



City of Seattle
Seattle City Council

MEMORANDUM

Date: June 30, 2012

To: Monica Martinez Simmons, City Clerk

HARD COPY: City Hall, Third Floor, Main Reception

ELECTRONIC COPY: clerkfiling@seattle.gov

From: Susana Serna, Central Staff
 (Ketil Freeman, Staff Analyst)

Re: Request to Create Clerk File – Response to 2012 Council Statement of Legislative Intent

Title of Clerk File: Department of Planning and Development Department’s Response to 2012 Statement of Legislative Intent (SLI) No.: 65-1-A-1: DPD report to Council on Hansen permitting software replacement or upgrade.

Please cross-reference: Resolution No. 31361 (2012 SLI Adoption Resolution)
 Ordinance No. 123758 (2012 Budget Adoption Ordinance)
 Clerk File No. 311810 (City Council Changes to the 2012 Proposed Budget and the 2012-2017 Proposed Capital Improvement Program)

Please create a Clerk File for the DPD response, and related documents to 2012 Council SLI No. 65-1-A-1.

I am attaching hard and electronic copies of all materials related to this SLI.

Clerk File Table of Contents:

Item	Title	File Name
1.	SLI 65-1-A-1 DPD Response to_Status Report FINAL	SLI 65-1-A-1 Response Memo.docx
2.	2012 Statement of Legislative Intent 65-1-A-1	SLI 65-1-A-1.docx



City of Seattle

Department of Planning and Development

Diane M. Sugimura, Director

June 30, 2012

MEMORANDUM

TO: Honorable Richard Conlin, Chair
Planning, Land Use and Sustainability Committee

Tim Burgess, Vice Chair
Mike O'Brien, Member
Sally Clark, Alternate

FROM: Diane M. Sugimura

SUBJECT: DPD Response to SLI 65-1-A-1

The following information is in response to SLI 65-1-A-1 (DPD report to Council on Hansen permitting software replacement or upgrade) that was approved as part of the 2012 Adopted Budget process last year.

Introduction

The Department of Planning and Development (DPD) is providing this status report to the Council regarding work performed in 2012 related to the upgrade/replacement and maintenance of the Hansen permitting system. The 2012 budget appropriated \$550,000 to the Process Improvement and Technology (PI&T) BCL to review options for replacing or updating the Hansen v.7 permitting software system. Approximately \$200,000 of the appropriation is to complete an upgrade to the Oracle database that began in 2011. Approximately \$350,000 of the appropriation is to analyze options for future replacement of or upgrade to Hansen to ensure the long range integrity and stability of the department's core permitting and enforcement system.

DPD is at a point where we need to make a strategic decision about our long-term permitting system needs. Over the last decade, we have built many custom applications to fill the functionality gaps that Hansen v.7 does not cover. It has become a complex system that is challenging and costly to maintain and support. We are seeking a new system architecture that will be easier and less costly to maintain, but more importantly has a flexible user interface that will make data entry and retrieval easier and less cumbersome to staff which will result in better support overall to our external customers. We are also seeking better integration with our new electronic Plan Review system and online permitting systems.

Some of the key drivers for replacing our Hansen v.7 permitting software include:

- Hansen v.7 is at end of life – vendor is no longer updating this product



City of Seattle, Department of Planning and Development

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- Hansen v.7 is built on an outdated technology platform (not web based)
- Hansen v.7 cannot handle new functionality, so custom web applications continue to be built to meet business and customer needs (driving up maintenance and administration costs)
- Hansen v.7 has a cumbersome user interface – data entry and workflow process is tedious and not intuitive (contributes to entry of incorrect data which affects customers)

This document provides a status of activities completed to date and planned activities for the remainder of the year to arrive at a recommendation for a future replacement of our permitting system.

Permitting System History and Background

The current DPD permitting system – Hansen v.7 – was selected in 2000 to replace a variety of legacy permit tracking systems. Hansen v.7 is a commercial off-the-shelf client-server application that includes a generic permit database and simple workflow engine. Out of the box, Hansen v.7 does nothing, but comes with tools that allow configuration to fit local business practices.

Hansen v.7 was configured to provide basic tracking of application, review, inspection, and enforcement processes for all Department permit types, and most major Department regulatory processes. It includes status tracking, data collection, basic workflow management, and business rule enforcement for the processes for which it is configured.

The system was implemented in phases starting in 2002 with the simplest permit processes. This was followed in 2002- 2004 with additional rollouts for increasingly complex workflows. A major rollout of permit types for the most complex building and Land Use permit processes was deployed in July 2005, and brought the vast majority of Department permits into the Hansen system. Further smaller rollouts of new permit and process workflows have continued to the present, with the most recent new workflow deployed in March 2012.

The total cost over six years of making Hansen fully operational and migrating from PTS was approximately \$11 million.

Typical volumes of “widgets” handled by Hansen v.7 in a calendar year would currently include:

- 26,000 simple building permits
- 8,500 complex building permits
- 900 Land Use permits
- 4,500 code enforcement cases
- 7,000 misc permit support processes

Hansen v.7 is integrated with a variety of other systems, including:

- Interactive Voice Response (IVR) – (a system that is available 24x7 that enables customers to call in to schedule their inspections),

- Electronic Plan Review,
- Several self-service web applications (for issuing permits, paying fees, and requesting inspections online), and
- Various custom internal and external web applications created to fill gaps in Hansen v.7 functionality or usability.

Hansen v.7 currently has about 400 users. While Hansen v.7 is primarily used by DPD, a number of users are part of other City departments use the application for coordinating permit review and other functions. These include: Department of Neighborhoods, Seattle Fire Department, Seattle Department of Transportation, Seattle Public Utilities, Department of Finance and Administrative Services, and Seattle Office of the Hearing Examiner.

Present Situation

After ten years of using Hansen v.7 as a major production system, DPD faces the choice of whether to upgrade to the new version of Hansen, or look to alternative products for meeting its permit tracking, code enforcement, process workflow, and customer service needs. DPD would like to make a strategic decision for this eventual Hansen v.7 system evolution, one that positions us well for future growth and future technology trends. Because of rapidly changing technology and the evolution of vendors available in the marketplace, the landscape is very different from what it was twelve years ago when Hansen was selected. DPD wants to analyze the market to identify the best product to fit our current business needs that have evolved from our continued process improvement and service delivery practices.

Work has been completed this year on the Hansen v.7 upgrade that brings us to the latest Oracle Database version and the latest Hansen v.7 release. This upgrade went live the weekend of May 19th. Total project cost was \$165,000.

Although this upgrade brings us to the latest Oracle database version, and it is currently reliable and stable, the Hansen v.7 product is still at end of life. Infor, the Hansen vendor, is not investing in further updates or enhancements to the v7 product. They are no longer selling the Hansen v.7 product line and are steering customers to their Hansen v8 product (now called Infor 10). We anticipate support for the v.7 product to wane over the next several years so we will be forced to upgrade or replace the system when support for this version ends. DPD would rather be in a position of strategically planning for an upgrade/replacement than be forced in a direction due to lack of vendor support.

We envision implementation of an alternate platform in the 2013-2015 time period, with an expected service life of 5-8 years beyond (through 2019-2023). The platform that replaces Hansen v.7 must continue to support all currently supported processes, as well as including capabilities for new process support requirements and new technology opportunities that may arise in the future.

Upgrade Options Analysis Project Scope of Work

Currently, DPD is in the process of evaluating project management consultants from the City's Consultant Roster to identify a firm with expertise in defining system requirements and conducting gap/fit analyses to help identify replacement alternatives and develop a business case with cost estimates for the future upgrade/replacement. The consultant will analyze comprehensive business requirements and recommend options the City should consider to meet current and future permitting and enforcement system needs. We're seeking a consultant with knowledge of permitting, land management, and enforcement systems and industry best practices.

Key milestones and deliverables for this analysis project are as follows:

Business Requirement Assessment

Gather and confirm the full scope of user functionality requirements including but not limited to the evaluation of current business processes using knowledge of industry best practice and associated functional requirements. Gather, confirm and document data requirements and data sources, interfaces, and reporting and analysis requirements. The project will review existing system functionality documentation to serve as a foundation for the business requirements assessment. The Consultant will facilitate interviews and workshops as needed to gather and confirm requirements.

Options Analysis

Use the assessment of business requirements, market forces, technology trends, and vendor stability/health, coupled with knowledge of permitting and enforcement systems to inform an analysis of replacement system options. Consider business benefits, fit/gap results, risks and timing of replacing, modifying or upgrading current permitting system. This analysis should be supported with cost/benefit evaluation of options presented and should include technical requirements and associated costs. At the conclusion of the analysis, the consultant should make a recommendation. The recommendation is expected to reflect the assessment of required business functionality, City priorities and incorporate permitting best practices where appropriate and practical.

Business Case

Prepare a business case to support the recommended option. System acquisition, design or implementation is out of scope. The business case will include:

- Description of project scope and objectives
- Description of both functional and technical requirements
- Identification of alternative solutions including:
 - Description
 - Advantages and disadvantages
 - Risk assessment
 - Life cycle cost analysis based on detailed resource requirements
 - Life cycle benefit analysis
 - Intangible benefits

Project Deliverables include:

- Business Requirements/User functionality assessment
- Options analysis to include cost/benefit and fit/gap
- Recommended option
- Business Case to support recommended option

Project Schedule

Task	Timeframe
Define project scope of work and deliverables	Completed
Informal solicitation of Roster consultants to provide project oversight & analysis	Completed
Interview & select Project Management consultant	In progress
Negotiate contract	June
Project planning & kickoff	July
Document business, functional and technical requirements	July – Aug
Market research & Cost analysis	Sept
Options analysis	Oct - Nov
Develop business case & recommendation	Nov - Dec

2012 Seattle City Council Statement of Legislative Intent

Approved

Tab	Action	Option	Version
65	1	A	1

Budget Action Title: DPD report to Council on Hansen permitting software replacement or upgrade.

Councilmembers: Bagshaw; Burgess; Clark; Conlin

Staff Analyst: Ketil Freeman

Budget Committee Vote:

Date	Result	SB	BH	SC	TR	JG	NL	RC	TB	MO
11/08/2011	Pass 9-	Y	Y	Y	Y	Y	Y	Y	Y	Y

Statement of Legislative Intent:

The Council requests that the Department of Planning and Development (DPD) report to the Council by June 30, 2012 on options for replacing or upgrading the Hansen permitting software system. The Council further requests that DPD provide this report prior to issuing any requests for proposals to identify vendors for replacement software.

Background:

The budget appropriates \$550,000 to the Process Improvement and Technology (PI&T) budget control level to review options for replacing or updating the Hansen permitting software system. This system was first put into operation in 2001 and replaced the 1980s era Permit Tracking System (PTS). The total cost over six years of making Hansen fully operational and migrating from PTS was approximately \$11 million.

The current version of Hansen is reaching the end of its useful life and vendor support for the current version may soon be unavailable. Approximately \$200,000 of the appropriation is to complete an upgrade to the Oracle database that began in 2011. Approximately \$350,000 of the appropriation is to analyze options for future replacement of or upgrade to Hansen to ensure ongoing vendor support and compatibility with Windows 7 and Internet Explorer 9.

Information provided by DPD indicates that work products anticipated from the options analysis may include:

1. Defining current permitting system requirements and key business processes;
2. Identifying impacts to peripheral systems and other possible impacts related to Hansen upgrade or replacement;

3. Information Gathering – site visits with similar size and complexity jurisdictions to gather lessons learned and successes with their permitting systems;
4. Conducting requests for interest to identify potential vendor products that meet requirements;
5. Developing fit/gap analyses to determine feasible replacement solutions to fit requirements;
6. Conducting cost/benefit analyses for top options which may include:
 - a. Upgrading to Hansen version 8,
 - b. Replacement with a new vendor solution, or
 - c. Replacement with an in-house developed solution;
7. Recommending an approach, which includes identifying a best scenario that meets DPD business process needs with the least amount of disruption to current business;
8. Conducting a request for proposals, if needed, to identify a vendor if a replacement option is chosen; and
9. Developing a project plan, schedule, timeline, resource requirements, etc... for an upgrade project, which might be implemented in 2012 or 2013.

Responsible Council Committee(s): Built Environment

Date Due to Council: June 30, 2012