Commonwealth of Massachusetts
Office of the State Auditor
Suzanne M. Bump

Making government work better

Official Audit Report-January 28, 2013

Executive Order No. 510 Compliance Review for Consolidation of IT Systems within Executive Departments

For the period July 1, 2009 through August 31, 2011

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INTRODUCTION AND SUMMARY OF FINDINGS AND RECOMMENDATIONS

On February 19, 2009, the Governor issued Executive Order No. 510 (EO510)[1] for the purposes of achieving greater efficiency and cost-effectiveness by centralizing the management and operation of information technology (IT) systems across the state's Executive Department agencies (Secretariats). This IT consolidation initiative requires Secretariats to perform various IT consolidation activities, including a reorganization of IT staff, consolidation of IT budgets, and relocation of IT systems and processing environments. The administration believes that IT consolidation will allow for an optimized IT infrastructure that will better support state agency missions and customer-centric services. Included in the stated goals of EO510 are improved customer services, enhanced IT security, and reduced IT costs.

EO510 establishes specific objectives for IT consolidation. Among others, these include the Commonwealth Chief Information Officer (CIO) issuing, by May 30, 2009, a high level description of his or her plans for completing the migration of unrestricted infrastructure services for all Secretariats to the state's Information Technology Division (ITD); the Commonwealth CIO, by September 30, 2009, finalizing a detailed plan for completing the migration of infrastructure services for all Secretariats to ITD; and ITD, by December 30, 2010, substantially completing the consolidation of infrastructure services for its Executive Department.

In accordance with Chapter 11, Section 12, of the Massachusetts General Laws, the Office of the State Auditor (OSA) conducted an audit of the IT consolidation efforts by Secretariats and ITD for the period July 1, 2009 through August 31, 2011. The scope of our audit was to assess the extent to which Secretariats and their agencies complied with the requirements of EO510 to consolidate their IT services.

The overall initiative to consolidate disparate and redundant IT services and resources can potentially enhance the value achieved by the Commonwealth's investment in technology and related resources. By implementing enterprise-based IT operations and management, EO510 provides an opportunity to achieve improved integrity, security, efficiency, and availability of IT services to support agency operations and services for the Commonwealth's citizens. Realization of these outcomes depends on providing the financial and organizational resources required, including

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[1] In May 2011, EO510 was superseded by EO532. However, EO532 adopted the same key IT consolidation objectives as EO510.

continued management commitment, performance measurement, detailed monitoring and evaluation, detailed reporting of the project's status, and business and IT strategic alignment.

Highlight of Audit Findings

- A number of the objectives required by EO510 were completed according to schedule. However, according to various officials involved in the IT consolidation process, because of fiscal and other resource constraints, as well as the magnitude and complexity of consolidating IT functions and technology across eight Secretariats encompassing more than 80 agencies, the December 30, 2010 deadline proved to be far too ambitious. As a result, the implementation date for the project is now projected to occur in 2014.

Recommendations of the State Auditor

- The Commonwealth should take the measures necessary to ensure that adequate resources are made available to meet the new EO510 implementation deadline.

- Secretariats, ITD, and the Commonwealth CIO should continue to monitor and manage the IT consolidation process and provide status updates to the state Legislature and other key stakeholders in order to effect proper implementation and provide the appropriate transparency relative to EO510 activities.

OVERVIEW OF AUDITED AGENCY

On February 19, 2009, Executive Order No. 510 (EO510), entitled "Enhancing the Efficiency and Effectiveness of the Executive Department's Information Technology Systems," was issued. It required all of the state's Executive Department agencies (Secretariats) to consolidate their information technology (IT) systems and operations. Before EO510 was implemented, the Executive Department's IT infrastructure comprised 183 data centers, 15 major data networks, 24 e-mail systems, and 200 phone systems. In addition, 48 helpdesks and more than 50 desktop and local area network (LAN) organizations provided IT support services for the Commonwealth.

EO510 established specific implementation milestones. Among others, these include the Commonwealth Chief Information Officer (CIO) issuing, by May 30, 2009, a high level description of his or her plans for completing the migration of unrestricted infrastructure services for all Secretariats to the state's Information Technology Division (ITD); the Commonwealth CIO, by September 30, 2009, finalizing a detailed plan for completing the migration of infrastructure services for all Secretariats to ITD; and ITD, by December 30, 2010, substantially completing the consolidation of infrastructure services for its Executive Department. These consolidated infrastructure services to be provided by ITD had to meet, at a minimum, the same service levels as those received by Secretariats before consolidation. The Commonwealth CIO is required to report annually to the Executive Office for Administration and Finance concerning (a) progress made by the Executive Department toward Secretariat and infrastructure consolidation, (b) the results of such consolidation, (c) service levels for the consolidated infrastructure services provided to the Executive Department, and (d) the cost of such services.

A copy of EO510 appears in the Appendix to this report.

AUDIT SCOPE, OBJECTIVES, AND METHODOLOGY

In accordance with Chapter 11, Section 12, of the Massachusetts General Laws, the Office of the State Auditor (OSA) conducted an audit of Executive Department agencies' (Secretariats') compliance with Executive Order No. 510 (EO510). The Commonwealth's Executive Department consists of eight Secretariats: the Executive Offices of Administration and Finance, Energy and Environmental Affairs, Education, Housing and Economic Development, Health and Human Services, Labor and Workforce Development, Public Safety and Security, and Transportation and Public Works[2]. Within each Secretariat are multiple agencies. We conducted this performance audit, which covered the period July 1, 2009 through August 31, 2011, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Our audit scope included a review of the measures taken by the state's Secretariats and the state's Information Technology Division (ITD) during the period July 1, 2009 through August 31, 2011 to coordinate and centralize the management and operation of Executive Department's information technology (IT) systems in compliance with EO510. Our audit objective was to determine what progress, if any, has been made in meeting the implementation milestones established by EO510.

To achieve our audit objectives, we:

- Conducted interviews with ITD management, including the Executive Director of ITD's IT Consolidation Program Management and its Chief Capital Planning Officer, the Commonwealth Chief Information Officer (CIO), Secretariat Chief Information Officers (SCIOs), and various other IT Consolidation Program management personnel.

- Reviewed relevant documentation from the Commonwealth's CommonWiki[3] website pertaining to IT consolidation policies, procedures, and internal controls.

- Reviewed the process by which ITD tracks the submission of agency EO510 plans and updates through the IT Consolidation website.

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[2] Under Chapter 25 of the Acts of 2009, An Act Modernizing the Transportation Systems of the Commonwealth, the Executive Office of Transportation and Public Works and its divisions were merged into the Massachusetts Department of Transportation.

[3] A wiki is a website that makes it easy for anyone to add or modify pages and link them together. CommonWiki is an enterprise system powered by a tool called Confluence and offered by ITD for use by employees of the Commonwealth of Massachusetts.

- Reviewed organizational controls with respect to the establishment of SCIO positions, reporting lines, and points of accountability.

- Reviewed management control practices regarding the consolidation of IT staff and IT budgets within Secretariats.

- Documented the progress each Secretariat has made in meeting the milestones established by EO510.

Criteria used in this audit included the requirements of EO510; applicable Executive Department management policies and procedures; and control guidelines outlined in Control Objectives for Information and Related Technology (CobiT version 4.1), issued by the Information Systems Audit and Control Association in July 2007.

Based on our audit, we have concluded that, although a number of the objectives established by EO510 were completed according to schedule, Secretariats were not able to meet EO510's December 30, 2010 deadline for substantially completing the consolidation of infrastructure services for the Executive Department at ITD. According to various officials involved in the IT consolidation process, because of fiscal and other resource constraints, as well as the magnitude and complexity of consolidating IT functions and technology across eight Secretariats encompassing more than 80 agencies, the December 30, 2010 deadline proved to be far too ambitious.

AUDIT FINDINGS

CONSOLIDATION OF IT SYSTEMS WITHIN THE EXECUTIVE DEPARTMENT WAS NOT SUBSTANTIALLY COMPLETED WITHIN THE SCHEDULED TIME FRAME

As previously discussed, Executive Order No. 510 (EO510) requires the substantial completion of overall information technology (IT) consolidation by Executive Department agencies (Secretariats) by December 30, 2010. Based on our audit work, we determined that although the overall consolidation of IT infrastructure has been delayed, a number of objectives required by EO510 have been accomplished. The statuses of the most significant objectives required under EO510 are discussed below.

a. Appointment of Secretariat Chief Information Officers

EO510 states, "By March 1, 2009, the secretary of each executive office ('secretariat') in the Executive Department shall appoint a Secretariat Chief Information Officer ('SCIO')." During our audit, we determined that each Secretariat had appointed an SCIO responsible for its consolidated IT by the March 1, 2009 due date. Each SCIO reports to his or her respective Secretariat and to the Commonwealth Chief Information Officer (CIO). Where operationally warranted, SCIOs have the authority, following consultation with agency heads, to appoint CIOs for agencies within their Secretariats.

The new SCIO positions serve as a point of accountability for IT in each Secretariat and provide an improved foundation for enterprise-based IT management and stronger IT governance. Senior-level IT employees in each Secretariat report to the Commonwealth CIO, providing a liaison between centralized IT via the Commonwealth CIO and each Secretariat and providing horizontal integration/communication of IT. We also found that weekly status meetings occur between the SCIOs and the Commonwealth CIO.

b. Consolidation of IT Staff

In general, EO510 requires the consolidation of IT staff. As of July 1, 2009, IT personnel from individual agencies within Secretariats were transferred to Secretariat-level IT organizations. Consolidating IT personnel who report to a central SCIO potentially enhances IT staff capabilities and allocates staff resources based on specific needs for agencies served by IT. Further, the consolidation of IT staff provides opportunities to strengthen professional development and makes it more likely that staff members can meet training requirements. For

example, since consolidation, 1,027 staff members have completed training in Information Technology Infrastructure Library control practices as part of the adoption of generally accepted IT management and control practices.
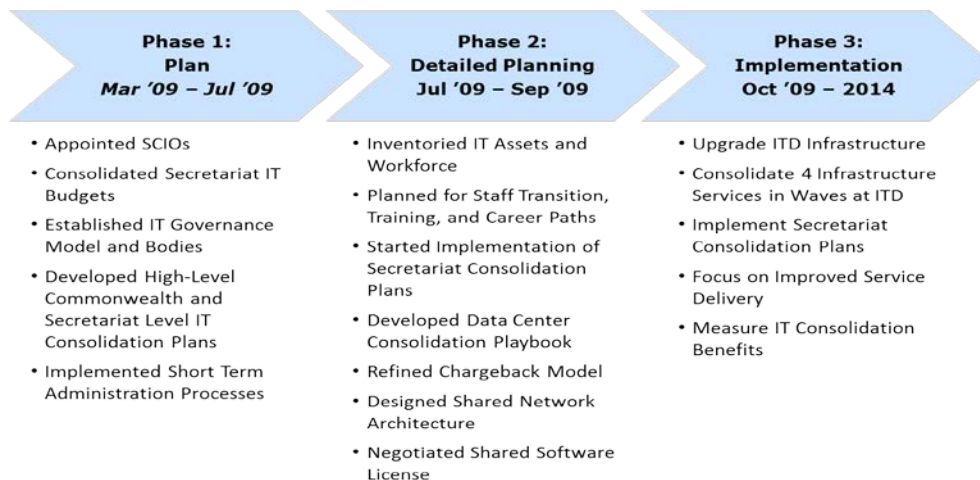
c. Consolidation of IT Budgets

EO510 requires that all agency budgets for IT within the Executive Department be aggregated at the Secretariat level as of July 1, 2009. According to the state's Massachusetts Management Accounting and Reporting System, all IT budgets originally under the control of individual agencies within Secretariats were consolidated at the Secretariat level as of July 1, 2009.

The consolidation of IT budgets provides the opportunity to improve budget allocations on an enterprise basis across the agencies within each Secretariat. If Secretariat-level IT strategic plans develop in alignment with the business objectives of the Secretariats, then consolidation of IT budgets at the Secretariat level should provide improved resource allocation and IT value delivery for IT functions and initiatives. Consolidation at this level should also help identify misaligned or conflicting IT functions or initiatives.

d. Submission of Secretariat Consolidation Plans

EO510 requires that Secretariat Consolidation Plans be submitted to the Commonwealth CIO for review and approval by July 1, 2009. We found that each Secretariat's SCIO had submitted plans outlining how IT consolidation efforts will be addressed by the July 1, 2009 due date. The following table, which appears on CommonWiki, outlines the key initiatives for all Secretariats for IT consolidation.

Phase 1: Plan Mar '09 – Jul '09	Phase 2: Detailed Planning Jul '09 – Sep '09	Phase 3: Implementation Oct '09 – 2014
• Appointed SCIOs • Consolidated Secretariat IT Budgets • Established IT Governance Model and Bodies • Developed High-Level Commonwealth and Secretariat Level IT Consolidation Plans • Implemented Short Term Administration Processes	• Inventoried IT Assets and Workforce • Planned for Staff Transition, Training, and Career Paths • Started Implementation of Secretariat Consolidation Plans • Developed Data Center Consolidation Playbook • Refined Chargeback Model • Designed Shared Network Architecture • Negotiated Shared Software License	• Upgrade ITD Infrastructure • Consolidate 4 Infrastructure Services in Waves at ITD • Implement Secretariat Consolidation Plans • Focus on Improved Service Delivery • Measure IT Consolidation Benefits

As can be seen above, the combined consolidation plan outlined three phases with specific deliverables and time periods. For fiscal years 2010 and 2011, the Secretariats created consolidation plan roadmaps that showed the current state and future planned deliverable completion date of numerous goals within the Secretariat Consolidation Plans.

e. Commonwealth's CIO Consolidation Plan and Submission of Periodic IT Plans and IT Procurement Plans to the Commonwealth CIO for Review and Approval

EO510 states, in part:

> *By July 1, 2009, each SCIO shall submit to the Commonwealth CIO for review and approval a secretariat consolidation plan ("Secretariat Consolidation Plan") demonstrating how the Secretariat will, no later than September 30, 2009, migrate to the most efficient model for the delivery of IT services…. Pursuant to reporting requirements established by the Commonwealth CIO, Secretariat Consolidation Plans shall provide for the submission of periodic IT and IT procurement plans to the Commonwealth CIO for the CIO's review and approval.*

We found that the Commonwealth CIO developed an overall IT Consolidation Plan for the Secretariats based on the Secretariat Consolidation Plans and the state Information Technology Division's (ITD's) efforts to further develop shared services. The Commonwealth CIO submitted this plan for IT consolidation across the Secretariats by September 30, 2009. The plan outlined major areas of consolidation by Secretariats required to complete the migration of infrastructure services. The key initiatives as outlined in the plan were Secretariat consolidation, shared service-oriented architecture infrastructure, network architecture, enterprise security plans, civic engagement strategy, identity management, and enhanced procurement processes. Secretariat annual IT Consolidation Plans include a financial budget and detailed business, IT, and financial priorities for the fiscal year. Separate procurement plans have not been used because IT Consolidation Plans include procurement information.

f. Establishment of Infrastructure Services Board

EO510 requires the establishment of an Infrastructure Services Board (ISB) to advise the Commonwealth CIO regarding the services and service level performance of the infrastructure services provided by ITD. Based on our audit work, we determined that the ISB had been established and the composition of the ISB was consistent with the requirements of EO510.

g. Submission of Annual IT Consolidation Progress Reports

EO510 states that the Commonwealth CIO "shall report annually to the Executive Office for Administration and Finance concerning: (a) progress made by the Executive Department towards secretariat and infrastructure consolidation; (b) the results of such consolidation; (c) service levels for the consolidated infrastructure services provided to the Executive Department; and (d) the cost of such services." The former and current Commonwealth CIOs submitted the required reports for this audit period, one on February 5, 2010 and the other on March 1, 2011.

h. Consolidation of Infrastructure Services at ITD for the Executive Department

EO510 requires that ITD, by December 30, 2010, substantially complete the consolidation of infrastructure services at ITD for the Executive Department. Infrastructure services include consolidated e-mail, websites, helpdesks, desktop and local area network (LAN) services, data center service, and networks. According to various officials involved in the IT consolidation process, because of fiscal and other resource constraints, as well as the magnitude and complexity of consolidating IT functions and technology across eight Secretariats encompassing more than 80 agencies, the December 30, 2010 deadline proved to be far too ambitious.

In addition to the EO510 objectives discussed above, according to a March 1, 2011 Report to the House and Senate Committees on Ways and Means on IT Consolidation[4] from the Acting CIO of ITD, "progress is being tracked and reported on a quarterly basis through the IT Consolidation Benefits Tracking Program. Secretariats map progress against clearly defined metrics and work towards common goals, ensuring consistency in reporting across the Executive Department." Fiscal year 2011 fourth-quarter results for key metrics follow:

Consolidation Goals	Baseline	As of June 2011	Target
Reduce Number of Help Desks	43	19	9
Reduce Number of Desktop and LAN Teams	55	19	8
Eliminate Noncompliant Websites	50	30	0
Consolidate Applications	0	7	59
Reduce Number of Data Centers	60	51	5
Establish SCIOs for All Secretariats	2	8	8

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[4] This reporting requirement was included in the state's fiscal year 2011 General Appropriation Act, Chapter 131 of the Acts of 2010.

As can be seen in the preceding chart, IT consolidation efforts have progressed. For example, the number of helpdesk functions across all Secretariats has been reduced from 43 to 19. Agencies are using improved helpdesk support systems to ensure that all requests for service are properly logged and managed through resolution. Secretariats have largely adopted the helpdesk application developed by ITD, referred to as CoMIT. Further, we found that Secretariats and their agencies have established committees and work groups, developed plans, held planning and review meetings, issued status reports, provided a centralized wiki for access and distribution of consolidation-related documents, and established formal reporting relationships between SCIOs and the Commonwealth CIO.

We also believe that ITD and the Secretariats exercised appropriate project management techniques to help ensure that consolidation objectives would be addressed. For example, the overall IT consolidation project was divided into phases, each with specific deliverables and targeted time frames. Individual consolidation projects have defined implementation plans, tasks with assigned responsibilities, review and approval meetings, and progress reporting. Established templates exist for the Secretariat Consolidation Plans, and through the Commonwealth's wiki, each of the Secretariat plans can be reviewed. The Commonwealth CIO has also reviewed and approved IT budgets submitted by the SCIOs and has met regularly with the SCIOs to discuss the status of, and provide direction and support for, consolidation efforts.

Recommendation

The Commonwealth should take the measures necessary to ensure that adequate resources are made available to meet the new EO510 implementation deadline. Further, Secretariats, ITD, and the Commonwealth CIO should continue to monitor and manage the IT consolidation process and provide status updates to the state Legislature and other key stakeholders in order to effect proper implementation and provide the appropriate transparency relative to EO510 activities. Secretariats and the Commonwealth CIO should develop more detailed performance metrics to assess value delivery. Also, enterprise risk management processes should be enhanced to manage IT risk in concert with IT consolidation initiatives.

Auditee's Response:

ITD is in general agreement with the recommendations made by the SAO. Below are specific responses to each recommendation.

(a) ITD has long recognized that persistent and pervasive budget constraints created both funding and resource shortages that have severely hampered implementing IT Consolidation. As a result, ITD continues to work closely with SCIOs and the Executive Office for Administration and Finance to identify strategies to financially support the effort. From FY 2011 – FY 2014, over $20M from the Commonwealth's capital budget has been allocated to advance the IT Consolidation program. This funding has primarily been applied to establishing a dedicated team of program/project managers, IT architects and systems engineers and administrators to perform the bulk of the consolidation work; investing in needed hardware and software infrastructure and temporarily assisting Secretariats to absorb the initial costs of modernizing and properly supporting their IT systems.

Simultaneously, efforts continue to ensure that IT annual operating budgets can fully sustain the on-going costs required to effectively and securely manage and maintain these consolidated systems in the coming years. ITD is currently working on updating a plan that identifies the net amount of operating funding required to sustain the gains made through consolidation.

(b) ITD is actively engaged in developing outcomes-based performance metrics as part of the Administration's CPAT [Commonwealth Performance, Accountability and Transparency] initiative. Accordingly, a new strategic plan is currently under development, with an expected publication date of January 2013. Examples of potential metrics include:

Decreased cost per page published on Mass.gov, which results from both the consolidation goal of greater efficiency as well as the Administration's goal of providing greater transparency for constituents by enabling more information to be shared at a lower cost

Lower unit costs for data storage, which demonstrates the economies of scale that result from consolidation.

Target date(s): January 2013 and ongoing.

ITD will continue to work with Secretariat CIOs, related business leaders, and the Commonwealth IT Service Excellence Committee (ITSEC) to develop more detailed performance metrics that assess value delivery.

The ITSEC was created as a result of Consolidation and continually works toward the objective of better aligning IT with the business to deliver the highest quality IT services at the most efficient cost. The ITSEC fosters inter-agency communication and effective service delivery through the collaboration, sharing, and adoption of best practices to achieve our collective goal of best serving the agencies and citizens of the Commonwealth.

At the start of consolidation, detailed metrics – most often in the form of counting IT systems, assets, and the like – were determined and reported on regularly as part of the Benefits Tracking Program. As the consolidation process has evolved, so too have the metrics used for tracking progress. ITD and SCIOs will continue to develop and act based upon constantly improving performance metrics to assess the value delivery of the Consolidation initiative.

(c) ITD is actively engaged in enhancing enterprise IT risk management processes as is reflected in the agency's top-level goals. ITD will continue to evolve those processes in concert with IT

consolidation initiatives. Consolidating agency systems into purpose-built data centers staffed by dedicated and experienced IT resources fundamentally enhances the reliability, availability, and security of these critical systems. As such, the IT Consolidation program has already and continues to inherently and dramatically improve the Commonwealth's ability to mitigate and manage enterprise IT risk across the Executive Branch. ITD is also working with Secretariats to compile metrics that measure the number of applications hosted in secure data centers today vs. at start of consolidation.

In addition, ITD has recently launched a Commonwealth Compliance Assurance Program (CCAP) charged with driving compliance with information security standards, regulations, and protocols across the Executive Department. The CCAP will track and report on agency compliance levels. The program will also engineer and offer solutions for remediation in cases where compliance shortcomings exist. The newly established role of Commonwealth Compliance Assurance Program Director (CCAPD) will drive this initiative. The CCAPD is responsible for interfacing with and assisting the Secretariat CIOs as they work to comply – and maintain compliance – with our relevant Executive Orders as well as the many diverse security requirements to which they must adhere. The CCAPD will provide high-level direction to the SCIOs regarding the necessary components of cyber security reviews and audits. Staff from ITD's Security Office will support the CCAPD and provide technical services as needed.

Target Date: The first Assurance Report is scheduled for delivery to the Administration before the release of the first 2014 budget recommendation; ongoing

(d) Each year ITD files a report on IT Consolidation progress with the chairs of the Senate and House Committees on Ways and Means and the Secretary of the Executive Office for Administration and Finance. ITD and the Commonwealth CIO will continue to work closely with Secretariats to monitor and manage the consolidation process and provide continuous status updates to the state Legislature and key stakeholders.

APPENDIX

By His Excellency

DEVAL L. PATRICK
GOVERNOR
EXECUTIVE ORDER NO. 510

<u>ENHANCING THE EFFICIENCY AND EFFECTIVENESS</u>
<u>OF THE EXECUTIVE DEPARTMENT'S</u>
<u>INFORMATION TECHNOLOGY SYSTEMS</u>

WHEREAS, the national economy, the financial system on which the economy relies, and the state budget are now under significant stress;

WHEREAS, state government must strive to achieve every possible efficiency in its operations and in its delivery of services to the people of the Commonwealth; and

WHEREAS, one mechanism for achieving greater efficiency and cost-effectiveness is by further coordinating and centralizing the management and operation of the Executive Department's information technology systems;

NOW, THEREFORE, I, Deval L. Patrick, Governor of the Commonwealth of Massachusetts, by virtue of the authority vested in me by the Constitution, Part 2, c. 2, § I, Art. I, do hereby order as follows:

Section 1. This Executive Order shall apply to all state agencies in the Executive Department. As used in this Order, "state agencies" (or "agencies") shall include all executive offices, boards, commissions, agencies, departments, divisions, councils, bureaus, and offices, now existing and hereafter established.

Section 2. By March 1, 2009, the secretary of each executive office ("secretariat") in the Executive Department shall appoint a Secretariat Chief Information Officer ("SCIO"). Such appointments shall be made following consultation with and approval by the Assistant Secretary for Information Technology (the "Commonwealth Chief Information Officer" (or "CIO")). Each SCIO shall report both to the SCIO's respective secretariat and, through a dotted line relationship, to the Commonwealth CIO. Where operationally warranted, SCIOs shall have the authority, following consultation with agency heads, to appoint chief information officers for agencies within their secretariats ("Agency CIOs"). Each Agency CIO shall report to the SCIO of his or her secretariat. All agency information technology ("IT") personnel shall report to the Agency CIO or to his or her designee, or where no Agency CIO is appointed, to the SCIO for the agency's secretariat.

Section 3. By July 1, 2009, with the approval of the Legislature, agency budgets for IT shall be aggregated at the secretariat level and managed by each secretariat's SCIO.

Section 4. By July 1, 2009, each SCIO shall submit to the Commonwealth CIO for review and approval a secretariat consolidation plan ("Secretariat Consolidation Plan") demonstrating how the Secretariat will, no later than September 30, 2009, migrate to the most efficient model for the delivery of IT services. Each Secretariat Consolidation Plan shall address, among other things, how the SCIO will manage and consolidate (or, at the SCIO's discretion, retain at the agency level or regionalize):

o helpdesk services;

o desktop and local area network (LAN) services;

o web site information architecture; and

o application services which the SCIO proposes to provide at the Secretariat level.

Pursuant to reporting requirements established by the Commonwealth CIO, Secretariat Consolidation Plans shall provide for the submission of periodic IT and IT procurement plans to the Commonwealth CIO for the CIO's review and approval. Plans shall require SCIO approval for all secretariat and agency IT expenditures regardless of funding source. Subject to such approval, plans may provide for the acquisition and maintenance of agency-specific applications to remain at the agency level. Following the Commonwealth CIO's approval of their respective Secretariat Consolidation Plans, and no later than September 30, 2009, each SCIO shall manage IT for his or her secretariat based on that approved plan.

Section 5. By May 30, 2009, the Commonwealth CIO shall issue a high level description of his or her plans for completing the migration of Infrastructure Services for all Executive Department agencies to the Information Technology Division ("ITD"), except those services, if any, that the Commonwealth CIO determines cannot be centralized at ITD due to restrictions imposed by state or federal law. By September 30, 2009, the Commonwealth CIO shall finalize a detailed plan for completing the migration of Infrastructure Services for all Executive Department agencies to ITD. By December 30, 2010, ITD must substantially complete the consolidation of Infrastructure Services for the Executive Department at ITD. Consolidated Infrastructure Services provided by ITD shall, at a minimum, meet the same service levels as those received by Executive Department agencies prior to consolidation. The Commonwealth CIO may, at his or her discretion and through a written delegation, authorize certain Secretariats to operate specific Infrastructure Services.

Section 6. There shall be an Infrastructure Services Board ("ISB") which shall advise the Commonwealth CIO regarding service levels for the Infrastructure Services provided by ITD. The precise members and make-up of the Infrastructure Services Board shall be determined by the Commonwealth CIO, but its membership shall be drawn from state employees across the Executive Department with knowledge and experience in the field of IT, with additional representatives from the Judicial and Legislative Branches, other constitutional offices, and quasi-public authorities whose entities are or become customers of ITD's Infrastructure Services and who accept an invitation from the Commonwealth CIO to participate. The ISB shall have no decision making authority; its sole function shall be to provide information and advice, as requested, to the Commonwealth CIO.

Section 7. The Commonwealth CIO shall have the authority to coordinate Executive Department IT planning by:

- Reviewing and approving Secretariat Consolidation Plans and periodic Secretariat IT and IT procurement plans, and setting timeframes for both secretariat and infrastructure consolidation;
- Reviewing and approving secretariat IT budget requests and establishing IT budget priorities, including for all major IT projects regardless of funding source;
- Developing a comprehensive multi-year strategic plan for IT for the Executive Department, which addresses the acquisition, management and use of IT and specific projects that implement the strategic plan;
- Issuing policies, standards and guidelines governing IT procurement, development and maintenance; and

- Identifying opportunities for cost savings based on standardization, cross-agency collaboration, use of shared services and centralization of resources.

Section 8. Where appropriate, and with the approval of the Secretary for Administration and Finance, the Commonwealth CIO shall have the authority to enforce this Executive Order by determining and imposing remedial courses of action in instances of secretariat or agency non-compliance with this Order's requirements. Such actions may include, without limitation, a freeze on the non-compliant secretariat's or agency's authority to make IT-related expenditures, as well as a loss of eligibility for IT capital funding.

Section 9. The Commonwealth CIO shall report annually to the Executive Office for Administration and Finance concerning: (a) progress made by the Executive Department towards secretariat and infrastructure consolidation; (b) the results of such consolidation; (c) service levels for the consolidated infrastructure services provided to the Executive Department; and (d) the cost of such services.

Section 10. As used in this executive order:

"Information technology" means hardware, software, and telecommunications equipment, including but not limited to personal computers, mainframes, wide and local area networks, servers, mobile or portable computers, peripheral equipment, telephones, wireless communications, handheld devices, public safety radio services, facsimile machines, technology facilities including but not limited to data centers, dedicated training facilities, switching facilities, and other relevant hardware and software items as well as personnel tasked with the planning, implementation, and support of technology;

"Infrastructure Services" shall mean data and telecommunications networks, data center services, web site hosting and portal services (except the provision of website information architecture and content), and shared enterprise services such as email and directory services; and

"Telecommunications" means any origination, transmission, emission, or reception of signs, signals, writings, images, and sounds or intelligence of any nature, by wire, radio, television, optical, or other electromagnetic systems.

Section 11. Nothing in this Executive Order shall be construed to require action inconsistent with any applicable state or federal law.

Section 12. This Executive Order shall take effect immediately and shall continue in effect until amended, superseded or revoked by subsequent Executive Order.

Given at the Executive Chamber in Boston this 19th day of February in the year of our Lord two thousand and nine, and of the Independence of the United States of America two hundred and thirty-three.

DEVAL L. PATRICK, GOVERNOR
Commonwealth of Massachusetts

WILLIAM FRANCIS GALVIN
Secretary of the Commonwealth

GOD SAVE THE COMMONWEALTH OF MASSACHUSETTS