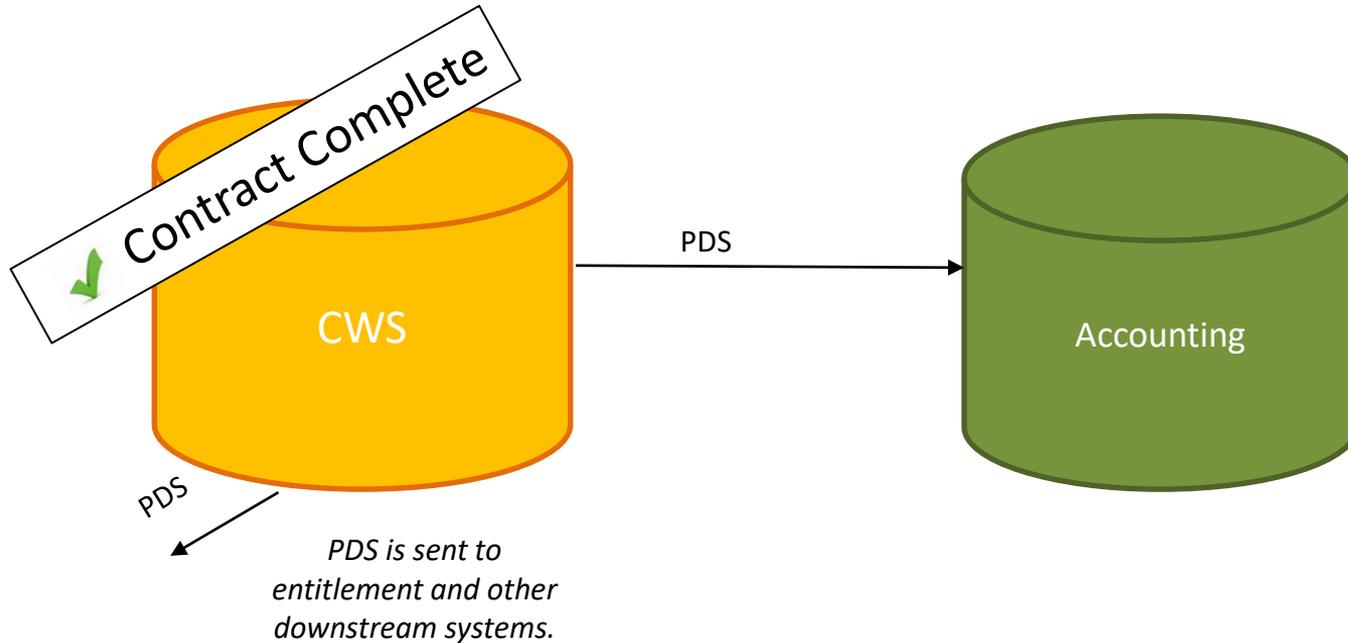
Handshake 2

Once draft contract is completed, route to Accounting system for pre-validation just prior to award.



Handshake 3

Once contract funds are validated, issue contract in PDS format. Send a copy to Accounting system for obligation.



PRDS & PDS FAQ

- Main Values

What value goes in <DocumentPurpose>?

- Uses
 - Determines how the document will be processed.
 - Denotes where the document is in the procurement process.

- Funds Certification Request

- Initiates Handshake 1 (PRDS) or 2 (PDS) of the Procure-to-Pay (P2P) process.
- If the document passes validations, sent to enabled accounting systems/
- 1-2 Validation Response xmls returned:
 - 1st from PDS/PRDS validations. If non-fatal errors, contains list of accounting systems and whether or not the transaction was sent to them.
 - 2nd with results from contacted accounting systems if they responded.

- Validation Test

- Initiates a pre-award validation process.
- 1 Validation Response xml returned.
- Document not provided to any system.

- Original

- Indicates an awarded procurement document.
- 1 Validation Response xml returned.
- If non-fatal errors, passed to destination systems when connections in place.
 - PR system to CWS (PRDS example)
 - CWS to accounting (PDS example, Handshake 3)

The screenshot displays a procurement system interface. On the left, a document structure is shown with several elements: 'BasicInformation' (Miscellaneous procurement instrument information), 'DocumentPurpose' (The purpose of the procurement instrument. (see list)), 'EmergencyRequestContract' (Denotes whether or not the procurement instrument is an Emergency action requiring expedited processing by the selling party.), 'MiscellaneousTextDetails' (Text relating to the procurement instrument that cannot be captured as discrete elements. 0..∞), and 'NotFullOpenCompetition' (Competition in Contracting Act (CICA) authority for using other than full and open competition. (see list)). On the right, a 'Facets' window is open, showing a list of document types: Cancellation, Conformance Test, Draft, Funds Certification Request, Original, Retransmission, Transfer, and Validation Test. The 'Original' facet is highlighted with a red box.

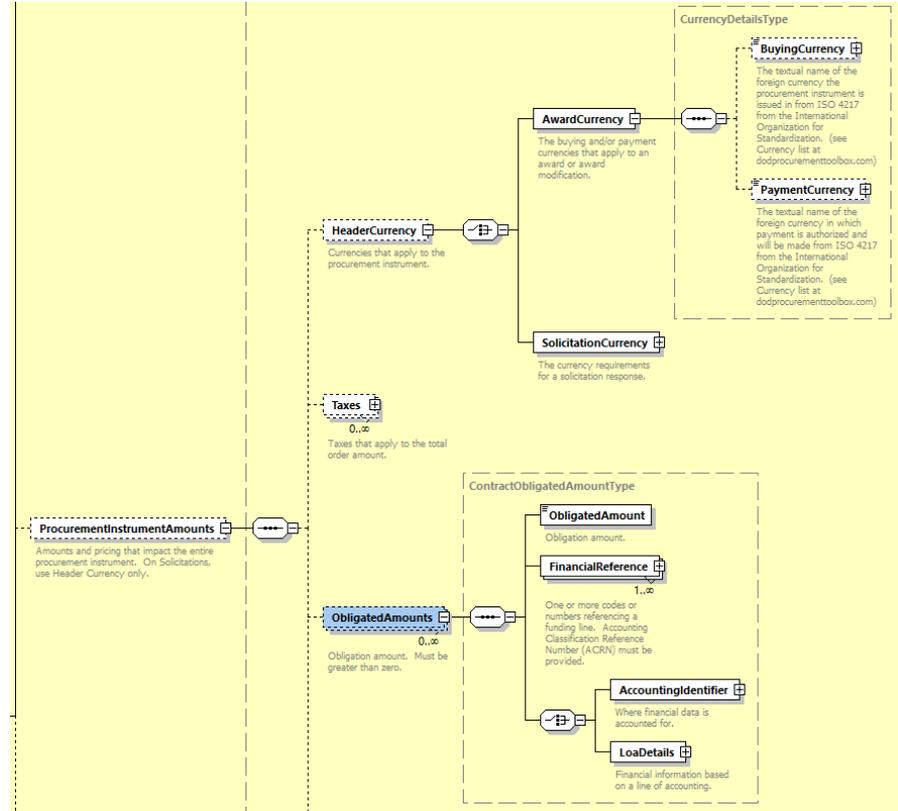
PRDS & PDS FAQ

If document issued in a foreign currency, which amount fields must be in US dollars?

- Committed Amounts
- Obligated Amounts
- Not To Exceed Funding Amounts

Why can't US Dollars be used for a Unit of Measure?

- Does not describe what is being delivered
- Not an allowable unit of measure in the DFARS





Procure-to-Pay

Training Symposium

April 23 - April 25, 2019 • Hilton Lake Buena Vista - Florida