Customs Modernization

Transforming an Agency
in an Interagency Environment

Acquisition of Software-Intensive Systems Conference

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January 28, 2003
Customs Modernization: The Automated Commercial Environment (ACE) Project
Customs Modernization: The ACE Project

Key Modernization Drivers

- Increase in Mission Requirements
- Demands of the Operational Environment
- Aging, Outdated Technology
- Legislative Mandates
ACE
Improving Trade and Border Security

✔ Enhanced border enforcement based in knowledge management
✔ Interagency shared information, risk assessment and targeting PRIOR to arrival
✔ Results used to determine admissibility for truck, rail, air and sea
   ✔ All import, export, and in-transit transactions
   ✔ Single web-based interface for the trade community
✔ Expedite low risk shipments, moving goods to market faster at lower cost
✔ ACE development critical to Container Security Initiative
Governance

Customs Modernization: New World, New Tools
Governance

The Case for a Governance Framework

1. Modernization is long-term (15 years)
2. Scope demands expanded level of cooperation and application of resources
3. Governance authority, roles and responsibilities must be clear
4. Engages key leadership
5. Ensures integration of processes and activities
6. Inclusive of key stakeholders
Governance

Authority Levels: Roles and Responsibilities

Executive Steering Committee (Executive Level Policy & Priority)
- Commissioner Chair
- Deputy Commissioner & Designated Assistant Commissioners
- Department Representatives
- General Accounting Office
- Office of Management & Budget
- Trade Representative
- International Trade Data System
- e-Customs Partnership

Customs Modernization Board of Directors
- Designated Assistant Commissioners
- Deputy Commissioner/Modernization Executive Chair
- CMO & Field Representatives

Assistant Commissioner, Office of Information and Technology (OIT)/Chief Information Officer

Modernization Management Team (Program Level Planning, Oversight, & and Reporting)
- Executive Director, Customs Modernization Office (CMO) Chair
- OIT Direct Reports
- Customs Business Representatives
- CMO Acquisition Directors

Systems Integration Contractor (Project Level Execution and Implementation)
Governance
Coordination With Congress & Oversight

1. Routine communication
2. Early collaboration and action on issues
3. Mandated reports

Congress

Oversight Agencies
Government Accounting Office
Office of Management and Budget

Department
Inspector General
Investment Management

U.S. Customs Service

e-Customs Partnership
Acquisition
The Streamlined Acquisition Process

1. Streamlined source selection for acquisition of the Systems Integration Contractor
   - Awarded contract in four months
   - Oral presentation versus written documentation
   - Emphasized the Offeror’s
     - Prior experience, past performance, and understanding of work required to determine that the Offeror presented best value and lowest risk
     - Rating at Level 3 process maturity of the Software Engineering Institute (SEI) Software-Capability Maturity Model (SW-CMM®).
   - Reduced procurement risk and cost

2. Contract characteristics
   - Indefinite Delivery, Indefinite Quantity (IDIQ) contract awarded to a single team
   - Task Order-based and performance-based
Acquisition

Tapping in to the Private Sector

MITRE Corporation

Not-for-profit FFRDC providing strategic guidance, independent technical oversight, systems engineering support

Robbins-Gioia LLC

Providing program management, business management, configuration management, requirements management, process improvement, contracting support, and communications support

E-Customs Partnership (eCP)

Consortium serving as systems integration contractor

1. This team is a crucial part of the Customs Modernization strategy
2. eCP is helping Customs design, build, and implement ACE and other new information systems for Customs
3. Each team member has a specialized role, e.g. software development, program management, change management
4. eCP is responsible for ensuring that all modernization projects are integrated into one enterprise solution
Acquisition

Lessons Learned in the Customs-Contractor Relationship

1. Establish and communicate a project mission and vision early

1. Early and continuous collaboration across the program helps in forecasting risks and addressing issues

1. Carefully and clearly define roles and responsibilities for both the government and the contractor

1. Establish agreement on terminology and word meaning to ensure understanding and reasonable expectations

1. Develop review and approval processes with adequate review periods for deliverables

1. Establish configuration control, Integrated Baseline reviews, and Earned Value reporting early in the contract period
Enterprise Lifecycle Methodology

Customs Modernization: New World, New Tools
1. Integrate and align enterprise-wide management, business, and engineering lifecycle processes so that information technology activities are aligned with business goals.
Enterprise Lifecycle Methodology
Linking Mission, Business Outcomes and Technology Investments

**Desired Business Results (DBRs)**

Linkages to Customs Strategic Intent and Stakeholders (sample)

<table>
<thead>
<tr>
<th>Ref Num</th>
<th>ACE Desired Business Result</th>
<th>Customs Strategic Intent</th>
<th>Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Reduced Predatory &amp; Unfair Trade Practices</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.2</td>
<td>Prevention of Acts of Terrorism</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>3.3</td>
<td>Increased Effectiveness of Risk Management</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>3.4</td>
<td>More Accurate Targeting /Selectivity</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
</tr>
</tbody>
</table>
## Desired Business Results

### Prioritized DBRs (sample)

<table>
<thead>
<tr>
<th>Anti-Terrorism and Border Security</th>
<th>Priority Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE Desired Business Result (DBR)</td>
<td></td>
</tr>
<tr>
<td>Continuity of Operations</td>
<td></td>
</tr>
<tr>
<td>Integrated PGA Risk Analysis and Clearance Processing</td>
<td>Higher</td>
</tr>
<tr>
<td>Integration of Conveyance and Commercial Goods Data</td>
<td></td>
</tr>
<tr>
<td>More Accurate Targeting /Selectivity</td>
<td></td>
</tr>
<tr>
<td>Prevention of Acts of Terrorism</td>
<td></td>
</tr>
<tr>
<td>Promotion of Informed Decision Making</td>
<td></td>
</tr>
<tr>
<td>Increased and Enhanced Visibility of Cargo Status</td>
<td></td>
</tr>
<tr>
<td>Improved Data Analysis and Reporting</td>
<td>High</td>
</tr>
<tr>
<td>Improved Individual Productivity</td>
<td></td>
</tr>
<tr>
<td>Improved Inter-Agency Information Exchange</td>
<td></td>
</tr>
<tr>
<td>Uniformity of Operations</td>
<td></td>
</tr>
<tr>
<td>Increased Effectiveness of Risk Management</td>
<td></td>
</tr>
<tr>
<td>Increased Protection of All Data and Operations</td>
<td></td>
</tr>
<tr>
<td>Integrated PGA Participation</td>
<td></td>
</tr>
<tr>
<td>Reduced Illegal Goods Traffic</td>
<td></td>
</tr>
<tr>
<td>Increased Customer / Stakeholder Satisfaction</td>
<td>Medium</td>
</tr>
</tbody>
</table>
Organizational Change Management (OCM) objectives

- Identify and mitigate organizational risks that threaten successful implementation
- Build a guiding coalition of Customs leaders at all levels to drive Modernization
- Generate understanding and agreement among employees and selected external stakeholders to take collective action to support Modernization
- Apply a strong analytical focus to workforce impacts, job design, training requirements, and other human resource issues
- Develop and deliver role-based training to impart new technology and process skills
- Use measurement tools to monitor progress and adjust OCM activities to meet evolving program needs
Software Acquisition-Capability Maturity Model (SA-CMM)
SA-CMM
From Hip-Shooting to Team Standards

1. SA-CMM® is Customs framework for developing acquisition and management processes

2. CMO is working to achieve SEI Software Acquisition Capability Maturity Model® (SA-CMM®) Level 2 process maturity.
   - Develop and institutionalize repeatable processes to help:
     ♦ Reduce costs
     ♦ Improve the business responsiveness of systems
     ♦ Form a solid basis for further improvements

3. Level 2 work will be the foundation of long-term, ongoing process improvement

4. SA-CMM will be applied across all Modernization acquisitions
1. Level 2
   - Congressional/GAO Requirement
   - Attainment is an all or nothing proposition
   - Strategy:
     - Ensure strong leadership sponsorship for process improvement
     - Develop effective process improvement infrastructure
     - Empower process domain owners
     - Conduct specialized process asset training
     - Monitor progress through verification and reporting
Interagency Coordination

Customs Modernization:
New World, New Tools
Interagency Coordination
Interconnectivity and the International Trade Data System

ACE/ITDS: Creating New Information Flows

Traders
Importers and Exporters

Carriers
Truck, Air, Rail, and Sea

Intermediaries
Brokers and Trade Advisors

Statistics
Census et. al. Trade Statistics

Admissibility & Export Control

Typical Daily Volume
• 1,300,000 passengers
• 2,600 aircraft
• 50,000 trucks & containers
• 355,000 vehicles
• 588 vessels
• 65,000 entries

Customs Service
• Primary Inspection Point
• 100% Border Presence
• Revenue Collection
• Drug Interdiction
• Money Laundering
• ACE/ITDS System Operations

Sample list of agencies

AMS
Fruit and Vegetable Safety

DEA
Drug Interdiction

FDA
Food, Drug, & Device Safety, Bio-terrorism

FMCSA
Trucks and Buses; and HAZMAT Transport

FMCSA
Motor Vehicles and Parts

NHTSA
Arms and Munitions Control

BPMA
Export Controls

NRC
Radioactive Material

EPA
Environmental Safety
Interagency Coordination


1. Transition to the Department of Homeland Security
2. “22 agencies working as one”
3. Collaboration with government agencies is essential to the budget process and for integrating IT efforts
4. Customs IT planning interface
   - Homeland Security IT Investment Review Group
   - Border Security Working Group
5. Adoption of best practices
6. Planning continues for future integrated DHS systems
7. ACE could potentially help accomplish the objectives of the Homeland Security IT Investment Review Group by providing a state-of-the-art, integrated system for tracking information on commerce entering the U.S.
Questions

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