



THE CITY OF SAN DIEGO  
**REPORT TO THE CITY COUNCIL**

DATE ISSUED: June 6, 2007 REPORT NO: 07-106

ATTENTION: Council President and City Council  
Docket of May 22, 2007

SUBJECT: Selection of Enterprise Resource Planning (ERP) System Software &  
Establishment of CIP

REFERENCE: Enterprise Resource Planning System Core Project, Report No: 07-027  
Lease Purchase Agreement with IBM Credit LLC, Report No: 07-060

REQUESTED ACTION:

1. Authorize the Mayor or his designee to make or cause to make draws against the IBM Master Lease Agreement established with IBM Credit LLC, and approved by Ordinance O-19618, for the purposes of acquiring the equipment, software, and services as selected by the Data Processing Corporation, together with any related cost related thereto, for the implementation of the Enterprise Resource Planning System Core Project [ERP System];
2. Authorize the addition of CIP # 92-000.0, Enterprise Resource Planning System Core Capital Project, for the purpose of Purchasing and completing the ERP Implementation;
3. Authorize the addition of special interest bearing reimbursement fund 500711, ERP Capital Project Fund, for the purpose of depositing funds from IBM in accordance with the lease purchase agreement that was previously approved via O-19618;
4. Authorize a \$5,000,000 increase in the FY07 Capital Improvement Program Budget within fund 500711, ERP Capital Project Fund, CIP # 92-000.0, Enterprise Resource Planning System Core Capital Project;
5. Authorize the appropriation and expenditure of \$5,000,000 from fund # 500711, ERP Capital Project Fund, CIP # 92-000.0, for the purpose of purchasing the ERP equipment, software, and services, contingent upon the Auditor & Comptroller first certifying that funds are, or will be, on deposit with the City Treasurer;
6. Authorize that interest earnings in fund 50071, ERP fund, be redirected to fund 500711, ERP Capital Project Fund.
7. Authorize the Auditor & Comptroller to return excess funds to the appropriate reserves.

STAFF RECOMMENDATION:

Approve the Resolution.

## SUMMARY:

### Background

The project to implement the ERP System is described in Report No. 07-027, and was approved, in concept, by Council on February 5, 2007.

The projects financing requirements are described in Report No. 07-060. Through OO-19618, introduced on April 24, 2007, and adopted on May 15, 2007, Council authorized the Mayor to enter into a lease-purchase agreement with IBM Credit LLC for the financing required to implement the ERP Core Project. In addition, Council authorized establishment of an ERP Fund (50071) and the transfer of up to \$3.5 million from the City's A-List Fund (50066) to the ERP Fund.

On May 12, 2007, the SDDPC Board of Directors authorized the President and Chief Executive Officer, Chief Financial Officer, and Corporate Legal Counsel to negotiate and execute a contract with SAP (contingent upon affirmation by resolution from the City Council) to provide software and maintenance support for the City's ERP Project. The term of the maintenance contract will be for two (2) years with eight (8) one (1) year renewal options. The software and first year maintenance cost is \$4,575,882.50.

On May 12, 2007, the SDDPC Board of Directors authorized the President and Chief Executive Officer, Chief Financial Officer, and Corporate Legal Counsel to designate and use \$3.5M of SDDPC's equity for various SDDPC expenses related to the City's ERP system implementation.

OO-19618, as adopted, requires that Council have affirmatively voted by resolution to acquire the equipment, software, and services as selected by the Data Processing Corporation, before making the initial draw on the credit facility. The understanding of this requirement is that Council desires the opportunity to be informed of the ERP software selection, understand the process used by SDDPC to select the software, and present Council the opportunity to meet and question representatives from the selected ERP software vendor, before authorizing the initial draw on the credit facility.

### Discussion

SAP AG has been selected to supply the City's ERP software, and company representatives will be present and available for questions when this report is presented to Council. This report provides a review of the process used to select the software, an overview of the capabilities of the selected software, and an overview of the project management processes that will be used to manage the implementation project following selection of a system integrator.

### Software Selection Process

In October 2006, City staff contacted SDDPC Procurement to request support in the procurement of an ERP system. Guidance given to SDDPC specified that the ERP system is intended to

replace the major software systems being used in the Department of Finance and Business and Support Services.

The major systems to be replaced include:

- AMRIS (General Ledger)
- ALVA (Financial Reporting)
- APIS (Accounts Payable)
- ARIS (Accounts Receivable)
- FMIS (Budgeting & Financial Management)
- FAMIS (Fixed Asset Management)
- OPIS (Purchasing)
- CAPPs (Payroll)
- PATS (Applicant Tracking)

Additional guidance given to SDDPC included that the ERP system must address the needs outlined in the final report of the Audit Committee (Kroll Report) and also that the system should meet the following high level objectives:

- Implement a system that promotes effective and efficient management of the City's financial data and the preparation of timely and accurate Comprehensive Annual Financial Reports (CAFRs) and budgets.
- Implement and utilize an automated financial reporting system to prepare financial statements and complete year-end closing.
- Implement a system that supports major financial and non-financial modules in a single integrated environment.
- Implement a system that reduces business process fragmentation by providing a unified vision for financial and business support applications.
- Implement a system that utilizes embedded "best business practices" to standardize business practices across City departments and do so with minimal customization to the software.
- Implement a system with proven technology in the Public Sector, and in use by similar sized local government entities.
- Implement a system that is suitable as the foundation for the City's IT application architecture, and capable of meeting the City's IT needs for the next 15+ years. In selecting future systems the City will favor full integration over singularly focused functional applications.
- Implement a system that enables a reduction in the number of custom and third-party software applications required to provide core and extended capabilities.

The procurement plan for the ERP system includes two (2) Request for Proposals (RFPs); one to select the software, and a second to select the system integration partner.

As of the date of this report, the RFP process for the ERP software has been completed. The process included requirements gathering, RFP development, RFP publication, evaluation of the

responses, and vendor selection. The RFP for the system integration partner is in development and is expected to be released before the end of May.

On October 20, 2006, an RFP kickoff meeting was held with City and SDDPC staff. A plan was outlined to develop the ERP functional and technical requirements for inclusion in the RFP.

The functional and technical requirements were gathered and refined during a series of over 50 requirements sessions. The sessions included both City and SDDPC subject matter experts and were led by a combination of City and SDDPC requirements analysts. The requirements package included over 3,000 functional and technical requirements.

The RFP for the ERP software, including the detailed set of functional and technical requirements, was developed over an eleven (11) week period and culminated with the release of the RFP on January 5, 2007. The proposal response due date was February 9, 2007.

In parallel to the RFP, a detailed evaluation process was defined by SDDPC procurement. The process contains six (6) steps and is described in the following paragraphs.

#### Software Evaluation Process

Two (2) responsive proposals were received from the following vendors: Oracle and SAP. Proposals were evaluated by an evaluation committee (“Committee”) comprised of three (3) SDDPC representatives and eight (8) City representatives. The Committee consisted of staff that individually reviewed and scored each proposal against a selection matrix. The evaluation process consisted of a six (6) step process.

#### Committee Members:

Laura Atkinson, SDDPC	Mike Bresnahan, Water Department
George Brister, Office of the CIO	Patrick Kelleher, Purchasing & Contracting
Anne Lamén-Aban, Personnel	Matt McGarvey, Office of the CIO
Elizabeth Monillas, Risk Management	Nader Tirandazi, Public Works / Dept of Finance
Marlyn Webb, SDDPC	Ed Wochaski, Auditor & Comptroller
Lori Jo Zehner, SDDPC	

Step 1 was a pass/fail determination on the ability to meet the mandatory requirements. Both vendors passed.

Step 2 consisted of a detailed review of the responses for each of the following criterion:

- a. company background
- b. comparable site installs
- c. quality and completeness of proposal
- d. technical requirements
- e. functional requirements

The technical and functional evaluations during this step were limited to calculations based on responses to Exhibits C & D of the RFP. A numerical score was awarded for each criterion.

Step 3 consisted of an assessment of the following criterion:

- a. software demonstrations
- b. site visits
- c. an assessment of the written response
- d. reference checks

Each vendor demonstrated their software solution over a nine (9) day period. There were over one hundred (100) subject matter experts reviewing and scoring the demo scripts. The subject matter experts represented a broad cross-section of the City's departments. Software demonstrations began February 26, 2007 and concluded March 22, 2007.

The Committee also participated in two (2) site visits for each vendor. Site visits began on April 5, 2007, and concluded on April 16, 2007. The following sites were visited:

- Oracle: County of Riverside for Core Financials/Human Resources
- SAP: Marin County for Core Financials/Human Resources
- Oracle: City of San Jose for CIS – Utilities
- SAP: City of Tacoma for CIS - Utilities

The assessment of the written responses included a comprehensive evaluation of the answers to Sections 4 through 10 of the vendor responses. Reference checks were also performed.

Step 4 consisted of a review of the cumulative score and assessment of the initial proposed cost from each vendor. On April 19, 2007, the Committee reviewed the proposed cost and the cumulative score, and after deliberation, reached a unanimous decision to recommend that SAP be selected as the ERP software vendor. Step 4 culminated in a meeting on April 26, 2007, during which the Committee provided their recommendation to Rick Reynolds, the City's Project Sponsor. The recommendation was accepted by Rick Reynolds.

Step 5 consisted of the Project Sponsor presenting the Committee's recommendation to the ERP Core Project Executive Steering Committee ("Steering Committee"). The Steering Committee is composed of multiple representatives from the City as well as a representative from SDDPC. The presentation to the Steering Committee was held on April 27, 2007. The recommendation was accepted by the Steering Committee.

ERP Core Project Executive Steering Committee Members:

- Rick Reynolds, Asst COO, Project Sponsor
- Jay Goldstone, CFO, Primary Stakeholder
- Rich Snapper, Director Personnel, Major Stakeholder
- Matt McGarvey, CIO, Major Stakeholder
- Tom Fleming, President & CEO SDDPC, Major Stakeholder

Greg Levin, Comptroller, Major Stakeholder  
David Jarrell, AD COO Public Works, Major Stakeholder  
Howard Kummerman, AD COO Neighborhood & Community Services, Stakeholder  
Beth Murray, AD COO Land Use and Economic Development, Stakeholder  
Mary Lewis, Director of Finance, Major Stakeholder  
Lance Wade, Director Purchasing, Major Stakeholder  
Tammy Rimes, DD Purchasing, Major Stakeholder

Step 6 consisted of meetings and contract negotiations with the finalist(s) to gather any additional information that may be needed by SDDPC or the City in order to make a software selection.

In summary, based on all of the evaluation elements, the Committee unanimously recommended SAP as the selected vendor. The Steering Committee accepted the Committee's recommendation and authorized SDDPC to proceed with obtaining SDDPC's Board approval.

SDDPC is in final contract negotiations with SAP. Negotiations on price and contract terms and conditions have been substantially completed.

#### Capabilities of Selected Software

SAP AG ("SAP") is the third largest software company in the world, and is the leading supplier of Enterprise Applications software. SAP was founded in 1972 in Mannheim, Germany. SAP has a substantial presence in the public sector at the local government level.

The software selected for the City's ERP system is designed to integrate an organization's multiple functions in a manner that reflects best practices. This is accomplished in part, by providing a configurable software system and a set of Implementation Guides tailored to industry specific best practices. For the City, the industry specific best practices are tailored for the Public Sector.

Through SDDPC, the City will license the mySAP ERP product as well as several extensions to the mySAP ERP product. The mySAP ERP product and the extensions are listed in the following paragraphs.

#### mySAP ERP Product

The license model that SAP uses for the mySAP ERP product is predominantly based on the number of Named Users. Users will fall into one of five (5) categories as described below:

- SAP Application Professional User is a Named User who performs operational related roles supported by the Software and includes the rights granted under the Employee User. These are people who are the primary users of the system (accountants, purchasing specialist, personnel analyst, etc.)
- SAP Application Limited Professional User is a Named User who is an employee or Business Partner performing limited operational roles supported by the Software. These

are people who use the system frequently, but in a more limited role (e.g., financial analyst)

- SAP Application Employee User is a named user who is authorized to access read-only analytics, and is also authorized to access the Software solely for the purpose of executing the following transactions: (1) desktop procurement services, (2) Travel planning and expense reporting, (3) talent management self-services including employee appraisals, employee development plans, employee training registration, employee opportunity inquiry and response. Most supervisors will fall into this category, unless they are a SAP Application Professional User or SAP Application Limited Professional User.
- SAP Application Employee Self Service (ESS) User is a Named User authorized to access the licensed Software solely for the purpose of executing the following HR self service transactions: (1) employee records maintenance, (2) employee time and attendance entry, (3) employee directory. Each ESS user shall access the Software solely for their individual use. Most employees will fall into this category, unless they are a SAP Application Professional User, SAP Application Limited Professional User, or SAP Application Employee User.
- SAP Application Development User is a Named User who uses development and application tools provided with the Software for the purpose of modifying, deploying, or managing the Software.

The mySAP ERP product includes four solution sets. Each solution set includes multiple modules. Not all modules will be implemented as part of the ERP Core Project. However, the additional modules will be available for configuration at a later time, with no additional software license cost.

One of the earliest phases of the project will be to define the mappings from the major systems being replaced as part of the project to the solutions, modules, and components listed below. City and SDDPC staff will work together with the system integrator to accomplish the mappings.

The mySAP ERP product includes the following solutions:

- mySAP ERP Financials
- mySAP ERP Human Capital Management
- mySAP ERP Operations
- mySAP ERP Corporate Services

The mySAP ERP Financials solution includes the following modules and components:

- Financial Accounting Module
  - General Ledger Accounting
  - Accounts Payable
  - Accounts Receivable
  - Asset Accounting
  - Funds Management
  - Special Purpose Ledger

- Overhead Cost Controlling
- Controlling Module
  - Overhead Cost Controlling
  - Activity-Based Costing
  - Product Cost Controlling
  - Profitability Analysis
- Treasury Management Module
  - Cash Management
  - Treasury Management
  - Market Risk Analysis
  - Funds Management
- Enterprise Controlling
  - Executive Information System
  - Business Planning and Budgeting
  - Consolidation
  - Profit Center Accounting

The mySAP ERP Human Capital Management solution includes the following modules and components:

- Personnel Administration
  - Benefits Administration
  - Compensation Management
  - Recruitment
  - Time Management
  - Payroll
- Personnel Planning and Development
  - Organizational Management
  - Training and Events Management
- Employee Self Service
- Manager Self Service

The mySAP ERP Operations Solution includes the following modules and components:

- Sales and Distribution
- Production Planning and Control
- Materials Management
  - Inventory Management
  - Warehouse Management
  - Purchasing
  - Invoice Verification
  - Materials Planning
  - Purchasing Information System
- Plant Maintenance
  - Preventative Maintenance
  - Service Management



- Maintenance Order Management
- Maintenance Projects
- Equipment and Technical Objects
- Plant Maintenance Information System
- Logistics Information System

The mySAP ERP Corporate Services Solution include the following modules and components:

- Real Estate Management
  - Rental Administration and Settlement
  - Controlling, Position Valuation, and Information Management
- Quality Management
  - Quality Planning
  - Quality Inspections
  - Quality Control
  - Quality Notifications
  - Quality Certificates
  - Test Equipment Management
  - Quality Management Information System
- Project and Portfolio Management
  - Operational Structures
  - Project Planning
  - Approval
  - Project Execution and Integration
  - Project System Information System
- Travel Management

#### mySAP ERP Extensions

The following extensions to the mySAP ERP basic product will be licensed as part of the negotiated contract.

- BSI: TAX – a 3<sup>rd</sup> party product that provides updates for tax tables.
- Governance, Risk, and Compliance – An SAP module that leverages information within the ERP system and business applications to allow the City to proactively govern business processes, provide risk management and internal controls, and improve operational efficiencies. The module supports automated controls to ensure appropriate user access and authorization, and proper segregation of duties, including the ability to identify potential segregation of duties violations in the business process.
- Program Management for Public Sector – Enables extending self service to the public.
- Duet – Enables seamless access to SAP business processes and data via Microsoft Office products.
- Adobe Forms Enterprise – Enables data entry, and population of the SAP database through interactive Adobe forms.

- SAP Learning Solutions – A learning management solution that is pre-integrated into every aspect of SAP. It manages and measures the learning process, provides robust analytics, and dynamic testing capabilities.
- RWD Productivity Pak – A third part training development platform. It automates the creation of support materials, storage, and the management of application simulators and procedural documentation.

### mySAP CRM

The mySAP Customer Relationship Management (CRM) solution set for the Public Sector is being provided along with the mySAP ERP solution set. It will be used to enable citizen-care functions across all touch points, including the Internet, call centers, e-mail, fax, and face-to-face. **Full implementation of these features is not within the scope of the ERP Core Implementation Project.** However, the additional modules will be available for configuration at a later time, with no additional software license cost.

### Project Management Processes

The City of San Diego utilizes an established IT Project Management Framework that was jointly developed by the Office of the CIO and SDDPC during 2001 and 2002. The framework incorporates many of the concepts outlined in the *Project Management Body of Knowledge*, an industry standard, which is published by the Project Management Institute.

The framework provides guidance and tools in the form of questionnaires and template documents. Significant focus is placed on risk management and change management.

The Project Management Framework is based on a six-phase process and is outlined below. The ERP Core Implementation Project is concluding Phase 2 of the City's six-phase process.

Phase 1: Explore - Ensure all significant business opportunities are evaluated

- Collect requests for IT work
- Briefly study the business need
- Identify IT solution alternatives to satisfy the request
- Evaluate high level risk
- Obtain approval of the project / initiative idea

Phase 2: Initiate - Understand business needs and objectives

- Detail the business problem / need
- Build and agree upon the business justification
- Detail risks involved / foreseen
- Establish management commitment to the project
- Go / No Go

Phase 3: Plan - Plan the detailed approach to execute the project / phase

- Kickoff the project / phase
- Plan and schedule project / phase activities
- Assign resources

- Prepare risk response plans
- Communicate how the project will be accomplished
- Go / No Go

Phase 4: Execute - Apply the appropriate engineering methodology and complete the work required to accomplish the project's objectives

- Perform the technical activities
- Manage project functional and technical requirements
- Implement risk mitigation measures
- Perform quality assurance activities

Phase 5: Monitor & Control - Ensure the project's performance in achieving objectives to the satisfaction of the stakeholders

- Achieve predictable results
- Manage project risks
- Track and address exceptions to enable timely decisions
- Ensure that changes are identified and managed
- Provide project stakeholders with information on the project

Phase 6: Close - Validate that all work was completed and formally end the project

- Communicate post-implementation risks to maintenance team
- Obtain project completion approval
- Obtain feedback on the project
- Share project experiences
- End the project

SAP has developed and refined an implementation methodology and set of tools designed to support rapid deployment of SAP software products. The implementation methodology is known as ASAP, which is an acronym for Accelerated SAP. The toolset includes the Solution Manager and Implementation Guides.

### ASAP Methodology

The ASAP methodology is designed to help implement SAP products in the most efficient manner possible. It takes into consideration that an SAP implementation is a significant undertaking and involves a reengineering of current processes across both business and IT organizations.

The methodology is defined by a five-phase process for guiding implementation. The five phases are listed below and described in the following paragraphs. Timelines for the various phases will be established following selection of the system integrator.

- Phase 1: Project Preparation
- Phase 2: Business Blueprint
- Phase 3: Realization
- Phase 4: Final Preparation
- Phase 5: Go-live and Support

Project Preparation is the initiation phase. The ERP Core Implementation Project is currently in this phase. Major activities include:

- Establishing senior-level management support
- Establishing stakeholder support
- Identifying project objectives
- Establishing an efficient decision making process
- Establishing the change management process
- Building the project team
- Initial (Level 1 and Level 2) training for the project team

Business Blueprint is the phase that is targeted at extracting the relevant information about current business processes that is necessary for product implementation. The System Integrator and City process subject matter experts are actively engaged in this phase. Major activities include:

- Answering questionnaires about current business processes
- Documenting the current business processes
- Mapping current business processes to new business processes
- Additional (Level 2) training for project team members

Supporting tools for this phase include a Questions and Answers Database and an Issues Database.

Realization is the phase that implements the baseline configuration settings, and then fine tunes the configuration settings. Major activities include:

- Configuration of baseline settings
- Configuration testing
- Configuration fine tuning
- Legacy interface development and testing
- Legacy data conversion development and testing
- Additional (Level 2 and Level 3) training for the project team members
- Initial (Level 1 and Level 2) training for end users

Final Preparation is the phase that prepares the system for the Go-live Phase. It includes rigorous functional and stress testing and migration of legacy data to the ERP system. Major activities include:

- Rigorous functional testing
- System load and stress testing
- Performance tuning
- Final maintenance updates
- Migration of old system data to the ERP system
- Plan for Go-live

Go-live is the start of production use of the system. Major activities include:

- Provision of on-going support
- Monitoring system and usage

#### Tools Supporting the ASAP Methodology

Solution Manager is an SAP toolset that is designed to facilitate:

- Shorter implementation times
- Efficient operations
- Provides access to support services

The Solution Manager tools provide the following:

- Implementation roadmaps
- System landscape information
- Business process repository
- Project documentation
- Rollout support
- Synchronization of custom settings
- Testing

Implementation Guides (IMG) provide industry specific roadmaps for configuring the ERP software. An IMG lists all the actions required for implementing SAP and guides the implementation team through each of the implementation steps required to configure each area that requires configuration.

It is anticipated that the City and System Integrator will agree to use the SAP supported methodology since both the System Integrator and SAP are well practiced in the SAP methodology. If required, the SAP supported methodology will be supplemented by the City's Project Management Framework.

#### FISCAL CONSIDERATIONS:

Overall fiscal considerations have been addressed in Report No. 07-027 and Report No. 07-060.

The total amount that will be budgeted in the CIP project is \$29.5 million; \$5 million in FY07, \$16.3 million in FY08 (included in the May Revised Budget), and \$8.2 million in FY09. These amounts match the projected fiscal year draws from the Lease Purchase Agreement with IBM Credit LLC.

The interest earnings in fund 50071 will be used to offset any of the negative interest related to the planned quarterly reimbursements from the credit vehicle.

Initial project estimates for the ERP software were in the range of \$4 million to \$5 million. Negotiated contract price for the ERP software, including SAP licenses and 3<sup>rd</sup> party software licenses, is \$3,757,250. Initial project estimates for the ERP software annual license maintenance were in the range of \$1 million to \$2 million. Negotiated price for the ERP software annual license maintenance, including SAP license maintenance and 3<sup>rd</sup> party license maintenance is \$818,633.

PREVIOUS COUNCIL and/or COMMITTEE ACTION:

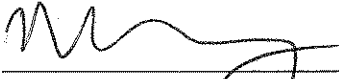
On September 6, 2006 the Mayor presented to City Council his proposed responses to the remedial recommendations of the City of San Diego's Audit Committee. The City Council agreed to accept and adopt in principle the Mayor's responses to the remedial recommendations of the City's Audit Committee, knowing that any changes in appropriations, Municipal Code, Council Policy or City Charter, will come to the Council for further review and discussion as the plan is implemented.

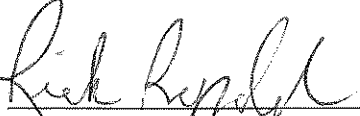
COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

On August 24, 2006 the Mayor discussed his remediation plan in response to the City of San Diego's Audit Committee Report at a town hall style meeting. In addition, the Mayor created a "Kroll News Center" on the City's public website that includes the Mayor's proposed Remediation Plan with Fact sheet and Remediation Plan Remarks as well as a video link to the previously mentioned town hall meeting and the Audit Committee Report itself.

KEY STAKEHOLDERS AND PROJECTED IMPACTS:

The City is evaluating the impact of this project on its business partners and on related agencies to include the San Diego City Employee Retirement System (SDCERS) and San Diego Data Processing Corporation (SDDPC). It is anticipated that some effort will be required to integrate the financial systems used by these organizations with the City's ERP system. Detailed planning of these integrations will take place as part of the project planning phase.

  
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Matt McGarvey  
Chief Information Officer

  
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Rick Reynolds  
Assistant Chief Operating Officer