



## ENOVIA Aerospace and Defense Accelerator for Program Management

### Product Objective

Successful execution of an Aerospace and Defense (A&D) program means managing volumes of information to meet all contractual obligation efficiently. Tracking, reporting and communicating that information involves teams of people across multiple functions and organizations. Programs succeed or fail on their ability to communicate very reliably with all the team members over long periods of time. A solution is required that both integrates all of the critical data and program information into one consistent whole to make it more understandable and provides a permanent reference and program "memory" to inform new team members.

Through project pipeline dashboards, ENOVIA® Aerospace and Defense Accelerator™ for Program Management provides real-time visibility into a project's status in terms of schedule, resources, costs and benefits. Users can create and access ENOVIA data from the most popular Microsoft® applications, including Word®, Excel®, PowerPoint®, Outlook®, Project®, Windows Explorer®, and Windows Desktop Search®. With product content being managed in the ENOVIA environment rather than on users' PCs, organizations are now able to create, manage and review product content more securely. The native integration to Microsoft applications supports a rapid adoption of ENOVIA Aerospace and Defense Accelerator for Program Management.

### Product Overview

ENOVIA Aerospace and Defense Accelerator for Program Management uses one central repository to support key functional disciplines within the A&D enterprise:

- Contracts Management
- Subcontracts Management
- Data Management
- Program Management
- Program Planning & Control (PP&C)
- System Engineering

Performance-to-contract is greatly improved when all contract requirements are visible to the entire team. Using one system to bring together the core processes of these functional disciplines provides the ability to improve overall performance of program execution and delivery-to-contract. ENOVIA Aerospace and Defense Accelerator for Program Management provides the ability to:

- Capture contracts and their associated work-breakdown elements in line-item detail to ensure complete assignment, scheduling and proper execution. Work-breakdown elements reference the scheduled tasks required to complete the work assigned.
- Link projects with critical milestones and deliverables to the contracts and baseline product architectures.
- Link hardware and software deliverables to schedule tasks.
- Capture contract requirements for data delivery with the Contract Data Requirements List (CDRL) and Subcontract Data Requirements List (SDRL). Generate and schedule submittal tasks and link actual data deliverables documents for assignment and future completion.

In order to align downstream product development with the contract requirements, ENOVIA Requirements Central™ can be deployed to capture, share and manage technical requirements.

### Key Customer Benefits

- Secure program award fees and profits with perfect contract delivery performance
- Increase customer satisfaction as the result of responsive and reliable issue and correspondence management with the customer
- Reduce or eliminate penalties and late fees through management of contract work items, schedules, deliverables and all adjustments and changes
- Eliminate failed contract audits through the use of repeatable and secure storage, submittal and contract verification processes
- Optimize staffing plans with real-time utilization reports to assess availability of key skills across all projects
- Drive a phased-base decision making process using best-in-class process templates with predefined phases, gates and milestones
- Improve execution and oversight of complex product development activities by decomposing projects into smaller manageable projects with visibility to sub-project dependencies
- Coordinate and collaborate on the planning and execution of projects in real-time
- Manage complex collaborative projects involving internal and external teams of customers, suppliers and partners
- Enhance user adoption by simplifying access to product content using the most popular Microsoft applications
- Improve collaboration and decision making throughout the enterprise by leveraging product data.
- Apply enterprise-level data sharing and security without disrupting established end user work procedures
- Increase overall end user efficiency and productivity

## Product Highlights

### Contracts Management

ENOVIA Aerospace and Defense Accelerator for Program Management allows companies to manage and store contractual correspondence and documentation. Program managers can capture and decompose product requirements, contract line-items (CLINs) and work breakdown structure elements (WBSE) into manageable, traceable and auditable entities. Responsibilities for the execution and contract closure of program plans are assigned through the requirements allocation matrix (RAM). Formal change and approval processes are provided to enforce Contract Modifications and Contract Change Orders. Tools include Contract Charge Proposals, Rough Order of Magnitude (ROM) estimates and Preliminary Impact Analyses (PIA) for evaluation of customer proposed contract changes. Contract forms are provided for contract authoring and SF-1411 (Contract Pricing Proposal Cover Sheet) certification of cost is also supported.

**A001: Submittals**

Submit	Est. Submitted Date	Act. Submitted Date
Submit Schedule...	5/15/2004	5/15/2004
882 1 Closed	6/15/2004	6/15/2004
883 1 Closed	7/15/2004	7/15/2004
884 1 Closed	8/15/2004	8/15/2004
885 1 Closed	9/15/2004	9/15/2004
886 1 Initiated	10/15/2004	

**CDRLs Report**

Section 1: Data Items Delinquent

Program	CDRL #	Name	Revision	Submittal Requirements	Resp Person	Resp Customer
No Objects Found						

Section 2: Data Items Shipped Previous Month - June 2004

Program	CDRL #	Name	Revision	Submittal Requirements	Submitted Date
No Objects Found					

Section 3: Data Items Approved Previous Month - June 2004

Program	CDRL #	Name	Revision	Submittal Requirements	Resp Person	Response Due	Submitted Date
No Objects Found							

Section 4: Data Items Due Current Month - July 2004

Program	CDRL #	Name	Revision	Submittal Requirements	Due	Continues
No Objects Found						

CONTRACTOR SHALL SUBMIT THEIR PROPOSED FORMAT IN CALENDAR DAYS AFTER CONTRACT AWARD. VENDOR SUBMITTER SHALL BEGIN WORK PRIOR TO THE SCHEDULED DELIVERY OF FIRST ARTICLES AND/OR PRODUCTION ARTICLE AND MONTHLY THEREAFTER.

### Subcontracts Management

Contracts and subcontracts can be managed in the context of programs with automatic synchronization of contractual milestones in master projects. Subcontractors' schedules and deliverables can be assigned and their performance to schedule can be tracked.

### Data Management

Users can capture CDRL and SDRL specifications and manually or automatically schedule multiple data submittals based on milestone dates and frequency. DRL approval processes can be managed. Data Item Descriptions (DIDs) are linked as individual items to contracts, which permits classification and "where-used" lookup.

### Program Planning & Control (PP&C)

Program managers can plan the execution of major programs through the development of schedule task breakdowns. Program risks and issues can be identified and mitigated throughout the project's execution. Issues are real incidents, inquiries or problems that are impacting your project negatively, and risks are anything that has the potential to impact your project negatively. Issue management provides a context for capturing, tracking and closing Issues in the context of a project. Issues are identified, captured, classified and assigned to project members for resolution.

Risk management enables project teams to identify, quantify, analyze and mitigate project risks. This is supported by risk projects, which can be leveraged for the creation of itemized risk mitigation plans integrated with the master schedule. During the analysis process, risks need to be assessed and quantified in two dimensions. These two dimensions are impact and probability with ranges from 1-5. These dimension values are used to determine each risk priority and clarify which project risks need mitigation to help minimize these potential negative impacts.

### Extended Enterprise

Secure access is provided using standard Internet tools for customer, supplier and partner personnel into relevant aspects of product architecture and projects. Program management and product architecture data is accessed with a Web browser or via Microsoft Windows applications such as Explorer, Office, etc. Support for customer notification and approval is provided by delivery folders for customers to receive contractual data submittals. Customers also have the ability to review and approve deliverables and download deliverable content. Flexibility is provided through configurable dashboards that display information such as the status of a program's key performance indicators (KPIs). Configurable supplier access is available as well as configurable access to subcontract data (Statement of Work, specifications, etc.). Collaboration occurs between the subcontract management team and supplier members, allowing subcontract risks, issues and opportunities to be tracked and the ability for supplier team members to record supplier schedule and deliverable status.

### Schedule Change Management

Baseline schedules can be defined and any proposed changes to these baselines must obtain program/project manager approval for incorporation. Alternative tasks/schedules can be defined to assess the impact to a baseline schedule. In addition, the ability to "Lock/Unlock Schedules" in support of "End of Period" activities allows the program schedule team to control changes in the schedule while formal contract progress reviews occur.

**Resource Loading Report**

Report Period: From: Aug 1, 2004 To: Dec 31, 2004

Person	Project	WBS Task	Aug 2004	Sep 2004	Oct 2004	Nov 2004	Dec 2004	
Kristin Perry	Test Project 2	PA-1700.050	0.00	0.00	0.00	0.23	0.00	
		PA-1700.040	0.00	0.00	0.00	0.31	0.00	
	Test Project 2	PA-1700.042	0.00	0.00	0.00	0.00	0.19	
		PA-1700.041	0.27	0.00	0.00	0.00	0.00	
	Test Project 2	PA-1700.053	0.23	0.00	0.00	0.00	0.00	
		PA-1700.054	0.27	0.00	0.00	0.00	0.00	
	Test Project 2	PA-1700.052	0.15	0.00	0.00	0.00	0.00	
		PA-1700.051	0.31	0.00	0.00	0.00	0.00	
	Test Project 2	PA-1700.050	0.04	0.08	0.00	0.00	0.00	
		PA-1700.051	0.04	0.12	0.00	0.00	0.00	
	Project 4	Sustain Phase		0.00	0.00	0.08	0.15	0.00
				0.00	0.27	0.00	0.00	0.00
	Calendar Project	Task 4		0.00	0.08	0.00	0.00	0.00
				0.00	0.27	0.00	0.00	0.00
Project Estimate Date	TJ		0.00	0.12	0.00	0.00	0.00	
			0.00	0.12	0.00	0.00	0.00	
<b>Total</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.69</b>	<b>0.19</b>	

## Business Goals

Managers can define a business goal hierarchy to help identify which projects should be approved and funded based on how they impact strategy.

## Resource Management

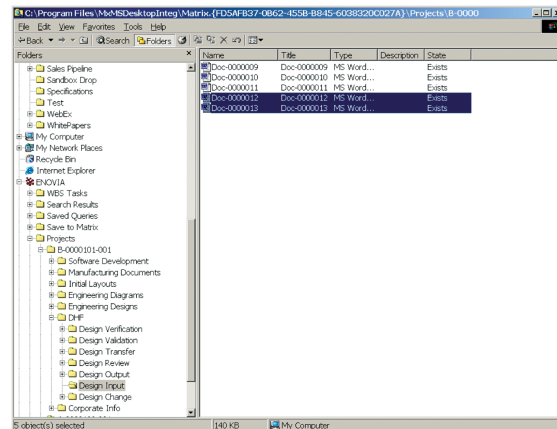
Organizations can define enterprise wide business skill hierarchies to perform project planning based on resource competency and experience along with resource utilization reports to optimize productivity and improve resource allocation decisions.

## Project Dashboards

Management can leverage dashboards to get an aggregated high-level graphical view of project status by phase, risk, quality, issues, assessments, costs and benefits. The dashboards provide visibility into enterprise metrics such as Program Performance, Organizational and Integrated Program Team (IPT) Performance and Performance of Operating Units. Alternative views of program status are provided through Executive Dashboards, Proposal Dashboards, Departmental Dashboards and Product Line Dashboards.

## Project Templates

Develop process standards and enhance predictability by driving repetitive project execution throughout the organization. Project template consists of schedule elements defined by responsible roles, folder structures, questionnaires, document templates, and bookmarks.



## Task Deliverables

As tasks are assigned and being worked, task deliverables should be associated and managed in the context of the task. As a deliverable progresses through its lifecycle, the system automatically updates the task status. After tasks are completed, the deliverables will be stored and categorized into project folders for access controls and increased visibility. To keep task deliverables on schedule, project leaders can configure automatic reminders of upcoming or late tasks that project members will receive in their company email.

## VPM V5 Data-Driven Project Management

For companies using either ENOVIA® VPM V5 or ENOVIA® VPM Central™ V6, it is possible to monitor design activity with

the project. In V6, ENOVIA Aerospace and Defense Accelerator for Program Management and ENOVIA VPM Central both run on the same technology platform. Users can search for and associate VPM data as deliverables to assigned project tasks. For ENOVIA VPM V5, ENOVIA Aerospace and Defense Accelerator for Program Management synchronizes project tasks to VPM actions. These triggered VPM V5 actions include required input for a designer to do his job. Output from the VPM actions is instantaneously available on the corresponding project tasks. As the VPM design data matures, its status changes automatically to update the project task status.

## Product Line Management

ENOVIA Aerospace and Defense Accelerator for Program Management provides companies with the ability to organize and manage their portfolio of products and the planning and introduction of future products by executing development projects. Product lines and model hierarchies organize a company's family of products. Model hierarchies represent specific products available to customers. Product managers can associate product releases with development projects and organize them into portfolios. A portfolio provides visibility into a product line's road map, product release dependencies and a real time status of strategic project milestones to share with other organizations.

## Project Content

All project content and deliverables are managed securely and stored within folder and subfolder structures. Project owners and project leads establish security on a per project basis by setting individual access rights. Within a project, each folder and file maintains additional levels of security. Team members can establish a single environment where all project information—not just documents—can be managed and shared. Members can subscribe to document events for immediate notification as changes and additions occur. Reports can be executed to provide a consolidated list of project-related content from either the work breakdown structure or from the folder structure.

## Project Financials

Project leaders can define a financial plan for each project. The financial plan includes a project costing model by investment and expense types along with the financial business benefits the project will deliver over a defined time line. The project leader can capture the plan with estimated and actual project costs and benefit values.

## Team Collaboration

A project manager can institute standard reviews for project members using routes or workflows to circulate tasks, projects and files. Online discussions are used to keep the entire project team informed of important project information. All team members can subscribe, view and comment on the original discussion topic or any of the subsequent responses.

## Critical To Quality (CTQ)

To ensure that projects meet customer requirements, project teams can define and measure a project's CTQs. These are the key measurable characteristics of a product or process in which performance standards or specification limits must be met in order to satisfy the customer needs.

### Access PLM Data with Microsoft Applications

With ENOVIA Aerospace and Defense Accelerator for Program Management users create and access PLM data from the most popular Microsoft applications. This enables enterprise-level collaboration while not disrupting the established productivity of end users. Users can access all files in the ENOVIA system as if they had been saved locally on their PC's hard drive. ENOVIA business objects are represented as directories and files on the user's PC, which enables easy saving and retrieval of files regardless of their format (CAD, PDF, MS Office, etc.). Using Windows Explorer, it is possible to store files easily in ENOVIA using popular Windows functions such as "cut and paste" and "drag and drop". Through the Microsoft Office tools (Word®, Excel®, PowerPoint®, Outlook®), users can easily save, browse and navigate product content with standard "Open", "Insert", "Save" and "Save As" dialogs to perform PLM actions such as search, document lock/unlock, file check in/check out, delete, version and revise.

In addition, users can:

- Promote company standards with document templates stored in ENOVIA and accessed with Microsoft Office applications
- Populate data from ENOVIA into MS Word tables
- Direct searches into the ENOVIA database to find product information
- Subscribe to document modification events
- Route documents for review, comment and approval
- Record key decisions with saved email threads
- Manage project schedules with MS Project

### The role of ENOVIA V6 and PLM 2.0

ENOVIA Aerospace and Defense Accelerator for Program Management supports PLM 2.0, product lifecycle management online for everyone, and the ENOVIA V6 values: global collaboration innovation, single PLM platform for intellectual property (IP) management, online creation and collaboration, ready to use PLM business processes, and lower cost of ownership.

### About ENOVIA

ENOVIA is the recognized leader in delivering collaborative PLM solutions. We enable companies from a broad range of industries to dramatically accelerate innovation, time-to-market and revenue generation by collaboratively developing, building and managing products. Our solutions facilitate the sharing of concepts, content and context across product lifecycles and throughout value chains of employees, customers, suppliers and partners.

ENOVIA collaborative PLM solutions help global enterprises bring together people, processes, content and systems to achieve a compelling competitive advantage. Our interoperable solutions unify and streamline processes across the product lifecycle, enabling companies to easily and cost-effectively work on projects within and outside of their enterprises. Our adaptable, scalable technology is built to accommodate the ever-changing marketplace.

### About Dassault Systèmes

As world leader in 3D and Product Lifecycle Management (PLM) solutions, the Dassault Systèmes group brings value to more than 90,000 customers in 80 countries. A pioneer in the 3D software market since 1981, Dassault Systèmes develops and markets PLM application software and services that support industrial processes and provide a 3D vision of the entire life cycle of products from conception to maintenance. Our offering includes integrated PLM solutions for product development (CATIA®, DELMIA®, ENOVIA®, SMARTEAM®), mainstream product 3D design tools (SolidWorks®), 3D components (Spatial/ACIS®) and SIMULIA®, DS' open scientific platform for realistic simulation. Dassault Systèmes is listed on the Euronext Paris (#13065, DSY.PA) stock exchange. For more information, visit [3ds.com](http://3ds.com).

For additional information, contact us at:  
Dassault Systèmes Enovia Corp.  
900 Chelmsford Street, Lowell, Massachusetts 01851  
978 442 2500 • ENOVIA.com • 3DS.com

