

BY08 - Central Data Exchange (CDX)

Exhibit 300: Part I: Summary Information and Justification (All Capital Assets)

I.A. Overview

1. Date of Submission:	9/11/2006
2. Agency:	Environmental Protection Agency
3. Bureau:	Office of Environmental Information
4. Name of this Capital Asset:	BY08 - Central Data Exchange (CDX)
5. Unique Project (Investment) Identifier: (For IT investment only, see section 53. For all other, use agency ID system.)	020-00-01-16-01-6005-00
6. What kind of investment will this be in FY2008? (Please NOTE: Investments moving to O&M ONLY in FY2008, with Planning/Acquisition activities prior to FY2008 should not select O&M. These investments should indicate their current status.)	Mixed Life Cycle
7. What was the first budget year this investment was submitted to OMB?	FY2001 or earlier

8. Provide a brief summary and justification for this investment, including a brief description of how this closes in part or in whole an identified agency performance gap:

The Central Data Exchange (CDX) is an electronic gateway on the Web for all environmental data entering the Agency. It offers its thousands of customers a faster, easier, more secure electronic reporting option. Prior to the development of CDX, EPA programs had to develop their own data systems. These systems were duplicative, did not comply with security requirements, and did not allow EPA to integrate data for cross-program analysis. CDX allowed EPA to leverage savings from establishing a joint data exchange infrastructure that complied with all legislative and regulatory requirements concerning electronic information exchange and offered the potential to conduct cross-program analysis. CDX is a primary of EPA's target Enterprise Architecture. This system is in a mixed phase of its life cycle to support basic electronic reporting services. Data flows and enhancements continue to be added, and development related to these flows will continue through 2015. CDX has been implemented using a Service Oriented Architecture (SOA) approach. This drives a lower cost per data flow that is added to CDX, and therefore allows more data flows to be added to CDX for the same operational budget. Furthermore, because the CDX architecture is a series of services, these services can be exposed to various offices within EPA to achieve agency wide service reuse. CDX is also part of a broader effort by states and EPA working together to build an Exchange Network to integrate state and federal environmental data; reduce the burden of environmental reporting; and improve data quality. This effort is being supported through a multi-year state grant program, and is heavily reliant upon CDX both as EPA's gateway, and as a mentor for state agencies under this program. By offering CDX as a single point of exchange, CDX has begun to eliminate independent interfaces to major EPA systems with states, eventually eliminating as many as eight for a given state doing business with EPA. CDX currently accepts data for certain air, water, waste, and toxics programs receiving environmental data from 50 states and the District of Columbia; and supporting electronic business with over 67,000 registered business and local government users (and more users sign up each day).

9. Did the Agency's Executive/Investment Committee approve this request?	Yes
a. If "yes," what was the date of this approval?	5/11/2006
10. Did the Project Manager review this	Yes

Exhibit?	
11. Contact information of Project Manager?	
Name	Freeman, Charles E
Phone Number	202-566-1694
Email	freeman.charles@epa.gov
12. Has the agency developed and/or promoted cost effective, energy efficient and environmentally sustainable techniques or practices for this project.	Yes
a. Will this investment include electronic assets (including computers)?	Yes
b. Is this investment for new construction or major retrofit of a Federal building or facility? (answer applicable to non-IT assets only)	No
1. If "yes," is an ESPC or UESC being used to help fund this investment?	
2. If "yes," will this investment meet sustainable design principles?	
3. If "yes," is it designed to be 30% more energy efficient than relevant code?	
13. Does this investment support one of the PMA initiatives?	Yes
If "yes," check all that apply:	Expanded E-Government
13a. Briefly describe how this asset directly supports the identified initiative(s)?	CDX supports "expanded e-government": 1. CDX supports the cross-agency exchange of environmental data with DOD, DOE, DOT, & DOI; 2. CDX integrates with Grants.gov, to provide EPA with grants applications, & provides an interface from Grants.gov to EPA's Integrated Grants Management System; 3. CDX also supports the federal E-Authentication initiative & has been identified as a lead agency; 4. CDX is the model that many state partners are using to build & deploy electronic services.
14. Does this investment support a program assessed using the Program Assessment Rating Tool (PART)? (For more information about the PART, visit www.whitehouse.gov/omb/part.)	No
a. If "yes," does this investment address a weakness found during the PART review?	No
b. If "yes," what is the name of the PART program assessed by OMB's Program Assessment Rating Tool?	
c. If "yes," what PART rating did it receive?	
15. Is this investment for information technology?	Yes

If the answer to Question: "Is this investment for information technology?" was "Yes," complete this sub-section. If the answer is "No," do not answer this sub-section.

For information technology investments only:

16. What is the level of the IT Project? (per CIO Council PM Guidance)	Level 2
17. What project management qualifications does the Project Manager have? (per CIO Council PM Guidance):	(1) Project manager has been validated as qualified for this investment
18. Is this investment identified as "high risk" on the Q4 - FY 2006 agency high risk report (per OMB's "high risk" memo)?	No
19. Is this a financial management system?	No
a. If "yes," does this investment address a FFMIA compliance area?	
1. If "yes," which compliance area:	N/A
2. If "no," what does it address?	
b. If "yes," please identify the system name(s) and system acronym(s) as reported in the most recent financial systems inventory update required by Circular A-11 section 52	
20. What is the percentage breakout for the total FY2008 funding request for the following? (This should total 100%)	
Hardware	10
Software	10
Services	80
Other	0
21. If this project produces information dissemination products for the public, are these products published to the Internet in conformance with OMB Memorandum 05-04 and included in your agency inventory, schedules and priorities?	No
22. Contact information of individual responsible for privacy related questions:	
Name	
Hutt, Judy	
Phone Number	202-566-1668
Title	Agency Privacy Act Officer
E-mail	hutt.judy@epa.gov
23. Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration's approval?	Yes

I.B. Summary of Funding

Provide the total estimated life-cycle cost for this investment by completing the following table. All amounts represent budget authority in millions, and are rounded to three decimal places. Federal personnel costs should be included only in the row designated "Government FTE Cost," and should be excluded from the amounts shown for "Planning," "Full Acquisition," and "Operation/Maintenance." The total estimated annual cost of the investment is the sum of costs for "Planning," "Full Acquisition," and "Operation/Maintenance." For Federal buildings and facilities, life-cycle costs should include long term energy, environmental, decommissioning, and/or restoration costs. The costs associated with the entire life-cycle of the investment should be included in this report.

Table 1: SUMMARY OF SPENDING FOR PROJECT PHASES (REPORTED IN MILLIONS) (Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)									
	PY - 1 and Earlier	PY 2006	CY 2007	BY 2008	BY + 1 2009	BY + 2 2010	BY + 3 2011	BY + 4 and Beyond	Total
Planning									
Budgetary Resources	22.81	0	0	0					
Acquisition									
Budgetary Resources	10.39358	2.369	2.369	2.369					
Subtotal Planning & Acquisition									
Budgetary Resources	33.20358	2.369	2.369	2.369					
Operations & Maintenance									
Budgetary Resources	19.5349	6.443	6.443	6.443					
TOTAL									
Budgetary Resources	52.73848	8.812	8.812	8.812					
Government FTE Costs									
Budgetary Resources	4.2699	1.425	1.425	1.425					
Number of FTE represented by Costs:	33	11	11	11					

Note: For the cross-agency investments, this table should include all funding (both managing partner and partner agencies). Government FTE Costs should not be included as part of the TOTAL represented.

2. Will this project require the agency to hire additional FTE's? No

a. If "yes," How many and in what year?

3. If the summary of spending has changed from the FY2007 President's budget request, briefly explain those changes:

I.C. Acquisition/Contract Strategy

1. Complete the table for all (including all non-Federal) contracts and/or task orders currently in place or planned for this investment. Total Value should include all option years for each contract. Contracts and/or task orders completed do not need to be included.

Contracts/Task Orders Table:

Row Number	Contract or Task Order Number	Type of Contract/ Task Order	Has the contract been awarded?	If so what is the date of the award? If not, what is the planned award date?	Start date of Contract/ Task Order	End date of Contract/ Task Order	Total Value of Contract/ Task Order	Is this an Interagency Acquisition?	Is it performance based?	Competitively awarded?	What, if any, alternative financing option is being used?	Is EVM in the contract?	Does the contract include the required security and privacy clauses?	Name of CO	CO Contact information (phone/email)	Contracting Officer Certification Level	If N/A, has the agency determined the CO assigned has the competencies and skills necessary to support this acquisition?
1	GS00T99ALD0203 (Please note, the contract value is higher than the budget dollars for the program as the contract supports more activities than CDX.)	Cost Plus Incentive Award Fee (Performance Based)	Yes	3/27/2002	3/27/2002	3/21/2009	285	No	Yes	Yes	NA	Yes	Yes	Pinskey, Lin	202-564-4394 / pinskey.lin@epa.gov	Level 3	

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:

3. Do the contracts ensure Section 508 compliance?	Yes
a. Explain why:	
4. Is there an acquisition plan which has been approved in accordance with agency requirements?	Yes
a. If "yes," what is the date?	2/1/2002
b. If "no," will an acquisition plan be developed?	
1. If "no," briefly explain why:	

I.D. Performance Information

In order to successfully address this area of the exhibit 300, performance goals must be provided for the agency and be linked to the annual performance plan. The investment must discuss the agency's mission and strategic goals, and performance measures must be provided. These goals need to map to the gap in the agency's strategic goals and objectives this investment is designed to fill. They are the internal and external performance benefits this investment is expected to deliver to the agency (e.g., improve efficiency by 60 percent, increase citizen participation by 300 percent a year to achieve an overall citizen participation rate of 75 percent by FY 2xxx, etc.). The goals must be clearly measurable investment outcomes, and if applicable, investment outputs. They do not include the completion date of the module, milestones, or investment, or general goals, such as, significant, better, improved that do not have a quantitative or qualitative measure.

Agencies must use Table 1 below for reporting performance goals and measures for all non-IT investments and for existing IT investments that were initiated prior to FY 2005. The table can be extended to include measures for years beyond FY 2006.

Performance Information Table 1:					
Fiscal Year	Strategic Goal(s) Supported	Performance Measure	Actual/baseline (from Previous Year)	Planned Performance Metric (Target)	Performance Metric Results (Actual)
2003	Cross-Goal Strategy: CDX is a single Web portal for all environmental data entering the Agency. It offers companies, states, & tribes access to a faster, easier, more secure reporting option. Data permit measurement of performance for all goals.	To support long-term implementation of CDX services, FY 03 CDX will 1) complete transition to full production facility; 2) implement node on the network (Web services); & 3) expand CDX services by expanding number of EPA major systems using CDX	CDX includes over 2,800 industry users, 3350 labs & PWS, 38 state & tribal users, 95% of state programs submitting annual emissions inventories, 90% of PWSs enrolled with CDX, 3,000 companies, CDX node for network completed feasibility testing.	Users include 3K-10K companies, 3K-5K PWS/labs, 45 states & 50-200 tribal/local govts in prod, 7 exchanges implemented, 3 exchanges testing, 3 exchanges tested & imp, CROMERRR published as a final rule, cost of CDX information collections down 5-10%.	By end of Q4 2003, CDX has implemented 7 systems & is testing or planning 6 more; CDX has over 14K registered users including: Representatives of 46 states, 8 tribes, 4K local governments & public water supply systems, 280 labs & 4K companies.

		& number of users on CDX.			
2004	Cross-Goal Strategy: CDX is a single Web portal for all environmental data entering the Agency. It offers companies, states, & tribes access to a faster, easier, more secure reporting option. Data permit measurement of performance for all goals.	To support long term implementation of CDX services 1) CDX will expand capacity of its system to more broadly support Node (Web services) on the network; 2) industry and states will have opportunity to use the full production CDX for all but one major EPA/state system and several minor systems; and 3) begin testing with the E-Authentication Gateway and/or Federal Bridge Certificate Authority (FBCA).	CDX is operating 9 systems in production and developing 6; CDX is also testing or planning 6 more; CDX has 10K+ registered users including reps of 46 states, 8 tribes, 4K local governments and public water supply systems, 280 labs, and 4K companies.	12-20 states using node, 10K-20K companies, 3.5K-5K PWS/labs; 100-300 tribal/ local govs, Exchanges: 9 implemented, 6 tested, 3 initiating development, 1with E-Authentication Gateway, cost of CDX information collections down 5-10%.	15 states using CDX node. Users: 4K companies, 4K local govs, PWS, 280 labs. CDX implemented 14 systems & developing/testing 8 more. CDX has 4 systems in planning stage, over 22,000 registered users with representatives of 49 states & 8 tribes.
2005	Cross-Goal Strategy: CDX is a single Web portal for all environmental data entering the Agency. It offers companies, states, & tribes access to a faster, easier, more secure reporting option. Data permit measurement of performance for all goals.	To support long term implementation of CDX services 1) CDX will expand capacity of its system to more broadly support Node (Web services) on the network; 2) industry and states have access to the full production CDX for all major EPA/state systems, and nearly half a dozen minor systems; 3) implement to E-Authentication gateway identity management.	CDX users include 15 states, 4K companies, 4K local govs & PWS, & 280 labs. CDX put 14 systems in Production and is developing 8 more. CDX has 4 other systems in Planning. CDX has over 22K registered users & representative of 49 states & 8 tribes.	24-40 states using CDX node; 15K-30K company reps; 3.5K-6K PWS /labs, 100-300 tribal and other local govs. Data exchanges: 12+ implemented (incl. 1 to E-authentication gateway), 6 tested. 10% cost reduction.	CDX includes 36 states. There are 42K users. CDX implemented 20 flows & developed 12. Cost of data collections = AQS up 55%; e-NOI down 35%; TRI down 23%. Overall weighted average shows cost of collections reduced by 24.7%.
2006	Cross-Goal Strategy: Information, 2008 Desired Outcome of Excellence in Info Service Delivery. CDX is single Web portal for all envirodata entering EPA. It offers customers universal access to a faster, easier, more secure	To support long term sustainability of CDX services: 1) CDX will expand capacity of its system to more broadly support Node (Web services) on the network, including: high availability infrastructure, usage reporting and testing of	Users: 36 states; 42K total registered users; 8645 company users; 16603 labs public water suppliers (3384) / labs (13219); 80 tribal & other local govts. Data exchanges: 20 in Production (with no exchanges to E-	CDX will include at least 33 and up to 45 states in the Exchange Network's CDX node, 40K-50K company reps, 5K-8K public water suppliers/labs, 200-400 tribal & other local govts. CDX will include at least 25 implemented & 9	CDX includes 41 states. There are 69K users. CDX implemented 26 flows & is developing eight. Cost of data collections = AQS up 55%; e-NOI down 35%; TRI down 23%. Overall weighted average shows cost of collections reduced

	reporting option.	Workflow/BPEL and ETL integration; 2) Industry and states have CDX access to 15 or more production systems; and 3) CDX will develop a Customer Satisfaction Baseline.	Authentication gateway), 12 in development.	new test data exchanges.	by 24.7%.
2007	Cross-Goal Strategy: Information, 2008 Desired Outcome of Excellence in Info Service Delivery. CDX is single Web portal for all envirodata entering EPA. It offers customers universal access to a faster, easier, more secure reporting option.	To support long-term implementation of CDX services: 1) CDX will expand capacity of its system to more broadly support Node (Web services) on the network, including: implementation of Workflow/BPEL and ETL integration, Web Services Management; 2) Industry and states have CDX access to 20 or more production systems; 3) Improve CDX Customer Satisfaction; and 4) Balanced Scorecard implemented.	At the end of FY06 CDX includes 40-45 states and tribes using CDX node, 20K-35K company reps, 5K-8K public water suppliers/labs, 200-400 tribal, & other local govts. CDX will include 15+ implemented & 9+ new test data exchanges. 15%+ cost reduction.	CDX users: 40-50 states using CDX node, ~ 60K- 65K total users, ~ 5K - 8K public water suppliers/labs, 200 to 400 tribal, & other governments. CDX will include 30 implemented flows & seven test flows. Cost of information collections reduced by 15%.	Actual results will be determined by some specified to be determined date, e.g., 4Q07.
2007	Cross-Goal Strategy: CDX is a single Web portal for all environmental data entering the Agency. It offers its customers -- companies, states, tribes, and other entities -- universal access to a faster, easier, more secure reporting option.	CDX began a Balanced Scorecard project 1/05 & identified new Performance Measures: 1. Customer satisfaction 2. Number of data flows/number of potential data flows 3. CDX availability 4. Ease of use 5. Satisfaction with customer support 6. % of repeat problems 7. Innovation in products & services 8. CDX operational costs 9. Clear documentation	CDX will report Baseline & Planned data for these Performance Measures in the FY09 CPIC for the FY08. CDX will then begin reporting Actuals data for these Performance Measures in the FY10 CPIC submission.	CDX will report Baseline & Planned data for these Performance Measures in the FY09 CPIC for the FY08. CDX will then begin reporting Actuals data for these Performance Measures in the FY10 CPIC submission.	Actual results will be determined by some specified to be determined date, e.g., 4Q07.

		CDX will begin reporting on these Performance Measures in the FY09.			
2008	Cross-Goal Strategy: Information, 2008 Desired Outcome of Excellence in Information Service Delivery. CDX is a single Web portal for all envirodata entering the Agency. It offers its customers universal access to faster, more secure reporting option.	To support long-term implementation of CDX services: 1) CDX will expand capacity of its system to more broadly support Node (Web services) on the network, including cost modeling; 2) Industry and states have CDX access to 25 or more production systems; 3) Cost Sharing implemented to have Program Offices pay for CDX services.	In 2007 CDX grows to 40-50 states/tribes in the Exchange Network's CDX Node, 25K-40K total users, 5K-8K public water suppliers/labs, 200-400 tribal, & other local govts. CDX includes 20+ implemented & 7+ test data exchanges. 15%+ cost reduction.	CDX will include 45-50 states in the Exchange Network's CDX node (65K-75K total users), 5K-8K public water suppliers/labs, 200-400 tribal, & other local govts. CDX will include at least 35 implemented & 7 new test data exchanges. 15%+ cost reductions.	Actual results will be determined by some specified to be determined date, e.g., 4Q08.
2008	Cross-Goal Strategy: CDX is a single Web portal for all environmental data entering the Agency. It offers its customers -- companies, states, tribes, and other entities -- universal access to a faster, easier, more secure reporting option.	CDX began a Balanced Scorecard project 1/05 & identified new Performance Measures: 1. Customer satisfaction 2. Number of data flows/number of potential data flows 3. CDX availability 4. Ease of use 5. Satisfaction with customer support 6. % of repeat problems 7. Innovation in products & services 8. CDX operational costs 9. Clear documentation CDX will begin reporting on these Performance Measures in the FY09.	CDX will report Baseline & Planned data for these Performance Measures in the FY09 CPIC for the FY08. CDX will then begin reporting Actuals data for these Performance Measures in the FY10 CPIC submission.	CDX will report Baseline & Planned data for these Performance Measures in the FY09 CPIC for the FY08. CDX will then begin reporting Actuals data for these Performance Measures in the FY10 CPIC submission.	Actual results will be determined by some specified to be determined date, e.g., 4Q08.

All new IT investments initiated for FY 2005 and beyond must use Table 2 and are required to use the Federal Enterprise Architecture (FEA) Performance Reference Model (PRM). Please use Table 2 and the PRM to identify the performance information pertaining to this major IT investment. Map all Measurement Indicators to the corresponding "Measurement Area" and "Measurement Grouping" identified in

the PRM. There should be at least one Measurement Indicator for at least four different Measurement Areas (for each fiscal year). The PRM is available at www.egov.gov.

Performance Information Table 2:							
Fiscal Year	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results

I.E. Security and Privacy

In order to successfully address this area of the business case, each question below must be answered at the system/application level, not at a program or agency level. Systems supporting this investment on the planning and operational systems security tables should match the systems on the privacy table below. Systems on the Operational Security Table must be included on your agency FISMA system inventory and should be easily referenced in the inventory (i.e., should use the same name or identifier).

All systems supporting and/or part of this investment should be included in the tables below, inclusive of both agency owned systems and contractor systems. For IT investments under development, security and privacy planning must proceed in parallel with the development of the system/s to ensure IT security and privacy requirements and costs are identified and incorporated into the overall lifecycle of the system/s.

Please respond to the questions below and verify the system owner took the following actions:

1. Have the IT security costs for the system(s) been identified and integrated into the overall costs of the investment:	Yes
a. If "yes," provide the "Percentage IT Security" for the budget year:	10
2. Is identifying and assessing security and privacy risks a part of the overall risk management effort for each system supporting or part of this investment.	Yes

3. Systems in Planning - Security Table:			
Name of System	Agency/ or Contractor Operated System?	Planned Operational Date	Planned or Actual C&A Completion Date

4. Operational Systems - Security Table:							
Name of System	Agency/ or Contractor Operated System?	NIST FIPS 199 Risk Impact level	Has C&A been Completed, using NIST 800-37?	Date C&A Complete	What standards were used for the Security Controls tests?	Date Complete(d): Security Control Testing	Date the contingency plan tested
Central Data Exchange (CDX)	Government Only	Moderate	Yes	7/12/2005	FIPS 200 / NIST 800-53	9/21/2006	2/15/2006
CSC-NC	Contractor Only	Moderate	Yes	8/15/2006	FIPS 200 / NIST 800-53	10/23/2006	2/15/2006

5. Have any weaknesses related to any of the systems part of or supporting this investment been identified by the agency or IG? Yes

a. If "yes," have those weaknesses been incorporated agency's plan of action and milestone process? Yes

6. Indicate whether an increase in IT security funding is requested to remediate IT security weaknesses? No

a. If "yes," specify the amount, provide a general description of the weakness, and explain how the funding request will remediate the weakness.

7. How are contractor security procedures monitored, verified, validated by the agency for the contractor systems above?

8. Planning & Operational Systems - Privacy Table:					
Name of System	Is this a new system?	Is there a Privacy Impact Assessment (PIA) that covers this system?	Is the PIA available to the public?	Is a System of Records Notice (SORN) required for this system?	Was a new or amended SORN published in FY 06?
CDX	No	Yes.	Yes.	Yes	No, because the existing Privacy Act system of records was not substantially revised in FY 06.

I.F. Enterprise Architecture (EA)

In order to successfully address this area of the business case and capital asset plan you must ensure the investment is included in the agency's EA and Capital Planning and Investment Control (CPIC) process, and is mapped to and supports the FEA. You must also ensure the business case demonstrates the relationship between the investment and the business, performance, data, services, application, and technology layers of the agency's EA.

1. Is this investment included in your agency's target enterprise architecture? Yes

a. If "no," please explain why?

2. Is this investment included in the agency's EA Transition Strategy? Yes

a. If "yes," provide the investment name as identified in the Transition Strategy provided in the agency's most recent annual EA Assessment. Central Data Exchange

b. If "no," please explain why?

3. Service Reference Model (SRM) Table:

Identify the service components funded by this major IT investment (e.g., knowledge management, content management, customer relationship management, etc.). Provide this information in the format of the following table. For detailed guidance regarding components, please refer to <http://www.whitehouse.gov/omb/egov/>.

Agency Component Name	Agency Component Description	Service Domain	FEA SRM Service Type	FEA SRM Component	FEA Service Component Reused Name	FEA Service Component Reused UPI	Internal or External Reuse?	BY Funding Percentage
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Back Office Services	Data Management	Data Exchange			Internal	10
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Back Office Services	Data Management	Extraction and Transformation			Internal	2
Portal/Extract, Transform, and Load Tool (ETL) Tool (PETL)	The Portal will provide dynamic tools enabling the transformation of data into knowledge, improving the environmental community's ability to access and report on the environment and human health. A single Agency-standard Extract, Transform and Load (ETL) tool will allow program systems to replace their old, less efficient ETL processes with modern, easy to use technology.	Back Office Services	Data Management	Extraction and Transformation		020-00-01-16-02-6029-00-404-142	Internal	0
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Back Office Services	Data Management	Loading and Archiving			Internal	1
Central Data Exchange	A website through which environmental data enters	Back Office Services	Data Management	Meta Data Management			Internal	1

	the Agency electronically.							
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Back Office Services	Development and Integration	Legacy Integration			Internal	1
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Business Analytical Services	Reporting	Ad Hoc			Internal	4
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Business Analytical Services	Reporting	Standardized / Canned			Internal	3
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Business Analytical Services	Visualization	Graphing / Charting			Internal	1
National Geospatial Program (GEO/GIS)	Ties directly to Geo One-Stop business case-supports FGDC framework activities.	Business Analytical Services	Visualization	Mapping / Geospatial / Elevation / GPS		020-00-01-16-01-0120-00-404-142	Internal	0
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Business Management Services	Investment Management	Strategic Planning and Mgmt			Internal	4
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Business Management Services	Management of Processes	Business Rule Management			Internal	3
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Business Management Services	Management of Processes	Change Management			Internal	2
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Business Management Services	Management of Processes	Configuration Management			Internal	5
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Business Management Services	Management of Processes	Governance / Policy Management			Internal	3

Central Data Exchange	A website through which environmental data enters the Agency electronically.	Business Management Services	Management of Processes	Program / Project Management			Internal	6
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Business Management Services	Management of Processes	Quality Management			Internal	1
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Business Management Services	Management of Processes	Requirements Management			Internal	1
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Customer Services	Customer Relationship Management	Call Center Management			Internal	4
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Customer Services	Customer Relationship Management	Customer / Account Management			Internal	1
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Customer Services	Customer Relationship Management	Partner Relationship Management			Internal	1
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Digital Asset Services	Content Management	Content Authoring			Internal	5
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Digital Asset Services	Content Management	Content Publishing and Delivery			Internal	3
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Digital Asset Services	Content Management	Content Review and Approval			Internal	1
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Digital Asset Services	Document Management	Classification			Internal	1
Central Data Exchange	A website through which environmental	Digital Asset Services	Document Management	Document Conversion			Internal	3

	data enters the Agency electronically.							
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Digital Asset Services	Document Management	Document Review and Approval			Internal	3
System of Registries (SoR)	Supports data integration, security, and accurate identification values.	Digital Asset Services	Knowledge Management	Information Mapping / Taxonomy		020-00-01-16-01-6006-00-404-142	Internal	0
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Digital Asset Services	Knowledge Management	Information Retrieval			Internal	4
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Digital Asset Services	Knowledge Management	Information Sharing			Internal	1
Enterprise Content Management System (ECMS)	Allows agency to manage electronic records in a legally accepted manner-meets GPEA requirements.	Digital Asset Services	Records Management	Record Linking / Association		020-00-01-16-04-0240-24-404-141	Internal	0
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Support Services	Collaboration	Document Library			Internal	1
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Support Services	Collaboration	Email			Internal	6
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Support Services	Collaboration	Task Management			Internal	5
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Support Services	Security Management	Access Control			Internal	1
Central Data Exchange	A website through which environmental	Support Services	Security Management	Audit Trail Capture and Analysis			Internal	1

	data enters the Agency electronically.							
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Support Services	Security Management	Digital Signature Management			Internal	1
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Support Services	Security Management	FISMA Management and Reporting			Internal	1
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Support Services	Security Management	Identification and Authentication			Internal	1
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Support Services	Security Management	Intrusion Detection			Internal	1
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Support Services	Systems Management	License Management			Internal	4
Central Data Exchange	A website through which environmental data enters the Agency electronically.	Support Services	Systems Management	System Resource Monitoring			Internal	3

Use existing SRM Components or identify as "NEW". A "NEW" component is one not already identified as a service component in the FEA SRM.

A reused component is one being funded by another investment, but being used by this investment. Rather than answer yes or no, identify the reused service component funded by the other investment and identify the other investment using the Unique Project Identifier (UPI) code from the OMB Ex 300 or Ex 53 submission.

'Internal' reuse is within an agency. For example, one agency within a department is reusing a service component provided by another agency within the same department. 'External' reuse is one agency within a department reusing a service component provided by another agency in another department. A good example of this is an E-Gov initiative service being reused by multiple organizations across the federal government.

Please provide the percentage of the BY requested funding amount used for each service component listed in the table. If external, provide the funding level transferred to another agency to pay for the service.

To demonstrate how this major IT investment aligns with the FEA Technical Reference Model (TRM), please list the Service Areas, Categories, Standards, and Service Specifications supporting this IT investment.

FEA SRM Component	FEA TRM Service Area	FEA TRM Service Category	FEA TRM Service Standard	Service Specification (i.e. vendor or product name)
Data Exchange	Component Framework	Business Logic	Platform Dependent	
Extraction and Transformation	Component Framework	Business Logic	Platform Dependent	
Loading and Archiving	Component Framework	Business Logic	Platform Dependent	
Meta Data Management	Component Framework	Business Logic	Platform Independent	
Requirements Management	Component Framework	Business Logic	Platform Independent	
Legacy Integration	Component Framework	Business Logic	Platform Independent	
Graphing / Charting	Component Framework	Data Interchange	Data Exchange	
Strategic Planning and Mgmt	Component Framework	Data Interchange	Data Exchange	
Ad Hoc	Component Framework	Data Interchange	Data Exchange	
Document Conversion	Component Framework	Data Interchange	Data Exchange	
Business Rule Management	Component Framework	Data Management	Database Connectivity	
Governance / Policy Management	Component Framework	Data Management	Database Connectivity	
Configuration Management	Component Framework	Data Management	Database Connectivity	
Program / Project Management	Component Framework	Presentation / Interface	Content Rendering	
Quality Management	Component Framework	Presentation / Interface	Dynamic Server-Side Display	
Customer / Account Management	Component Framework	Presentation / Interface	Dynamic Server-Side Display	
Partner Relationship Management	Component Framework	Security	Certificates / Digital Signatures	
Content Authoring	Component Framework	Security	Supporting Security Services	
Call Center Management	Service Access and Delivery	Access Channels	Other Electronic Channels	
Content Publishing and Delivery	Service Access and Delivery	Access Channels	Other Electronic Channels	
Content Review and Approval	Service Access and Delivery	Access Channels	Web Browser	
Classification	Service Access and Delivery	Delivery Channels	Extranet	
Information Retrieval	Service Access and Delivery	Service Requirements	Hosting	
Document Library	Service Access and Delivery	Service Requirements	Legislative / Compliance	
Information Sharing	Service Access and Delivery	Service Requirements	Legislative / Compliance	

Email	Service Access and Delivery	Service Transport	Service Transport	
Task Management	Service Access and Delivery	Service Transport	Service Transport	
Access Control	Service Access and Delivery	Service Transport	Service Transport	
Digital Signature Management	Service Access and Delivery	Service Transport	Service Transport	
FISMA Management and Reporting	Service Access and Delivery	Service Transport	Supporting Network Services	
Identification and Authentication	Service Interface and Integration	Integration	Enterprise Application Integration	
License Management	Service Interface and Integration	Integration	Middleware	
Standardized / Canned	Service Interface and Integration	Interoperability	Data Format / Classification	
Document Review and Approval	Service Interface and Integration	Interoperability	Data Types / Validation	
Audit Trail Capture and Analysis	Service Platform and Infrastructure	Database / Storage	Database	
System Resource Monitoring	Service Platform and Infrastructure	Database / Storage	Storage	
Intrusion Detection	Service Platform and Infrastructure	Software Engineering	Test Management	
Change Management	Service Platform and Infrastructure	Support Platforms	Platform Independent	

Service Components identified in the previous question should be entered in this column. Please enter multiple rows for FEA SRM Components supported by multiple TRM Service Specifications

In the Service Specification field, Agencies should provide information on the specified technical standard or vendor product mapped to the FEA TRM Service Standard, including model or version numbers, as appropriate.

5. Will the application leverage existing components and/or applications across the Government (i.e., FirstGov, Pay.Gov, etc)? Yes

a. If "yes," please describe.

CDX leverages E-Authentication, Pay.gov, and Grants.gov: 1. E-Authentication: CDX sponsored the first project to successfully demonstrate that Federal and State agencies could accept and validate each other's PKI certificates, using GSA's Federal Bridge. In partnership with GSA and the State of Illinois, CDX demonstrated the ability to accept and validate Illinois certificates using the Federal Bridge. CDX is working with GSA on a second phase of E-Authentication integration, where a much broader set of CDX's infrastructure will be integrated with GSA's E-Authentication Portal, Step-down Translator and Hosted Validation Services. The pilot test is scheduled for 2005-2006, limited implementation in 2005 and full implementation scheduled in 2006-2007. 2. Pay.gov: EPA has collaborated with the Department of Treasury to integrate CDX functionality with Pay.gov. The first CDX data flow released that leverages this functionality is the Lead-Based Paint Abatement Request for Certification. EPA collects reviews and approves requests by abatement firms to be certified in accordance with laws and regulations. As a result of this investment, the review time for lead abatement certification requests has fallen from 10 to two days. This has resulted in dramatic savings for the customer (\$6.67 per application to \$3.00) and EPA (\$23 to \$38 per application) 3. Grants.gov: EPA working with DHHS has implemented a set of web services based interfaces with Grants.Gov E-Apply. The interfaces support the flow of grant applications received by the GRANTS.GOV site through CDX and into the Integrated Grants Management System (IGMS) application workflow for managing and awarding grants. This project successfully integrated three systems using W3C standards based web services. As a result of this project, grant applicants can now apply for grants from EPA directly on the Grants.Gov web site and have their applications seamlessly

submitted into the Integrated Grants Management System for processing. CDX is also becoming an asset which other Federal Agencies can leverage. For example, other Federal Agencies could make use of CDX-developed tools such as the Exchange Network security model, QA services, and other web services that support the exchange data.

6. Does this investment provide the public with access to a government automated information system? Yes

a. If "yes," does customer access require specific software (e.g., a specific web browser version)? No

1. If "yes," provide the specific product name(s) and version number(s) of the required software and the date when the public will be able to access this investment by any software (i.e. to ensure equitable and timely access of government information and services).

Exhibit 300: Part II: Planning, Acquisition and Performance Information

II.A. Alternatives Analysis

Part II should be completed only for investments identified as "Planning" or "Full Acquisition," or "Mixed Life-Cycle" investments in response to Question 6 in Part I, Section A above.

In selecting the best capital asset, you should identify and consider at least three viable alternatives, in addition to the current baseline, i.e., the status quo. Use OMB Circular A- 94 for all investments, and the Clinger Cohen Act of 1996 for IT investments, to determine the criteria you should use in your Benefit/Cost Analysis.

1. Did you conduct an alternatives analysis for this project? Yes

a. If "yes," provide the date the analysis was completed? 1/5/2000

b. If "no," what is the anticipated date this analysis will be completed?

c. If no analysis is planned, please briefly explain why:

2. Alternative Analysis Results:

Use the results of your alternatives analysis to complete the following table:

Send to OMB	Alternative Analyzed	Description of Alternative	Risk Adjusted Lifecycle Costs estimate	Risk Adjusted Lifecycle Benefits estimate
True	Alternative 1: Single Common Infrastructure with contractor support			
True	Alternative 2: In House Development			
True	Alternative 3: Multiple Data Systems			
True	Baseline			

3. Which alternative was selected by the Agency's Executive/Investment Committee and why was it chosen?

Alternative 1 was chosen because it was the best alternative for the Agency in terms of costs, complexity, architecture, and security. Alternative 1 is: (1) Likely to pose the least risk vis-À-vis security as central control can be maintained at a low cost; and (2) More likely to fit together with the existing EPA architecture.

4. What specific qualitative benefits will be realized?

CDX has conducted a detailed analysis to identify potential qualitative benefits. We have documented the following benefits: 1. Timeliness: CDX improves the timeliness of information. For example, for the Toxic Release Inventory (TRI) program, CDX eliminates 33 days of processing time. For the eNOI initiatives, Public Data Release would be 7-8 months earlier if all data came through CDX and with Unregulated Contaminant Monitoring Regulation (UCMR), data preparation times have been released reduction from 5-7 years to 90-120 days. Simply for Safe Drinking Water Information Systems (SDWIS), the elapsed time between data being submitted and cleansed is now minutes rather than weeks and months. 2. Data Quality: CDX greatly improves the quality of information transmitted to EPA. For the TRI, electronic notification of intent (eNOI), lead and SDWIS programs, data entry errors are close to zero. For UCMR, CDX resolved data completeness & quality issues. For CDX-SDWIS, the program had to spend weeks or months dealing with data quality issues. This slowed down the frequency with which accurate, comprehensive information could be published. As a result, enforcement lagged and potentially dangerous contaminants could be released. Similarly, for the lead abatement program, before CDX, faxes and mailings were often either illegible or incomplete requiring query letters. Now data is always high-quality and right the first time. This has greatly reduced the elapsed time between submission and review by EPA. 3. Customer Access: CDX improves customer access substantially. CDX allows easy and immediate access to all register users. This has proved difficult to quantify but customers have reported that CDX is easier to access and use. For example, for UCMR, CDX offers secure, integrated repository for States, labs, PWSSs, EPA this should make it easier for customer to access. For eNOI, data now available to filers, enforcement, Program Office & the public via website. 4. Security: All systems now comply with security-related electronic information exchange requirements. This means that EPA can receive electronic information in a secure, regulatory compliant system. 5. Regulatory Compliance: CDX creates a Cross-Media Electronic Reporting Rule (CROMERR) compliant solution for information exchange. No other EPA, in-house solution contemplated by EPA Programs would do this.

II.B. Risk Management

You should have performed a risk assessment during the early planning and initial concept phase of this investment's life-cycle, developed a risk-adjusted life-cycle cost estimate and a plan to eliminate, mitigate or manage risk, and be actively managing risk throughout the investment's life-cycle.

1. Does the investment have a Risk Management Plan?	Yes
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a. If "yes," what is the date of the plan? 6/1/2005

b. Has the Risk Management Plan been significantly changed since last year's submission to OMB?	No
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c. If "yes," describe any significant changes:

2. If there currently is no plan, will a plan be developed?	
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a. If "yes," what is the planned completion date?

b. If "no," what is the strategy for managing the risks?

3. Briefly describe how investment risks are reflected in the life cycle cost estimate

and investment schedule:

II.C. Cost and Schedule Performance

1. Does the earned value management system meet the criteria in ANSI/EIA Standard-748? Yes

2. Answer the following questions about current cumulative cost and schedule performance. The numbers reported below should reflect current actual information. (Per OMB requirements Cost/Schedule Performance information should include both Government and Contractor Costs):

a. What is the Planned Value (PV)?

b. What is the Earned Value (EV)?

c. What is the actual cost of work performed (AC)?

d. What costs are included in the reported Cost/Schedule Performance information (Government Only/Contractor Only/Both)? Contractor Only

e. "As of" date: 6/30/2006

3. What is the calculated Schedule Performance Index (SPI = EV/PV)?

4. What is the schedule variance (SV = EV-PV)?

5. What is the calculated Cost Performance Index (CPI = EV/AC)?

6. What is the cost variance (CV=EV-AC)?

7. Is the CV% or SV% greater than +/- 10%? No
(CV%= CV/EV x 100; SV%= SV/PV x 100)

a. If "yes," was it the?

b. If "yes," explain the variance:

c. If "yes," what corrective actions are being taken?

d. What is most current "Estimate at Completion"?

8. Have any significant changes been made to the baseline during the past fiscal year? No

8. If "yes," when was it approved by OMB? No

Comparison of Initial Baseline and Current Approved Baseline

Milestone	Description	Initial Baseline	Current Baseline	Current	Percent
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Number	of Milestone							Baseline Variance		Complete
		Planned Completion Date	Total Cost (Estimated)	Completion Date		Total Cost		Schedule (# days)	Cost	
				Planned	Actual	Planned	Actual			
01	FY 2004	09/30/2004	\$7.636	09/30/2004	09/30/2004	\$7.636	\$7.636	0	\$0.000	100%
22	Maintain centralized EPA CDX/ER for up to 15 major EPA data exchanges (O&M)	09/30/2004	\$6.213	09/30/2004	09/30/2004	\$6.213	\$6.213	0	\$0.000	100%
23	Begin implementing for three new data exchanges (DME)	09/30/2004	\$0.266	09/30/2004	09/30/2004	\$0.266	\$0.266	0	\$0.000	100%
24	Design and conduct testing, for up to three data exchanges, including a test of the Federal Bridge Certificate Authority or E-authentication gateway with one state partner (DME)	09/30/2004	\$0.453	09/30/2004	09/30/2004	\$0.453	\$0.453	0	\$0.000	100%
25	Assess and evaluate CDX strategic design and operations to incorporate E-Authentication Gateway functionality as necessary, and update plans - security, risk mitigation, acquisition and other documentation as necessary. (DME)	06/30/2004	\$0.230	06/30/2004	09/30/2004	\$0.230	\$0.230	-92	\$0.000	100%
26	Expand CDX support to at least 12 state nodes (DME)	09/30/2004	\$0.474	09/30/2004	09/30/2004	\$0.474	\$0.474	0	\$0.000	100%
02	FY 2005	09/30/2005	\$182.905	09/30/2005	09/30/2005	\$7.035	\$7.781	0	(\$0.746)	100%
27	Maintain centralized EPA CDX/ER for 15 to 18 major EPA data exchanges (O&M)	09/30/2005	\$42.209	09/30/2005	09/30/2005	\$3.517	\$4.206	0	(\$0.689)	100%
30	Assess and evaluate CDX strategic design and operations and update plans - security, risk mitigation, acquisition and other documentation as necessary (DME)	09/30/2005	\$70.348	09/30/2005	09/30/2005	\$1.901	\$1.934	0	(\$0.033)	100%
31	Maintain state and tribal nodes (DME)	09/30/2005	\$70.348	09/30/2005	09/30/2005	\$1.616	\$1.641	0	(\$0.025)	100%

03	FY 2006	09/30/2006	\$11.780	09/30/2006		\$8.810	\$6.023		\$2.787	61.9%
32	Maintain centralized EPA CDX/ER for 18 to 20 major/minor data exchanges (O&M)	09/30/2006	\$7.707	09/30/2006		\$4.370	\$3.004		\$1.366	69%
33	Begin implementing for three new data exchanges (DME)	09/30/2006	\$0.000	09/30/2006		\$0.470	\$0.349		\$0.121	83%
34	Design and conduct testing for up to three data exchanges (DME)	09/30/2006	\$0.000	09/30/2006		\$0.470	\$0.211		\$0.259	59%
35	Assess and evaluate CDX strategic design and operations and update plans - security, risk mitigation, acquisition and other documentation as necessary (O&M)	06/30/2006	\$1.225	06/30/2006		\$1.600	\$1.368		\$0.232	100%
36	Maintain state and tribal nodes for multiple delegated programs (DME)	09/30/2006	\$2.848	09/30/2006		\$1.900	\$1.091		\$0.809	9%
47	Develop an inventory of current sources and contractual obligations for information security products and services	12/31/2005	\$0.000	12/31/2005		\$0.000				100%
48	Develop migration plan for acquiring information security products and services from Centers of Excellence established under the Information Systems Security Line of Business.	09/30/2006	\$0.000	09/30/2006		\$0.000				0%
04	FY 2007	09/30/2007	\$14.410	09/30/2007		\$8.810				%
37	Maintain centralized EPA CDX/ER for 20 to 23 major/minor data exchanges	09/30/2007	\$9.586	09/30/2007		\$4.370				%
38	Begin implementing for three new data exchanges	09/30/2007	\$0.000	09/30/2007		\$0.470				%
39	Design and conduct testing for up to three data exchanges	09/30/2007	\$0.000	09/30/2007		\$0.470				%
40	Assess and evaluate CDX strategic design	06/01/2007	\$0.980	06/01/2007		\$1.600				%

	and operations and update plans - security, risk mitigation, acquisition and other documentation as necessary									
41	Maintain state and tribal nodes for multiple delegated programs	09/30/2007	\$3.844	09/30/2007		\$1.900				%
49	Implement plan to migrate from current information security acquisition processes to the procurement of information security products and services from Centers of Excellence established under the Information Systems Security Line of Business.	09/30/2007	\$0.000	09/30/2007		\$0.000				%
05	FY 2008	09/30/2008	\$0.000	09/30/2008		\$8.810				%
50	Maintain centralized EPA CDX/ER for 25 major/minor data exchanges (O&M)	09/30/2008	\$0.000	09/30/2008		\$4.370				%
51	Begin implementing for three new data exchanges	09/30/2008	\$0.000	09/30/2008		\$0.470				%
52	Design and conduct testing for up to three data exchanges	09/30/2008	\$0.000	09/30/2008		\$0.470				%
53	Assess and evaluate CDX strategic design and operations and update plans--security, risk mitigation, acquisition and other documentation as necessary	09/30/2008	\$0.000	09/30/2008		\$1.600				%
54	Maintain state and tribal nodes for multiple delegated programs (O&M)	09/30/2008	\$0.000	09/30/2008		\$1.900				%
55	Implement plan to migrate from current information security acquisition processes to the procurement of information security products and	09/30/2008	\$0.000	09/30/2008		\$0.000				%

