

2010 - 2011 Annual Report

Bureau of Integrated Enterprise System

Director's Message

The Bureau of the Integrated Enterprise System (IES) manages and grows the Commonwealth of Pennsylvania's enterprise resource planning (ERP) system. This system, which runs on SAP software, was launched in early 2004. The bureau has a staff of 125 that is responsible for implementing new functionalities, enhancing current functionalities and supporting the software and hardware that drives the system. Staff are also responsible for testing and quality assurance, business warehouse (reporting), requirements definition and project management.

IES supports a broad range of business functionality in the SAP environment, including finance, budget, procurement, human resources, payroll, travel, plant maintenance and real estate. The bureau works closely with the commonwealth's core business owners and individual agencies to fulfill their business needs in a timely and efficient manner. Core business owners include the Office of the Budget's General Budget Office (budget) and Comptroller Operations (finance, payroll and travel), the Office of Administration's Office of Human Resources (human resources), the Department of General Services (procurement and real estate) and the Department of Transportation (plant maintenance).

The commonwealth's leveraging of the SAP system continues to grow and expand. Projects on the horizon include the launch of a learning management system, upgrades to the budget system, upgrades to the procurement system and expanded use of the real estate module for continuity of operations purposes. The bureau looks forward to continuing to serve our customers and support both existing and emerging needs.

Colby B Smith

Director, Bureau of the IES

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Executive Summary

The Bureau of the Integrated Enterprise System (IES) continues to provide high quality application support to its business owners and other customers. This year, there was significant activity in all three of our major categories of work: sustainment, enhancement and growth. The implementation of SAP's Budget Control System (BCS) and the migration of the IES technical environment to the Data PowerHouse (DPH) represent the most complex and resource-intensive projects for this period. Other accomplishments are noted later in this document.

Five-Year Strategic Plan (2010-2014)

Vision

The vision of the Bureau of the IES is to sustain the operations of the commonwealth's Integrated Enterprise System at a highly predictable level of performance and efficiency while supporting initiatives to improve and expand the business processes it supports within the budgetary limits established for the bureau, general funding provided by the IES business process owners and other funding and resources that may be made available.

Mission

The Bureau of the Integrated Enterprise System (IES) is responsible for the operation, maintenance, sustainment, upgrade, growth, standardization and quality assurance of the commonwealth's enterprise resource planning (ERP) system, known as the Integrated Enterprise System (IES).

Strategic Goals

To guide decision making, IES has established the following high-level goals:

- Identify and exploit opportunities for technical and process efficiencies in order to improve the operational efficiency of the bureau and free-up staff to increase support for new initiatives.
- Review and evaluate potential SAP-based solutions for initiatives early in the project life cycle in order to reduce redundancy in effort and to promote proactive collaboration among business process owners, agencies and IES.
- Support the commonwealth's reporting requirements to improve the availability of actionable information to executive leadership and senior-level management.
- Extract more value from the commonwealth's ERP and demonstrate that value, through improved communications and services, in order to ensure that customers have the information necessary to make informed and timely decisions.



IES Success Stories / Accomplishments

- Implemented the SAP Budget Control System (BCS) in July 2010. Improves the commonwealth's budget preparation process.
- Completed the transition from the IBM MSP (managed services provider) environment to the Unisys DPH (Data Powerhouse) services environment in September 2010.
- Implemented the Office of the Budget's Cash Drawdown System (CDS) in March 2011 using SAP Grants Management functionality. CDS was transferred to the SAP system from a software product that is being decommissioned.
- Implemented the commonwealth's Flexible Real Estate (FRE) module as part of the Enterprise Facilities Management System (EFMS) (go live July 2011). The Department of General Services will use this system to track and manage the Commonwealth's real estate assets, and eventually to track personnel locations for continuity of operations purposes.
- Implemented enhancements to the commonwealth's Travel System in support of the Governor's cost reduction initiatives.
- Implemented Employee Self Service (ESS) enhancements for SECA contributions and benefits enrollment.
- Implemented Federal Highway Administration billing report enhancements for PennDOT. Transfer of the FHWA reporting process from the core business system to the Business Warehouse system reduced the demand on system resources, allowing for improved performance for transaction processing.
- Supported various BusinessObjects (BOBJ) projects, including enhancement of the Manager Dashboard, ongoing American Recovery and Reinvestment Act (ARRA) and Federal Funding Accountability and Transparency Act (FFATA) reporting activities, State Government Workforce Statistics, IT Expenditure Dashboard for the CIO and other business owner and agency initiatives.
- Worked with the Office of the Budget and other business representatives to complete
 the technical implementation of SAP Access Controls (Governance, Risk and
 Compliance GRC) and supporting the business implementation of this tool to
 correct and mitigate GAAP audit findings.



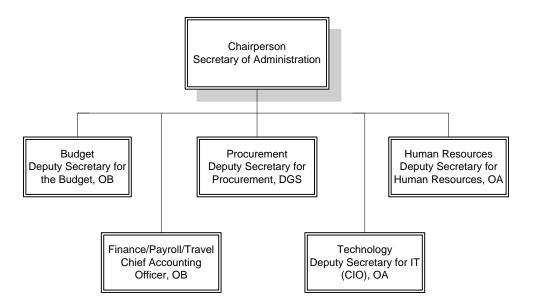
Governance Structure

IES Business Advisory Group

The IES Business Advisory Group coordinates, prioritizes and synchronizes improvements in the commonwealth's business policies, practices and processes that are part of, or will be incorporated into, the commonwealth's ERP system.

Activities include:

- Periodic review of Business Process Owner (BPO) strategic plans and major initiatives
- Determine strategic timelines for major SAP-related implementations
- Direct the review of projects/procurements to determine whether full advantage is being taken of SAP solutions
- Resolve cross-functional project collisions that result in competing demands on IES resources





IES Operating Committee

The IES Operating Committee serves as the two-way conduit between the business owners and the Bureau of the IES for the exchange of business requirements and information.

The committee coordinates the operational and tactical implementation of business process owner (BPO) strategic priorities. It is a forum for discussion of cross-functional issues and plans (e.g., non-availability periods, end of fiscal year activities (FYE), budget impasse, support packs and cross-BPO projects).

The committee also represents enterprise-wide end-user interests, including training requirements and delivery, receipt and review of business requirements and submission of the requirements to IES for further analysis and recommendations. It guides the development of new policies and processes.

Chairperson IES Assistant Director for Business Operations

Voting Members - Business Process Owner Representatives

Finance CAO's Representative

Payroll/Travel

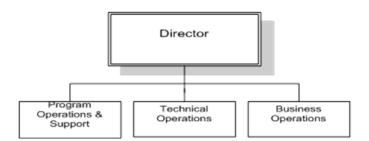
Budget Div Chief, GBO Procurement Bureau Director, CPO Dir, Bur of Policy, Programs & Planning Plant Maintenance PDOT Representative

Ex-Officio Members - IES Business Operations Team Managers

Organization

The IES bureau is led by a director and is organized into three divisions, each lead by an assistant director, to ensure continuity and discipline in the IES program in three major areas: Program Operations and Support, Technical Operations, and Business Operations.

IES Organizational Structure





Program Operations and Support is comprised of IES project managers, data (business) warehouse administrators and report developers, IES portal administrators and training and adaptive technology support staff.

- Program Management: Manages and implements all IES SAP projects, manages and executes IES communications to agencies and users and prepares and conducts exercises of the IES business continuity of operations program.
- Business Warehouse: Configures and manages the SAP Business Intelligence application to support the information needs of commonwealth employees, managers, and executives.
- Testing and Quality Assurance: Manages overall system and business process testing and end-to-end quality assurance; maintains the integrity and functionality of the SAP test environments; and develops, maintains, and enforces testing and quality assurance policies, measures, standards, procedures and objectives.
- User Support/Training: Provides issue resolution services and system usage guidance to a user of the IES and SAP training curriculum development (e.g., Knowledge Sharing Workshops (KSW), Web-based training, instructor-led training, and SAP help (U-Perform)).
- Adaptive Technology: Supports products to help people with physical disabilities such as limitations to vision, hearing, and mobility who cannot use regular versions of products.
- IES Website: Develops and ensures the currency and accuracy of the IES website portal content and supports portal maintenance.

Technical Operations is responsible for maintenance, upgrade, modification, improvement, security, monitoring and performance tuning of SAP software; SAP software and database administration; IES business application custom development; data archive administration; Employee Self Service (ESS) custom development; and SAPscript, Smart Form and Area Menus.

- System Administration (SAP Basis): Manages all facets of SAP systems, including all hardware and software, with special emphasis on SAP component systems installation, software updates, configuration, monitoring and performance tuning. Supported systems include Core R/3, Business Warehouse, Solutions Manager, and Exchange Infrastructure (XI)
 - Manages the day-to-day operations and administration of IES SAP environments for the above systems.
 - Prepares SAP client software installation packages and coordinates the install and update on PCs with agency IT teams.
 - Manages IES technical support for SAP software problem management, troubleshooting, and resolution.
- Infrastructure & Web Administration: Manages all facets of SAP systems, including all hardware and software, with special emphasis on SAP component systems installation, software updates, configuration, monitoring and performance tuning. Supported Systems include Portal, Supplier Relationship Management, Customer Relationship Management, Document Builder, Content Manager and TREX search engine.



- Plans, manages and administers IES SAP network infrastructure and connectivity to all IES systems.
- Prepares and maintains network requirements documentation and coordinates implementation with agency IT teams.
- Manages IES support for SAP software problem management, troubleshooting and resolution.
- Database Administration: Maintains database structures; ensures data integrity and recoverability; implements and manages data archiving and monitoring and tuning database performance.
 - Update and maintain current support patch levels for all IES databases (Oracle, MSSQL, MAXDB).
- Technical Integration (IHUB) and Work Flow: supports the transport of data into and out of SAP and custom work flow development and operation.
 - o IHUB:
 - Develops, maintains, and operates all IES integration that facilitates the transport of data into and out of the SAP environment.
 - Ensures reliability and maintains the integrity of all IES integration test and production environments.
 - o Work Flow:
 - Develops, maintains, monitors and tunes custom SAP workflows.
 - Measures the effectiveness and performance of SAP workflows.
- Security Administration: Designs, implements, administers and supports SAP systems application security.
 - Supports security assessments, designs and implementations of new or updated SAP security models.
 - Oversees the development, testing, and maintenance of the security roles and profiles for system users.
- Application Development: Performs custom application development for all SAP business functions; Employee/Supervisor Self Service (ESS/SSS); and SAPscript, Smart Form, and Area Menus
 - Prepares and maintains standards for custom program design, development, error handling, and system controls.
 - o Performs technical evaluation of functional specifications received from the business owners that require SAP customization.



Business Operations is comprised of business operations analysts with knowledge of both commonwealth business processes and expertise in SAP function and configuration.

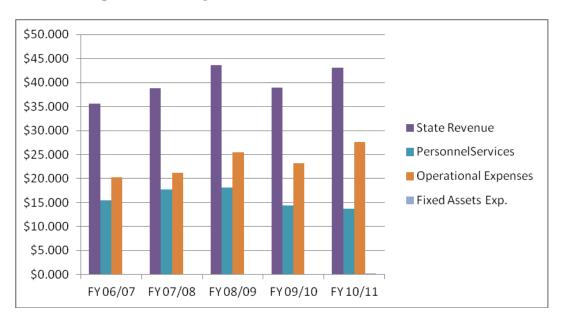
- Budget Team: Configures the SAP Budget (Funds Management) module and SAP Strategic Enterprise Management application to support the commonwealth's budget planning and execution business processes.
- Finance Team: Configures the SAP Finance module to support the commonwealth's financial business processes.
- Procurement Team: Configures the SAP Procurement module and the SAP Supplier Relationship Management application to support the commonwealth's procurement business processes.
- Human Resources Team: Configures the SAP Human Resources module to support the commonwealth's human resources business processes.
- Payroll Team: Configures the SAP Payroll module to support the commonwealth's payroll business processes and ensures the accurate and timely payment of approximately 192,000 electronic paychecks monthly.
- Travel Team: Supports the commonwealth's travel planning and expense reporting business processes.
- Plant Maintenance Team: Configures the SAP Plant Maintenance module to support the commonwealth's highway and bridge maintenance business processes.



Budget

IES is funded through augmentation that is allocated via individual agency billings. The agencies are billed based on measures of their relative use of the ERP system (e.g., number of personnel on their complement, number of financial transactions, number of lines in their budget and number of procurement documents produced). IES continues to meet customer requirements with respect to funding enterprise-level projects, while also contributing significantly to SAP license and product procurements that enhance and grow the commonwealth's ERP environment.

IES Budget History



In Millions of Dollars (does not include \$20K in fixed assets for FY11-12)



Highlights Fiscal Year 2010-2011

Project Implementations

Project Name	Description	Implementation Date
Federal Funding Accountability and Transparency Act (FFATA)	Reporting of sub-recipient spending from federal funding	4/8/11
Time Data Collection (TDC)	Used TimeLink time collection devices as an integrated solution for employee time collection and supervisor time review and approval and SAP software to calculate overtime	1/11/11
Full Time Evaluation (FTE)	Standardized processes within SAP for employee attendance in coordination with TDC project. Configured SAP to automatically convert time data to appropriate wage types based on business rules	1/11/11
Human Resources (HR) Shared Services Enhancement Project	Enhanced integration between SAP and third-party software (Enwisen Answer Source)	12/31/10
Health Care Reform Project	Implemented requirements to meet the Patient Protection and Reconciliation Act of 2010	4/28/11
Cash Drawdown System (CDS)	Developed custom process to draw down cash for grants awarded to the commonwealth	4/1/11
SAP Loan Accounting	Determined whether the SAP Loan Management functionality can support the PENNVEST loan accounting system (external to SAP)	1/1/13
Act 534/632 Project	Created a custom application within SAP for Act 534/632 (PA Heart and Lung Act) to replace an existing Progress software application for Act 434/632.	4/20/11
Archiving Project	Archived SAP documents	3/31/11
Installation of APOS Software (enterprise)	I decensial information evereme (1-15) data with SAP	
Vendor Payment Inquiry/Invoice in Process (VPI/IiP)	t Provided online access for vendors to inquire and track	
Federal Highway Administration (FHWA) Bill Redesign Project	Redesigned FHWA reimbursement process	1/3/11
SAP Governance, Risk and Compliance (GRC) Security Roles Project	Reviewed and redefined business processes to support SAP roles for monitoring and enforcing user access and authorizations	Phase I - 6/30/11
Comptroller Operations (CO) Business Warehouse (BW) Transaction Count Billing	Implemented BW report to display total fiscal year transaction counts used in summarizing, allocating and billing to agencies for CO services	6/30/11
Pennsylvania Department of Transportation (PennDOT) System Performance – Reclassification of Plant Maintenance Settlement Costs	Implemented custom code to manage the large volume of data that is generated with PennDOT's reclassification of costs in Plant Maintenance. The change was needed to effectively process the significant number of transactions that are created for each PennDOT work order.	2/12/11
Business Area (BA) 74 – Dept. of Drug and Alcohol Programs	Created a new business area in SAP.	6/30/11
Interim Reporting Information System (IRIS) Replacement Project	Replaced existing HR functionality with SAP BW reporting and application redesign	6/30/11



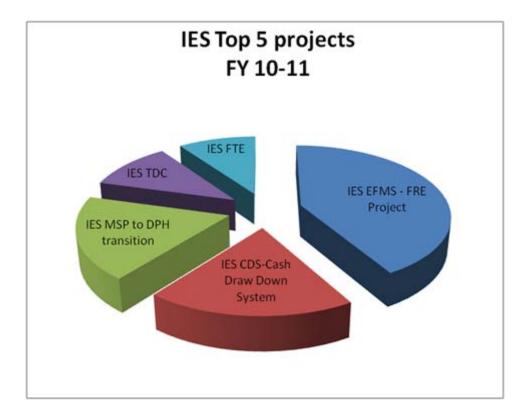
Project Name	Description	Implementation Date
Department of General Services (DGS) Warehouse Management	Implemented SAP's warehouse management module	3/15/11
Prudential Group Life Insurance Interface File Revisions	Revised existing interface file with Prudential to include additional employee information	6/30/11

Recurring IES Support Tasks

- Calendar Year End: generate W-2 and 1099 reports
- Fiscal Year End: close books on previous FY budget and open new budget
- SAP Support Packs: apply software updates two to three times per year
- Other software updates: apply software updates provided by other vendors such as Oracle, Microsoft, etc.
- Open Enrollment: process annual employee health benefits changes
- Union contracts: apply system changes based on collective bargaining agreements
- Archiving: archive additional database tables
- BW Reports: create new reports for business owners
- User Support: provide business and technical help desk assistance



Appendix A - IES Top 5 Projects



Projects are ranked based on time and resources required to implement.



Appendix B – User Statistics

Monthly Average # of Unique SAP Users

The commonwealth's SAP system supports a large volume of users. This table shows the average number of unique users who accessed various SAP modules each month in FY 10-11

SAP System	# of Unique Users
PC1 (ECC6 - Core)	21,768
PW1 (BI/SEM)	540
PP2 (Procurement)	3,006
PE6 (Employee Portal)	20,343
PV6 (Vendor Portal)	545

System Availability - Service Level Agreements

In FY 10-11, IES exceeded its minimum system availability targets (SLAs) in every module.

System Name	SLA	Availability
PC1 (ECC6 - Core	99.8%	100%
PE6 (Employee Portal)	99.8%	100%
PW1 (BI/SEM)	99.8%	100%
PP2 (Procurement)	99.8%	100%
PV6 (Vendor Portal)	99.8%	100%



Appendix C - IES Software List

SAP Software

SAP ERP 6.04, EhP4 – Core business functions (budget, finance, human resources, payroll, travel, procurement, plant maintenance, and real estate management)

SAP Business Warehouse 7.0 – Data warehouse for core business functions

SAP/Business Objects Enterprise – Reporting system

SAP SEM 6.0 – Budget preparation

SAP Portal 7.0 – Employee and Vendor access to core business functions

SAP SRM 5.0 – Supplier relationship management and procurement

SAP CRM 5.0 – Customer relationship management

SAP Solution Manager 4.0 – Management of the SAP software environment

SAP Exchange Infrastructure (XI/PI) – file exchange management

SAP RWD uPerform 4.3 – SAP Help for end users; creation of help desk and training materials for SAP courses

SAP GRC Access Control 5.3 – management of SAP security roles and system access

Non-SAP Software

BSI Tax Factory 8M: SAP add-on that performs tax calculations for U.S. Payroll component

IBM Websphere MQ 7.0.1.3: Manages the transfer of interface files between IES and other commonwealth agencies

BMC Remedy Action Request System 7.1.00: Change management tracking and reporting

HP LoadRunner 9.10: Provides user load testing functionalities to help anticipate the performance and behavior of SAP applications.

HP Lifecycle Management (ALM) 11.0: Manages the SAP business application testing lifecycle

HP Quality Center Dashboard 9.2: Reports the status/results of the application testing lifecycle

TimeLink Enterprise 6.7.2.2: Remotely collects employee time data via time clocks or direct entry, routes for management approval and transmits to the SAP HR/Payroll system for processing

EPIUse - VM 3.22.1 / DSM 3.15: Transfers master and transactional data between SAP systems

ACL Direct Link 6.0 (plug-in): Used by Comptroller Operations auditors to select and extract data from SAP

