

**CIO COUNCIL
ARCHITECTURE & INFRASTRUCTURE (AIC)
AND
BEST PRACTICES COMMITTEES**

**ADDITIONAL GUIDANCE FOR
CONSOLIDATED OMB EXHIBIT 300
(INFRASTRUCTURE, AUTOMATION, TELECOM)**

1.0 BACKGROUND AND PURPOSE OF THE CONSOLIDATED EXHIBIT 300

OMB's draft circular A-11 requires that agencies:

"...create and manage department-wide IT programs for office automation, and telecommunications. IT investments (major and non-major) in these areas should be coordinated through an agency-wide process and reported in September as a single business case for the department."

The intent of this requirement is for agencies to demonstrate that they have established, or are in the process of establishing, an overall program for managing all infrastructure, office automation, and telecommunications (herein referred to as I/OA/T) projects/investments.

The business case for an I/OA/T program should specify how these projects/investments are integrated and managed across the entire enterprise. The entire enterprise includes all organizations within that agency (e.g., bureaus, components, operating administrations, operating divisions, etc.). The requirement is not intended to imply that every individual project included in the I/OA/T program is implemented centrally by the agency-level CIO organization. The requirement is intended to ensure that all of these projects are integrated into an overall strategy that is consistent with the Department's strategic direction and allows for consolidation and integration across the enterprise.

The I/OA/T Exhibit 300 should discuss consolidation on two levels; *project consolidation* and *technical consolidation*. The *project consolidation* discussion should specify how the large number of projects documented in previous years across many Exhibit 300s and the Exhibit 53 is being reduced. The discussion should demonstrate streamlined operations and reduced management burden. The *technical consolidation* discussion should focus on ongoing activities and plans for the consolidation of physical infrastructure and services. Suggested methods for technical consolidation include, but are not limited to:

- Centralized/consolidated/shared data centers
- Centralized/consolidated/shared data storage and warehousing
- Centralized/consolidated/shared web hosting, housing, and content management
- Centralized/consolidated/shared processing services (e.g., mainframe batch processing)
- Centralized/consolidated/shared data backup and recovery services
- Enterprise software licensing
- Enterprise desktop leasing (bulk pricing)
- Enterprise maintenance contracts

- Consolidated help desks
- Reasonable desktop to peripheral ratios (e.g., 1 network printer or fax per 30 desktops)
- Centralized/consolidated/shared call centers and CRM services
- Centralized/consolidated/shared network backbone
- Centralized/consolidated/shared access circuits
- Centralized/consolidated/shared WAN contract
- Bulk long distance voice contracts
- Bulk local voice contracts
- Centralized/consolidated/shared voice equipment contracts (for PBXs, etc.)
- Shared intrusion detection and firewall services
- Shared disaster recovery services
- Shared network management resources

The Consolidated Exhibit 300 should categorize projects into something akin to common “clusters” and “categories” for analytical purposes. These clusters and categories should, in turn, be mapped to OMB’s Federal Enterprise Architecture Reference Models. Suggested clusters and categories are presented in Section 2.0 of this document. Section 3.0 of this document contains a section-by-section breakdown of the Exhibit 300 requirements and an indication of whether the response should focus on the I/OA/T Consolidation Program itself, or individual projects that are part of the overall program. Section 3.0 also includes evaluation questions that will be used by OMB in scoring the agency submissions.

2.0 WHAT IS INCLUDED IN THE CONSOLIDATED EXHIBIT 300?

OMB has provided a broad description of what types of investments and activities should be included within this consolidated business case. The determination of which initiatives are viable for inclusion in a consolidated 300 per the definition of “infrastructure” contained in OMB Circular No A-11 (2003) Section 53-12 pertaining to IT infrastructure and office automation.

“Report all IT investments that support common user systems, communications, and computing infrastructure. These investments usually involve multiple mission areas and might include general LAN/WAN, desktops, data centers, cross-cutting issues such as shared IT security initiatives, and telecommunications. Report your IT security initiatives and projects that are not directly tied to a major project on a separate line identified as “non-major.”

In an effort to clarify what investments should be included in this consolidated business case and to ensure consistency, the following categories and clusters are suggested as a guide for what types of projects/investments are to be included.

IT Infrastructure, Office Automation and Telecommunications

Cluster	Category or Service	Definition	Examples
Computing Services Cluster			
	Desktop Hardware & Software Category	Desktop computing services to users to include all general purpose, desktop computing hardware and software (OS, applications and utilities) components and services (including design, build, operations, support , and maintenance services) Includes peripherhals/printers Does not include email and calendaring client & servers. Does not include desktops whose primary use is mission specific. Includes multipurpose help desks.	Desktop computers, laptop computers, operating systems, software (e.g., word processing, spreadsheet, presentation, project management, browser, etc.)
	Application Services Category	Application services provide an end service to end-users. Applications services include the development, operations and maintenance of applications that are not desktop services. Includes IT investments in hardware (not a part of a datacenter), software and services required to provide application services remote from a desktop and not provided by a Data Center. This includes design, development, help and other support, operations and maintenance.	Includes but is not limited to: Standard Agency-wide Administrative Systems, Web services internal to Agency or Bureau (to include GP applications with a web front-end), and General Purpose IT Support of Missions/Projects.
	Data Center Category	From IT POP Guidance 2003 - A data center is a collection of IT hardware and software that is used for <u>multiple</u> purposes, and often related, computing services. Furthermore, these resources are usually funded and operated as a shared resource with management dedicated to operating the center. Mass storage systems should be included as a data center unless the mass storage is integrated into some other IT facility. Includes data storage (digital data storage services, including hardware, software and services) Does not include public Web hosting services.	IT Support for Centralized Services (data center, servers, mass storage, web services, e-mail, etc.)

Communications Services Cluster

	Wide Area Network Category	All IT investments required to support network communications between LANs, and data centers	Commercial ISP (WANs), Agency Wan, Converged Voice/video/data networks
	Local Area Network Category	All IT investments required to provide networking services within a building, campus, data center or Center, including hardware, software, and services (including wireless LANs, remote access, Domain naming services, network management, X500/directory services)	Local Area Network
	Voice Category	All elements that provide voice services to users including hardware, software, services and communications that are not provided by WANs	Telephones local and long distance services, 2-way radio, Cell Phones Services, Facsimile Services, FTS services, international services, Voice Teleconferencing (VoTS), Calling cards, 800 # service, voice over IP, PBXs, voice mail, Public Address (PA), Emergency Warning System (EWS), Satellite Phones
	Video Category	All investments required to support video and video distribution and video conferencing services used by Agency or Bureau to include hardware, software and support services - not including LAN or WAN.	Video Services, Administrator Video, VITS, digital video production equipment/facilities, Conference Room A/V support, video distribution systems, Digital TV (DTV) Project and HDTV

Electronic Work Environment Cluster

	Messaging and Collaboration Category	All IT investments to provide Email, instant messaging, and collaborative tools.	All Email, Calendaring, Wireless PDA/Handheld (i.e.: Blackberry), Pagers, Advanced Engineering Environment (AEE), Electronic Work Environment Initiative, Video over IP, ISOWAN, Center E-mail, WebEx, E-Room, and related services
	Public Web Services Category	Web services Agency or bureau provides to citizens. (all costs: HW/SW, design maintenance and support). Externally focused websites (not internally focused websites).	Center Web Services Public Web Portal Data dictionary (XML and other) and directory services focused on facilitating web access to information. Includes ODIN Web1 seats

Cross-cutting Categories or Services

	Security Category	All IT investments to provide shared security services.	Certificates / Digital Signatures, Digital Certificate Authentication, SSL, Supporting Security Services
	Software Engineering	All IT investments to support software engineering services.	Integrated development Environments, Requirements Development and Management, Software Configuration Management, Software / System Test, Modeling
	IT Asset management	All IT investments to provide shared IT asset management services.	Center Web Services NASA Public Web Portal Data dictionary (XML and other) and directory services focused on facilitating web access to information. Includes ODIN Web1 seats

There may be some overlap among these areas, however these definitions provide a general basis by which to select investments that should be included in the consolidated business case. As a general rule, mission focused initiatives should not be included. Furthermore, corporate “system” 300s (Financial Systems, HR Systems, est.), should not be included in this consolidated business case. They will be reported in separate exhibits.

3.0 SECTION-BY-SECTION GENERAL DISCUSSION OF ISSUES

Question	Scope	General Response	Potential Evaluation Questions
Summary of Spending Table	Overall I/OA/T Effort	This table should be a roll-up of all I/OA/T projects across the agency. Agencies may find it useful to be able to produce tables that outline spending by their organization units and by individual project. In effect, the agency should be able to produce a "mini Exhibit 53" within the Exhibit 300 that documents spending on individual projects for internal tracking purposes.	
IA – Project Summary/IB – Justification	Overall I/OA/T Effort	The project description needs to describe the overall consolidation process and the strategy for implementation and management. Agencies should move towards the consolidation of these activities and ensure that a plan and schedule is in place. General categories of activities should be created (see clusters and categories in Section 2.0) This categorization of projects/investments can be carried throughout the entire business case. These categories can also be mapped to mission and strategic goals and objectives and the PMA.	<p>Have you clustered your projects into sets of like services or components?</p> <p>Does the business case clearly describe the approach for consolidation?</p> <p>Is your approach to clustering projects described in a manner that demonstrates the agency is moving from many instances of a service to few instances of that service when appropriate?</p> <p>How are you utilizing a common infrastructure to achieve your business requirements?</p> <p>How do the projects merge to a single overall program?</p> <p>Does your set of programs align with your Enterprise Architecture "to-be" state?</p> <p>How did you prioritize the projects that compose your overall integrated program plan?</p> <p>Has the justification for consolidation been supported by quantified costs savings, benefits, supported research, etc.?</p> <p>Does the consolidated system/project have linkages with or dependencies on other systems?</p> <p>How will the consolidated system improve communications with citizens or businesses?</p> <p>Are there any major constraints that stand in the way of successful implementation?</p>

IC – Performance Measures	Overall I/OA/T Effort and Individual Major Projects	Performance measures should be developed for the integration effort as a whole. Performance measures should also be developed for major projects/investments that fall within the overall I/OA/T program.	Do you have metrics for the integration program? Are the performance metrics measurable? Are you using common performance metrics for like or similar projects? How are metrics from different focus areas (e.g., cost vs. customer satisfaction) balanced? Are you using performance metrics that are consistent with the FEA Performance Reference Model? Does EA provides a standardized “language” to characterize business functions and processes, which can then be measured? Are there measurements to determine whether the consolidation is delivering its services on time and within budget?
ID – Project Management	Overall I/OA/T Effort	The management structure of this consolidated initiative needs to be developed. An overall accountability structure should be identified. This section may propose an Integrated Project Team.	How is the management team structured? Is the Integrated Project Team comprised of the appropriate mix of skills sets to assure success consolidation and management of the project? How is the management team resolving conflicts and developing a road-map to achieve to the overall Agency goals? What is the accountability structure? How does your Agency manage the project portfolio?
IE – Alternatives Analysis	Overall I/OA/T Effort	A new, “big picture” alternatives analysis will need to be done. This is an area that cannot be extrapolated from individual investments.	Which alternatives did you consider for the overall integration program? Does the alternatives analysis demonstrate that consolidation is the best option? Are costs and benefits quantified? What are the benefits of this consolidation? Does the analysis of the consolidation include measurable benefits—financial and non-financial— such as improved mission performance, increased customer satisfaction, reduced costs? Will significant resources be required to maintain the project over its lifecycle?

IF – Risk Assessment	Overall I/OA/T Effort	Risks from multiple investments that are to be included in this consolidated business case may be combined. Many of the risks associated with individual investments are applicable for this consolidated initiative. Risks may be identified by component area. Additional risks will need to be included based on the OMB risk categories.	What are the risks for the overall integration program? Are all risks categories addressed? Are the integration risks adequately addressed and are sufficient plans in place to mitigate these risks? Does the level of rigor in the risk management plan correspond to the size, scope, and significance of the consolidation? Is there a plan to ensure that the consolidation exhibit functional and effective risk management procedures throughout the project's life cycle?
IG – Acquisition Strategy	Individual Projects	This will need to be developed based on the final list of projects to be included. It is likely that multiple contracts will be used to accomplish the tasks associated with this initiative. These contracts will have to be broken out and clearly explain what aspects they cover.	What is your approach to making balanced decisions about consolidating elements in your overall integration program? Are you partnering with other Agencies to develop or acquire common services at the federal level (e.g. e-payroll)? Is a strategy in place to consolidate these individual contracts so they are managed more centrally? Is this strategy clearly defined? Does the project have an acquisition strategy that appropriately allocates risk between the Government and the contractor, effectively uses competition, ties contract payments to accomplishments, and takes maximum advantage of commercial technology?
IH – Project Funding Plan	Overall I/OA/T Effort and Individual Major Projects	A new consolidated baseline will need to be developed. Once again, individual baselines may be developed by component areas and costs totaled.	Are milestones defined at an appropriate level of detail? Are major milestones provided for each component of common services? Have milestones been developed in line with how the project will be managed? Are there methods for maintaining disciplined budgets and authorizations for all project expenditures and baseline changes? planned, and does not achieve 90% of planned cost, schedule and performance goals, do you have a corrective action plan in place?

IIA – Enterprise Architecture	Overall I/OA/T Effort and Individual Major Projects	The overall business case should map the infrastructure components to the FEA reference models.	<p>Do you have a current Enterprise Architecture (EA)?</p> <p>If not, do you have a documented plan to develop or update you EA?</p> <p>If so, is your current EA consistent with the released Federal Enterprise Architecture Reference Models?</p> <p>Do you perform IV&V on your EA?</p> <p>How does this investment align with your Agency's "to be" Enterprise Architecture?</p> <p>How has your Agency's EA driven/directed this consolidation effort?</p> <p>Does the consolidation meet IT needs through cost effective intra-agency & interagency sharing, before acquiring new information technology resources?</p> <p>Does the consolidated system have an integrated and comprehensive Enterprise Architecture that provides a clear roadmap for how it will modernize and transform the agency?</p>
IIB – Security and Privacy	Overall I/OA/T Effort and Individual Major Projects	Security/Privacy measures should be described at the component area level. In addition, specific system level security measures should be described for all major projects that cover each of the component areas.	<p>Under this consolidation, how will security and privacy be addressed and protected?</p> <p>Are the major systems that cover each component of common services identified and do they all have up to date security</p> <p>Are system level security measures described for all major systems that are included in this consolidation effort?</p> <p>Will a privacy impact assessment been performed if the system includes, involves, transmits, or collects personal information/information on individuals?</p> <p>Will there be a security plan (consolidated) that meets the requirements of NIST guidance and OMB IT security policy?</p>