

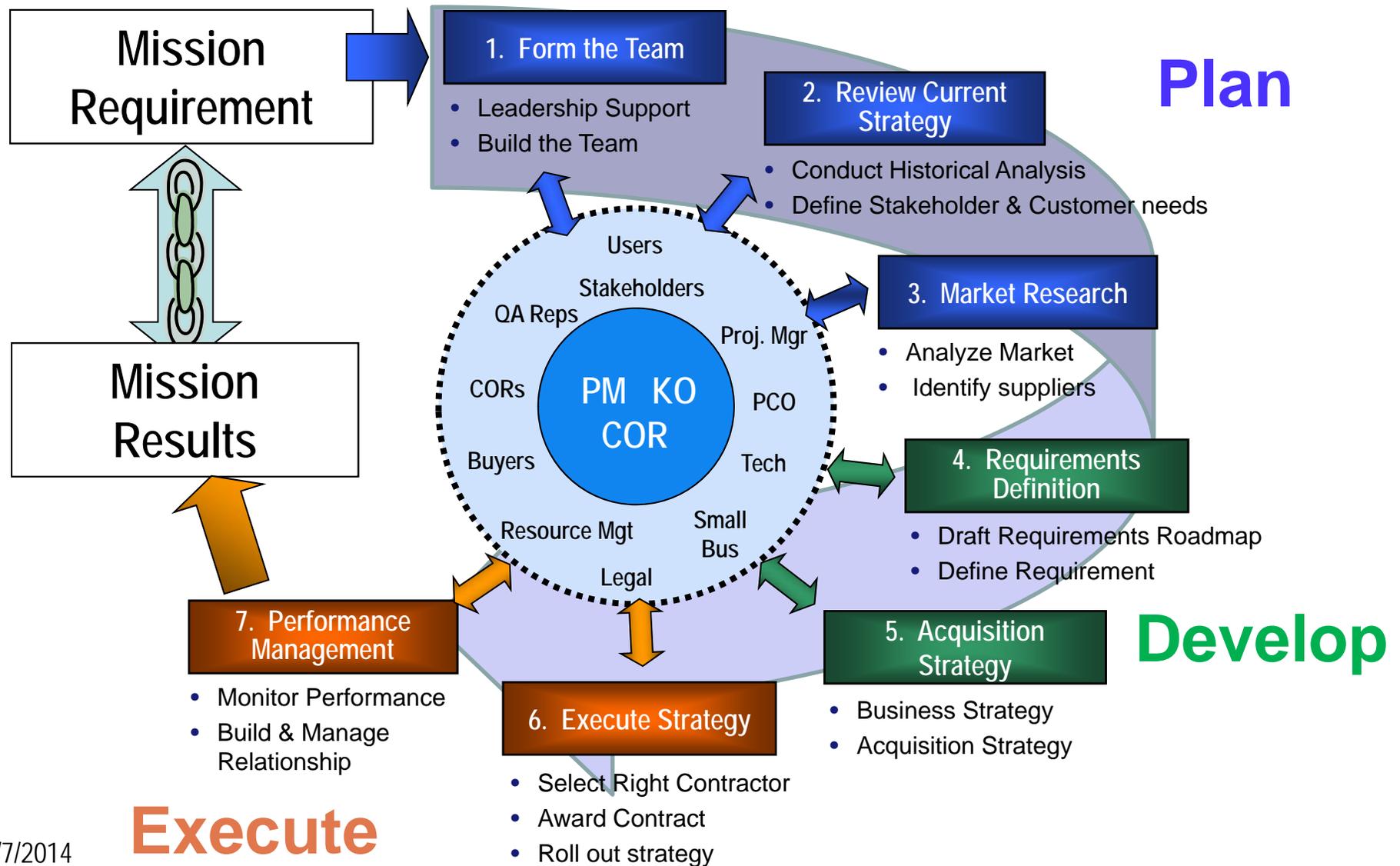


Improving the Tradecraft in Services Acquisition

ARRT – Automated Requirements Roadmap Tool

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Services Acquisition Process





ARRT's Template Approach for developing Service Requirements Documents

- “Turbo Tax” guides the user through the process of filling in the blanks of a tax form template
- Asks the user relevant questions
- Provides samples and explanations to complete a tax return

Form 1040 U.S. Individual Income Tax Return 2009

Department of the Treasury—Internal Revenue Service

For the year Jan. 1–Dec. 31, 2009, or other tax year beginning 2009, ending 2009.

OMB No. 1545-0047

PS Use Only—Do not write or staple in this space.

Label (Use instructions on page 14.) Use the IRS label. If a joint return, spouse's first name and initial. Last name. Your social security number. Spouse's social security number. Home address (number and street). If you have a P.O. box, see page 14. Apt. no. You must enter your SSN(s) above. City, town or post office, state, and ZIP code. If you have a foreign address, see page 14. Checking a box below will not change your tax or refund.

Filing Status Check only one box. 1 Single. 2 Married filing jointly (even if only one had income). 3 Married filing separately. Enter spouse's SSN above and full name here. 4 Head of household (with qualifying persons (see page 15.) if the qualifying person is a child but not your dependent, enter this child's name here. 5 Qualifying widow(er) with dependent child (see page 16).

Exemptions 6a Yourself. If someone can claim you as a dependent, do not check box 6a. 6b Spouse. 6c Dependents: (i) First name, Last name, social security number, (ii) Dependent's relationship to you, (iii) Qualifies for child tax credit (see page 17). 6d Total number of exemptions claimed. Add numbers on lines above.

Income 7 Wages, salaries, tips, etc. Attach Form(s) W-2. 8a Taxable interest. Attach Schedule B if required. 8b Tax-exempt interest. Do not include on line 8a. 9a Ordinary dividends. Attach Schedule B if required. 9b Qualified dividends (see page 22). 10 Taxable refunds, credits, or offsets of state and local income taxes (see page 23). 11 Alimony received. 12 Business income or (loss). Attach Schedule C or C-EZ. 13 Capital gain or (loss). Attach Schedule D if required. If not required, check here. 14 Other gains or (losses). Attach Form 4797. 15a IRA distributions. 15b Taxable amount (see page 24). 16a Pensions and annuities. 16b Taxable amount (see page 26). 17 Rental real estate, royalties, partnerships, S corporations, trusts, etc. Attach Schedule E. 18 Farm income or (loss). Attach Schedule F. 19 Unemployment compensation in excess of \$2,400 per recipient (see page 27). 20a Social security benefits. 20b Taxable amount (see page 27). 21 Other income. List type and amount (see page 29). 22 Add the amounts in the far right column for lines 7 through 21. This is your total income.

Adjusted Gross Income 23 Educator expenses (see page 29). 24 Certain business expenses of reservists, performing artists, and fee-based government officers. Attach Form 2106 or 2106-EZ. 25 Health savings account deduction. Attach Form 8889. 26 Moving expenses. Attach Form 3903. 27 One-half of self-employment tax. Attach Schedule SE. 28 Self-employed SEP, SIMPLE, and qualified plans. 29 Self-employed health insurance deduction (see page 30). 30 Penalty on early withdrawal of savings. 31a Alimony paid. b Recipient's SSN. 32 IRA deduction (see page 31). 33 Student loan interest deduction (see page 34). 34 Tuition and fees deduction. Attach Form 8917. 35 Domestic production activities deduction. Attach Form 8903. 36 Add lines 23 through 31a and 32 through 35. 37 Subtract line 36 from line 22. This is your adjusted gross income.

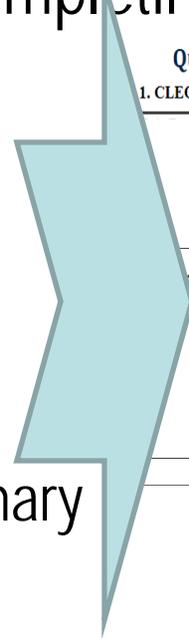
For Disclosure, Privacy Act, and Paperwork Reduction Act Notice, see page 97. Cat. No. 11320B Form 1040 (2009)

Tax Template



DAU is developing the same approach

- ARRT will provide the user a structured methodology and thought process for completing:
 - Performance Work Statement
 - Quality Assurance Surveillance Plan
 - Performance Requirements Summary



Performance Work Statement (PWS) - Draft

Project / Requirement Title

1. CLEO Support Services

Project Vision

PWS Template

Introduction

Quality Assurance Surveillance Plan (QASP) - Draft

1. CLEO Support Services

QASP Template

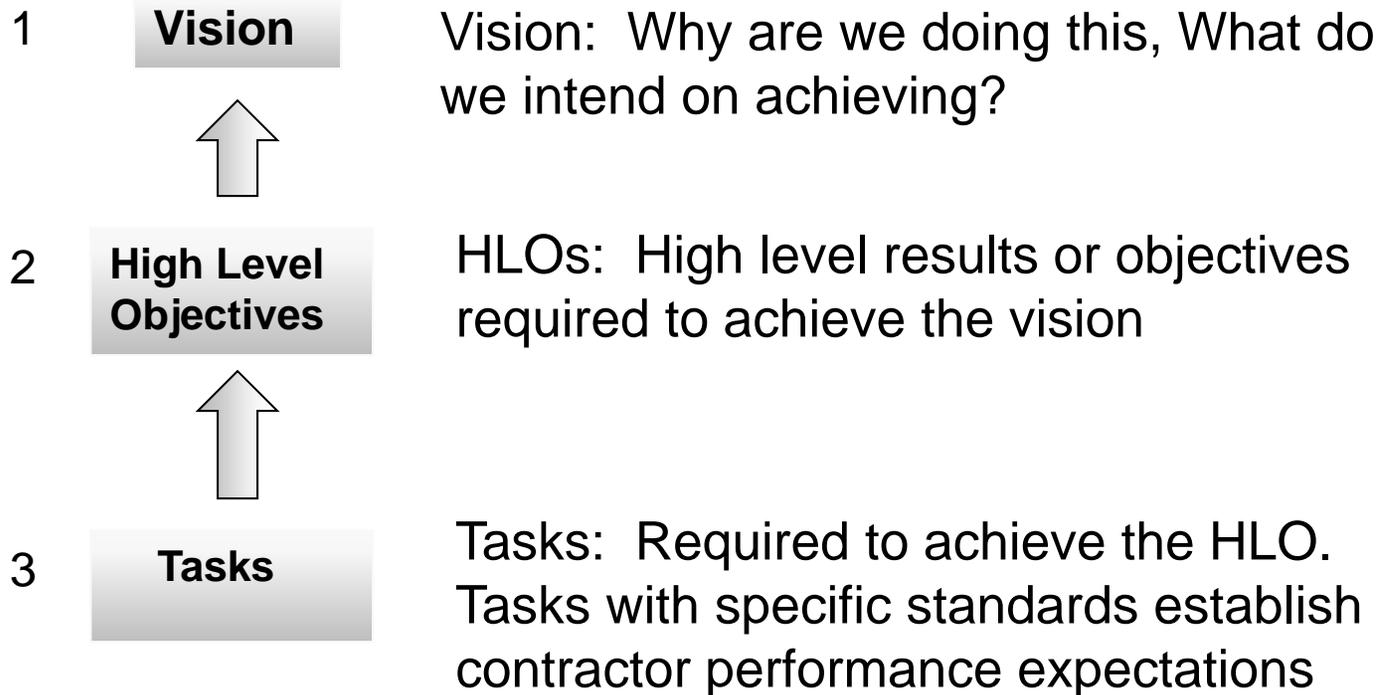
Performance Requirement Summary (PRS) - Draft

1. CLEO Support Services

PRS Template



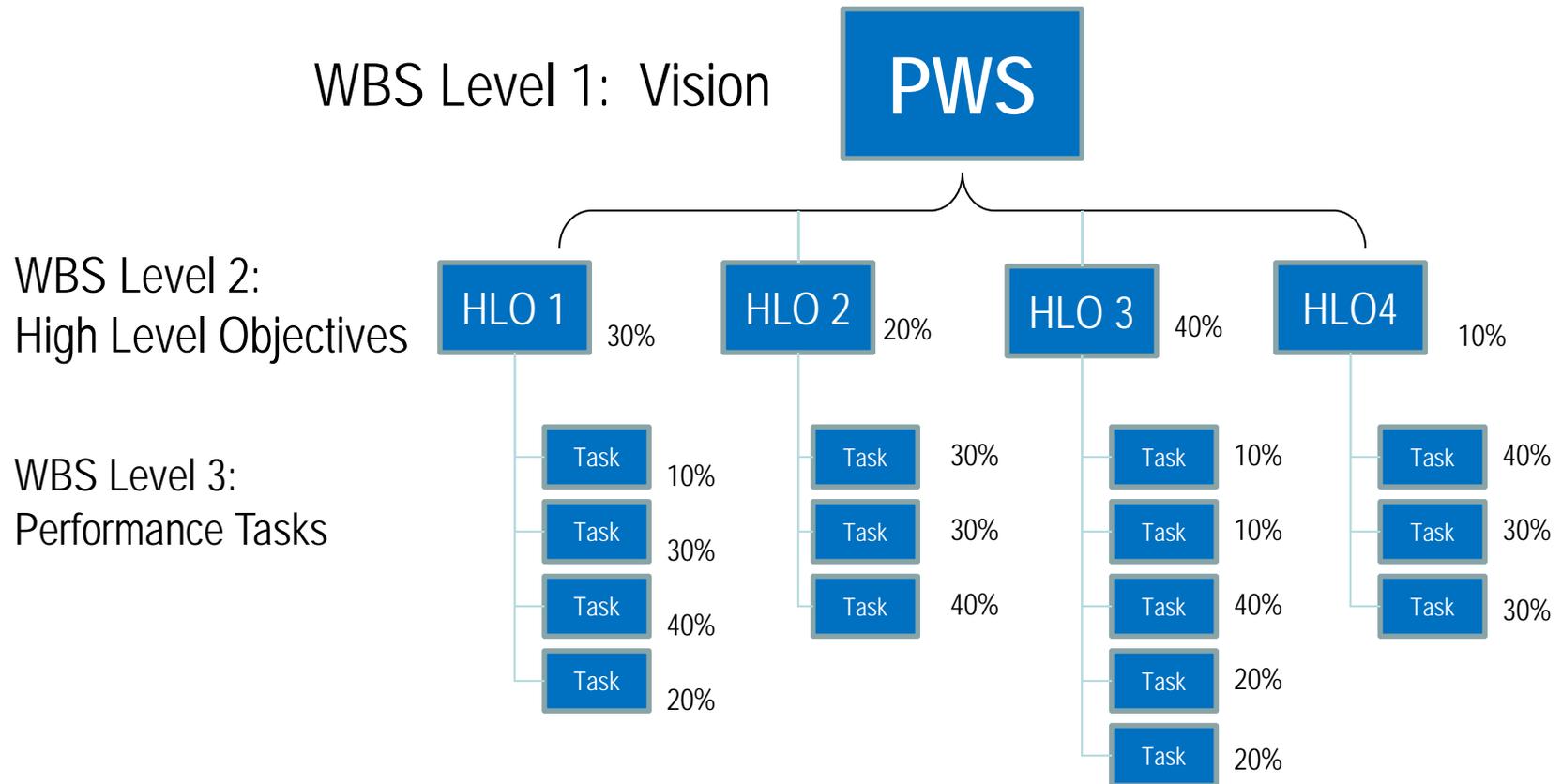
Requirements Analysis



Completing the Roadmap provides the framework for the PWS, PRS and QASP



Work Breakdown Structure for Service Performance Work Statement (PWS)

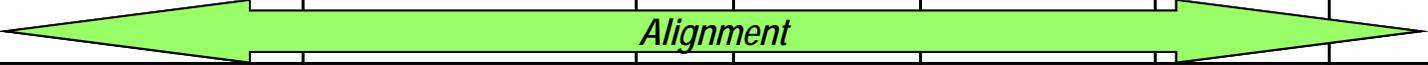


Note: This sample contains weightings for each task and HLO for performance assessment purposes



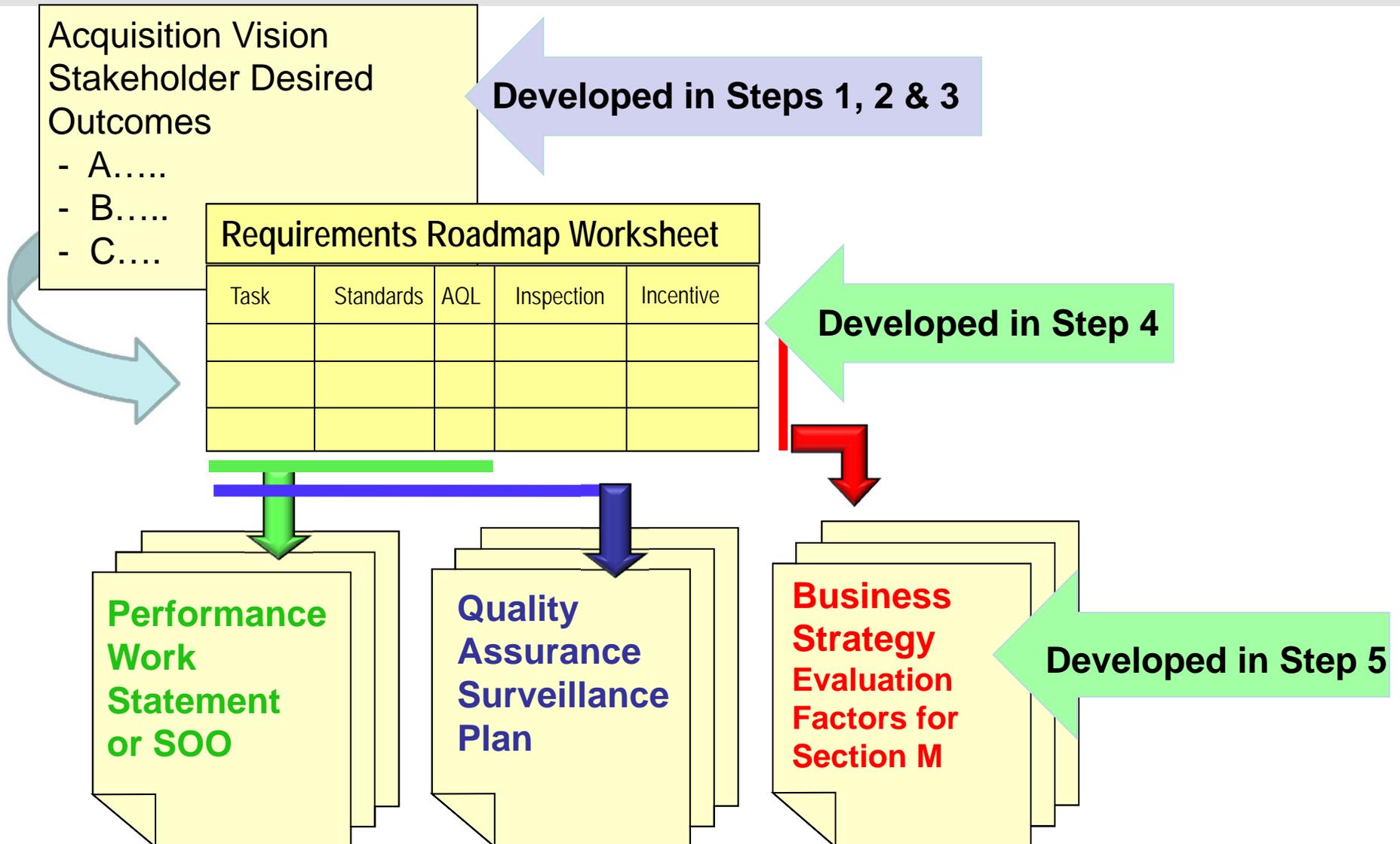
Requirements Roadmap Worksheet

Vision: _____

	Performance			Assessment/Inspection			
High Level Objective # ____	A: Result B: Context C: Action	Standard D: Cost, Quality, Timeliness	D: AQL	E: What will be Inspected	F: How will it be Assessed/ Inspected	G: Who is responsible	H: Incentive or Remedy
Supporting Tasks							

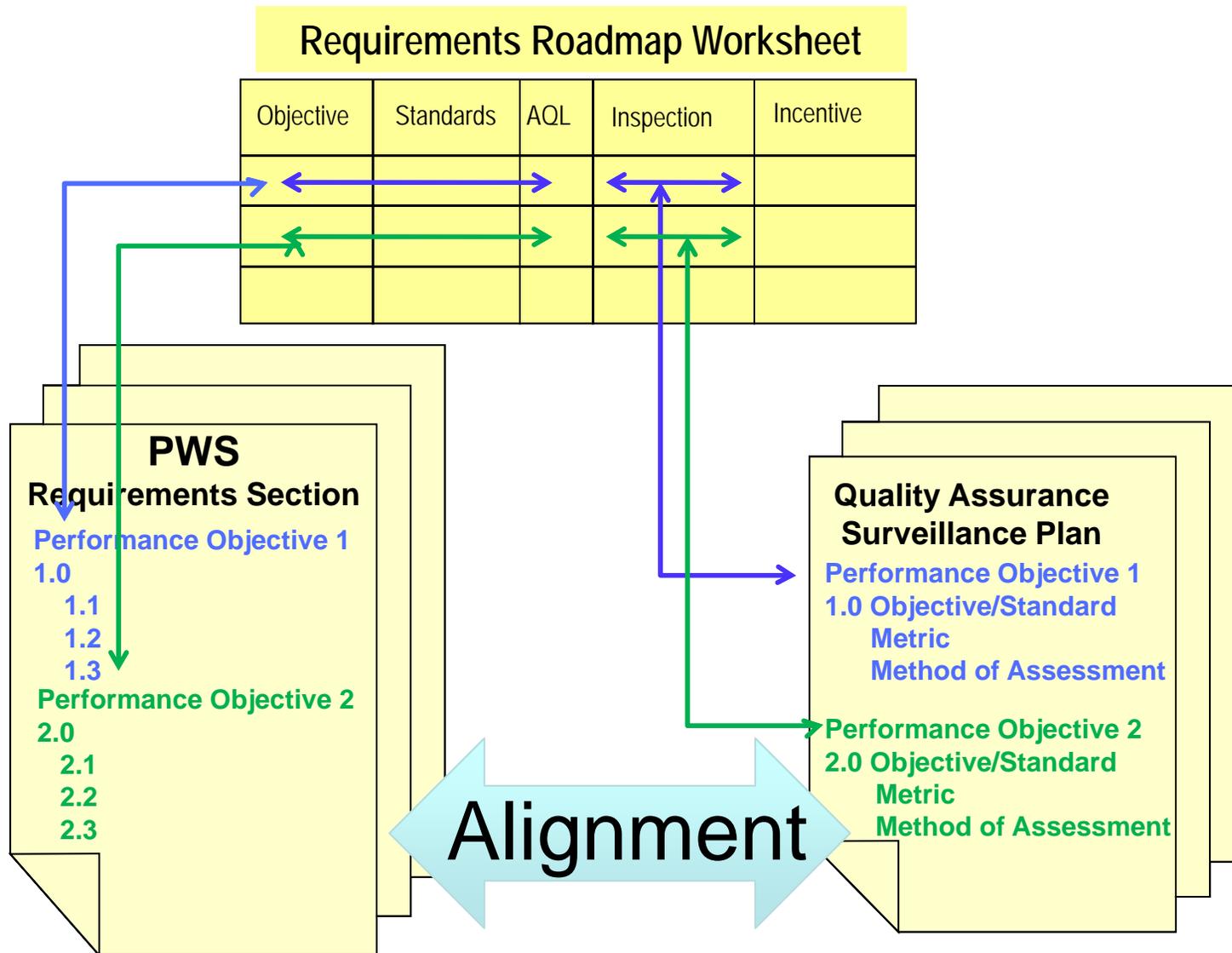


Roadmap provides linkage for PWS, QASP and Acquisition Approach





Provides disciplined approach for linking PWS and QASP





Dissecting A PWS Work Statement

- The contractor shall perform and document initial inspection for newly received vehicles and equipment. Actions shall be completed within 72 hours of vehicle and equipment arrival on station. Documentation shall be in accordance with AR 735-5 paragraph xx-xxx

A PWS Statement is composed of multiple parts

The roadmap helps build these from the top down, but let's examine one from the bottom up.



Elements of a Performance Work Statement

1) The Result, or Task

2) The context of the work to be performed

- The contractor shall **perform and document initial inspection** for **newly received vehicles and equipment**. Actions shall be **completed within 72 hours of vehicle and equipment arrival** on station. **Documentation shall be in accordance with AR 735-5 paragraph xx-xxx**

3) The "Action(s)" that you want performed.

4) The level of performance that you want (standard)



The Performance Task

- The contractor shall **perform and document initial inspection** for newly received vehicles and equipment.

Actions shall be completed within 72 hours of vehicle and equipment arrival on station. Documentation shall be in accordance with AR 735-5 paragraph xx-xxx

This is your Performance Task statement



Performance Work Statement = Task + Standards

- The contractor shall **perform and document initial inspection** for newly received vehicles and equipment. Actions shall be **completed within 72 hours of vehicle and equipment arrival** on station. Documentation shall be in accordance with **AR 735-5 paragraph xx-xxx**

This is your Performance Work Statement



Build it up...

Vision Statement for the Requirement

- What are the key results or performance outcomes expected for this objective?
 - Initial Inspection
- What is the context of the work to be performed?
 - Newly arrived vehicles and equipment
- What do you want the contractor to do?
 - perform
 - document
- At what level of quality, quantity, timeliness, or cost performance?
 - Completed within 72 hours of vehicle and equipment arrival
 - Documentation shall be in accordance with AR 735-5 paragraph xx-xxx



Determine What level of Performance

- Performance Standards describe what level of performance must be met to satisfy the required task

Requirements Roadmap Worksheet

Task	Standards	AQL	Assessment	Incentive

- Standards should be established based on mission requirements and not over stated
 - Ask the Question: What is the basis for the standard and why at that level?
- Standards must be clear and measurable
- Standards are described with adverbs and adjectives
- Are the standards you're setting achievable and affordable
 - Are you willing to pay extra for a higher standard ?
 - What is the impact on your budget ?



Define your tolerance for variation

- An AQL is an acceptable deviation from the performance standard
- However, the contractor is still expected to meet the performance standard

Requirements Roadmap Worksheet

Task	Standards	AQL	Assessment	Incentive

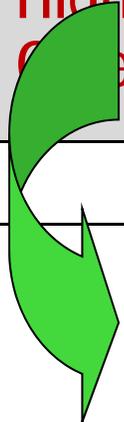
- Is there an allowable range of performance associated with each performance standard?
 - Perfection comes at a price
- What should you address to determine if an AQL is appropriate?
 - Will it still achieve our performance task result
 - Easily understood
 - Clearly delineated



How will you Know? Determine Assessment Approach

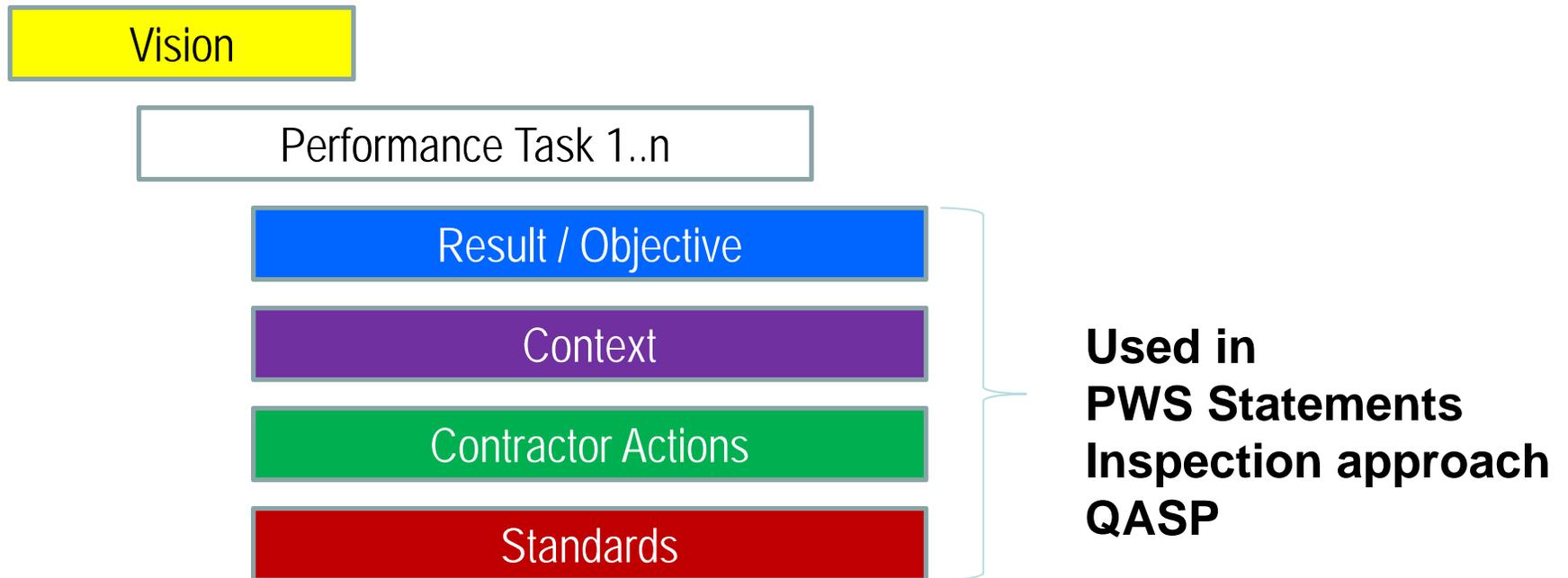
Vision: _____

		Performance			Assessment/Inspection			
High Level Requirements	A: Result	Standard Quality, Fitness	D: AQL	E: What will be Inspected	F: How will it be Assessed/ Inspected	G: Who is responsible	H: Incentive or Remedy	
	Tasks	Determine: <ol style="list-style-type: none"> 1. What will be inspected 2. How will it be assessed 3. Who is responsible 4. Is there an incentive or remedy for exceeding or failing to meet the performance standard? 						



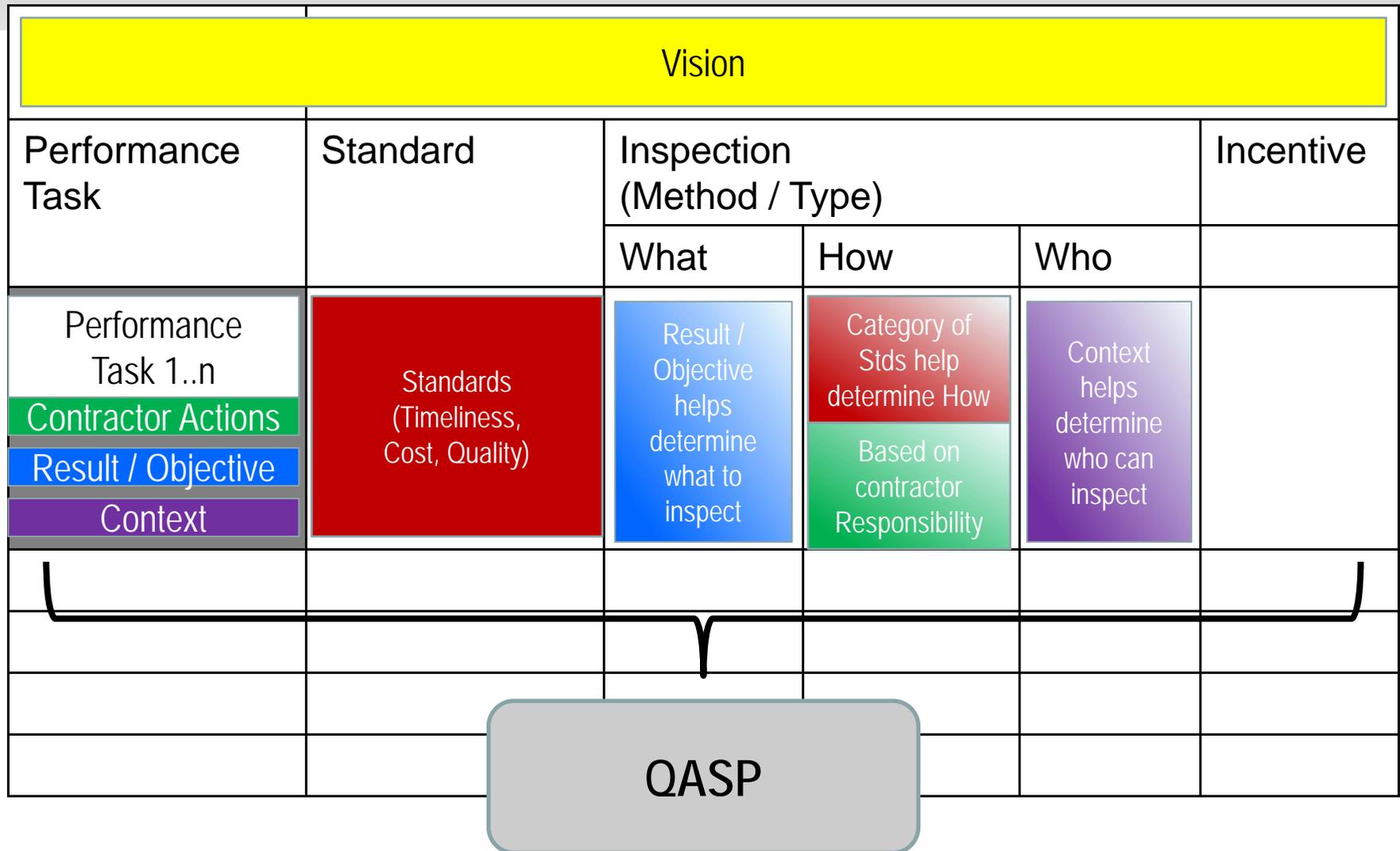


Building the QASP





Building the QASP





What are you going to look at to measure against the standard?

Performance Task	Standard / AQL	Inspection (Method / Type)		
		What	How	Who
<p>Perform and document initial inspection for newly received vehicles and equipment.</p>	<p>Completed within 72 hours of vehicle and equipment arrival on station.</p> <p>Documentation shall be in accordance with AR 735-5 paragraph xx-xxx</p>	<p>Equipment receipt records vs documentation submittals</p> <p>Inspection Report(s)</p>		



How are you going to measure it against the standard?

Performance Task	Standard / AQL	Inspection (Method / Type)		
		What	How	Who
<p>Perform and document initial inspection for newly received vehicles and equipment.</p>	<p>Completed within 72 hours of vehicle and equipment arrival on station.</p> <p>Documentation shall be in accordance with AR 735-5 paragraph xx-xxx</p>	<p>Equipment receipt records vs documentation submittals</p> <p>Inspection Report(s)</p>	<p>Random samples to evaluate if inspections where completed within 72 hours of arrival</p> <p>Determine if documentation conforms to AF 735-5 paragraph xx-xxx</p>	



Who is going to do it?

Performance Task	Standard / AQL	Inspection (Method / Type)		
		What	How	Who
Perform and document initial inspection for newly delivered vehicles and equipment.	Completed within 72 hours of vehicle and equipment arrival on station. Documentation shall be in accordance with AR 735-5 paragraph xx- xxx	Equipment receipt records vs documentation submittals Inspection Report(s)	Random samples to Evaluate if inspections where completed within 72 hours of arrival Determine if documentation conforms to AF 735-5 paragraph xx-xxx	Trans COR



ARRT

(Automated Requirements Roadmap Tool)

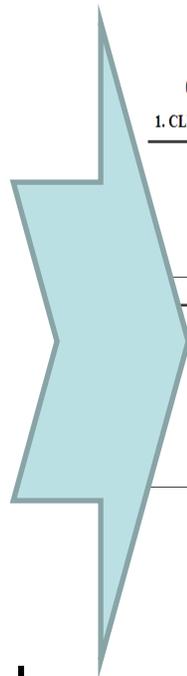
ARRT guides user to define requirements with a structured thought process using standard templates for completing:

Performance Work Statement

Quality Assurance Surveillance Plan

Performance Requirements Summary

ARRT is a MS Access Tool



Performance Work Statement (PWS) - Draft

Project / Requirement Title

1. CLEO Support Services

Project Vision

PWS Template

Introduction

Quality Assurance Surveillance Plan (QASP) - Draft

1. CLEO Support Services

QASP Template

Performance Requirement Summary (PRS) - Draft

1. CLEO Support Services

PRS Template

id



ARRT

ARRT v.3.0.003 Release



ACQUISITION REQUIREMENTS ROADMAP TOOL

Welcome to the Acquisition Requirements Roadmap Tool (ARRT). ARRT is an automated job assistance tool used to write performance-based requirements following the Requirements Roadmap process. Using ARRT, you can create Performance Work Statements (PWS), Quality Assurance Surveillance Plans (QASP), and Performance Requirement Summaries (PRS).



Using Help in
ARRT



Configure
ARRT Settings



Connection:
All-In-One
Mode



Begin Using
ARRT 3.0



ct from the list below and use the Blue Banner above to navigate between sections.

Process Flow

 Projects

- Elevator Support
- Equipment Related Services
- Ground Maintenance
- Maintain the Clark River Channel
- Survival Equipment
- Transient Aircraft Support Equipment Main**

- New
- Import
- Copy
- Delete
- Lock
- Export

Project Name: Transient Aircraft Support Equipment Maintenance

Project Status: Sample

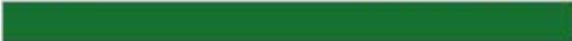
Creation Date: 10/17/2012

Version: 1.0

PWS Template: PWS Default 10/17/2012

QASP Template: QASP Default 10/17/2012

Project Progress:

Requirements	100% (10 of 10)
	
PWS	100% (27 of 27)
	
QASP	100% (12 of 12)
	

Requirements contribute 50% toward PWS and QASP completion.

and Vision - Edit

Save Cancel Process Flow [Navigation icons]

Folder: Samples

Transient Aircraft Support Equipment Maintenance

Provide the highest level service for transient aircraft and assured availability and reliability of Transient Support Equipment

us: Sample

te: 10/17/2012

1.0

late: PWS Default 10/17/2012

plate: QASP Default 10/17/2012

Statement

Contractor shall develop and provide service maintenance plan for GFE vehicles.

Generated Task Statement Add "The Contractor shall"

Contractor shall develop and provide service maintenance plan for GFE vehicles.

Task Statement

A) RESULTS: What are the desired output(s) of the task that the contractor is to provide?

Results

	▼	Add
Service maintenance plan		Edit
		↑
		↓
		Delete

B) CONTEXT: To what does this task pertain?

Sample Contexts

	▼	Add
GFE vehicles		Edit
		↑
		↓
		Delete

C) ACTIONS: What actions do you want the contractor to execute to accomplish the result(s)?

Sample Actions

	▼	Add
develop		Edit
provide		↑
		↓
		Delete

(optional) - If necessary, provide additional details as to WHAT you need rather than how good it needs to be or how to do it:

ent Related Services

ment

The contractor shall develop and provide service maintenance plan for GFE vehicles.

at level of performance (standard) do you need to successfully achieve this requirement?
 in mind the results you are looking for and the actions that the contractor is responsible for.

Standard | Sample Standards | Copy Standards

Process Flow

[Up] [Down] [Refresh] [Right]

Complete

0 [Icons]

Related Documents

s for this Task

Executable [Edit](#) [Up] [Down] [X]

95%
 No more than x complaints per y

Comprehensive [Edit](#) [Up] [Down] [X]

100% Compliant with all Regulations

Results for this Task:

service maintenance plan

Actions for this Task:

develop
 provide

Requirement Related Services

Requirement

The contractor shall develop and provide service maintenance plan for GFE vehicles.

Create New Inspection

Copy Inspections

View Standards

Process Flow controls: up/down arrows, refresh, right arrow, Complete checkbox, count 0, and other icons.

Information:



Inspection Applies to All Standards

Edit St

service maintenance plan

100 % review of final plan
interim reviews randomly

Project lead feedback to COR

rework needed due to mistakes will be accomplished at no additional cost to the government

Equipment Related Services

Manage Documents

Summary Report

Process Flow

Documents

Export WBS

Editable Popup



Sticky Note Feature

	Completed:			
	Sta	Std	Ins	Del
Equipment Related Services	Y	Y	Y	Y
Vehicle operations and Maintenance	Y	Y	Y	Y
1.1 ... develop and provide services.	Y	Y	Y	Y
1.2 ... perform preventive maintenance.	Y	Y	Y	Y
1.3 ... provide certified vehicle	Y	Y	Y	Y
Contractor shall provide, install	Y	Y	Y	Y
2.1 ... inspect, maintain, repair	Y	Y	Y	Y
2.2 ... prepare and submit Service	Y	Y	Y	Y
2.3 ... maintain, repair, trouble	Y	Y	Y	Y
2.4 ... test, inspect, maintain, and repair	Y	Y	Y	Y
HVAC/R Systems operation and maintenance	Y	Y	Y	Y
3.1 ... maintain, repair, and test operating environmental control systems for Government Installation.	Y	Y	Y	Y
3.2 ... maintain, repair, and install industrial and commercial grade real property equipment and appliances for Government Installation.	Y	Y	Y	Y
3.3 ... operate and maintain HVAC equipment water treatment program for Government Installation.	Y	Y	Y	Y
3.4 ... review and update the five year plan for mechanical systems.	Y	Y	Y	Y
Operation of Power Production and Generator Equipment	Y	Y	Y	Y
4.1 ... install, operate, and maintain gas and diesel engines and generators for the Government Installation.	Y	Y	Y	Y
4.2 ... install, maintain, and operate properly functioning automatic transfer panel by-pass switches.	Y	Y	Y	Y
4.3 ... install, maintain, and operate properly functioning Fire Deluge Pumpm Systems for Government Installation.	Y	Y	Y	Y
4.4 ... provide generator training for managers and custodians.	Y	Y	Y	Y
4.5 ... maintain an inventory of all emergency generators.	Y	Y	Y	Y
Support of Fire Suppression Equipment	Y	Y	Y	Y
5.1 ... operate, maintain, and test fire suppression system for Government Installation.	Y	Y	Y	Y
5.2 ... ensure Deluge pump start for Government Installation.	Y	Y	Y	Y
5.3 ... maintain diesel fuel tanks for Government Installation.	Y	Y	Y	Y

[Preferences](#) |
 [Create and Attach to Email](#) |
 [Create and Send For Review](#)

[Project Information](#) |
 [Requirements Definition \(A-H\)](#)

Equipment Related Services

Popup

Equipment Related Services

Operations and Maintenance

develop and provide service maintenance plan for GFE

perform preventive maintenance service and schedule

provide certified vehicle operators for GFE vehicles.

contractor shall provide, install, and maintain alarm system

inspect, maintain, repair, troubleshoot, test, and calibrate

prepare and submit Semi-annual Halon Report for Government

maintain, repair, troubleshoot, inspect, upgrade, program

test, inspect, maintain, and repair Civil Defense Warning

Systems operation and maintenance

maintain, repair, and test operating environmental control

maintain, repair, and install industrial and commercial

operate and maintain HVAC equipment water treatment

review and update the five year plan for mechanical systems

of Power Production and Generator Equipment

install, operate, and maintain gas and diesel engines

install, maintain, and operate properly functioning automatic

install, maintain, and operate properly functioning Fire

provide generator training for managers and custodians

maintain an inventory of all emergency generators.

of Fire Suppression Equipment

operate, maintain, and test fire suppression system for

ensure Deluge pump start for Government Installation

maintain diesel fuel tanks for Government Installation.

Equipment is maintained and related services are performed

Comments
Close

Current item: [Show Comments on current item only](#)

Project: Equipment Related Services

[All Comments](#) |
 [Advanced Filter](#) |
 [New Comment](#) |
 [Delete All](#)

Task	Assigned: ARRT User	By: ARRT	10/16/2012	New	Medium	Edit	x
Statement							
3.3.2 The contractor shall maintain, repair, and install industrial and commercial grade real property equipment and appliances for Government Installation.							
The inspection column, when 3.3.2 is highlighted, under the blue button at the top Requirements Definition (A-H). There appears to be two, one blank and one that I filled out... not sure what happened...							
Task							
Assigned: ARRT User							
By: ARRT							
10/16/2012							
New							
Medium							
Edit							
x							
Statement							
3.3.4 The contractor shall review and update the five year plan for mechanical systems.							
Just noticed that the count in the box at the top for notes does not change after I save and close a note, but the count will show up after I leave the screen, and then come back... confusing delay... as once I make a note comment, I would think it would show up right away. Maybe this was resolved in 2.0							
Task							
Assigned: ARRT User							
By: ARRT							
10/16/2012							
New							
Medium							
Edit							
x							
Statement							
3.3.4 The contractor shall review and update the five year plan for mechanical systems.							
Seems if I enter the inspection process from the ABC, D, EFGH, deliverables screen, it is fine, but if I try to build the inspection process EFGH from another screen is duplicates or puts a blank EFGH, and then the filled out EFGH below it as can be seen in the other task statement.. See notes							
Task							
Assigned: ARRT User							
By: ARRT							
10/16/2012							
New							
Medium							
Edit							
x							
Inspection							
3.4.2 The contractor shall install, maintain, and operate properly functioning automatic transfer panel by-pass switches.							
OK one more... when I get to what to inspect, it is usually a report, which is in the column to the right... It would be nice to have a left arrow rather than type in the report name as to what I am							

Equipment Related Services

	Completed:			
	Sta	Std	Ins	Del
Equipment operations and Maintenance	Y	Y	Y	Y
1 ... develop and provide service maintenance plan for GFE vehicles.	Y	Y	Y	Y
2 ... perform preventive maintenance service and scheduled maintenance service for GFE vehicles.	Y	Y	Y	Y
3 ... provide certified vehicle operators for GFE vehicles.	Y	Y	Y	Y
Contractor shall provide, install, and maintain alarm systems for XYZ Organization.	Y	Y	Y	Y
1 ... inspect, maintain, repair, troubleshoot, test, and calibrate operating fire alarm systems for Government Installation.	Y	Y	Y	Y

Task 3.1.1

Statement (ABC)	Standards / AQLs (D)	Inspection (EFGH)	Deliverables
Statement Is Complete	<input checked="" type="checkbox"/> Standards Are Complete	<input checked="" type="checkbox"/> Inspection Is Complete	<input checked="" type="checkbox"/> Deliverables Are Complete
1.1 Statement: The contractor shall develop and provide service maintenance plan for GFE vehicles.	b) STD: Executable AQL: 95% No more than x complaints per y <hr/> pppp STD: Comprehensive AQL: 100% Compliant with all Regulations	What: service maintenance plan How: 100 % review of final plan interim reviews randomly Who: Project lead feedback to COR Incentive: rework needed due to mistakes will be accomplished at no additional cost to the government Related STDs: Applies to All Standards	# Deliverable: A001 Service Maintenance Plan A003 Monthly Reports A004 Final Report

Transient Aircraft Support Equipment Maintenance

Export to Word | Process Flow

	Weighting Percentages			
	L1	L2	L3	L4
Transient Aircraft Support Equipment Maintenance				
Service for transient aircraft	62.5%			
1.1 ... establish and maintain transient aircraft service records for transient aircraft.		41.7%		
1.2 ... accomplish aircraft arrival services for transient aircraft.		33.3%		
1.3 ... maintain aircraft arresting system & barriers for XYZ runway.		25%		
Available and Reliable Transient Support Equipment (TSE)	37.5%			
2.1 ... maintain mission capable ground support equipment at the required Ao for transient aircraft.		20%		
2.2 ... document all support equipment discrepancies in the appropriate records		20%		
2.3 ... create a Hazardous Material Management Center (HAZMAT Mgt Center) for Transient Support Equipment.		20%		
2.4 ... perform operations for the HAZMAT Management Center.		20%		
2.5 ... maintain records for Transient Support Equipment.		20%		

Objective 3.1

Service for transient aircraft Relative Weight: 62.5%

	Lowest					Highest	Value
Contractor shall establish and maintain transient aircraft service records for transient aircraft.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		41.7%
Contractor shall accomplish aircraft arrival services for transient aircraft.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		33.3%
Contractor shall maintain aircraft arresting system & barriers for XYZ runway.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		25%

Requirements Weighting

Efficient Aircraft Support Equipment Maintenance

document below to review, edit, and/or export.

Process Flow




Review Completeness

Rectangular Snip

Work Statement (PWS)



Your PWS is 100% complete.

Requirement Statements



The PWS clearly describes the project requirements, mission, scope, tasks, and standards.

Requirement Summary (PRS)



The PRS is the combination of tasks and standards that defines the requirements for the contractor.

Quality Assurance Surveillance Plan (QASP)



Your QASP is 100% complete.

Quality Assurance Surveillance Matrix



The QASP is the document government personnel use to determine if the contractor is meeting the performance standards contained in the contract.

Report



A summary report of the Requirements you created (Statements, Standards, Inspection, Incentives, Deliverables).

Work Breakdown Structure



Review and print the Project's WBS.

Requirements Weighting and Importance



Review the Importance and Weights you assigned to each Requirement Statement.

Related Documents



Related Documents are a list of documents that are associated with a Project. These might include published documents referenced as compliance standards, official policy relevant to this PWS, and other necessary external document references.



So Lets Look at the ARRT Tool!



SAM - Service Acquisition Mall

Website to promote collaboration among acquisition workers at all levels of government.

Provides a “hands-on” resource for getting real world examples for writing performance based contracts.

Follows DOD Guidebook for the Acquisition of Services

Organized by Service Portfolio Groups containing:

- Best practices
- Training, guidance, and videos
- Knowledge repository
- Keyword search
- Tools to plan, develop, and execute service requirements

