



**ASD
NII
DoD CIO**

Enhanced ISP Process

Understanding and Utilizing the ISP Analysis Process

7 – 8 November 2006

Roger Thorstenson
OASD(NII) A&I Dir.
Phone 703-607-0506
Roger.thorstenson@osd.mil



Outline

- Background
- Overview of the ISP Enhancement Process
- ISP Development Philosophy
- Introduction to the ISP Template
 - Process Analysis
 - Descriptive Text, Graphics, Keywords, and Developer Notes
 - Printable ISP Document
- Summary



Background

The current ISP process:

The Enhanced ISP process will:

Very costly and time consuming to produce	<ul style="list-style-type: none">• Reduce formatting and publishing effort• Allow for easy search, discovery, retrieval, and reuse of ISP data• Reduce errors by validating the ISP structure
Time consuming to review	<ul style="list-style-type: none">• Reduce errors by validating the ISP structure• Facilitate the ability to conduct subject specific reviews
PMs do not receive reviewer feedback quickly	<ul style="list-style-type: none">• Allow for a future collaborative review process
Frequently includes low-value data	<ul style="list-style-type: none">• Focus the effort on the high-value analytical information
Difficult to use for PMs, requirements & acquisition community, reviewers, and other study teams	<ul style="list-style-type: none">• Allow for easy storage, search, discovery, retrieval, and reuse of ISP data• Improve ability to manage information supportability aspect of programs and associated processes

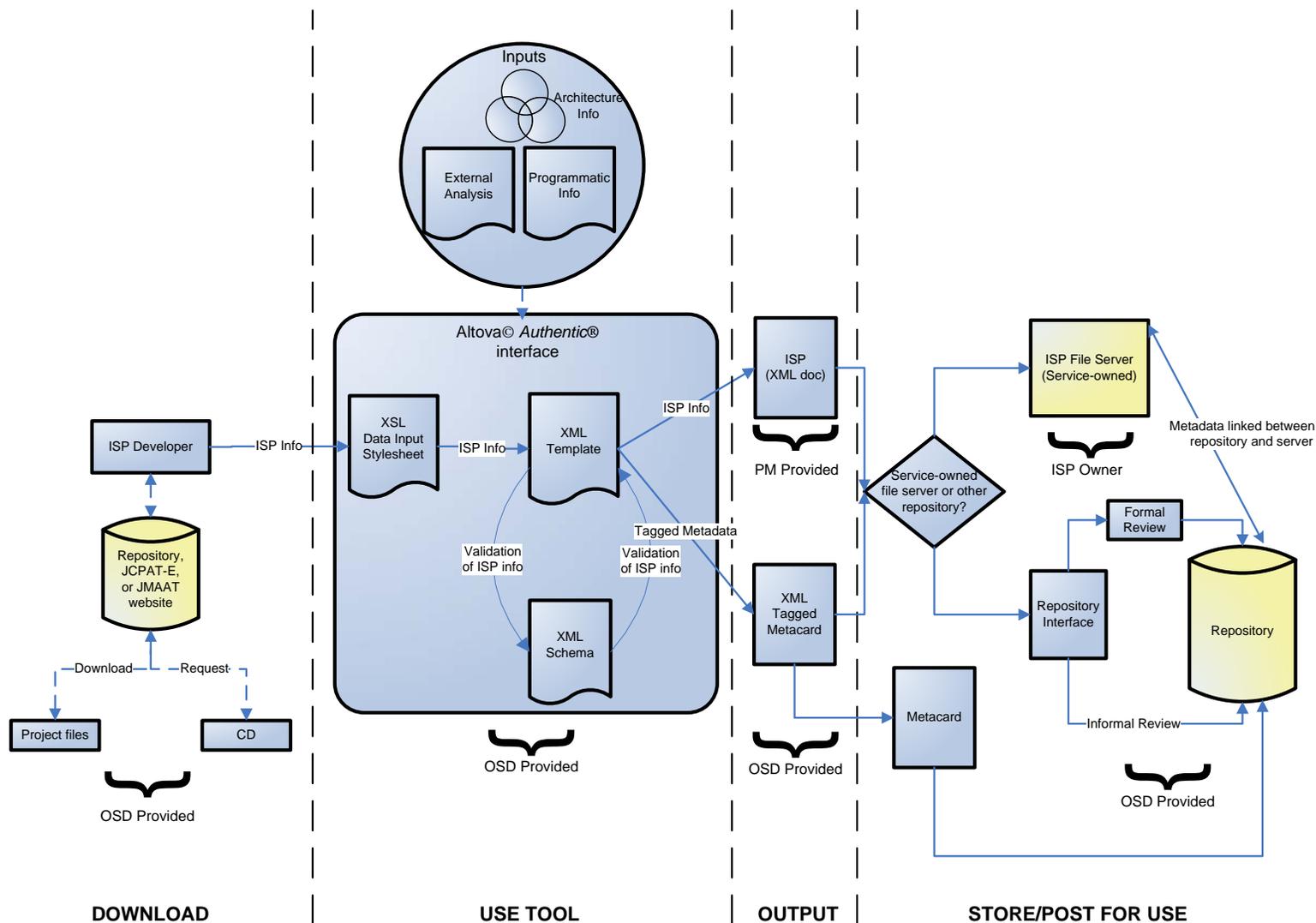


ISP Development Philosophy

- Transition the current ISP process from document-centric to data-centric.
- Data entry through formatted templates using Authentic®, a free word-processing type application (similar to Acrobat reader).
- Extensible Markup Language (XML) tagging is transparent to the user.
- Authentic® provides data capture and analysis functionality in two ways:
 - Structured input- TurboTax®-like
 - Flexible arrangement- Standard analytical structures- Lego® block-like
- Focus user on the program's processes and critical informational needs.
- Provide collaborative capability with version control through a centralized file server.



Overview of the ISP Enhancement Process: Developing the ISP



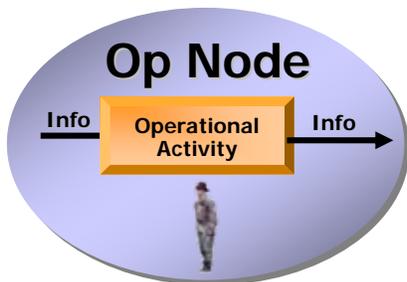
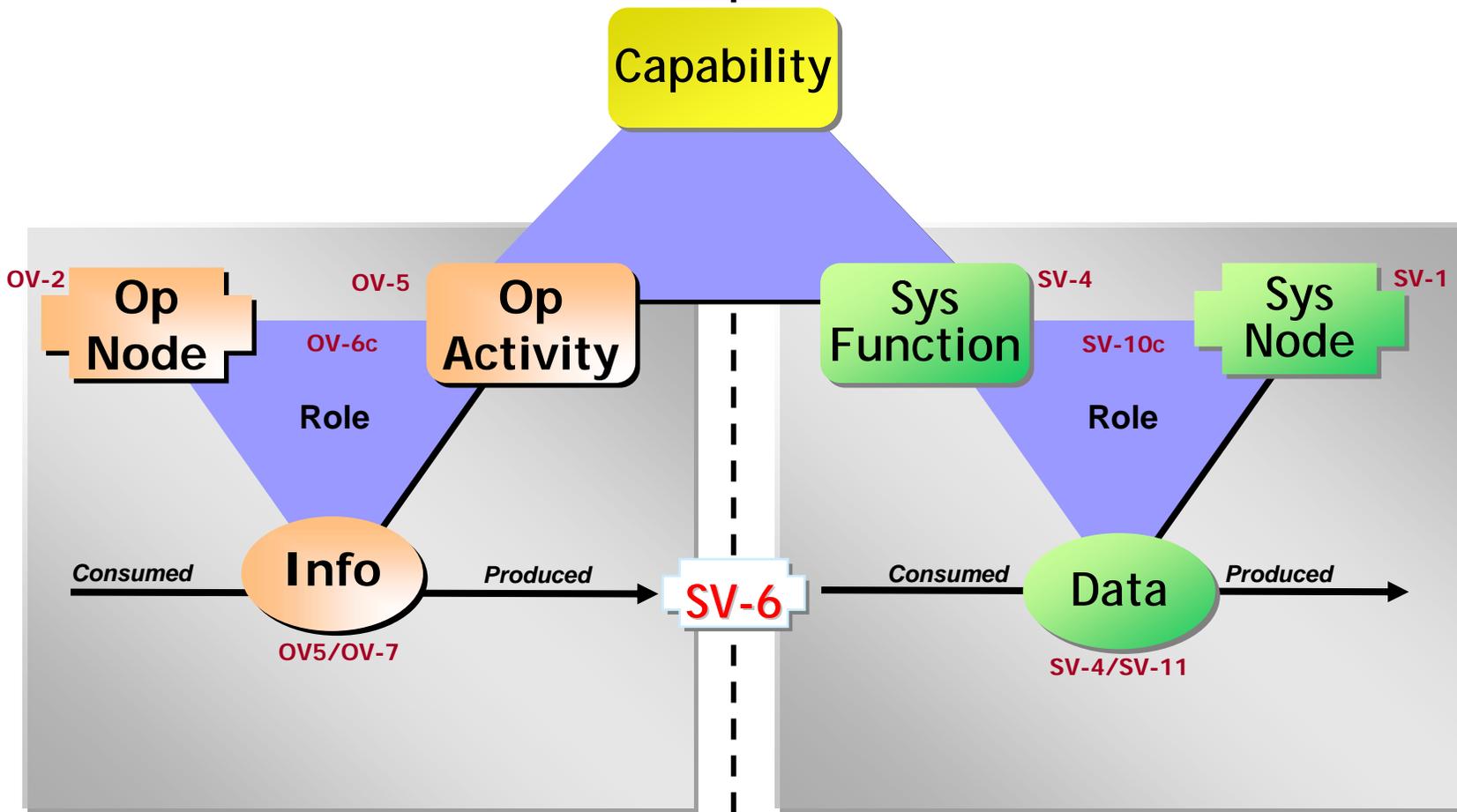


Introduction to the ISP template

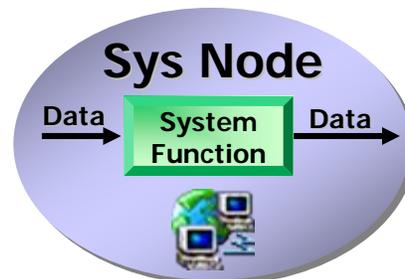
- The **Program Data** section allows the ISP developer to enter general information about their program.
- The **Overview** section allows the ISP developer to enter the program's purpose and scope.
- The **Analysis** section is the crux of the ISP and consists of the following sub-sections:
 - Process Analysis- IDs interoperability Issues and Risks*
 - Net-centric Assessment
 - Information Assurance (IA) Status
 - Radio Frequency Spectrum Needs Status
- **Appendices** and **Supporting Documentation** sections as needed.

* **Issues and Risks** are an automatically generated product of the process analysis.

ISP = Process Analysis



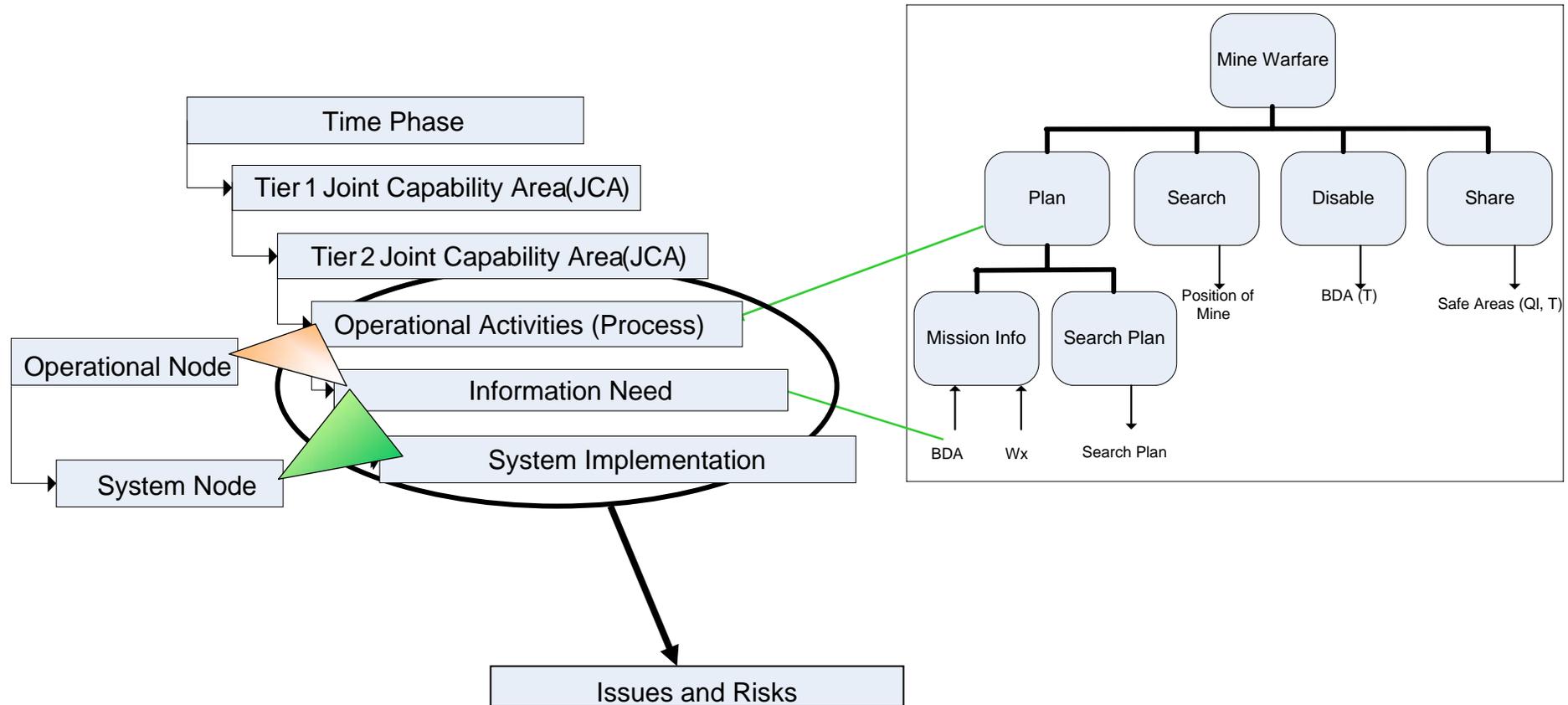
Implementation Analysis





Process analysis section

- In the Process Analysis section, the ISP developer is asked to enter their detailed warfighter or business process related data



Process analysis

Select Tier 1 & Tier 2 Joint Capability Area(s)

- After the Node hierarchy has been entered, select the Tier 1 Joint Capability Area(s) (JCAs) that apply to the program. If a particular JCA is not in the menu, it may be entered manually in the “Tier 1 Name” field.

Outline Number:	2.1.1.1.	2.1.1.2.
Tier 1 Joint Capability Area Name: *	Options: Maritime/Littoral Control Operations Tier 1 Name: Maritime/Littoral Control Operations	Options: Logistics Tier 1 Name: Logistics

...For each Tier 1 JCA entered, one or more Tier 2 JCAs may be selected....

Collapse Tier 2 Capability Areas for JCA: Maritime/Littoral Control Operations

Please enter the Tier 2 Joint Capability Areas.

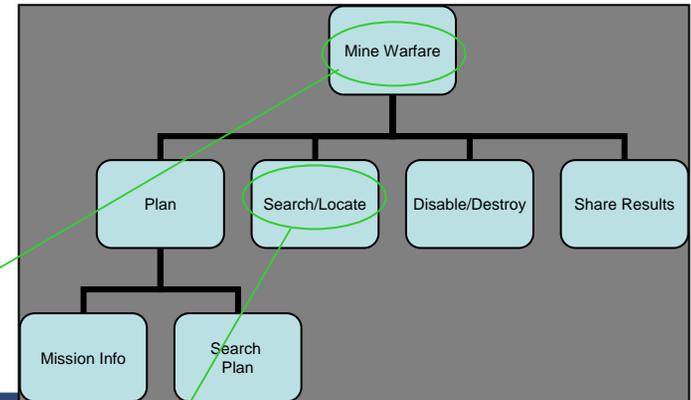
Tier 2 Joint Capability Area Name: *	Options: <input type="text"/> Tier 2 Name: Surface Warfare 1.1	Options: <input type="text"/> Tier 2 Name: Undersea Warfare 1.2
---	---	--

Collapse Task List for JCA: Maritime/Littoral Control Operations, Tier 2: Surface Warfare 1.1

Process analysis

Enter Task Hierarchy

- After the JCA Tiers have been entered, manually enter in the Task Hierarchy: Tasks and Subtasks.



Collapse Task List for JCA: Maritime/Littoral Control Operations, Tier 2: Surface Warfare 1.1

Collapse Task List for JCA: Maritime/Littoral Control Operations, Tier 2: Surface Warfare 1.1

For each task list entry that you create, you may enter multiple sub-task lists. There is no limit to the depth of the hierarchy you create.

Outline Number:	1.1.1
Task List Type:	Navy
Task List Name:	Navy Tactical Task List
Task List Number: *	1.1.1
Task Title: *	Mine Warfare
Task Description:	
Task Start Time:	T + 1 minute
Task Duration:	10 minutes
Keywords:	• mission

Collapse Subtask List for Task: Navy Tactical Task List 1.1.1 - Mine Warfare

Please enter the following information for the task.

Outline Number:	1.1.1.1	1.1.1.2	1.1.1.3	1.1.1.4
Task List Type:	Navy	Navy	Navy	Navy
Task List Name:	Navy TTL	Navy TTL	Navy TTL	Navy TTL
Task List Number: *	1.1.1.1	1.1.1.2	1.1.1.3	1.1.1.4
Task Title: *	Plan	Search/Locate	Disable/Destroy	Share Results
Task Description:	add TaskListDescription	add TaskListDescription	add TaskListDescription	add TaskListDescription
Task Start Time:	add TaskStartTime	add TaskStartTime	add TaskStartTime	add TaskStartTime
Task Duration:	add TaskDuration	add TaskDuration	add TaskDuration	add TaskDuration
Keywords:	add Keyword	add Keyword	add Keyword	add Keyword

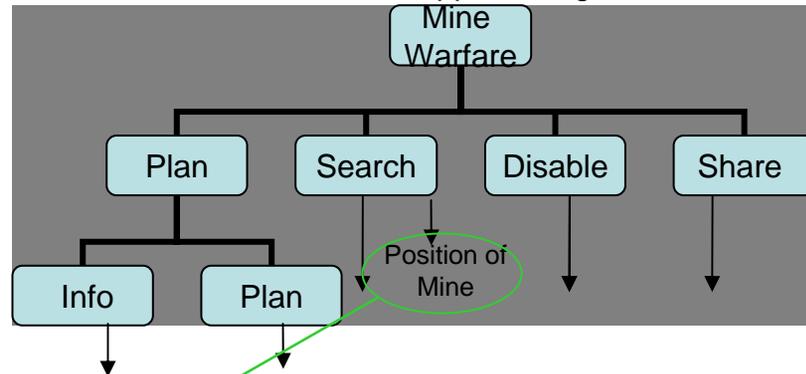
Collapse

Information Needs for Task: 1.1.1.2 : Search/Locate

Process analysis

Indicate Information Need(s)

- For each Leaf Task, indicate the associated Information Needs by un-checking the appropriate "Collapse" checkbox and entering data into the fields. The Information Needs Title Bars appear in light blue.



Collapse Information Needs for Task: Navy Tactical Task List 1.1.1.2: Search/Locate

Critical/Vital Processes	Minimum Parameters	Intelligence Supportability Related	Information Need Name *	Information Need Source	Information Need Consumer	Information Need Identifier	Information Need Type	Select Min Parameters	Information Need Quality
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Position of Mine	ON 1 - Multi Mission Helicopter	ON 2.1 - Aegis Cruiser	Lat/Long	Output to the Process	<input checked="" type="checkbox"/> Quality <input type="checkbox"/> Quantity <input type="checkbox"/> Time <input type="checkbox"/> Other	<input type="checkbox"/> <1/2 NM

Check the box if this information need contains intelligence data for further exploitation or dissemination.

Collapse System Implementations for Information Need: Position of Mine

Process analysis

Analyze System Implementation(s)

- For each Information Need indicated, enter the System Implementation(s) that satisfies the Information Need.

<u>System Implementation Name</u>	<u>System Implementation Source</u>	<u>System Implementation Consumer</u>	<u>System Implementation Identifier</u>	<u>System Implementation Type</u>	<u>Information Quality</u>
Position of Mine	1 - UYS-1	2 - UYA-4	Lat/Long	Datalink	<p>Do these systems (Source, Consumer, Identifier, or Type) adequately support this Information Need related to Quality?</p> <p>No</p> <p>Explanation:</p> <ul style="list-style-type: none"> 2 NM

You have identified either an unknown or problematic parameter, please explain in the risk block below for each No or Unknown selected. Please identify a mitigation strategy if possible.

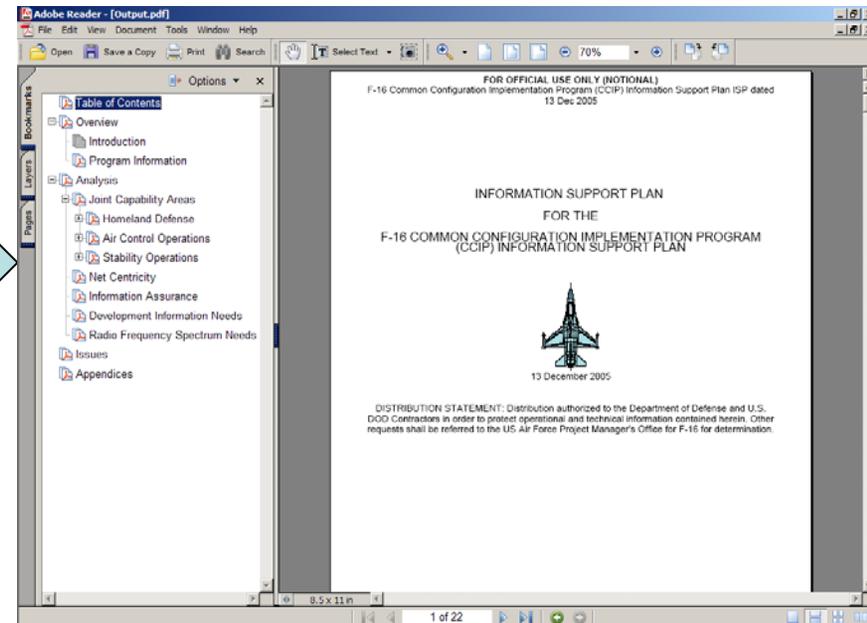
<u>Risk Title</u>	<u>Risk Source</u>	<u>Risk Type</u>	<u>Risk Number</u>	<u>Impacted Task</u>	<u>Risk Description</u>	<u>Risk Impact</u>	<u>Mitigation Strategy</u>
Position of Mine for Search/Locate	UYS-1	Operational	1	Search/Locate	<ul style="list-style-type: none"> UYS-1 does not locate the position of the mine within the required metric of < 1/2 NM. 	<ul style="list-style-type: none"> The inability to transmit mine position information required quality metrics results in a hazard to navigation and a reduced operational area for friendly surface traffic. 	<ul style="list-style-type: none"> All data transmissions will be backed up with voice reports to reduce the position error.



Printable ISP document

- ISP developers have the ability to transform the data in the ISP template into a printable document in Adobe's Printable Document Format (PDF)
- The printable document can be easily distributed to colleagues, reviewers, and other developers

Program Information	
<i>Please enter the following general information pertaining to your ISP. If a field does not apply, please enter "N/A". * Required</i>	
Program Name: *	Program XYZ
ISP Date: *	2006-01-31 <input type="text"/>
ISP Draft Status: *	<input type="text" value="DRAFT"/>
ISP Classification: * <small>The security of the medium that is being used to create this ISP must meet or exceed the classification of the ISP.</small>	<input type="text" value="UNCLASSIFIED"/>
ISP Classification Caveats:	
ISP Classified By: *	
ISP Classification Derived From: *	
ISP Declassify On: *	





Printable ISP document cont...

Table of Contents

1. Overview	4
1.1. Introduction	4
1.3. Program Information	9
2. Analysis	12
2.1. Joint Capability Areas	12
2.1.1. Homeland Defense.....	12
2.1.1.1. Population Protection.....	12
2.1.1.1.1. CAP TKOP 6 : Provide Operational Force Protection.....	12
2.1.2. Air Control Operations.....	12
2.1.2.1. Force & Supply Interdiction.....	12
2.1.2.1.1. Strike TKOP 1.2.4.3 : Conduct Forcible Entry Ops.....	12
2.1.2.1.2. Attack Ground Forces TKTA 3 : Empty Firepower.....	12
2.1.2.2. SEAD.....	12
2.1.2.2.1. Strike SAM Sites TKOP 3.2.4 : Suppress Enemy Air Defenses.....	12
<u>Subtasks</u>	
2.1.2.2.1.1. Mission Plan TKOP 3.1.3 : Develop Operational Targets.....	13
2.1.2.2.1.2. Strike Mobile Launchers TKOP 3.3.2 : Attack Aircraft and Missiles.....	13
2.1.2.3. DCA.....	13
2.1.2.3.1. Mission Plan TKOP 3.1.3 : Develop Operational Targets.....	13
2.1.2.3.2. Patrol Convoy Route TKTA 3.2.8 : Conduct Air-to-Air Operations.....	13
2.1.2.4. OCA.....	13
2.1.3. Stability Operations.....	13
2.1.3.1. Security.....	13
2.2. Net Centricity	14
2.3. Information Assurance	15
2.4. Development Information Needs	16
2.5. Radio Frequency Specrum Needs	17
3. Issues	18
4. Appendices	19
4.1. Appendix A.	19
4.2. Appendix B.	20
4.3. Appendix C.	21
4.4. Appendix D.	22

Provides document features:

- Table of contents
- Auto formatting
- Classification markings
- Figures and Table titles and markings
- Headers and footers
- Distribution and handling instructions
- Appendices

Enabled by data which is automatically XML tagged by the tool



Summary- What the Enhanced ISP provides to the users

Program Managers

- Makes ISP development easier, faster, and more efficient
- Streamlines ISP review process for more efficient scheduling and faster feedback
- Allows PMs to synchronize and compare programs as well as share critical information across the Services
- Provides collaborative capability with version control through a centralized file server.

Architecture Developers (Domain Owners, COI managers, JCIDS process supporters)

- Ready access to the data to support their purposes (e.g., analysis, architecture development, program assessments).

Testing Community (e.g., JITC)

- Easy access to ISP data to support interoperability test plan development or validation.

Studies and Analysis Groups (e.g., Welsh Panel, JFIRT)

- Improves ability to access architecture data and programmatic analysis, especially cross-program net-centric analysis.

Reviewers

- Allows for quicker Program Manager response to reviewer comments.



Questions?