Design Review of SAP Solutions with Responses

Municipality of Anchorage: Synergy Project

January 2015

DOCUMENT IDENTIFICATION

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1. DEFINITIONS

1.1. BUSINESS PROCESS SCORECARD DEFINITIONS

Risk indicator: The overall status of the Business Process area. The indicator represents the current Overall risk level based on the detailed analysis performed during the Design Review of SAP Solutions.

Design build completeness risk: The status indicator that represents the design or build configuration completeness and accuracy to meet business requirements and expected business outcomes. The indicator represents the current risk level in this analysis area based on the detailed review performed during the Design Review of SAP Solutions.

Future fit or impact on scalability risk: The status indicator that represents the current design or configuration to meet as-is and to-be product development direction in any given Business process area. The indicator represents the current risk level in this analysis area based on the detailed review performed during the Design Review of SAP Solutions.

Remaining effort: A rough order of magnitude for the hours required to complete the design, build it, and unit-test it based upon capabilities of a person with reasonable or average knowledge of SAP software. Low/Green indicates approximately 0–120 hours of remaining work, Medium/Yellow indicates 120–500 hours of remaining work, and High/Red indicates over 500 hours of remaining work.

1.2. RISK INDICATOR DEFINITIONS

Low: Minor impact to program success and will not likely adversely affect the implementation or business operations.

Medium: May produce or contribute to a negative outcome during the implementation, including extended Realization lifecycles.

High: A significant likelihood of causing or contributing to a negative impact during the implementation or at go-live. A critical topic to be addressed and requires investigation, follow-up, and response.

Topic not reviewed: This topic was either not appropriate for review at this stage of the project or there was insufficient information to be able to review the topic to the appropriate level of detail.

2. EXECUTIVE SUMMARY

GENERAL COMMENTS

This report represents the results of the Quality Assurance Design Review of SAP Solutions conducted January 7–23, 2015 for the Realization phase of the Municipality of Anchorage implementation of SAP ERP Central Component (SAP ECC), the SAP Supplier Relationship Management (SAP SRM) application, the SAP Business Warehouse (SAP BW) application, and the SAP Enterprise Portal component.

This report reflects a point-in-time analysis on current state and future deliverable readiness.

The findings and recommendations are a result of information provided to SAP during onsite Q&A sessions with numerous Municipality of Anchorage, Peloton Group, and SAP resources.

At the request of the Municipality of Anchorage, designated numbering was added to both the findings and recommendations throughout this document. Although an identical number may appear in both the finding and recommendation sections of a given topic, the two items are not, in fact, correlated to each other. The numbering simply serves to identify the findings and recommendations.

The Design Review centered on SAP ECC with a focus on:

- Finance and billing
- Logistics and Inventory
- Human capital management
- Project system
- FERC
- Security
- Data
- Testing
- Reporting
- Integration and master data

This report is forward-looking in that it focuses on the actions necessary for future operational success and reserves commentary on project history only for contextual understanding.

As part of this Review, the assessment team was made aware of pain points and concern areas. It was important to understand both in terms of the requirements and functional needs of Synergy. This understanding provided additional information and awareness of the Municipality of Anchorage's situation. But because this was a Design Review of SAP Solutions, it was not the intent of this exercise to try to solve all identified pain points and concerns.

2.1. OVERALL SCORECARD

Executive summary

Benchmark scorecard

Solution Area	Ranking	Findings		
Finance and Billing		23	15	3
Logistics and Inventory		3	6	4
Human Capital Management		1	24	7
SAP Business Warehouse and SAP Business Objects Solutions		3	6	10
Project System		13	4	1
FERC		4	3	2
Security		5	3	9

SAP Confidential/Proprietary Data SAP QA 1 Municipality of Anchorage

Executive summary

Benchmark scorecard

Solution Area	Ranking	Findings		
Data		0	2	8
Testing		0	1	10
Grants		3	1	2
Reporting		1	2	4
Integration and Master Data		0	2	9
Project Scheduling (Separate Document)		0	2	3

Total Findings: 199

(Green – 56, Yellow – 71, and Red – 72)

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Document Guidance Regarding MoA Responses

- The MOA responded to “Findings” with one of the following designations and provided commentary where applicable:
  - Agree
  - Agree with Comment
  - Disagree
  - Disagree with Comment
  - Need More Information

- The MOA responded to “Recommendations” with one of the following designations and provided commentary where applicable:
  - Accept
  - Accept with Comment
  - Reject
  - Reject with Comment
  - Need More Information

Responses are inserted immediately following the relevant paragraph and shaded in light gray for emphasis.

If there is no response after a finding or recommendation, the response from the MoA is Agree or Accept.

3. FINANCE AND BILLING

3.1. FINANCE AND BILLING – SCORECARD

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
General Ledger (GL)	LOW	MEDIUM	MEDIUM	LOW
GL Data	LOW	LOW	LOW	LOW
FI Transaction Processing	LOW	LOW	LOW	LOW
FI Month- and Year-End	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Accounts Receivable (AR)	LOW	LOW	LOW	LOW
Customer Master	LOW	LOW	MEDIUM	LOW
Sales Order	LOW	MEDIUM	LOW	LOW
Agreement Billing	LOW	LOW	LOW	LOW
Sales Order Billing	LOW	MEDIUM	LOW	LOW
AR–FI Billing	LOW	LOW	LOW	LOW
AR Adjustments – Billing	LOW	LOW	LOW	LOW
AR – Cash Processing with Clearing	LOW	LOW	LOW	LOW
AR – Month- and Fiscal Year-End	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Accounts Payable (AP)	HIGH	HIGH	HIGH	HIGH

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
AP Data	LOW	LOW	LOW	LOW
AP Transaction Processing	HIGH	HIGH	HIGH	HIGH
AP Month- and Fiscal Year-End	MEDIUM	MEDIUM	MEDIUM	MEDIUM
AP Calendar Year-End	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Controlling Master Data	LOW	LOW	LOW	LOW
Controlling Allocations and Distribution	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Controlling Month- and Year-End	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Capitalized Projects (Including Value-Added Projects)	LOW	LOW	LOW	MEDIUM
Construction and Nonconstruction	LOW	LOW	LOW	MEDIUM
Maintenance Projects	LOW	LOW	LOW	LOW
Reimbursable Projects and Billing	LOW	LOW	LOW	MEDIUM
Asset Capitalization	LOW	MEDIUM	LOW	MEDIUM
Asset Retirements	LOW	LOW	LOW	LOW
Asset Transfers	LOW	LOW	LOW	LOW
Asset Period- and Year-End Tasks	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Asset Reporting	MEDIUM	MEDIUM	MEDIUM	MEDIUM

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
Period End	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Funds Management (FM) – Maintain FM Master Data	LOW	LOW	LOW	LOW
Budget Execution – Annual Approved Budget, Budget Transfers, and Supplements	MEDIUM	MEDIUM	MEDIUM	MEDIUM
FM Derivation Rules	MEDIUM	LOW	MEDIUM	MEDIUM
Earmarked Funds	MEDIUM	MEDIUM	LOW	LOW
Carry-Forward Process	MEDIUM	MEDIUM	MEDIUM	MEDIUM
P-Card Process	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Electronic Bank Statement	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Cash Management	HIGH	HIGH	HIGH	HIGH

3.2. General Ledger (GL)

Overall Risk: LOW
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: LOW

Finding

- 3.2.1 All document types used for financial posting have been configured.
- 3.2.2 The chart of accounts has been completed. Configuration for the chart-of-accounts mapping has been completed and documented.

- 3.2.3 The recommendation for the new SAP General Ledger application made in the 2012 SAP QA Design Review was implemented.
- 3.2.4 Configuration of SAP General Ledger has been completed to include the following key items:
    - 3.2.4.a Document-type mapping to transaction type and variant
    - 3.2.4.b General ledger–account mapping to item-category mapping
    - 3.2.4.c Splitting rules combined for the SAP Grants Management application and SAP General Ledger
    - 3.2.4.d Table in SAP General Ledger: PSGLFLEXT
    - Scenarios:
        - 3.2.4.e.1 PSM_BUDPER – Budget Period
        - 3.2.4.e.2 PSM_FAC – Fund Accounting
        - 3.2.4.e.3 PSM_CL – Cash Ledger
        - 3.2.4.e.4 FIN_CONS – Preparations for Consolidation
        - 3.2.4.e.5 .FIN_GSBER – Business Area
        - 3.2.4.e.6 PSM_GM – Grants Management
    - 3.2.4.f Leading ledger and nonleading ledger
    - 3.2.4.g Average daily cash balance
    - 3.2.4.h Extending the coding block for custom fields was determined not to be applicable.
- 3.2.5 Posting keys for all business processes that generate financial transactions have been completed.
- 3.2.6 Open item–clearing configuration has been completed for banking, accounts payable (AP), and accounts receivable.
- 3.2.7 Substitution rules have been developed for key processes that have been tested.
    - **3.2.7 Response: Agree with Comment**
    - It should be noted that there will be more substitute rules going forward.

- 3.2.8 All identified RICEFW items have been developed and tested.

Impact

- The core configuration for SAP General Ledger is completed and has been tested.
- Testing scripts reflect the design described in the general ledger Design Review workshop. All documents generated from a financial document have been reviewed.
- Configuration of the new general ledger, which includes unrequired content, does not follow leading practice.
- When split rules are not unique for funds management and SAP Grants Management, future scalability is negatively affected.

Recommendation

- 3.2.1 Correct the following items in the configuration of SAP General Ledger:
    - 3.2.1.a Remove scenario PSM_CL Cash Ledger from ledger 0L. This scenario is assigned only to the nonleading ledger for cash reporting or cash ledger. No requirements exist for these scenarios.
    - 3.2.1.b Remove scenario FIN_CONS Preparations for Consolidation from the ledger 0L. This scenario is assigned only to the nonleading ledger. No requirements exist for these scenarios.
    - 3.2.1.c Separate splitting rules for SAP General Ledger and SAP Grants Management. Leading business practice for public sector recommends a unique split rule for SAP General Ledger and SAP Grants Management. This approach allows unique controls for table PSGLFLEXT (Ledger 0L) and GMIT (Ledger 90).

3.3. GL Data

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.3.1 Three legacy charts of accounts have been merged into one common chart of accounts for the Synergy project.
- 3.3.2 Master-data flags for the chart of accounts have been set properly. Key indications have been set properly for balance sheets, revenue, expense, and conversion accounts.
- 3.3.3 GL accounts have been grouped to provide a core financial report for the Assembly and external entities. These groups have been configured into reporting sets. The reporting sets will be used for reporting in the SAP ERP Central Component (SAP ECC), business intelligence, and SAP Business Warehouse (SAP BW) application.
- 3.3.4 The chart of accounts can be uploaded and verified during conversion. The verification process is manual and time-consuming.
- 3.3.5 The chart of accounts has been documented so that a spreadsheet can be used to determine mapping to cost elements, commitment items, and sponsor classes using funds management and derivation rules in SAP Grants Management. In addition, the chart of accounts has been documented to link key configuration items that generate financial postings:
    - 3.3.5.a Asset management
    - 3.3.5.b Materials management
    - 3.3.5.c Sales and distribution
    - 3.3.5.d Human capital management (HCM) and payroll
    - 3.3.5.e Banking and electronic banking
    - 3.3.5.f FERC

      Note: Accounts payable and accounts receivable mapping are not included in the list because there are minimal configuration items. General ledger account mapping for sales and distribution is integrated with accounts receivable. Materials management configuration is integrated with accounts payable for logistics invoice verification (LIV) invoices.

- 3.3.6 GL account determinations from automatic account assignments have been unit-tested and integration-tested.
- 3.3.7 No golden client exists for the approved chart of accounts.
- 3.3.8 Cross-reference tables from legacy systems to the Synergy system will be used only for conversions. The cross-reference tables will not be used for interfaces.
- 3.3.9 Based on the GL Design Review workshops, the chart of accounts is 95% complete.
- 3.3.10 No business process to request additions, changes, and deletions to the chart of accounts has been documented.
- 3.3.11 FI team members are unaware of comparison tools provided by SAP to assist in loading data when a golden master-data client exists.
- 3.3.12 Changes to the chart of account are controlled by Municipality of Anchorage staff. Changes to the commitment items are controlled by the Office of Budget Management.

Impact

- Completion of the final 5% of the chart of accounts will be finalized during the final integration test. Reviewing financial documents is important to determine that the postings are correct and that no additional changes are required.
- Documentation of the chart-of-accounts mapping is important in assisting with the development of a change management–impact document, communications, and training materials.
- Chart-of-accounts integration points are understood with the merger of three legacy charts of accounts. As the book of record, Synergy will assisting in reporting on multiple account methods.
- Management of master data is difficult without a golden client during conversions and client copies. This situation can lead to project time delays.
- Lack of a consolidated chart of accounts configuration mapping will negatively affect:
    - Training material
    - Policy and procedure on additions, changes, and deletions

    Enhancement of the business process document to add a new chart of accounts and analyze the impact of configuration, master data, and other business processes such as FERC and reporting

Recommendation

- 3.3.1 Consolidate all chart-of-accounts mapping for configuration into one document. Load the chart of accounts into a golden configuration client DE1 100 to assist in the conversion and comparison of the chart accounts across multiple clients. Having the chart of accounts in the golden client will allow Synergy team members to compare master data faster for the following activities:
    - 3.3.1.a Client copies
    - 3.3.1.b Integration test preparation
    - 3.3.1.c Production cut-over
    - 3.3.1.d Support pack testing
    - 3.3.1.e Conversion validations
    - **3.3.1 Response: Accept with Comment**
        - MoA will explore the security option.

3.4. FI Transaction Processing

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.4.1 The one validation rule that exists for financial transactions has been configured and tested.
- 3.4.2 Synergy validation edits for data entry of financial transactions are incomplete. In the GL meeting, legacy edit mapping to the Synergy system was reviewed. An exercise to map legacy edits to Synergy edits has not been completed.
- 3.4.3 Screen variants and screen displays are controlled by posting keys, and GL accounts have been finalized and tested.
- 3.4.4 Changes to the coding block during data entry always invoke derivation rules without additional actions by the end user.
    - **3.4.4 Response: Disagree with Comment**

  - This statement is incomplete. Changes to coding blocks do require further actions by the Municipality.

- 3.4.5 In the GL Design Review workshop, several persons stated that key integration knowledge is limited among the Synergy team members. Transferring knowledge from the consultants has been difficult. The priority of the issues drives the work efforts and knowledge transfer.

- 3.4.6 The workflow of GL documents has been tested. The workflow supports an n+ level of approvals. During the GL Design Review workshop, statements indicated that the organizational structure that will be used for production and maintain the workflow tables has not been finalized.

- 3.4.7 During the GL Design Review workshop, several team members stated that a great deal of testing was completed by consultants to meet the tight project deadlines.

- 3.4.8 Reports for the GL have not been finalized and cross-referenced from the legacy system.

- 3.4.9 The completion of testing by the consultants has limited knowledge transfer in different divisions of the Municipality of Anchorage.

- 3.4.10 Derivation rules for funds management and SAP Grants Management are working for GL postings.

- 3.4.11 Development of journal voucher upload is complete.

Impact

- Financial posting has been tested. Key components of the testing have been reviewed and validated for accuracy. Integration points across all application areas are being understood with each testing cycle.

- Testing scripts reflect the design described in the GL meeting. All documents generated from a financial document have been reviewed.

- Testing scripts and business transaction–flow documents are aligned, and the expected results have been documented in testing.

- Supporting documentation for all financial postings will be uploaded using standard document management functionality in SAP software. During the meeting, participants stated that the retention parameters of documents need additional review.

- A failure to complete financial document posting edits can create data-integrity issues across all application areas.

- Testing conducted by consultants reduces knowledge transfer and complicates development of training materials.

Recommendation

- 3.4.1 Ensure that Synergy team members conduct all integration testing. The testing will assist in knowledge transfer, postproduction support, and error-resolution.
- 3.4.2 Test workflow organization and table maintenance for workflow consistently across all environments to reduce frustration and concerns about the correction of errors.
- 3.4.3 Finalize financial-posting edits to reduce end-user errors. Document the edits according to the following categories:
    - 3.4.3.a Application area, document type, and transaction code
    - 3.4.3.b Fund type by GL account
    - 3.4.3.c Standard edits
    - 3.4.3.d Budget checks
    - 3.4.3.e Workflow checks
- 3.4.4 Develop a comprehensive document to assist in the training and support of end users.
- 3.4.5 Update training material to include document simulation and simulation in SAP General Ledger to assist in regenerating derivation rules in funds management and SAP Grants Management.

3.5. FI Month- and Year-End

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 3.5.1 Month-end business process has been documented in a Microsoft Excel workbook for preliminary and final close.

- 3.5.2 Month-end business process was tested mostly by the consultants. This approach was reviewed during the GL Design Review workshop, when several persons stated that key integration knowledge is limited among the Synergy team members.

- 3.5.3 Year-end business process has been documented in an Excel workbook for preliminary and final close. The order of the process steps has been defined.

- 3.5.4 Year-end business process was tested mostly by the consultants. This approach was reviewed during the GL Design Review workshop, when several persons stated that key integration knowledge is limited among the Synergy team members.

- 3.5.5 The closing cockpit functionality in SAP software has not been configured to manage closing steps and provide documentation.

- 3.5.6 No test scripts for month- or year-end closing exist.

    - **3.5.6 Response: Agree with Comment**

        - Spreadsheets were utilized in lieu of scripts.

- 3.5.7 Not all job schedules and job parameters have been documented. No document exists that outlines each schedule job, job parameter, and owner.

- 3.5.8 The standard job schedule in SAP software will be used to manage process steps.

- 3.5.9 Knowledge transfer on the closing steps has not occurred for all divisions.

- 3.5.10 The closing process is managed through Excel, which makes it difficult to communicate progress, errors, and ownership.

- 3.5.11 The schedule of background jobs has not been completed to be consistent across all environments.

- 3.5.12 Management of the schedule job is not aligned with change management business processes.

Impact

- Without the closing cockpit, the closing schedule will be longer than expected. Steps of the closing process might not be performed as expected.

- Implementation of the closing cockpit for month-end business process schedules will require additional testing.

- Implementation of the closing cockpit for year-end business process schedules will require additional testing.

- The lack of test scripts can have a negative impact on future upgrades and the project timeline.

Recommendation

- 3.5.1 Complete the job schedule list for daily, weekly, monthly, year-end, and calendar-year jobs. This document will assist the Basis team.

- 3.5.2 Configure the closing cockpit for weekly, monthly, quarterly, year-end, and calendar process steps. The closing cockpit enables the creation of a structured interface for executing transactions and programs that form part of complex processes, such as closing processes. The structural layout supports processes within an organizational structure, such as within the company code, as well as scenarios that affect multiple organizational structures. The closing cockpit can be used in cases where:

    - 3.5.2.a Activities recur periodically

    - 3.5.2.b More than one person responsible is involved

    - 3.5.2.c Activities are performed within a process that has a fixed chronological sequence or is determined by dependencies

    - 3.5.2.d Activities need to be supported by a shared, uniform interface for all involved

    - 3.5.2.e The status of all periodic activities needs to be documented and made transparent and available for all involved

3.6. Accounts Receivable (AR)

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.6.1 Document types for accounts receivable configuration are complete.

    - **3.6.1 Response: Agree with Comment**

        - Document types associated with grants may need to be reviewed.

- 3.6.2 Open item-clearing configuration is complete and has been tested.

- 3.6.3 Not all configuration has been completed and tested. Four levels of dunning testing are incomplete. Configuration and testing around dunning is incomplete. The Design Review workshop determined that additional review and testing is required for dunning.

- 3.6.4 Standard functionality in SAP software is used to calculate later charges. The late-charge process has been tested.

- 3.6.5 An invoice form along with terms and conditions on the form have been developed.

- 3.6.6 A cash receipt form has been completed. The cash receipt is used at many office and locations. Given that printers are inconsistent, the cash receipt form does not print correctly at all locations. An open issue remains for printing cash receipts to different print drivers.

- 3.6.7 A custom cash journal has been developed and tested. Two issues are involved:

    - 3.6.7.a Display of negative numbers on the screen.

    - 3.6.7.b Return of credit card entries on the next day is not displayed in the cash journals. If the credit card has a return in the current day, the process is supported. A manual procedure is being reviewed.

- 3.6.8 Derivation rules in funds management and SAP Grants Management are working for all accounts receivable documents.

- 3.6.9 The periodic process of statements was reviewed and used based on the master data setup.

- 3.6.10 On-demand correspondence of customer invoices has been tested. The customer master record in QE1 200 (testing client) did not have the Period Statement flag set. The job to run the period statement has not been executed.

    - **3.6.10 Response: Disagree with Comment**

        - Finding was that our testing client QE1 200 did not include the periodic statement flag and that period statements have not been executed. The periodic statement flag is set to either monthly or no statement (for Risk Management CMRs) and we have tested statements in batch jobs.

- 3.6.11 Clearing of open items has been tested and validated for cash receipt. No residual payments will be processed. Only full and partial payments will be processed.

- 3.6.12 Doubtful-invoice processing has been tested. A manual process will be followed to send information to the collection agency. No interface exists. No business process has been tested to manage payments for doubtful accounts.

- 3.6.13 The workflow of accounts receivable documents has been tested. The workflow supports an n+ level of approvals. During the accounts receivable meeting, participants stated that the organizational structure that will be used for production and maintain the workflow tables has not been finalized. Testing of workflow is based on the testing client organizational structure.

- 3.6.14 The reconciliation procedure from the subledgers has not been developed.

- 3.6.15 The AR standard evaluation reports cannot be used without scheduling program RFDRRGEN being daily. The QE1 200 system and the program RFDRRGEN does not have an executed process to enable use of the following standard reports:

    - S_ALR_87012167 – Accounts Receivable Information System
    - S_ALR_87012172 – Customer Balances in Local Currency
    - S_ALR_87012186 – Customer Sales
    - S_ALR_87012169 – Transaction Figures: Account Balance
    - S_ALR_87012170 – Transaction Figures: Special Sales
    - S_ALR_87012171 – Transaction Figures: Sales

    The Municipality is missing out on standard AR reports.

- 3.6.16 Accounts Receivable documentation will support the design. The documentation needs to be modified to reflect changes during testing.

Impact

- Additional testing is required to determine posting for doubtful account when monies are collected.

- Reconciliation of the cash journal with credit card return will require additional business process and reports.

- The dunning procedure needs review by the organization to define additional requirements and development of testing scripts. A change request for development might be required extend the dunning cycles by business area or fund.

- Not having a common printer for cash receipts will affect additional development for forms.

- Standard reports for accounts receivable cannot be used and management of AR days will be difficult.

Recommendation

- 3.6.1 Develop a reconciliation procedure for credit card returns that affect the cash journal. Document the volume and options.

- 3.6.2 Review the dunning process to gather additional requirements to complete testing scripts. Evaluate any additional requirement to dun by fund or business area. This kind of dunning often requires development.

- 3.6.3 Roll out printers to locations that will support the print drivers for the cash receipt form. Have the Basis team review support for print drivers to complete testing.

- 3.6.4 Schedule program RFDRRGEN to run daily.

3.7. Customer Master

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: LOW

Finding

- 3.7.1 All customer-account groups have been configured.

- 3.7.2 No central master-data sales area for the customer master and material master has been defined. The configuration and process flows for the sales and distribution functionality were reviewed in detail. When sales and distribution is implemented, accounts receivable customers are extended to all sales organizations, however; this is not the case for all customer account groups.

    - **3.7.2 Response: Disagree with Comment**

        - Finding was that not all customers were extended to all sales organizations and customer account groups. This is intentional because we do not want all Customer Managed Relationships (CMR) in the customer account group for Sponsors (grants). This is also a separate distribution channel (from an SD perspective) and must remain separated.

- 3.7.3 No one-time customer will be used.

- 3.7.4 No customer master will be linked to a vendor master.

- 3.7.5 Not all customers will have a sales and distribution view, but project customers and grant customers will.

    - **3.7.5 Response: Need More Information**

        - Finding is that not all customers will have a sales and distribution view. This is not correct. All customers will be loaded as extended to all sales divisions. We are not impacting grants which are distribution channel 90.

- 3.7.6 The periodic-statement flag is not used to control monthly statements.

    - **3.7.6 Response: Disagree with Comment**

        - Two are configured: 1) Customer with no statement and 2) Standard with monthly statement.

- 3.7.7 No central notes have been configured for customers with Z-account groups. The central notes would provide the end user to select consistent statements when updating documentation for customer master records, financial posting, and invoicing documents. The benefits were reviewed during the accounts receivable interview sessions.

    - **3.7.7 Response: Agree**

- 3.7.8 After going live, the created master-data records will be maintained differently in the sales areas because harmonization is not needed. If new sales-area data for existing customers is required, customer masters must be extended to bill for service from a different area.

    - **3.7.8 Response: Disagree with Comment**

        - We do have a process in place to extend customer master records if a new sales organization is added post go-live. The process is part of the CMR conversion process and has been tested successfully.

    - 3.7.8.a The primary concern is to ensure that future scalability of the system is taken into account if additional sales organizations are added to the system. A process needs to be put in place to extend custom masters if a new sales organization is added after going live. Information obtained during interviews indicated customer master data and material data specific to a central sales area, not different master data per sales area.

        - **3.7.8.a Response: Disagree with Comment**

            - See comment above.

Impact

- Based on the testing conducted, the process will meet the business requirements for creating and changing customer-master records for accounts receivable.
- Customer-master records can be loaded based on the documentation provided.
- Additional development will be required to add central notes for customers with Z-account groups.
- Additional sales areas will create additional work to extend the customer master record to an additional sales organization to support the business requirement.
- Note having central notes will results in inconsistent accounts receivable documentation for each invoice and billing document.

Recommendation

- 3.7.1 Set up the central sales area for the customer and material master. Pricing can remain different for each sales area.
    - **3.7.1 Response: Need More Information**
        - Awaiting clarification from SAP.
- 3.7.2 Assign a standard text-procedure and central notes 0 and1 to the Z-account groups.

3.8. Sales Order

Overall Risk: LOW
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.8.1 Sales order types and item categories have been set up.
- 3.8.2 The process flow for sales orders exists and looks satisfactory.
- 3.8.3 Approval workflows have been defined.
- 3.8.4 Sales and distribution (SD) order processes have been tested and found satisfactory according to discussions.

- 3.8.5 Sales-order workflow has a detailed specification.
- 3.8.6 Documentation was provided that listed the sale order configuration. The configuration meets MUNI requirements.

Impact

- From an external perspective, it is impossible to determine if the sales-order setup meets business requirements.
- A lack of issues from testing provides only an indication that business requirements may be met.

Recommendation

- 3.8.1 Provide a specification that describes the sales-order setup vis-à-vis the business requirements. Otherwise the setup may be not audit-compliant.

3.9. Agreement Billing

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.9.1 The agreement billing process flow exists and looks satisfactory.
- 3.9.2 Configuration is complete according to the specification provided for billing in SAP Grants Management.
- 3.9.3 All order scenarios have been tested according to the users including differences.
    - **3.9.3 Response: Agree with Comment**
        - We didn't test for differences to date.
- 3.9.4 No test script for the difference process was found.

Impact

- Additional testing of the difference process may be required.

Recommendation

- 3.9.1 Create a test script for the difference process and execute it.

3.10. Sales Order Billing

Overall Risk: LOW
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.10.1 Process flow exists and looks satisfactory.
- 3.10.2 Billing types have been defined.
- 3.10.3 Specification for printout exists and covers agreement billing.
- 3.10.4 According to users, billing has been tested and found satisfactory.
- 3.10.5 Documentation describes the billing process, including resource-related billing (RRB) vis-à-vis the business requirements. The MUNI requirements for RRB are being meet.
- 3.10.6 A requirement routine requested in the approval-workflow description to prevent billing of only partially released orders is missing.
    - **3.10.6 Response: Need More Information**
- 3.10.7 No test script for the difference process was found. Each invoice sent to a customer may result in "difference claims," so that such a process must be tested with the appropriate document-types.

Impact

- From an external perspective, it is impossible to make an independent judgment on the ability of the setup to meet business requirements.
- Billing of partially approved orders is possible.

Recommendation

- 3.10.1 Create the missing copy requirement for invoices.
    - **3.10.1 Response: Reject with Comment**
        - There are no missing copy requirements.
- 3.10.2 Provide a specification that describes the billing setup vis-à-vis the business requirements.

3.11. AR–FI Billing

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.11.1 Journal vouchers will be used to correct AR-FI billing.
- 3.11.2 The workflow of accounts receivable documents has been tested. The workflow supports an n+ level of approvals. During the accounts receivable Design Review workshop, participants stated that the organizational structure that will be used for production and maintain the workflow tables has not been finalized. Testing of workflow is based on the testing client organizational structure.
- 3.11.3 No reconciliation procedure from the subledgers has been developed.
- 3.11.4 The periodic statement is not scheduled as a monthly or semimonthly job. All statements are generated on demand.
- 3.11.5 Reconciliation process steps have not been defined.
- 3.11.6 AR-FI billing is defined as entering an invoice and providing an account statement on demand or monthly. An invoice or statement from accounts receivable is defined as a bill.
- 3.11.7 Material numbers are not used to derive revenue accounts. No material numbers are used in customer invoices to derive revenue general ledger accounts.
    - **3.11.7 Response: Disagree with Comment**
        - MoA uses material number to derive revenue accounts in SD customer invoices.
- 3.11.8 All testing has been completed by the Synergy team.

- 3.11.9 One interface for billing has been tested and validated.

Impact

- AR-FI billing has been tested by the Synergy staff. The results have been validated.
- Testing workflow with mock organizational data creates the possibility that workflow does not perform as expect in production environment.
- Reconciliation procedures for the subledgers are not completed and will affect closing procedures, leading to probable data integrity issues.

Recommendation

- 3.11.1 Develop a test script using transaction code F.03 – Reconciliation to reconcile between the subledgers.

3.12. AR Adjustments – Billing

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.12.1 Journal vouchers will be used to enter customer invoices to accounts receivable.
    - **3.12.1 Response: Agree with Comment**
        - The AR module will be used to enter customer invoices and adjustments.
- 3.12.2 Workflow of accounts receivable documents have been tested. The workflow supports n+ level of approvals. During the accounts receivable Design Review Workshop, participants stated that the organizational structure that will be used for production and maintain the workflow tables has not been finalized. Testing of workflow is based on the testing client organizational structure.
- 3.12.3 A reconciliation procedure from the subledgers has not been developed.
- 3.12.4 Periodic statements are not scheduled as a monthly or semimonthly job. All statements are generated on demand.

- 3.12.5 AR-FI billing is defined as entering an invoice and providing an account statement on demand or monthly.
- 3.12.6 Material numbers are not used to derive revenue accounts.
- 3.12.7 All testing has been completed by the Synergy team.
    - **3.12.7 Response: Disagree with Comment**
        - Not all testing has been completed.
- 3.12.8 The interface for billing has been tested and validated with satisfactory results.
    - **3.12.8 Response: Disagree with Comment**
        - This has been partially tested.

Impact

- AR-FI billing has been tested by the Synergy staff. The results have been validated.
- Testing workflow with mock organizational data creates the possibility that workflow does not perform as expected in the production environment.
- Reconciliation procedures for the subledgers are incomplete and will affect closing procedures leading to probable data integrity issues.

Recommendation

- 3.12.1 Develop a test script using transaction code F.03 – Reconciliation to reconcile between the subledgers.

3.13. AR – Cash Processing with Clearing

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.13.1 Transaction code F.13 will be used to clear open accounts receivable. The cash journal has been developed to provide the correct information to allow F.13 to clear open receivable will payments.

- 3.13.2 Transaction code F-28 will be used to post cash to grants receivable and clear based on the original documents. The residual payment process steps will not be used.

- 3.13.3 Derivation rules in funds management and SAP Grants Management are working for all accounts receivable documents.

- 3.13.4 Testing of the accounts receivable scripts was performed by the Synergy team members. Ownership of the accounts receivable process has been defined.

Impact

- Cash processing of accounts receivable is working with the desired outcome.

- The return credit–card process creates unbalanced cash journal entries when processed on two different days.

Recommendation

- 3.13.1 Develop a reconciliation procedure for credit-card returns that affect the cash journal. Document the volume and options.

- 3.13.2 Roll out printers to locations that will support the print drivers for the cash-receipt form. Have the Basis team review support for print drivers to complete testing.

3.14. AR – Month- and Fiscal Year-End

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 3.14.1 The month-end business process has been documented in an Excel workbook for preliminary and final close.

- 3.14.2 The month-end business process was tested mostly by the consultants. This approach was reviewed during the AR Design Review workshop, when several persons stated that key integration knowledge is limited among the Synergy team members.

- 3.14.3 Year-end business process has been documented in an Excel workbook for preliminary and final close. The order of the process steps has been defined.

- 3.14.4 The year-end business process was tested mostly by the consultants. This approach was reviewed during the AR Design Review workshop, when several persons stated that key integration knowledge is limited among the Synergy team members.

- 3.14.5 The closing cockpit functionality in SAP software has not been configured to manage closing steps and provide documentation.

- 3.14.6 No test scripts for month- or year-end closing exist.

- 3.14.7 Not all job schedules and job parameters have been documented. No document exists that outlines each schedule job, job parameter, and owner.

- 3.14.8 The standard job schedule in SAP software will be used to manage process steps.

- 3.14.9 Knowledge transfer on the closing steps has not occurred for all divisions.

- 3.14.10 The closing process is managed through Excel, which makes it difficult to communicate progress, errors, and ownership.

- 3.14.11 The schedule of background jobs has not been completed to be consistent across all environments.

- 3.14.12 Management of the schedule job is not aligned with change management business processes. The schedule of month-end, year-end, and calendar-year jobs has not been documented and communicated to the Training and Change Management team. Statements indicated that the job variant and timing has not been outlined. It will difficult to communicate policy and procedure changes to departments without this information. In addition, scheduling resources to complete closing steps have not been outlined. The majority of the closing steps were processed by the system integrator. This finding was documented during the closing process meeting by several end users. Limited knowledge transferred occurred during the testing. Knowledge transfer on processing the closing steps is still an open issue.

Impact

- Without the closing cockpit, the closing schedule will be longer than expected. Steps of the closing process might not be performed as expected.

- Implementation of the closing cockpit for month-end business process schedules will require additional testing.

- Implementation of the closing cockpit for year-end business process schedules will require additional testing.

- The lack of test scripts has a negative effect on future upgrades and the project timeline.

Recommendation

- 3.14.1 Complete the job schedule list for daily, weekly, monthly, year-end, and calendar-year jobs. This document will assist the Basis team.

- 3.14.2 Configure the closing cockpit for weekly, monthly, quarterly, year-end, and calendar process steps. The closing cockpit enables the creation of a structured interface for executing transactions and programs that form part of complex processes, such as closing processes. The structural layout supports processes within an organizational structure, such as within the company code, as well as scenarios that affect multiple organizational structures. The closing cockpit can be used in cases where:

    - 3.14.2.a Activities recur periodically

    - 3.14.2.b More than one person responsible is involved

    - 3.14.2.c Activities are performed within a process that has a fixed chronological sequence or is determined by dependencies

    - 3.14.2.d Activities need to be supported by a shared, uniform interface for all involved

    - 3.14.2.e The status of all periodic activities needs to be documented and made transparent and available for all involved.

3.15. Accounts Payable – (AP)

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding (Configuration)

- 3.15.1 All document types used for financial posting have been configured.

- 3.15.2 The document type KN and RN are being used for processing invoices. Document type KN has been configured for transaction codes FVB70 and FV70. Document type RN has been configured for transaction codes MIR4, MIR7, and MIR0. The documentation supports net invoicing at MOA. The net invoice simplifies data entry to capture discounts taken and lost during the payment process.

- 3.15.3 Posting keys for all business processes that generate financial transactions have been completed.

- 3.15.4 Open item–clearing configuration has been completed for AP, but additional testing is required.

- 3.15.5 Payment-terms settings and the assignment of payment types is not working as expected for end users. The payment terms are correct in the financial document, but the payment type is not to be substituted in the document. If the payment type is substituted from the payment term, a strong likelihood exists a check will be produced according to the AP invoice. The payment program by payment type controls this functionality. If multiple invoices are to be paid on one check, this substitution should not be performed.

- 3.15.6 The following ACH formats have been configured and tested:

    - 3.15.6.a PPD – Payroll

        - **3.15.6.a Response: Disagree with Comment**

            - We are unable to find any record of this test.

    - 3.15.6.b CCD – Third-party and AP checks

    - 3.15.6.c CTX – CTX is configured and tested but only for 3PRV. Additionally, CTX is not being used for trade vendors.

- 3.15.7 The core configuration for AP is complete and has been tested.

Impact

- Baseline configuration for accounts payable meets business requirements

Recommendation

- 3.15.1 Continue with current process design.

Finding (Business Process)

- 3.15.8 AP business processes have been developed to be decentralized across the organization.

- 3.15.9 Standard match codes for vendor lookup do not meet the AP requirements when searching the four name fields and vendor account groups. A functional specification has been developed and the change request is not approved.

- 3.15.10 No single check process has been documented and tested. The payment program is not configured to support this functionality. With accounts payable being decentralized at MUNI, departments need instructions on how to flag an invoice for a single check. The payment program configuration currently does not support a single check when a payment type is manually entered in the invoice.

- 3.15.11 An AP check form has been tested and approved by the bank.

- 3.15.12 Period-based encumbrance tracing (PBET) is activated. The PBET functionality is not understood. Documentation or test scripts have not been outlined to document this process.

- 3.15.13 Document management process steps and validation of attachments require knowledge transfer.

- 3.15.14 The payment program will be processed twice a week. The payment program is executed using transaction code F110. The payment program is not scheduled as a batch job.

- 3.15.15 Before a payment run, vendors are reviewed to determine if they owe the Municipality money. If such a vendor is found, payments to that vendor are blocked. A business process is defined to transfer the owned amount to the Municipality vendor using transaction code F-51. The payment program will process the Municipality vendor through ACH. This approach ensures that the Municipality gets its monies back. A cash receipt is required to clear the ACH deposit. This approach follows the current business process.

- 3.15.16 Quantity and price variance were reviewed. The Municipality understands the impact of the variance during the goods receipt and invoice receipt processes. Concerns were raised about how the purchase-order functionality must be adjusted due to the constraint of system settings.

- 3.15.17 The standard payment process error-logs are difficult to review. Errors are often difficult to understand.

- 3.15.18 Super-user training for the AP process is a concern. The responsibilities and roles of super users are not understood.

- 3.15.19 **Reserved for numbering.**

Impact

- Additional development and configuration is required to support an AP business process based on the AP manager changes to defined business process which causes project delays.

- Incomplete business processes for accounts payable negatively affects knowledge transfer, training material development, and testing delays.

- The goods receipt and invoice receipt clearing process is not understood, which affects closing procedures, security roles, and data integrity.
- The offset process for payables and receivable is awkward and manual, which leads to possible process errors.
- Standard reports in SAP software for accounts receivable cannot be used, and management of payment due dates will be difficult.

Recommendation

- 3.15.2 Schedule the program RFKRRGEN to run daily.
    - **3.15.2 Response: Accept with Comment**
        - Other reports are used to give us the same information.
- 3.15.3 Submit the match-code change request to improve vendor lookup by name and vendor account group.
- 3.15.4 Create batch variants and schedule the following jobs according to the schedule determined by the AP manager:
    - 3.15.4.a Payment processing
        - **3.15.4.a Response: Reject with Comment**
            - MoA will reevaluate this in the future.
    - 3.15.4.b DME transfer (direct deposit)
    - 3.15.4.c Positive pay file
- 3.15.5 Research SAP Notes when payment process errors are not understood to find adequate resolution.
- 3.15.6 Review the AP business process and align it to the project scope. Communicate the change management process across the project team.
- 3.15.7 Review the quantity and price-variance setting after additional testing

Finding (Workflow)

- 3.15.20 Workflow has been deferred for AP. Manual business processes have been tested to manage data entry and approval of supporting documentation. This application is the only one with a financial transaction without workflow. The setup of security roles and responsibilities is a concern. The type of security authorization to support decentralized processing is adequate. The alignment of security roles and validation integration is not understood.
    - **3.15.20 Response: Agree with Comment**
        - Manual processes that were tested revolved around invoice posting.
- 3.15.21 Security roles for the AP business process are not aligned with the defined business process
    - **3.15.21 Response: Agree with Comment**
        - Process flows have been provided. Security is understood. AP team understands validation of security roles.

Impact

- Without workflow, the approval process of vendor invoices is manual and will lead to vendor payment delays and increased errors.

Recommendation

- 3.15.8 Develop the two workflows for AP nonpurchase order invoice and for LIV.

3.16. AP Data

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.16.1 Vendors have been grouped into the following:
    - 3.16.1.a 3PRV Third-party vendors
    - 3.16.1.b ALTP Remit vendors (alternate payee)

  - 3.16.1.c EMPL Employees
  - 3.16.1.d ONET One-time
  - 3.16.1.e RFND Refunds
  - 3.16.1.f TRDV Trade vendors
- 3.16.2 Master-data flags and key fields for the vendors have been set properly.
- 3.16.3 FI team members are unaware of comparison tools provided by SAP to assist in loading data when a golden master-data client exists.
- 3.16.4 The fiscal address is used to manage a single 1099 for multiple vendors with the same taxpayer identification number (TIN).
- 3.16.5 Employee address will be set to the department's home address.
- 3.16.6 All four name fields are used for vendor masters.
- 3.16.7 Sort field for the vendor master is the first 10 characters for the vendor.
- 3.16.8 All address changes will be centrally maintained.
- 3.16.9 Sensitive field controls have not been configured. The following items can be displayed or changed:
  - 3.16.9.a Bank information
  - 3.16.9.b Social Security numbers
  - 3.16.9.c TINs
- 3.16.10 A change request for the vendor registration portal solution has been approved. The solution has not been configured or tested.

Impact

- Vendor-master records can be loaded based on the documentation provided.
- The current design allow users to view sensitive data like tax identification numbers and banking data.
- The vendor registration process is manual until a change request is implemented.

Recommendation

- 3.16.1 Load the vendors into a golden configuration client, DE1 100, to assist with conversion and comparison across multiple clients. Having the vendor master data in the golden client will allow Synergy team members to compare master data faster for the following activities:
    - 3.16.1.a Client copies
    - 3.16.1.b Integration test preparation
    - 3.16.1.c Production cut-over
    - 3.16.1.d Support pack testing
    - 3.16.1.e Conversion validations
- 3.16.2 Review sensitive field requirements for reporting and security assignments.

3.17. AP Transaction Processing

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 3.17.1 Validation rules for financial transactions have been configured and tested.
- 3.17.2 Synergy validation edits for data entry of financial transactions are incomplete. The AP Design Review workshop reviewed legacy edit-mapping to the Synergy system. No exercise to map legacy edits to Synergy edits has been completed.
- 3.17.3 Screen variants and screen displays are controlled by posting keys, and GL accounts have been finalized and tested.
- 3.17.4 In the AP meeting, several persons stated that key integration knowledge is limited among the Synergy team members. Transferring knowledge from the consultants has been difficult. The priority of the issues drives the work efforts and knowledge transfer.
- 3.17.5 The completion of testing by the consultants has limited knowledge transfer in different divisions of the Municipality.

- 3.17.6 Reports for AP have not been finalized and cross-referenced from the legacy system. Departments will manage clearing of goods receipts and invoice receipts (GR/IR). Key transaction codes like MR11 and MR11SHOW have been assigned to several users. The transaction codes will allow the departments to make corrections when clearing GR/IR.

- 3.17.7 Period-based encumbrance tracking (PBET) is active, but the functionality is not understood.

- 3.17.8 The personnel number is entered into the assignment field for travel request. The PERN fields in the data entry screens are not used.

- 3.17.9 The SAP Travel Management application is not in scope for travel reimbursement.

- 3.17.10 The baseline date on the AP invoice is determined by invoice date, not the posting date. Currently, the user can change the baseline date. The baseline date controls when an invoice will be paid.

- 3.17.11 Manual payment blocks will be used to manage incorrect vendor information during data entry. The manual payment block will be reviewed centrally, and vendor information will be corrected. Once the vendor is corrected, the department will be notified so that it can remove the payment block.

    - **3.17.11 Response: Agree with Comment**

        - Central AP will be removing the block after they update the address.

- 3.17.12 LIV will include postings distributed across multiple funds. The goods receipt will support only one-person approval. The other agency will need to be notified when the items are received. Cost distribution will be transferred to the LIV invoice during data entry.

- 3.17.13 The order of LIV invoices process was reviewed. The leading practice is to complete the document flow in the following order:

    - Goods receipt

    - Invoice receipt

    If the invoice is entered first, the system will set a payment block. Given that end users have access to transaction MRBR, the invoice block could be removed too early. Transaction code MRBR will be scheduled.

    The order and ramifications of these steps were reviewed in detail.

- 3.17.14 Retention has not been thoroughly tested. In particular, the release of the retention to the vendor was not tested.

Impact

- Financial posting has been tested with the currently designed edits. Key components of the testing have been reviewed and validated for accuracy. Integration points across all application areas are understood with each testing cycle.
- Testing scripts and business transaction–flow documents are aligned, and the expected results have been documented in testing.
- Given that end-users have access to transaction MRBR, the invoice block could be removed too early could cause incorrect payments and clearing problems.
- The functionality of PBET and LIV cannot be tested without test scripts.

Recommendation

- 3.17.1 Finalize financial-posting edits to reduce end-user errors. Document the edits according to the following categories:
    - 3.17.1.a Application area, document type, and transaction code
    - 3.17.1.b Fund type by GL account
    - 3.17.1.c Standard edits
    - 3.17.1.d Budget checks
    - 3.17.1.e Workflow checks
- 3.17.2 Update training material to include document simulation and simulation in SAP General Ledger to assist in regenerating derivation rules in funds management and SAP Grants Management.
- 3.17.3 Develop a test scenario for transaction PBET and reporting.
- 3.17.4 Develop a test case for LIV to process goods receipt and invoices out of order.
- 3.17.5 Lock down the baseline date to ensure that invoice payment dates are not changed. Additional authorization will allow a certain person to change the fields when required.
- 3.17.6 Test retention functionally and validate posting results.

3.18. AP Month- and Fiscal Year-End

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 3.18.1 Month-end business process has been documented in a Microsoft Excel workbook for preliminary and final close.
- 3.18.2 The month-end business process was tested mostly by the consultants. This approach was reviewed during the AP Design Review workshop, when several persons stated that key integration knowledge is limited among the Synergy team members.
- 3.18.3 The year-end business process has been documented in an Excel workbook for preliminary and final close. The order of the process steps has been defined.
- 3.18.4 The year-end business process was tested mostly by the consultants. This approach was reviewed during the AP Design Review workshop, when several persons stated that key integration knowledge is limited among the Synergy team members.
- 3.18.5 The closing cockpit functionality in SAP software has not been configured to manage closing steps and provide documentation.
- 3.18.6 No test scripts for month- or year-end closing exist.
- 3.18.7 Not all job schedules and job parameters have been documented. No document exists that outlines each schedule job, job parameter, and owner.
- 3.18.8 The standard job schedule in SAP software will be used to manage process steps.
- 3.18.9 Knowledge transfer on the closing steps has not occurred for all divisions.
- 3.18.10 The closing process is managed through Excel, which makes it difficult to communicate progress, errors, and ownership.
- 3.18.11 The schedule of background jobs has not been completed to be consistent across all environments.

- 3.18.12 Management of the schedule job is not aligned with change management business processes.

Impact

- Without the closing cockpit, the closing schedule will be longer than expected. Steps of the closing process might not be performed as expected.
- Implementation of the closing cockpit for month-end business process schedules will require additional testing.
- Implementation of the closing cockpit for year-end business process schedules will require additional testing.
- The lack of test scripts negatively affects future upgrades and the project timeline.

Recommendation

- 3.18.1 Complete the job schedule list for daily, weekly, monthly, year-end, and calendar-year jobs. This document will assist the Basis team.
- 3.18.2 Configure the closing cockpit for weekly, monthly, quarterly, year-end, and calendar process steps. The closing cockpit enables the creation of a structured interface for executing transactions and programs that form part of complex processes, such as closing processes. The structural layout supports processes within an organizational structure, such as within the company code, as well as scenarios that affect multiple organizational structures. The closing cockpit can be used in cases where:
    - **3.18.2 Response: Accept with Comment**
        - The team wants to better understand the impact of how much work is involved and when to implement this component.
    - 3.18.2.a Activities recur periodically
    - 3.18.2.b More than one person responsible is involved
    - 3.18.2.c Activities are performed within a process that has a fixed chronological sequence or is determined by dependencies
    - 3.18.2.d Activities need to be supported by a shared, uniform interface for all involved
    - 3.18.2.e The status of all periodic activities needs to be documented and made transparent and available for all involved

3.19. AP Calendar Year-End

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 3.19.1 The 1042 file for the federal government has been tested and errors were documented.
    - **3.19.1 Response: Agree with Comment**
        - Testing needs to be completed.
- 3.19.2 1099 process steps are not documented. The variant for the 1099 steps is incomplete to assist in managing following activities:
    - 3.19.2.a 1099 form printing
    - 3.19.2.b Single request for 1099 form
    - 3.19.2.c Replacement forms
    - 3.19.2.d File generation for remittance to the IRS
- 3.19.3 1099 correction steps are not in a test script. These items have been unit-tested. The order and example of various corrections have not been outlined. SAP has documented a process to make corrections to invoices before and after payment processing. The steps were reviewed during the AP sessions and can be found in SAP Notes.
- 3.19.4 The 2014 fiscal year-end support packs for 1099 and 1042 have not been applied. The forms are for 2013.
- 3.19.5 Steps to monitor 1099 activity were reviewed. The 1099 and 1042 testing is incomplete. Report variants for 1099 and 1042 processing were reviewed and found to be incomplete. Additional training is required to set up the report variant. In addition, the process steps to make corrections to the 1099 and 1042 must be reviewed with other departments. Test scripts must include additional scenarios that show end users complete the following tasks:
    - Edit 1099 and 1042
    - Submit Electronic Tape to the IRS

- Correction of 1099 and 1042
- Create 1099 and 1042 forms

- 3.19.6 Conversion steps for 1099 values were reviewed. If the go-live date is midyear, the process to produce two 1099 forms for a vendor was outlined. If one 1099 is required for a midyear conversion, an additional conversion object would be required.
- 3.19.7 When two 1099s need to be created for legal settlement, the business process steps were reviewed:
  - 3.19.7.a Create a vendor invoice FB60, which updates the 1099 database
  - 3.19.7.b Create a vendor payment F-42
  - 3.19.7.c Clear the vendor payment against the invoice using transaction code F-44
  - 3.19.7.d Run an AP payment run
  - 3.19.7.e Run the 1099 report to check the vendor information for accuracy
- 3.19.8 1099S forms are not produced in the system. SAP software does not support the 1099S. This gap has been validated through a review of the customer support system according to SAP Note 11.
- 3.19.9 Testing of the 1042 forms has resulted in errors that are being worked through.

Impact

- Testing of 1042 and 1099 processing is incomplete.
- The 1099S reporting will have to occur through manual steps.

Recommendation

- 3.19.1 Complete the documentation for 1042 and 1099 processing and error management.
  - **3.19.1 Response: Accept with Comment**
    - Testing needs to be completed.
- 3.19.2 Complete the program variant for 1042 and 1099 to produce forms, files, and reports.
- 3.19.3 Apply the 2014 support packs to correct the forms and be prepared for fiscal year 2015 forms.

- 3.19.4 Review SAP Note 1561889 to determine if the new fields for the vendor master are activated to capture the correct information. In addition, for calendar year 2014, apply SAP Notes 1949019 and 1949022 for fiscal year 2014 1099 and 1042 forms. Review SAP Note 1942340 on how to configure the forms.

3.20. Controlling Master Data

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.20.1 The standard cost center hierarchy has been completed.
- 3.20.2 The cost center structure has been completed. Each key field was reviewed. No changes to the master records are required.
- 3.20.3 A custom development exists for the cost center master for FERC treatment. The development item has been tested.
- 3.20.4 The impact of the cost center on other applications will require additional knowledge transfer.
- 3.20.5 Reorganization of the cost center hierarchy has not been reviewed, and the business process not developed to gauge the impact of request.
- 3.20.6 Cost element master data is related to the GL one to one. Each key field was reviewed. No changes to the master records are required.
- 3.20.7 Cost element groups are built only for business-process line-assessment and distributions.
- 3.20.8 Secondary cost elements have been developed and configured. Each key field was reviewed. No changes to the master records are required.
- 3.20.9 Configuration of cost centers and cost elements is complete.
- 3.20.10 The master data load for cost center and cost element is complete and tested.
- 3.20.11 Validation of master data after a conversion takes a long time because no golden client for master data is present.

- 3.20.12 Internal orders that are set up were reviewed. Each key field was reviewed. No changes to the master records are required.
- 3.20.13 Internal order groups will be used for reporting and the allocation cycles for FERC.
- 3.20.14 A custom enhancement on the internal order is for FERC treatment and grants management. The enhancement has been tested and is working.
- 3.20.15 Planning functionality with cost center, cost elements, and internal orders has not been implemented.
- 3.20.16 Statistical key figures were reviewed. The statistical key figures are used in allocation cycles.
- 3.20.17 The Budget Office stated that performance-based measurement was placed out of scope. During the review of the initial requirements, performance-based measurement was a must-have requirement. To implement performance-based measurement, the following is required:
    - 3.20.17.a Identify the statistical key figures used to measure performance. Examples include the following:
        - 3.20.17.a.1 Pool pass sold
        - 3.20.17.a.2 Permits sold to developers
        - 3.20.17.a.3 Number of tax liens collected
    - 3.20.17.b Identify the planning parameters for the fiscal year
    - 3.20.17.c Define the planning layout for data entry
    - 3.20.17.d Define the actual-versus-planned report for the performance measure
    - 3.20.17.e Define the coding block required
        - 3.20.17.e.1 Cost object
        - 3.20.17.e.2 Fund
        - 3.20.17.e.3 Grant
        - 3.20.17.e.4 Functional area
    - 3.20.17.f Load the plan data

- 3.20.17.g Load the actual data
- 3.20.17.h Extract the information for assembly report
- **3.20.17 Response: Agree with Comment**
  - This will be re-evaluated in the future. This applies to all sub-bullets.

- 3.20.18 Statistical key figures will not be used to store statistics for the *comprehensive annual financial report (CAFR).*
- 3.20.19 Activity types are not configured for controlling.
- 3.20.20 A custom enhancement was developed to allow other departments to post to internal orders.
- 3.20.21 BATCHMAN is used to load segments, cycles, and statistical key figures.

Impact

- The design of the master data is working has been tested in the initial integration testing.
- Integration with the master data is getting better with the completion of each test script.
- Measuring performance with statistical key figures is not in the current scope.
- Validation of master data will difficult without a master data golden client for conversions and client copies.

Recommendation

- 3.20.1 Load the cost center, cost element, and internal orders into a golden configuration client, DE1 100, to assist in the conversion and comparison of the chart of accounts across multiple clients. Having the chart of accounts in the golden client will allow the Synergy team members to compare the master data faster for the following:
  - 3.20.1.a Client copies
  - 3.20.1.b Integration test preparation
  - 3.20.1.c Production cut-over
  - 3.20.1.d Support-pack testing
  - 3.20.1.e Conversion validations

- **3.20.1 Response: Accept with Comment**
  - MoA will evaluate this.

- 3.20.2 Evaluate the performance measure process. Documentation was unavailable for review. The requirements have not been documented.
  - **3.20.2 Response: Accept with Comment**
    - MoA will evaluate this.

3.21. Controlling Allocations and Distribution

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 3.21.1 Allocation cycles for actual postings of intergovernmental charges (IGC) have been configured and tested according to business requirements.
- 3.21.2 Costing sheets have been configured and tested for AWWU and Municipality business areas according to verbal business requirements.
- 3.21.3 No business decision has yet been made on the use of costing sheets for overhead allocation to capital projects.
- 3.21.4 No allocation cycles for CO (controlling) planning to enable IGC budgeting have been set up or tested.
- 3.21.5 Development of the interface for importing pre-IGC data from the team budget system into SAP software is incomplete.
- 3.21.6 Development of the interface for exporting post-IGC data from SAP software into the team budget system is incomplete.

Impact

- The allocation cycles for actual postings will meet the business requirements.

- The costing sheets will meet the business requirements.
- Lack of a decision on the use of costing sheets for capital projects will affect system integration testing and validation.
- The business would be unable to perform IGC budgeting based on CO planning information from SAP software. IGC budgeting would be a manual process.

Recommendation

- 3.21.1 Continue current work on actual IGC actual allocation cycles.
- 3.21.2 Decide on the use of costing sheets for overhead allocation to capital projects. If a decision is made to use the costing sheets, include them in integration testing.

3.22. Controlling Month- and Year-End

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 3.22.1 Month-end business process has been documented in an Excel work sheet for preliminary and final close.
- 3.22.2 Month-end business process was tested mostly by the consultants. This approach was reviewed during the controlling meeting, when several persons stated that key integration knowledge is limited among the Synergy team members.
- 3.22.3 Year-end business process has been documented in an Excel workbook for preliminary and final close. The order of the process steps has been defined.
- 3.22.4 Year-end business process was tested mostly by the consultants. This approach was reviewed during the GL meeting, when several persons stated that key integration knowledge is limited among the Synergy team members.
- 3.22.5 The closing cockpit has not been configured to manage closing steps and provide documentation.
- 3.22.6 No test scripts for month or year-end closing exist.

- 3.22.7 Not all job schedules and job parameters have been documented. No document outlines each schedule job, job parameter, and owner.

- 3.22.8 The standard job schedule in SAP software will be used to manage process steps.

Impact

- Knowledge transfer of the closing steps has not occurred for all divisions, leading to unexpected closing delays for month-end and year-end.

- Without the closing cockpit, the closing schedule will be longer than expected. Steps of the closing process might not be performed as expected.

- Implementation of the closing cockpit for month-end business process schedules will require additional testing.

- Implementation of the closing cockpit for year-end business process schedules will require additional testing.

Recommendation

- 3.22.1 Complete the job schedule list for daily, weekly, monthly, year-end, and calendar year. This document will assist the Basis team.

- 3.22.2 Configure the closing cockpit for weekly, monthly, quarterly, year-end, and calendar process steps. The closing cockpit enables creation of a structured interface for executing transactions and programs that form part of complex processes, such as closing processes. The structural layout supports processes within an organizational structure, such as within the company code, as well as scenarios that affect multiple organizational structures. The closing cockpit can be used in cases where:

    - 3.22.2.a Activities recur periodically

    - 3.22.2.b More than one person responsible is involved

    - 3.22.2.c Activities are performed within a process that has a fixed chronological sequence or is determined by dependencies

    - 3.22.2.d Activities need to be supported by a shared, uniform interface for all involved

    - **3.22.2 Response: Accept with Comment**

        - The team wants to better understand the impact of how much work is involved and when to implement this component. This applies to all sub-bullets above.

- 3.22.3 The status of all periodic activities needs to be documented and made transparent and available for all involved.

3.23. Capitalized Projects (Including Value-Added Projects)

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 3.23.1 The design for capitalized projects is complete and the design is good. Integration with asset accounting using assets under construction (AUC) is good. Design documentation for capitalized projects that explains the various project types is unavailable.
- 3.23.2 Testing is advanced, but incomplete. Final integration testing is still to be done.
- 3.23.3 Standard reports are in place and working, but custom reports are undefined or not yet fully specified.
- 3.23.4 The conversion strategy is complete and main testing is finished; final conversion testing is still required.

Impact

- Medium effort is required to complete the design documentation and integration testing; to complete specification, development, and testing of custom reports in the SAP Business Warehouse (SAP BW) application; to perform final conversion testing; and to execute the cut-over tasks.

Recommendation

- 3.23.1 Continue with realization, including documentation development and sign-off, final integration tests, custom reporting specification, development, and testing. Update the project conversion spreadsheets to the new cut-over date to include new projects and changes from the current versions.

3.24. Construction and Nonconstruction

Overall Risk: LOW
Design Build Completeness Risk: LOW

Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 3.24.1 The design for construction and nonconstruction projects is complete, and the design is good. Project templates have been developed to support new project creation. The work breakdown structures (WBS) are based on project phases with four WBS levels. A validation rule exists to ensure that level-three WBS are for expenses and level-four WBS are for revenues. Separate templates have been developed for nonconstruction projects such as bus and vehicle purchases.

    - **3.24.1 Response: Agree with Comment**

        - This finding needs to be corrected. Validation rules as described are backwards. Level 3 WBS is for revenue and Level 4 WBS is for expenses.

- 3.24.2 Testing is advanced, but incomplete. Final integration testing is still to be done. A full integration test from project creation in project system (PS) through to substantial completion and project close, and then asset creation and a value update through a full asset lifecycle with a couple of month-ends and retirements, transfers, period-end tasks, and so on is needed to provide confidence that the system is fully tested and ready for cut-over.

- 3.24.3 Standard reports are in place and working, but custom reports are undefined or not yet fully specified.

- 3.24.4 The conversion strategy is complete and main testing is finished; final conversion testing is still required.

    - **3.24.4 Response: Disagree with Comment**

        - The MoA is still working on a conversion strategy.

Impact

- Medium effort is required to complete integration testing; to complete specification, development, and testing of custom reports in SAP BW; to perform final conversion testing; and to execute the cut-over tasks.

Recommendation

- 3.24.1 Continue with realization, including final integration tests, custom reporting specification, development, and testing. Update the project conversion spreadsheets to the new cut-over date to include new projects and changes from the current versions.

3.25. Maintenance Projects

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.25.1 Maintenance projects are in scope for maintenance activities that need to be capitalized. In AWWU the threshold for capitalization is $5,000. The setting means that maintenance work under the threshold is expensed and does not require a project to be created. Anything over $5,000 that needs to be capitalized in a fixed asset requires a project. The design for maintenance projects is complete and the design is good. Project templates have been developed to support new maintenance project creation.

- 3.25.2 Testing is advanced, but incomplete. Final integration testing is still to be done.

- 3.25.3 Standard reports are in place and working, but custom reports are undefined or not yet fully specified.

- 3.25.4 The conversion strategy is complete and main testing is finished; final conversion testing is still required.

Impact

- Low effort is required for maintenance projects to complete integration testing; to complete specification, development, and testing of custom reports in SAP BW; to perform final conversion testing; and to execute the cut-over tasks.

Recommendation

- 3.25.1 Continue with realization, including final integration tests, custom reporting specification, development, and testing. Update the project conversion spreadsheets to the new cut-over date to include new projects and changes from the current versions.

3.26. Reimbursable Projects and Billing

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 3.26.1 Reimbursable projects are in scope for billing developers and other external entities for engineering and other service activities performed on their behalf. The design for reimbursable projects is complete and the design is good. Project templates have been developed to support new reimbursable project creation. Billing is done using resource-related billing (RRB) for most of these projects, but manual non-RRB billing is also supported.

- 3.26.2 Testing is advanced, but incomplete. Final integration testing is still to be done.

- 3.26.3 Standard reports are in place and working, but custom reports are undefined or not yet fully specified.

- 3.26.4 The conversion strategy is complete and main testing is finished; final conversion testing is still required.

    - **3.26.4 Response: Disagree with Comment**

        - The MoA is still working on a conversion strategy.

Impact

- Medium effort is required for maintenance projects to complete integration testing; to complete specification, development, and testing of custom reports in SAP BW; to perform final conversion testing; and to execute the cut-over tasks.

Recommendation

- 3.26.1 Continue with the project realization phase, including final integration tests, custom reporting specification, development, and testing. Update the project conversion spreadsheets to the new cut-over date to include new projects and changes from the current versions.

3.27. Asset Capitalization

Overall Risk: LOW
Design Build Completeness Risk: MEDIUM

Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 3.27.1 The design for asset capitalization is complete and the design is solid. Configuration is complete, including asset master configuration, asset classes, depreciation areas, and depreciation keys. AWWU uses a combination of asset classes and functional areas to achieve the required breakdown for reporting, which has proven to be a successful approach. However, design and configuration documentation is incomplete and does not reflect the latest asset class design for AWWU.

- 3.27.2 Approximately 170,000 asset masters are to be converted into SAP software: 75 asset classes, 2 depreciation areas (one for modified accrual and one for full accrual), and 143 depreciation keys. Account determination is completely configured and tested in unit- and integration-testing. Low-value assets are not maintained in asset accounting, but will be in material inventories in materials management. A user-defined *Legacy Asset Number* field in the asset master is used to tie back to the legacy system.

    - **3.27.2 Response: Agree with Comment**

        - Low value assets are maintained in plant maintenance as equipment and not in material management.

- 3.27.3 Little customization is present, and the configuration design uses standard depreciation and reporting fields to meet almost all needs. A custom program was written in the ABAP programming language for asset conversion. A few minor outstanding change requests for interface tweaks and to lock down the inventory flag field are present.

- 3.27.4 Asset capitalization testing is advanced, but incomplete. Final integration testing is still to be done. A full integration test from project creation in PS through to substantial completion and project close, and then asset creation and value update through a full asset lifecycle with a couple of month-ends and retirements, transfers, period-end tasks, and so on is needed to provide confidence that the system is fully tested and ready for cut-over. AWWU requires a full load of assets to an integrated test environment so that it can confirm that the setup of asset classes and functional areas is 100% correct for its long-term reporting needs. Some tweaks may still be required before going live.

- 3.27.5 Standard reports are in place and working, but custom reports are undefined or not yet fully specified.

- 3.27.6 The conversion strategy is complete and main testing is finished; final conversion testing is still required. The project conversion spreadsheets must be updated to the new cut-over date to include new projects and changes from the current conversion spreadsheet versions.

Impact

- Without adequate testing, there may be unexpected errors in the production environment after go-live.

- Custom reports take time to develop. If they are needed but not identified or specified until the end or later in project there may not be amble time to develop them.

Recommendation

- 3.27.1 Continue with the project realization phase, including final integration tests, custom reporting specification, development, and testing. Update the project conversion spreadsheets to the new cut-over date and proceed with implementation on a key month-end (end of the second quarter, for example).

- 3.27.2 Complete the design and configuration documentation for asset capitalization, to complete the outstanding minor change requests that are needed for go-live, to complete integration testing, and to execute the cut-over tasks.

3.28. Asset Retirements

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.28.1 The design for asset retirements is complete and the design is good. Two business process flows well represent the to-be processes that will be in place after going live.

- 3.28.2 Testing is advanced, but incomplete. Test scripts were completed and signed off for the asset retirement tests during initial integration testing. Final integration testing is still to be done. The end users are confident that the asset accounting (AA) functionality is complete and working.

Impact

- Low effort is required for asset retirements to complete integration testing, and to make any final updates to the business process flows.

Recommendation

- 3.28.1 Continue with the project realization phase, including final integration tests for asset retirements.

3.29. Asset Transfers

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.29.1 The design for asset transfers is complete and the design is good. Three business process flows for transfers well represent the to-be processes that will be in place after going live.

- 3.29.2 Testing is advanced, but incomplete. Test scripts were completed and signed off for the asset transfer tests during initial integration testing. Final integration testing is still to be done. The end users are confident that the AA transfer functionality is complete and working.

Impact

- Business process flows are needed for developing training material and sustaining the system.

Recommendation

- 3.29.1 Continue with the project realization phase, including final integration tests for asset retirements.

3.30. Asset Period- and Year-End Tasks

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 3.30.1 The design for asset period- and year-end tasks is complete and the design is good. One business process for month-end flow covers the steps involved in the monthly depreciation runs. The process flow well represents the to-be processes that will be in place after going live and in is accord with leading practices.

- 3.30.2 The main concern for this area is that an integrated, automated month-end schedule using the month-end cockpit and scheduler is not in place. See section 3.5.

- 3.30.3 Testing is advanced, but incomplete. Test scripts were completed and signed off for the period-end tests during initial integration testing. Final integration testing is still to be done, including at least two month-

ends after asset creation and depreciation start. The end users are confident that the AA period-end functionality is complete and working.

Impact

- Month-end will be less efficient. Without adequate testing, errors may surface in the production environment after going live and create an unstable, error-prone environment.

Recommendation

- Design, develop, and implement a fully automated month-end schedule using the month-end scheduler tool.
- Complete integration testing for asset period- and year-end tasks and to make any final updates to the business process flow.

3.31. Asset Reporting

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 3.31.1 Reporting is an area where considerable work is needed. The gap list of asset reports requested by the Municipality and AWWU was reviewed. Most of these report requirements can be met by standard AA reports in SAP software. However, a few that may require customization or special attention (see below). In general, training is needed in how to access and use the standard reports that are readily available and sufficient for most reporting needs.
- 3.31.2 The following highlights reports for possible customization in SAP BW:
    - 3.31.2.a One large master asset report in SAP BW to satisfy all general asset accounting needs would have all standard reporting fields plus additional special or custom fields specific to the Municipality and AWWU. It would allow selection of various field combinations and definitions to produce the desired reporting breakdown and summarization.
        - **3.31.2.a Response: Disagree with Comment**

o This report will be produced out of ECC and not BW.

- 3.31.2.b Comprehensive annual financial reports (CAFR) reports are required on the FI side by general ledger (GL) account. This requirement is being addressed by a separate CAFR reporting review in section 13.5.
    - **3.31.2.b Response: Agree with Comment**
        - Report gap analysis is not complete. Reports will not be finalized until the reporting gap analysis is complete.
- 3.31.2.c Summary-level asset report with summary totals similar to the asset history sheet would be useful for financial statement purposes.
    - **3.31.2.c Response: Agree with Comment**
        - Report gap analysis is not complete. Reports will not be finalized until the reporting gap analysis is complete.
- 3.31.2.d Report showing lack of activity for work in progress (WIP) on active projects would help identify situations where projects have not been closed and assets capitalized in a timely fashion.
- 3.31.2.e Depreciation simulation report: Test a standard report in SAP ECC as a part of the integration testing. It forecasts depreciation for assets still being developed in active PS capital projects in combination with existing assets in AA.

Impact

- Project may risk not providing adequate reporting to support the Municipality in the post go-live environment.

Recommendation

- 3.31.1 Identify, develop, and test the custom reports that are needed for Asset Accounting.
- 3.31.2 Provide training in the use of standard AA reports in SAP ECC.
- 3.31.3 Provide additional training in the use of the new custom AA reports as developed in SAP BW and on how to perform ad hoc queries for one-time or limited-use reports.

3.32. Period End

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 3.32.1 The period-end business process has been documented in a Microsoft Excel workbook for preliminary and final close.
- 3.32.2 The period-end business process was tested mostly by the consultants. This approach was reviewed during the GL Design Review workshop, when several persons stated that key integration knowledge is limited among the Synergy team members.
- 3.32.3 The year-end business process has been documented in an Excel workbook for preliminary and final close. The order of the process steps has been defined.
- 3.32.4 The year-end business process was tested mostly by the consultants. This approach was reviewed during the GL Design Review workshop, when several persons stated that key integration knowledge is limited among the Synergy team members.
- 3.32.5 The closing cockpit functionality in SAP software has not been configured to manage closing steps and provide documentation.
- 3.32.6 No test scripts for month- or year-end closing exist.
- 3.32.7 Not all job schedules and job parameters have been documented. No document exists that outlines each schedule job, job parameter, and owner.
- 3.32.8 The standard job schedule in SAP software will be used to manage process steps.
- 3.32.9 Knowledge transfer on the closing steps has not occurred for all divisions.
- 3.32.10 The closing process is managed through Excel, which makes it difficult to communicate progress, errors, and ownership.
- 3.32.11 The schedule of background jobs has not been completed to be consistent across all environments.
- 3.32.12 Management of the schedule job is not aligned with change management business processes.

Impact

- Without the closing cockpit, the closing schedule will be longer than expected. Steps of the closing process might not be performed as expected.
- Implementation of the closing cockpit for month-end business process schedules will require additional testing.
- Implementation of the closing cockpit for year-end business process schedules will require additional testing.
- The lack of test scripts can have a negative impact on future upgrades and the project timeline.

Recommendation

- 3.32.1 Complete the job schedule list for daily, weekly, monthly, year-end, and calendar-year jobs. This document will assist the Basis team.
- 3.32.2 Configure the closing cockpit for weekly, monthly, quarterly, year-end, and calendar process steps. The closing cockpit enables the creation of a structured interface for executing transactions and programs that form part of complex processes, such as closing processes. The structural layout supports processes within an organizational structure, such as within the company code, as well as scenarios that affect multiple organizational structures. The closing cockpit can be used in cases where:
    - 3.32.2.a Activities recur periodically
    - 3.32.2.b More than one person responsible is involved
    - 3.32.2.c Activities are performed within a process that has a fixed chronological sequence or is determined by dependencies
    - 3.32.2.d Activities need to be supported by a shared, uniform interface for all involved
    - 3.32.2.e The status of all periodic activities needs to be documented and made transparent and available for all involved

3.33. Funds Management (FM) – Maintain FM Master Data

Overall Risk: LOW
Design Build Completeness Risk: LOW

Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.33.1 The financial management area has been created to reflect the same identifier as the chart of accounts, company code, and controlling area. The FM area is identified as MUNI.
- 3.33.2 The funds management (FM) master data elements have been created, and a master data record was reviewed for each type of element. The elements include funds, funds centers, commitment items, functional areas, funded programs, and budget periods.
    - **3.33.2 Response: Agree with Comment**
        - Grants should be included in the list of elements.
- 3.33.3 The FM master data has been created in accordance with the business requirements for the Municipality as well as leading practices:
    - 3.33.3.a Funds have been created in accordance with the business requirements for reporting and integration with other functionalities of SAP software.
    - 3.33.3.b The fund types have been created and mapped to the appropriate fund master data record.
    - 3.33.3.c The funds centers have been created with to have a 1:1 relationship with the cost centers in controlling (CO).
    - 3.33.3.d The commitment items have been created to have a 1:1 relationship with the general ledger accounts in financial accounting (FI) and the cost elements in CO.
    - 3.33.3.e The functional areas have been created with intelligent numbering and will be utilized for the comprehensive annual financial report (CAFR).
    - 3.33.3.f The funded programs have been created to have a 1:1 relationship with the project definitions in the project system (PS) functionality.
    - 3.33.3.g The funded program types have been created and mapped to the appropriate funded program master data record.
    - 3.33.3.h The recommendation from the 2012 SAP Quality Assurance Design Review to use budget period as an FM account assignment element has been implemented. The budget periods have been created and will only be mapped to bond–related funds.

- 3.33.4 Authorization groups for funds centers are not being utilized. Comments of workshop participants indicate a desire to utilize this field for security roles.

- 3.33.5 The configuration setting has been established not to allow any FM account assignment element fields to be left blank.

- 3.33.6 The master data groups for commitment items, funds centers, and funds have been created to assist with reporting needs and requirements. In addition to the commitment item groups, the commitment item hierarchy has been set to control the commitment item groups.

- 3.33.7 The FMMDAUTO program is used to create funded programs automatically and is scheduled as a batch job to run every three minutes. Some issues have arisen with the program running unsuccessfully. The program has stopped during processing and no updates were made.

Impact

- The process for the creation and maintenance of FM master data has been streamlined and will be managed centrally by the Office of Management and Budget (OMB), which is in alignment with common practice and will alleviate unnecessary creation of FM master data.

- The use of authorization group for funds center master data is an additional means of assigning authorization to end users who need access to certain funds centers only.

- If the FMMDAUTO program stops unexpectedly during background processing, no updates will be completed.

- The current master data design is working and has been successfully unit-and integration-tested.

Recommendation

- 3.33.1 Continue with the current process for creation and maintenance of FM master data (managed centrally).

- 3.33.2 Gather additional information on the use of the authorization group for funds center master data. Determine if the use of the authorization group will ensure that department end users will only be able to post or view data related to their specific funds centers as designated in the authorization group.

- 3.33.3 Streamline the batch job details for the FMMDAUTO program to ensure that the program runs successfully and updates accordingly.

3.34. Budget Execution – Annual Approved Budget, Budget Transfers, and Supplements

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 3.34.1 The business process for the annual approved budget was reviewed and discussed. The load of the approved budget has been unit-and integration-tested.
    - **3.34.1 Response: Agree with Comment**
        - Only applies to operating budget; the capital budget has not been addressed.
- 3.34.2 The budget is prepared in a third-party tool, TeamBudget. The tool will continue to be utilized to prepare the budget numbers, and the approvals of budget will continue, using the existing methodologies.
    - **3.34.2 Response: Agree with Comment**
        - Only applies to operating budget; the capital budget has not been addressed.
- 3.34.3 The approved budget will be extracted from TeamBudget and uploaded into the FM budgeting workbench.
    - **3.34.3 Response: Agree with Comment**
        - Only applies to operating budget; the capital budget has not been addressed.
- 3.34.4 Budget type FM01 for FM and GM01 for budget in SAP Grants Management has been created, and the applicable budget processes have been assigned accordingly.
- 3.34.5 The document types have been defined to reflect the required budget loads:
    - 3.34.5.a 1000 – Original Budget
    - 3.34.5.b 2000 – First Quarter Revision
- 3.34.6 The interface from TeamBudget to CO module was unit-tested by the previous system integrator with no involvement from the current functional team. Participants indicated that the plan

is to request assistance from those resources to return to the Synergy project to execute additional testing.

- **3.34.6 Response: Agree with Comment**
  - Additional testing is needed.

- 3.34.7 Four budget versions:
  - 3.34.7.a Version 0 – Current Budget
  - 3.34.7.b Version 1 – Original Budget
  - 3.34.7.c Version 2 – First Quarter Budget
  - 3.34.7.d Version 3 – First Quarter Delta Budget
- 3.34.8 The first quarter revised budget load (version 2) has not been tested.
- 3.34.9 The capital budget load program was tested during the Mock 2 conversion.
  - **3.34.9 Response: Agree with Comment**
    - The capital budget was tested during Mock 1 and Mock 2 for the utilities.
- 3.34.10 The business process for budget transfers was reviewed and discussed.
- 3.34.11 Document types have been defined to reflect the budget revisions:
  - 3.34.11.a 3000- Supplemental – workflow activated
  - 3.34.11.b 4000 – Transfers (nonavailability control (AVC)) – workflow activated
  - 3.34.11.c 5000 – Transfers (AVC) – workflow activated
- 3.34.12 The capability to scan the appropriation ordinance must be completed for budget transfers and supplements. These documents must be attached to the requested budget transfer and supplement document.
- 3.34.13 A requirement exists to include the applicable appropriation ordinance identifier on budget documents. The *Public Law* field on the *Additional Data* tab of the budgeting workbench has been configured as a required field for entry. This information should correlate to the *Budget Header* text field in SAP Grants Management for reporting.

- 3.34.14 The workflow for budget transfers requires four levels of approval if it crosses availability control for funds centers. Two levels of workflow approval are required if the transfer does not cross availability control for funds centers.

- 3.34.15 The custom table notification for budget transfer workflow has not been thoroughly tested, although workflow was integration tested in both integration-test cycles (ITC) 1 and 2.

- 3.34.16 The reject notifications for workflow are not working properly. During testing, the reject notifications were not displayed in the end user's workflow inbox.

- 3.34.17 The functional team has not been properly trained on how to read the workflow logs. No designated workflow administrator is assigned to help ensure that the workflow documents are not held in a queue waiting for approval or processing, which could create a backlog.

Impact

- The testing of the TeamBudget interface with CO was led by consulting resource(s) who are no longer on site. These resources will need to return to execute additional testing because the Municipality functional team was not part of this testing effort. Supplemental documentation must be included as a reference for justification for budget transfers and supplements as a requirement for the Municipality budget process.

- There is no correlation between the *Public Law* field in the FM budget document and the *Budget Header* text field in SAP Grants Management. This lack of correlation could cause reporting issues.

- The unsuccessful test results from the workflow reject notification impede the overall success of the workflow process for FM.

- The workflow testing is critical due to the different levels of approvals necessary for the budget transfer scenarios.

- Unless the workflow queue is managed, it could create a backlog of documents that are waiting to be processed. With the number of workflow approvals required for budgeting, any backlog of processing would affect daily business operations.

Recommendation

- 3.34.1 Continue with the current approach for the approved budget process.

- 3.34.2 Determine the process for document scanning to ensure that the supplemental documentation can be scanned into SAP software and attached to the applicable budget-transfer and supplement documents.

- 3.34.3 Add the *Public Law* field to the grant budget document using a BAdI. In addition:
    - 3.34.3.a Ensure that guidelines are established for the information entered in the field, such as specific naming convention, spacing, and so on.
    - 3.34.3.b Explore the options to validate the information in the *Public Law* field in both FM and GM.
- 3.34.4 Revisit the workflow settings to confirm that the reject notification function is working properly, and retest the workflow accordingly.
- 3.34.5 Conduct additional testing of the workflow process for budget transfers and supplements to include both approval scenarios – crossing and not crossing availability control.
- 3.34.6 Designate an individual as the workflow administrator to be responsible for overseeing workflow processing.

3.35. FM Derivation Rules

Overall Risk: MEDIUM
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 3.35.1 The FM derivation strategy (FMDERIVE table) was reviewed and discussed. The FMDERIVE table has a total of 53 lines. The current table entries are considered final.
- 3.35.2 The Configuration Rationale document for FMDERIVE was reviewed. This document details the FM derivation tool from a configuration perspective and does not include the purpose for the creation of each specific rule.
- 3.35.3 Detailed knowledge transfer on FMDERIVE has not been conducted with the FM functional team members.
- 3.35.4 It has not been determined who will be responsible for updating and maintaining the FM derivation table. The team expressed concern regarding the level of expertise and knowledge necessary for this responsibility.
- 3.35.5 The budget analyst role in the Office of Management and Budget (OMB) will have access to transaction code FMDERIVER, which does not allow for customizing, only displaying certain entries.

- 3.35.6 When changes to the coding block are made in a financial transaction, the derivation rules are not invoked to incorporate the changes. The current resolution is to have the end user make manual corrections. During the interviews, the SI consulting resource conveyed that the system is performing as it should. Certain derivation rules are in place to accommodate business processes in PS in accordance with Municipality business requirements and will not accommodate certain changes.
    - **3.35.6 Response: Agree with Comment**
        - It performs as designed; however, the business requires further refinement of the rules.

Impact

- The lack of knowledge transfer of FMDERIVE will result in a lack of understanding of how to troubleshoot errors due to incorrect entries, incorrect postings, and so on. The lack will affect the testing in terms of how to understand any related test defects and results. The earlier that knowledge transfer takes place the more exposure the Municipality functional team will have on how the tool works to troubleshoot any issues.
- The manual corrections performed by the end user to update changes to the coding block are a part of knowledge transfer that must be completed. For the transactions to be processed correctly, it is important for the end users to be trained on when the must make coding block updates. It is also important for the end users to understand the necessary changes and when the FM derivation rules are invoked.
- Due to the complex table, only certain individual(s) should be designated to maintain the table going forward.
- Additional documentation with details of the purpose of each derivation rule will assist the responsible individual(s) in ongoing maintenance of FMDERIVE.

Recommendation

- 3.35.1 Conduct knowledge transfer with the designated Municipality team members on how the FM derivation transaction and function work to assist in the understanding of certain testing results.
- 3.35.2 Determine the individual(s) who will be responsible for the ongoing maintenance of the FMDERIVE table. Give this responsibility to an individual who has been involved in the Synergy implementation, as well as reasonable or average knowledge of SAP software (based on K-5 rate). In addition, ensure that the individual(s) possess(es):
    - 3.35.2.a Deep understanding of the Municipality business processes

  - 3.35.2.b Certain level of expertise in FM functionality
  - 3.35.2.c Understanding of integration points in other SAP functionality

- 3.35.3 Create additional transfer knowledge regarding the purpose of each derivation rule and how it should be maintained in the future.

- 3.35.4 Conduct a review of the transactions that currently require changes to the coding block. Also, review the impact of these changes in relation to invoking the FM derivation rules. Ensure that the process is documented as part of the training material for the end users

  - **3.35.4 Response: Accept with Comment**

    - We will review to identify the scenarios and document where it is applicable to derive and override. We will edit derivation rules as appropriate.

- 3.35.5 Execute testing to ensure that end users have a full understanding of the process when the coding block changes must be derived. Test the transactions that require changes. Retest the scenarios for the rederivation of objects once the scenarios have been fully determined.

3.36. Earmarked Funds

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 3.36.1 The business process flow for funds reservation was reviewed and discussed. The department Budget Coordinators will use this functionality to reserve budget for a specific purpose. They will have the functionality to view the original funds reservations document as well as display the consumption history.

- 3.36.2 The configuration for funds reservations has been completed and was reviewed.

- 3.36.3 The funds reservation functionality from an FM perspective has been tested successfully.

- 3.36.4 For the year-end close process, only funds reservations attached to a purchase order will be carried forward. A small subset of purchase orders with these criteria was tested.

  - **3.36.4 Response: Agree with Comment**

- Further business decisions will need to be made.

Impact

- The funds reservation functionality will assist the department budget coordinators in having the ability to view the consumption history, which will help to track the amount spent against the funds reservation and the available amount.
- The configuration for funds reservations has been completed and is in alignment with leading practices for this functionality.
- The carry-forward process incorporating funds reservations attached to purchase orders was tested with only a small subset of data. It is therefore unlikely that the test results will reflect the true business process accurately.

Recommendation

- 3.36.1 Continue with current approach for funds reservations.
- 3.36.2 Ensure that the department budget coordinators are properly trained on how the earmarked funds functionality works, including the features of the earmarked funds report to view the consumption record for a particular document.
- 3.36.3 Conduct additional testing to include a larger volume of purchase orders with funds reservations to be carried forward.

3.37. Carry-Forward Process

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 3.37.1 The configuration settings for the closing operations for FM have been completed, including:
  - 3.37.1.a The document type 9000 – YE Residual CF
  - 3.37.1.b Settings for Commitment Carry-Forward Process
  - 3.37.1.c Settings for Fund Balance Carry-Forward Process

- 3.37.2 Residual budget carry-forward is processed only for capital projects in accordance with Municipality business requirements.
- 3.37.3 The carry-forward process was tested for a small volume of funds.
- 3.37.4 Period-based encumbrance tracking (PBET) has been activated in FM to update at the invoice and posting date.
- 3.37.5 During the year-end close workshop, inconsistency regarding the rule of what purchase orders are carried forward was apparent.
- 3.37.6 During testing, purchase orders were carried forward to the same account assignment. Reassignment of the account assignment for residual budget carry-forward can occur, but a decision still must be made to confirm the Municipality business rules for reassignment.
- 3.37.7 Authorization groups for FM closing periods will not be used.
- 3.37.8 Testing for the handling of purchase orders in the SAP Supplier Relationship Management (SAP SRM) application for carry-forward processing has not been completed.
- 3.37.9 For the year-end close process, only funds reservations attached to a purchase order will be carried forward. A small subset of purchase orders with these criteria was tested.
    - **3.37.9 Response: Agree with Comment**
        - Further business decisions will need to be made.
- 3.37.10 Integration testing for year-end close process was conducted by the system integrator consultants. Municipality team members viewed the testing.
- 3.37.11 Issues with the data utilized for month-end close and year-end close testing are apparent and affected execution of the transactions during testing.
- 3.37.12 Currently, no FM year-end close process exists in the PeopleSoft system. Key business decisions must be made to determine how certain processes will be accommodated.
- 3.37.13 Responsibility for the closing operations in FM has not been determined.

Impact

- The configuration settings for FM closing operations have been completed and testing can be completed in accordance with these settings. Any changes to these settings may affect the testing of the FM functionality.

- The carry-forward process was not fully tested, and only a small subset of data was used. It is therefore unlikely that the test results will reflect the true business process accurately.

- Without the key business decisions being finalized, it will be difficult for the Municipality to proceed with testing the correct scenarios for the month- and year-end close processes. Unless the correct scenarios are not determined and tested, incorrect test results could result.

- The main feature of the business function for reassignment for public sector management – reassignment with new general ledger accounting is to perform the reassignment as part of a fiscal year change in FM. This approach offers greater flexibility and enables adjustment to the budgetary account assignments for fiscal year change.

- With no designated responsibility for the FM closing operations, an inconsistency will exist in the year-end close process for the Municipality. All areas must have a designated responsible party(ies) to test the execution of the closing process in the proper sequence. The lack of designated responsibility could cause the testing results for the overall closing process to be erroneous.

Recommendation

- 3.37.1 Conduct additional testing to include a larger volume of actual data to be carried forward.

- 3.37.2 Determine the rules and criteria for the purchasing documents that will be carried forward.

- 3.37.3 Activate business function for public sector management – reassignment with new general ledger accounting to allow for reassignment of the FM account assignments as part of the fiscal year change in both FM and general ledger.

- 3.37.4 Complete testing of the carry-forward and handling of the purchase orders in SAP SRM.

- 3.37.5 Determine the areas of responsibility for each portion of the year-end close process.

3.38. P-Card Process

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 3.38.1 Purchase cards (P-cards) are used throughout the city. The end user must go to the bank site to validate and code the charge. Based on approval, the P-card file is created and sent to Synergy for processing. The format of the file supports the journal voucher interface.

- 3.38.2 Reconciliation of the vendor P-card process on the bank site does not constitute final approval. The P-card reconciliation process was reviewed during the interview. End-user approval of the P-card in the bank system is not considered the final reconciliation step. The steps to reconcile the open items of the P-card statement in SAP software have not been defined. All users interviewed agreed that additional meetings are required to complete the business process.

- 3.38.3 A P-card file must be approved and paid within two business days to receive a discount. The discounts received by this process support a full-time position.

    - **3.38.3 Response: Disagree with Comment**

        - The discounts are not directly allocated to support a full time position.

- 3.38.4 A P-card process to reconcile the open items after payment needs to be developed and tested. The interface has been tested, but not the reconciliation.

- 3.38.5 Synergy staff needs knowledge transfer on the use of clearing transaction codes.

- 3.38.6 The staff is trained on how to process a P-card or payments and on how to use the bank system. The reconciliation of the P-card in SAP software needs additional design.

- 3.38.7 Exceptions are outlined in Municipality policy and procedures.

- 3.38.8 Supervisors approve the charges before processing.

- 3.38.9 Categories are set up to ensure that the type of transactions is correct. The bank that processes the P-card has categories that match the account assignment in SAP software. The categories help determine the funding source to ensure that the correct budget is checked.

- 3.38.10 If the input file fails due to cost objects, the file is rejected and corrected. The process for correction is defined.

    - **3.38.10 Response: Disagree with Comment**

        - "If the input file fails due to cost objects, the file is rejected and corrected." This statement is incorrect since the file is not rejected. According to our design, invalid cost objects are substituted to a dummy cost object through a substitution rule, allowing them to process.

- 3.38.11 The policy off using a P-card with contract vendors is being reviewed.

- 3.38.12 No reconciliation process has been defined.

Impact

- The design of reconciliation of the P-card interface process is incomplete and will keep open items from being cleared according to the policies currently in place.
- The use of a P-card against contract vendor will affect the contract spend reports since these purchases will not be record

Recommendation

- 3.38.1 Complete the design of the P-card clearing process. Additional design sessions will be required to outline:
    - 3.38.1.a New GL account
    - 3.38.1.b T-account mapping
    - 3.38.1.c Reports to open items
    - **3.38.1 Response: Accept with Comment**
        - We have a design, but we need to complete testing.
- 3.38.2 Develop a P-card reconciliation process.
- 3.38.3 Provide training to the Synergy team on open item–clearing transactions.
- 3.38.4 Review the business process when P-cards are used with contract vendors.

3.39. Electronic Bank Statement

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 3.39.1 All GL account mapping for banking is complete and tested.
- 3.39.2 The bank master for ACH payments is loaded through a customer interface. The process is manual and runs daily. The ACH bank masters are downloaded from the FEDACH Web site. The bank directory is uploaded into SAP software through a custom program that formats the record to meet the requirements of SAP software. The business process is performed manually. The design is

standard to keep the bank master current. The bank records are used by accounts payable and payroll for ACH direct deposits.

- **3.39.2 Response: Agree with Comment**

  - MoA is not using a custom program to import bank master data. MoA is importing bank master data from the federal website via the standard transaction code: BAUP.

- 3.39.3 Electronic bank statements (EBS) are loaded into the test system daily. Additional training is required to understand how to process errors and open items.

- 3.39.4 The checks process by payroll is causing a problem in the bank clearing. Message 0000358424 2014 was entered to find a resolution. The EBS cannot clear open HCM checks due to a process-design problem. SAP provided a recommendation that must be reviewed. The message is currently closed.

- 3.39.5 The state's check process has been tested and is working.

  - **3.39.5 Response: Agree with Comment**

    - The word "state's" needs to be changed to "MoA".

- 3.39.6 The outstanding check conversion process has been tested.

Impact

- The current design does not clear payroll checks, and bank statements are not reconciled correctly.

Recommendation

- 3.39.1 Review HCM integration with the EBS bank process. Review closed message 0000358424 2014 and determine the optimal solutions. Review the SAP Notes that have been applied to see if they have been transported through the landscape.

3.40. Cash Management

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 3.40.1 Cash management has been configured and transported to all systems.
- 3.40.2 Master data for the vendor master in the general ledger account, customer master, and materials management have been configured with cash management settings.
- 3.40.3 House bank accounts have been configured according to cash management groups.
- 3.40.4 Cash management has been taken out of scope, which stops the final configuration steps.
- 3.40.5 Cash management reports by fund have not been configured.

Impact

- Cash position and liquidity forecast reporting and defined requirements are not being realized.

Recommendation

- 3.40.1 The following tasks needs to be complete to implement the cash management application.
    - 3.40.1.a Final configuration
    - 3.40.1.b Development of test scripts
    - 3.40.1.c Knowledge transfer
    - 3.40.1.d Documentation of the business process
- 3.40.2 A consultant may need to be engaged to complete these tasks.

Document Guidance Regarding MoA Responses

- The MOA responded to “Findings” with one of the following designations and provided commentary where applicable:
    - Agree
    - Agree with Comment
    - Disagree
    - Disagree with Comment
    - Need More Information

- The MOA responded to “Recommendations” with one of the following designations and provided commentary where applicable:
    - Accept
    - Accept with Comment
    - Reject
    - Reject with Comment
    - Need More Information

Responses are inserted immediately following the relevant paragraph and shaded in light gray for emphasis.

If there is no response after a finding or recommendation, the response from the MoA is Agree or Accept.

4. LOGISTICS AND INVENTORY

4.1. LOGISTICS AND INVENTORY – SCORECARD

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
SAP Suppler Relationship Management (SAP SRM) – Landscape and Architecture	MEDIUM	MEDIUM	HIGH	MEDIUM
Organizational Structure	MEDIUM	HIGH	HIGH	HIGH
Master Data	HIGH	HIGH	HIGH	HIGH
SAP SRM – Shopping Cart and Workflow	MEDIUM	MEDIUM	LOW	LOW
SAP SRM – Purchase Order and Workflow	HIGH	HIGH	HIGH	HIGH
SAP SRM – RFx and Workflow	HIGH	HIGH	HIGH	HIGH
SAP SRM – Contract and Workflow	MEDIUM	MEDIUM	MEDIUM	LOW
Materials Management (MM) – Process Goods Receipt	LOW	MEDIUM	LOW	MEDIUM
MM – Process Goods Issue	LOW	MEDIUM	LOW	MEDIUM
MM – Cycle-Count Process	MEDIUM	MEDIUM	MEDIUM	MEDIUM
MM – Maintain Material Master	LOW	MEDIUM	LOW	LOW
SAP SRM – Account Assignment	MEDIUM	MEDIUM	LOW	LOW
SAP SRM – Supplier Registration	HIGH	HIGH	HIGH	HIGH

4.2. SAP Suppler Relationship Management (SAP SRM) – Landscape and Architecture

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: MEDIUM

Finding

- 4.2.1 No architectural design document exists.
- 4.2.2 Supplier registration and supplier self-service of the SAP Supplier Relationship Management (SAP SRM) application have been removed from the scope. A hosted third-party supplier registration application is used to capture vendor registration data. Integrating it with SAP SRM has not been designed.
- 4.2.3 No online supplier sourcing collaboration is considered.

Impact

- No architectural and technical principle can be followed without a design document. Difficulties will arise on scalability in the IT landscape and security to expand supplier collaboration functions.
- Supplier collaboration is missing, which adds extra workload and manual processes to the purchasing department. The current process is error-prone and difficult to audit.

Recommendation

- 4.2.1 Complete the architecture design. It shows different components of a software solution and their integration. Architecture design documents are technical principles to follow during and after the implementation. The documents also provide a foundation for an IT audit.
- 4.2.2 Add external access (supplier access) into the IT landscape based on the IT security policy to minimize scalability issues for supplier collaboration.

    - **4.2.2 Response: Accept with Comment**

        - MoA will evaluate.

4.3. Organizational Structure

Overall Risk: MEDIUM
Design Build Completeness Risk: HIGH

Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 4.3.1 No organizational design document exists.
- 4.3.2 The design of the purchasing group is based on the actual buyer. The leading practice is to use responsibility.
- 4.3.3 The organization plan of the SAP ERP Human Capital Management (SAP ERP HCM) solution is replicated, but the replicated structure is altered in SAP SRM by using staff-assign method to assign purchasing positions.
- 4.3.4 The replicated organizational structure of SAP ERP HCM was not used in the integration test cycle (ITC). A very simple one-node-level and manufactured organizational structure was used instead.
- 4.3.5 No test script for organizational structure synchronization between SAP ERP HCM and SAP SRM exists.
- 4.3.6 Very limited ITC tests have been performed in the organizational structure of SAP SRM.
- 4.3.7 No plan-driven procurement scenario is considered in scope for the project.

Impact

- Without an organizational structure design document, no concrete principle and steps can be followed during implementation, making it very difficult for provide support and maintenance after going live.
- Staff-assign replicated positions defeat the purpose of integrating the organizational structure of SAP ERP HCM and break the links between the two. It would cause constant IDoc exchange errors after going live and increase the effort needed for production support.
- Because tests are conducted only in a simple, one-node organizational unit, they do not reflect real integration scenarios between SAP ERP HCM and SAP SRM. This leads to the possibility that the functionality will not perform as expected in production following the go-live.
- Without adequate testing, the system behavior is unpredictable.
- The functions of fully integrated of SAP software are not utilized without a plan-driven scenario; end users must manually enter data twice in two systems, making the process prone to error.

Recommendation

- 4.3.1 Redesign the organizational structure in SAP SRM to utilize the replicated organizational structure of SAP ERP HCM fully.
    - **4.3.1 Response: Reject with Comment**
        - MoA is currently replicating org structure. MoA will continue to use the current design.
- 4.3.2 Simplify the virtual structure in SAP SRM to reduce the effort needed for production support and maintenance.
    - **4.3.2 Response: Reject with Comment**
        - MoA is currently replicating org structure. MoA will continue to use the current design.
- 4.3.3 Use purchaser assignment for any position assignment to the virtual structure of SAP SRM so that the replicated structure of SAP ERP HCM is not altered.
    - **4.3.3 Response: Reject with Comment**
        - MoA is currently replicating org structure. MoA will continue to use the current design.
- 4.3.4 Complete test scripts for integration and maintenance of SAP ERP HCM and SAP SRM.
- 4.3.5 Consider implementing plan-driven procurement.

4.4. Master Data

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 4.4.1 The vendor master data process is obsolete. A new process design is being created using a third-party application (SIP).

- 4.4.2 No data process for service master data has been designed, and service master data is intended to be used in procurement.

Impact

- No vendor master data process exists. The current design of the new process using third-party software is a concern, because no standard integration with SAP SRM is available.
- Maintenance of the service master may be done incorrectly.

Recommendation

- 4.4.1 Implement supplier registration of SAP SRM (ROS) and supplier self-service (SUS) functionality. The development of the interface between SIP and SAP SRM alone may cost more than an implementation of ROS and SUS, both of which are already available to the Municipality. ROS and SUS will remove significant workload from buyers who manually enter vendor data.
    - **4.4.1 Response: Accept with Comment**
        - MoA will evaluate.
- 4.4.2 Complete the service master data design document.

4.5. SAP SRM – Shopping Cart and Workflow

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 4.5.1 The overall design of the shopping cart process is simple and easy to follow for end users.
- 4.5.2 There are few deviations from standard functions in SAP SRM.
- 4.5.3 The process design document is incomplete.
    - **4.5.3 Response: Disagree with Comment**
        - MoA believes that the completed documents were provided to SAP.

- 4.5.4 The shopping cart functions are inadequately tested, and the same person wrote the test scripts and tested them.

Impact

- Overall, the shopping cart process is easy to follow.
- The lack of an accurate design process to follow may cause delayed solution for support after going live.
- Lack of sufficient testing can result in functionality errors in production following the go-live resulting in customer satisfaction issues, costs to fix the defects, or other problems.

Recommendation

- 4.5.1 Finish the business design document.
    - **4.5.1 Response: Accept with Comment**
        - Completed documents have been provided to SAP.
- 4.5.2 Conduct more thorough integration tests and involve more super users in the tests.

4.6. SAP SRM – Purchase Order and Workflow

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 4.6.1 The business process design document is incomplete, inconsistent and inaccurate.
- 4.6.2 No year-end process design in procurement exists.
- 4.6.3 The order-limit function can be easily exceeded in a shopping cart and in a purchase order. This is because the order-limit function considers only the limit against one line item in shopping cart.
- 4.6.4 PO functions are inadequately tested in ITC, a real organizational structure is not used, and concrete year-end steps are not tested. Test scripts are written tested by the same person.

- 4.6.5 Because of the design of the organizational structure, all ITC tests related to a PO are problematic since they do not reflect a real-life situation.
- 4.6.6 Approval thresholds are hard-coded in programs.
- 4.6.7 POs are designed to be converted in saved status. Buyers have to correct each of them and order them as a cut-over step.
- 4.6.8 The general ledger (GL) mapping is not maintained, and the GL is manually entered in a procurement document (PO and shopping cart).
- 4.6.9 The Municipality has indicated that an optional line for a purchase order was required and tested, but the necessary configuration for this function in the integration-test cycle (ITC) environment (QS1 200) has not been completed.
- 4.6.10 The Municipality has indicated that procurement for public sector (PPS) close-out for a purchase order was required and tested, but the necessary configuration for this function in ITC testing environment (QS1 200) has not been completed.

Impact

- Without a complete business process design document, end users have no documentation to follow and no principle to follow for production support. This can result in support delays and added support costs.
- No year-end processes can be followed. As a result, year-end activities cannot be conducted or are likely to be conducted with errors and take longer than needed.
- The order-limit function considers only the limit against one line item in shopping cart. End users can create multiple lines to bypass the contract order limit. The PO could be automatically approved without any stop even though the order exceeds the designated limits.
- Without proper tests, the application is unstable and unpredictable. This results in possible errors in production following the go-live.
- Hard-coding the approval limit in the program makes it difficult to change and test if approval limits were to change in the future.
- PO conversion as a cut-over step would require a lot of time for buyers to finish each converted PO and may cause a delay of the go-live.
- Because the GL is manually entered in SAP SRM, no limits or controls exist, making the GL very error-prone.

- Options function not configured and tested in ITC would result in an unstable application.
- The PPS close-out function not configured and tested in ITC would result unstable application.

Recommendation

- 4.6.1 Finish the business process design document.
- 4.6.2 Thoroughly test PO functions with more buyers.
- 4.6.3 Design a detailed year-end process with FI and fully test year-end process.
- 4.6.4 Correct the enhancement for order limits to prevent end users from circumventing the system.
- 4.6.5 Do not hard-code approval limits in the program. Maintain them in the TVARVC table.
- 4.6.6 Improve the PO conversion program to create a PO in an ordered status. Prioritize manual PO conversion steps to finish (manually) only the POs that must be in an ordered status before going live.
- 4.6.7 Maintain mappings of the GL account to the product category and account assignment category to avoid errors.
- 4.6.8 Complete options configuration in QS1 200, and fully test the function.
- 4.6.9 Complete PPS close-out configuration in QS1 200, and fully test the function.

4.7. SAP SRM – RFx and Workflow

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 4.7.1 The business process design document is incomplete, inconsistent and inaccurate.
- 4.7.2 No supplier access is available in the bidding engine.
- 4.7.3 Not all bid responses would be entered in the system by buyers.
- 4.7.4 The process is inadequately tested in ITC.

Impact

- No guidelines can be followed during configuration, testing, and production support without a complete business process design document. This leads to a solution that may not fully meet the defined requirements.
- The online supplier sourcing collaboration function is missing. This adds extra workload to buyers who must enter bids from vendors in the systems.
- Without entering all vendors' bid responses into the system, auditing becomes more difficult by having to compare online data and paper files.
- The system is less stable without adequately tested sourcing functions.

Recommendation

- 4.7.1 Complete the business design document.
    - **4.7.1 Response: Accept with Comment**
        - Completed documents have been provided to SAP.
- 4.7.2 Thoroughly test the sourcing function and involve more users in the test.
- 4.7.3 Add supplier access to the bidding engine to remove the extra workload from buyers, which also makes it easier to audit.

4.8. SAP SRM – Contract and Workflow

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: LOW

Finding

- 4.8.1 The business process design document is incomplete, inconsistent, and inaccurate.
    - **4.8.1 Response: Disagree with Comment**
        - MoA believes that the completed documents were provided to SAP.

- 4.8.2 The process is inadequately tested in ITC, such as product category item type, order limit function, and so on.
- 4.8.3 Requirements for contracts have been insufficiently defined in the original requirements for the Synergy project (that is, Attachment 1 – Finance Requirements Questionnaire of original RFP).
- 4.8.4 Only one contract type exists in the system, which is unusual.
- 4.8.5 Contracts are to be converted in saved status. Buyers have to correct each of them and release them as a cut-over step.

Impact

- An oversimplified business process design may affect the efficiency of how the Municipality manages contracts.
- One contract type may not be enough to handle Municipality contract management requirements. For example, a lease contract is desired to handle lease-related procurement.
- Without thorough testing, functions may not be as stable as expected. This can lead to errors in production which may include process delays, incorrect results, or additional workload.
- Saving converted contracts with a status of saved adds extra workload for buyers to process them and extends cut-over time.

Recommendation

- 4.8.1 Collect the concrete business requirements of contract management so that contract management function in SAP SRM can be efficiently utilized.
- 4.8.2 Complete the business process design document and fully test the application with more super users.
- 4.8.3 Improve the functional specification and program for contract conversions. It should create a converted contract with a status of Released. This will reduce extra work for the buyers and shorten the cut-over time.

4.9. Materials Management (MM) – Process Goods Receipt

Overall Risk: LOW
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 4.9.1 The return purchase order process is not implemented. However, this process is mentioned in the original blueprint document. No document explains how this feature was removed from the scope.

    - **4.9.1 Response: Agree with Comment**

        - MoA has solved the problem differently than planned. MoA will document the reason it was removed from scope.

- 4.9.2 The Municipality project team said that the return to vendor process will be performed by reversal of goods receipt document (movement type 102 in transaction code MIGO).

- 4.9.3 No decision has been made, designed, or implemented on the scanning solution and technology required for scanning packing slips and attaching them to a goods receipt document. The absence of progress in selecting a scanning solution was cited by functional leads of several other functional tracks.

- 4.9.4 Bar code enablement (bar code printing and scanning) of goods receipt transaction or goods movement transactions is not enabled. However, this function is identified as a requirement in the original RFP and RFP Response for the Synergy project.

- 4.9.5 The delivery tolerance will be set to zero in the solution.

Impact

- Reversal of goods receipt will not produce the documentation output and audit trail provided by the return purchase order process. Therefore, some offline work is needed to be able to send the vendor the documentation needed for returns process.

- Scanned attachments form the unstructured data in a business process. Without the attachments, only structured data will be captured in the business process. It is a leading practice to have completed the design and implementation of the scanning solution along with the ERP solution at the point of integration testing.

- Without bar code enablement, the warehouse staff will have to capture the receipt data on paper and copy it in a computer terminal running the SAPGUI or enter the data in SAP software directly while receiving goods. This approach may be error -prone and increases the workload for the warehouse staff.

- A zero delivery tolerance will increase the warehouse staff's workload when receipting low-value items. For instance, if a wheel of cable was ordered for a length of 5,000 ft. but 5,050 ft. was delivered by the vendor, the warehouse staff will not be able to receipt it in the software. The warehouse staff will have to completely return the item or update the purchase order line to enter the goods receipt.

Recommendation

- 4.9.1 Implement the standard return purchase order process.
    - **4.9.1 Response: Reject with Comment**
        - MoA has solved the problem differently than planned. MoA will document the reason it was removed from scope.

- 4.9.2 Select and implement a scanning solution as soon as possible. Identify all key documents or unstructured data necessary for the business process documents. Set up rules in the scanning solution for mandatory and optional documents.

- 4.9.3 Consider implementing a hand-held bar code device infrastructure. It could be done on a smaller scale for the ML&P plant now and scaled up for other plants.

- 4.9.4 Implement material group-based over-delivery and under-delivery tolerance. This approach will ensure that low-value items are treated differently and appropriately during the goods receipt process.

4.10. MM – Process Goods Issue

Overall Risk: LOW
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 4.10.1 Goods issue is performed as a single-step goods movement process.
    - **4.10.1 Response: Accept with Comment**

- MoA will document the reason why we did not implement a pick list.

- 4.10.2 Goods issue with pick list output is not implemented, even though it is identified as a requirement in the RFP and RFP response.

  - **4.10.1 Response: Accept with Comment**

    - MoA will document the reason why we did not implement a pick list.

Impact

- The inability to print a pick list during the goods issue transaction will mean that the warehouse staff has to perform the task manually.

- A hard copy of the pick list is a functionality required in the original RFP and RFP response.

Recommendation

- 4.10.1 Implement a pick list process to save work for the warehouse staff.

- 4.10.2 Consider an outbound delivery process for printing paperwork required for the picking, packing, and shipping of the items. It will be useful when the items are required to be sent to a project location further away.

4.11. MM – Cycle-Count Process

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 4.11.1 The municipality performs a weekly cycle-count process, where a material has to be counted at least once a year.

- 4.11.2 According to the Municipality design, the physical inventory adjustment document that captures the difference between actual stock count and inventory book count will be posted by the warehouse manager or warehouse staff. The finance department will not be involved for the ML&P warehouse.

- 4.11.3 No threshold or workflow is set up for the physical inventory adjustment document.

Impact

- Allowing the warehouse staff to post the physical inventory adjustment document does not conform to leading practice. It results in a segregation-of-duties violation. Leading practice requires a finance department overseer, such as the controller, to approve the inventory adjustment document before the posting of inventory adjustment.

Recommendation

- 4.11.1 Configure authorization groups that can post inventory adjustments beyond a certain threshold. The authorization group must be assigned to the approver from finance department, such as the controller.

4.12. MM – Maintain Material Master

Overall Risk: LOW
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 4.12.1 According to the Municipality design, SAP software is not the single book of record for material masters. ML&P warehouse inventory will maintain the material masters in SAP software.
- 4.12.2 For ML&P generations inventory, the material master records will be maintained dually in Maximo first and then in SAP software.
- 4.12.3 For AWWU warehouse inventory, material master records will be maintained dually in Maximo first and then in SAP software.
- 4.12.4 Fleet Focus M5 material master records will be keyed in SAP software as well.
- 4.12.5 The following material types are configured in the SAP solution with customized views:
    - 4.12.5.a NLAG (nonstock materials)
    - 4.12.5.b UNBW (nonvaluated materials)
    - 4.12.5.c HALB (semifinished products)
    - 4.12.5.d ERSA (spare parts)

- 4.12.5.e ROH (raw materials)
- 4.12.5.f HIBE (operating supplies)
- 4.12.5.g IBAU (maintenance assemblies)
- 4.12.5.h PIPE (pipeline materials)
- 4.12.5.i HAWA (trading goods)
- **4.12.5 Response: Agree with Comment**
  - MoA does not directly use standard material types. MoA created custom material types by copying the standard material type and customize the views. MoA does not use the above material types.

- 4.12.6 Per Municipality's Blueprint document, all materials not in scope of the above list will be configured using material type NLAG. The Municipality has copied the SAP standard material types and created custom types so the views and fields are customized.
- 4.12.7 The Municipality does not have an offline form that can be used to capture a material create or update request from various departments. The offline workflow process is not fully established starting from the initiator of the material request.
- 4.12.8 For the new materials which will be created in SAP software after going live, no duplicate check strategy is identified in the documentation.
  - **4.12.8 Response: Agree with Comment**
    - For AWWU, the check for duplicates will occur in Maximo.

Impact

- Since there are several systems serving as books of records for various material types, it is critical to establish a material request form and an offline workflow process. Failure to do so will result in communication and organizational change management challenges after going live.
- Unless the duplicate check strategy for the materials is identified before going live, a risk exists that data stewards create duplicates of the same material. This situation will result in data issues.

Recommendation

- 4.12.1 Establish a material request form and an offline workflow process. Include all actors or agents who will be involved in this workflow process, starting from initiators to the individuals who perform data entry.
- 4.12.2 Establish some duplicate check rules such as combinations of material groups and material short texts and other classifications.
    - **4.12.2 Response: Accept with Comment**
        - MoA will evaluate.

4.13. SAP SRM – Account Assignment

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 4.13.1 The overall design is standard and complete based on discussions in workshop sessions.
- 4.13.2 No account assignment design document describes how to use account assignment in procurement.
- 4.13.3 Unnecessary account assignment data is still displayed in edit mode in the shopping cart.
- 4.13.4 Tests in this area are inadequate. For example, only one simple local testing organizational unit in SAP SRM and not the integrated organizational structure of SAP ERP HCM was used in integration testing. Also only ~4–5 user IDs were used for the entire integration test.

Impact

- Unnecessary accounting assignment fields in the shopping cart may confuse end users, and may cause errors in edit mode.

Recommendation

- 4.13.1 Test the account assignment area more thoroughly.
- 4.13.2 Clean up the account assignment screen and remove or inactivate unnecessary fields.

4.14. SAP SRM – Supplier Registration

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 4.14.1 The current process flow is obsolete; a revised business process is still in design.
- 4.14.2 The new design direction is questionable; using a third-party application (SIP) to fulfill this function is more difficult that using the existing integrated application in SAP software.

Impact

- The business process has not been completed. It will affect testing, training, and production support.
- The revised design may cost more than ROS and SUS.

Recommendation

- 4.14.1 Re-examine the current approach, and consider implementing existing supplier registration functions in SAP SRM.
    - **4.14.1 Response: Accept with Comment**
        - MoA will evaluate.

Document Guidance Regarding MoA Responses

- The MOA responded to “Findings” with one of the following designations and provided commentary where applicable:
    - Agree
    - Agree with Comment
    - Disagree
    - Disagree with Comment
    - Need More Information

- The MOA responded to “Recommendations” with one of the following designations and provided commentary where applicable:
    - Accept
    - Accept with Comment
    - Reject
    - Reject with Comment
    - Need More Information

Responses are inserted immediately following the relevant paragraph and shaded in light gray for emphasis.

If there is no response after a finding or recommendation, the response from the MoA is Agree or Accept.

5. HUMAN CAPITAL MANAGEMENT (HCM)

5.1. HUMAN CAPITAL MANAGEMENT (HCM) – SCORECARD

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
Payroll – Manage Overpayments	HIGH	HIGH	HIGH	LOW
Payroll – Tax Processing	MEDIUM	MEDIUM	LOW	MEDIUM
Payroll – Reconciliation	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Process Payroll	HIGH	HIGH	HIGH	HIGH
Process Off-Cycle Payroll	MEDIUM	LOW	MEDIUM	LOW
Time Management	HIGH	HIGH	MEDIUM	HIGH
Enter or Correct Time	HIGH	HIGH	MEDIUM	HIGH
Evaluate Time	HIGH	HIGH	MEDIUM	HIGH
Payroll – Modify Employee Data	MEDIUM	MEDIUM	LOW	LOW
Time – Manage Quota	MEDIUM	MEDIUM	LOW	MEDIUM
Time – Create or Change Work Schedules	MEDIUM	MEDIUM	MEDIUM	MEDIUM
OM – Enterprise Structure Definition	HIGH	HIGH	HIGH	HIGH
General Process Design for Organizational Management and Personnel Administration	MEDIUM	MEDIUM	LOW	LOW

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
OM – Create and Maintain Organizational Unit	MEDIUM	MEDIUM	LOW	MEDIUM
OM – Create and Maintain Job	MEDIUM	MEDIUM	LOW	LOW
OM – Create and Maintain Position	HIGH	MEDIUM	HIGH	MEDIUM
OM – Create and Maintain Relationships	MEDIUM	MEDIUM	MEDIUM	MEDIUM
OM – Delimit Organizational Unit	MEDIUM	MEDIUM	LOW	MEDIUM
OM – Delimit Job	MEDIUM	MEDIUM	LOW	MEDIUM
OM – Delimit Position	MEDIUM	MEDIUM	LOW	MEDIUM
PA – Hire Employee	MEDIUM	MEDIUM	MEDIUM	MEDIUM
PA – Hire Unpaid	MEDIUM	MEDIUM	MEDIUM	MEDIUM
PA – Manage Employee No Show	MEDIUM	MEDIUM	LOW	MEDIUM
PA - Maintain Employee Information	MEDIUM	MEDIUM	LOW	MEDIUM
PA – Separate Employee	MEDIUM	MEDIUM	LOW	MEDIUM
PA – Changes Due to CBA, Compensation Changes, or CPI	MEDIUM	MEDIUM	MEDIUM	MEDIUM
PA – Manage Employee Transfer or Leave of Absence	LOW	LOW	LOW	LOW
Modify Benefits Plan	MEDIUM	LOW	MEDIUM	LOW

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
Benefits Billing – Reconciliation and Remittance	MEDIUM	MEDIUM	LOW	MEDIUM
Benefits Enrollment	MEDIUM	LOW	LOW	MEDIUM
Benefits – Life Changes	MEDIUM	LOW	LOW	MEDIUM
Benefits Termination	MEDIUM	LOW	LOW	MEDIUM

5.2. Payroll – Manage Overpayments

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: LOW

Finding (Misunderstanding of Current Overpayment Usage)

- 5.2.1 The configuration of overpayment functionality is misunderstood.

Impact

- Overpayment processing may be executed incorrectly if the current implementation is not understood.

Recommendation

- 5.2.1 Train the users in Central Payroll who will be responsible for processing overpayments on the current implementation of this functionality.

- 5.2.2 Update the current business process to incorporate how the overpayment functionality operates.

Finding (Opportunity to Test)

- 5.2.2 The current staff of the Central Payroll has not had the opportunity to test this functionality. Although previous resources felt comfortable with how this process would work in SAP software, the current staff does not have the knowledge or understanding of how to process an overpayment in SAP software. The business process is not detailed enough to assist in this understanding, and knowledge of the process resides with the consulting payroll lead, who is not on site, to assist in knowledge-transfer on how to process an overpayment in SAP software.

Impact

- Overpayment functionality may not execute as the Central Payroll expects or provide the business process benefit as expected.

Recommendation

- 5.2.3 Develop the integrated test script for overpayments further. Although the script identifies the step to clear the overpayment claim, the specific steps on how to do so are not documented in the business process flow.

- 5.2.4 Execute the test script once it has been modified to ensure that the process is understood and functions as expected.

Finding (Antiquated Overpayment Functionality)

- 5.2.3 Antiquated overpayment functionality in SAP software has been implemented.

Impact

- SAP may choose at some point in the future to change how overpayments are processed using the old methodology, which would force the Central Payroll to implement the new methodology.

Recommendation

- 5.2.5 Assess the new overpayment functionality for leading practices and fit with the business requirements of the Central Payroll to determine if it will satisfy the overpayment policy and procedures obligations to employees.

- 5.2.6 Investigate the business benefits of implementing new overpayment functionality. The process is stable (it was introduced over three years ago) and is used by many payroll users in the public sector.

Finding (Integration Test Incomplete)

- 5.2.4 Integration test scenario is incomplete (72%).

Impact

- Integrated test scenario may not pass the test, exposing a gap in configuration.

Recommendation

- 5.2.7 Complete the current test scenario to ensure that it finishes as expected.

Finding (Overall Business Process Documentation Incomplete)

- 5.2.5 Although SAP software will identify which employees are in an overpayment situation, how the Municipality of Anchorage will follow up in establishing repayment is unclear. Policies and procedures exist currently for PeopleSoft on how to reclaim overpayments, but it is unclear how the policies and procedures will change using SAP software. The current process is quite labor-intensive. Example: After the notification letter is mailed or submitted to an employee, how long will the Municipality of Anchorage wait for the employee to acknowledge the notification? Has there been a process identified if repayment, once received, rejects for some reason? These possibilities are not identified in the business process flow document.

Impact

- The business process flow will be inadequate for successful use if unless all required steps are identified, especially in the area where exceptions will occur during execution of the overpayment process.

Recommendation

- 5.2.8 Fully identify the business process of repayment, especially in the area of what to do if the repayment check bounces.

Finding (Clearing a Claim After Repayment)

- 5.2.6 Although SAP software will identify which employees are in an overpayment situation, how to record and clear a claim once repayment has been received is unclear.

Impact

- Employees who have claims against them for repayment will remain in an overpayment situation until the claim is cleared from their payroll results.

Recommendation

- 5.2.9 Further develop the test script for overpayments to include how to record a claim using InfoType 0267. Although the script identifies the step to clear the overpayment claim, no specific steps on how to do so are documented in the business process flow.

- 5.2.10 Execute the test script once it has been modified to ensure that the process is understood and functions as expected.

Finding (Converting Employees in Overpayment Situation at Cut-Over)

- 5.2.7 It is unknown how employees who are in an overpayment plan or situation at go-live will be converted using the overpayment business process.

Impact

- Employees who have claims against them for repayment will remain in an overpayment situation until the claim is cleared from their payroll results.

Recommendation

- 5.2.11 Identify all employees who are on overpayment plans in PeopleSoft.

- 5.2.12 Manually adjust (convert) these employees' claims in SAP software based on the adjusted business process flows on how to do this once all master data from PeopleSoft has been converted.

5.3. Payroll – Tax Processing

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding (Utilization of Tax Reporter for Regulatory Filings)

- 5.3.1 Central Payroll and Accounting have seen benefits in using Tax Reporter for automating filing and generation of W-2s and 941 quarterly reporting for Alaska and Washington.

Impact

- Positive.

Recommendation

- 5.3.1 Continue knowledge-transfer in using Tax Reporter.

Finding (Correcting a W-2 or 941 After the Filing Deadline)

- 5.3.2 Central Payroll does not know how to correct an already-submitted W-2 or 941 form.

Impact

- Central Payroll may incur penalties until the corrected W-2 or 941 quarterly tax forms have been filed.

Recommendation

- 5.3.2 Train Central Payroll staff on how to correct an already-submitted and filed W-2 and 941 quarterly tax form for Alaska and Washington.

Finding (Inconsistency About Testing)

- 5.3.3 During on-site interviews with Central Payroll staff, participants stated that Tax Reporter was tested, but no test scenario or script formally documents that it has been tested by end users.

Impact

- Not testing Tax Reporter in a formally documented test scenario means that tax reports may not be configured properly, thereby jeopardizing the ability of Central Payroll to execute and generate the required tax documents for its employees and the Municipality.

Recommendation

- 5.3.3 Build and execute a test scenario that tests that transaction code PU19 for Tax Reporter functions as it is configured.

- 5.3.4 Further document in detail how to execute transaction PU19 for business process flow PFD-HCM-PY-05 Tax Processing.

Finding (Knowledge of Payroll Reconciliation Report)

- 5.3.4 A lack of knowledge exists in Central Payroll on how to utilize the payroll reconciliation report, which could inhibit its ability to balance its employee commitments when producing W-2s and the 941 quarterly tax report for Alaska and Washington.

Impact

- Not testing Tax Reporter in a formally documented test scenario means that tax reports may not be configured properly, thereby jeopardizing the ability of Central Payroll to execute and generate the required tax documents for its employees and the Municipality.

Recommendation

- 5.3.5 Train MOA Central Payroll on how to use the payroll reconciliation report (transaction code PC00_M10_REC).

- 5.3.6 Further document in detail how to execute the Payroll Reconciliation report (transaction code PC00_M10_REC) for business process flow PFD-HCM-PY-05 Tax Processing.

Finding (Handling Tax Payments in Central Payroll and Accounting)

- 5.3.5 Although the business process flow identifies tax payments on behalf of employees, it is unclear how they will be made using Automated Clearing House (ACH).

Impact

- Unless users know how to create ACH payments, the regulatory deadlines for submitting the payments may be missed, possibly incurring penalties.

Recommendation

- 5.3.7 Develop an additional business process flow for creating the ACH request and subsequent steps to make tax payments.

- 5.3.8 Train the appropriate staff in Central Payroll and Accounting on how make the tax payments using ACH.

Finding (HR Process Workbench Unused)

- 5.3.6 The HR process workbench is not being used to streamline processing of payroll and most subsequent post-payroll steps.

- 5.3.7 The payroll consultants acknowledged that a decision was made initially to not use the HR process workbench until Central Payroll was comfortable with the end-to-end processing of running payroll and post-payroll programs. It is not always a leading practice initially to introduce the HR process workbench until customers become mature in operating their business using SAP software. But benefits arise when using this technology at the appropriate time and once users are comfortable with SAP software.

Impact

- Without a method for automating repeatable tasks, significant steps may be overlooked and cause errors or disruptions of procedures that might inhibit the ability to meet payroll deadlines.

Recommendation

- 5.3.9 Develop an assessment to see if utilizing the HR process will eliminate manual steps in running and processing regular or off-cycle payrolls including all post-payroll programs. If using this functionality will reduce complexity in follow-up procedures and give more time to the payroll staff to work on issues, implementing the HR process workbench is recommended.

Finding (Year-End Adjustment Workbench)

- 5.3.8 The year-end adjustment workbench has not been introduced to the Central Payroll staff, which indicates that no master test scenario or script has been identified to be able to adjust payroll results at year-end in anticipation of generating W-2s for the current year.

Impact

- Central Payroll may need to make year-to-date (YTD) adjustments when preparing and reconciling year-end reporting of an employee’s wage earnings in preparation for generating and printing W-2s.

Unless users are trained on how to make these adjustments, W-2s will be generated with incorrect tax earnings and deductions.

Recommendation

- 5.3.10 Develop a master test scenario and script to utilize the year-end adjustment workbench so that the Central Payroll staff understands how to adjust an employee's payroll results in the following conditions:
    - 5.3.10.a Perform retroactive adjustments to an employee's payroll results with a proposed end date of 12/31 of current year
    - 5.3.10.b Trigger special adjustment payroll runs
    - 5.3.10.c Correct previously made adjustments
    - 5.3.10.d Evaluate special adjustments already made

It is understood that in every case it is wise to avoid situations that need the year-end adjustment workbench, but there are conditions where using it is unavoidable. In preparation for addressing these conditions, it is only prudent to know how to correct payroll results before executing year-end processing in preparation for W-2 and quarterly tax filings.

5.4. Payroll – Reconciliation

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding (Good Delineation of Reporting Responsibilities; Segregation of Duties Observed)

- 5.4.1 Central Payroll, Benefits Administration, and Finance separate cross-functional tasks for reporting. They are identified on the business process flows in their respective roles.

Impact

- Positive.

Recommendation

- 5.4.1 Maintain this separation as appropriate across integration operations to ensure that the appropriate staff reviews and approves data originating from its area of control. This approach helps ensure data accuracy across functional areas.

Finding (Errors in the Reconciliation Process)

- 5.4.2 The business process flow for payroll reconciliation does not take into account any corrections if the reconciliation amounts being verified are out of balance.

Impact

- Central Payroll, Finance, HR, and Benefits Administration may not know how to correct data when an account is out of balance. The biweekly payroll schedule may be in jeopardy if users do not know how to correct master data or payroll results before checks and direct deposits can be made.

Recommendation

- 5.4.2 Redesign the process flow for payroll reconciliation to take into account what to do if payroll results and HR posting amounts are out of balance. This approach ensures that all roles across Payroll, HR, Finance, and Benefits Administration understand what they'll need to do if data must be corrected. Additionally, the business process must incorporate what to do when retroactive changes are necessary when payrolls have already been run and financial documents have already been posted. Have separate process flows for what to do in case retroactive adjustments are needed, especially at the end of the first year of the new SAP software.

Finding (Assessment of Reporting Requirements)

- 5.4.3 A separate miniproject is underway to determine the reporting requirements. It is not known how this assessment will affect already-developed critical reports such as union dues. The master list of RICEFW items includes only three custom reports for Payroll:
    - 5.4.3.a Boot locking user out of SAP R/3 system (PY-SPR-001-Boot locking user out of SAP R/3 System)
    - 5.4.3.b FICO Run live (PY-SPR-001-Payroll Labor Distribution Report)
    - 5.4.3.c Union Dues Reports – Print Monthly (PY-SPR-001-Union Dues Report – Monthly Print)

- 5.4.4 The following reports were demonstrated during the Q&A workshop:
    - 5.4.4.a Teamster dues report
    - 5.4.4.b AMEA dues report
    - 5.4.4.c Engineer dues report
    - 5.4.4.d IBEW dues and assessment report
    - 5.4.4.e Local 71 dues report
    - 5.4.4.f Plumber dues report
    - 5.4.4.g IBEW monthly report
- 5.4.5 Functional and technical specifications for the above reports are not stored in the SAP Solution Manager application management solution. As a result, they could not be verified against the business requirements to determine if any gaps exist.

Impact

- Additional cost in development and time to build new reports is wasteful unless these reports truly fail to meet business requirements.

Recommendation

- 5.4.3 Keep in mind that development of certain critical reports has already been completed. Reworking the existing reports, if deemed necessary as a result of the miniproject and unless they are defective, will result in duplicated development work effort and cost. Unless absolutely necessary, refrain from reworking reports that have already been developed and approved.
- 5.4.4 Assess whether the developed reports match the original business requirements, preferably by comparing the functional specifications to documented business requirements and process benefits.

Finding (Roles and Authorizations Not Tested)

- 5.4.6 Custom reports were unit-tested by the Payroll team by consulting resources, but not tested by payroll end users with assigned roles.

Impact

- Custom reports may not operate as expected once they are tested with the current security design in place. More work will be required to flush out why they aren't operating as expected, which might affect the project timeline.

Recommendation

- 5.4.5 Create users and assign roles to the users after the design of security and authorization roles has been completed. Log on to the system with those roles assigned and test each specific report and variant to determine if any gaps in data requests are built into the custom report. This determination is very important for payroll because the roles typically require broad and deep access to employee information, and the custom nature of the report may not allow such access.

5.5. Process Payroll

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding (High Level of Customization)

- 5.5.1 A large number of schemas and subschemas exist for the payroll driver to process (approximately 30). Although the payroll driver program has been built to be flexible in processing unique business requirements, it is unusual to have such a highly customized schema for the small number of employees within the Municipality of Anchorage. The solution design appears to have pushed much of the heavy lifting to the payroll driver, when the real processing of how time is calculated and determined for these employees should be achieved in the time evaluation driver. The passing of the number of hours coupled with generation of time wage types associated with the shift for the Kelly Firefighters, for instance, would assist in reducing the complexity of the payroll driver and eliminate the need for custom coding to determine how to pay these employees.
    - **5.5.1 Response: Agree with Comment**
        - MoA plans to reevaluate this design during documentation and configuration.
- 5.5.2 The payroll consultants acknowledged that time evaluation is passing overtime hours for the Kelly shift firefighters, but it is unclear why further processing couldn't have been done in time valuation to offset some of the heavy lifting in payroll.

Impact

- The likelihood is high that not all real-life scenarios have been captured to test the highly complex schemas and custom rules and program code. Parallel payroll could be compromised due to unnecessarily complex payroll driver processing if not enough integrated tests have been executed beforehand.

Recommendation

- 5.5.1 Retool the payroll and time-evaluation schemas to segregate how many hours a Kelly shift firefighter worked and pass those hours with generated time wage types to payroll for payment. The overtime rates and factors would be applied to those hours without too much complexity in payroll and would eliminate the need to run payroll twice in the course of the payroll cycle. It would also eliminate the need to flag when to run the second payroll for the Kelly firefighters.
    - **5.5.1 Response: Accept with Comment**
        - We will revisit to see if there is a possible change that needs to be made.
- 5.5.2 Simplify business processes, if possible, to reduce the risk associated with generating pay for union-based employees. Attempting to replicate a PeopleSoft practice in SAP software may introduce unnecessary complexity in payroll processing. The standard functionality to calculate pay for these employees is to utilize time evaluation to calculate the time-based wage types when appropriate, without undue processing in the time-evaluation and payroll drivers.
    - **5.5.2 Response: Accept with Comment**
        - We will review business process in this area to see what changes need to be made.

Finding (Wage Types)

- 5.5.3 During the payroll process workshop, it was discovered that approximately 2,000 wage types are currently configured for payroll, time, and benefits. Given that only 2,700 employees are involved, the need to consolidate these wage types is apparent to the Payroll team, but no change order has yet been approved for the consolidation to occur. Comments also indicated that the high number of wage types was really a carryover from PeopleSoft, without much thought to how the design in SAP software would be affected by duplicating the wage types.

Impact

- The likelihood is high that end users will select the incorrect wage types for deductions or payments and will need to correct past payrolls, causing more convoluted processing that may result in issuing

incorrect paychecks to employees, opening the Municipality to possible grievances and long-term litigation.

Recommendation

- 5.5.3 Move forward with the miniproject of consolidating the wage types, keeping in mind how they'll be used in payroll, time, and benefits. Consolidation will reduce the high likelihood of end users selecting the incorrect wage type and will reduce the possibility of retroactive accounting payroll runs due to errors.

Finding (Corrections and Reconciliation of Errors)

- 5.5.4 Although the payroll business process is more detailed than others, it lacks the steps to define what to do if errors are found during payroll execution.

Impact

- Central Payroll staff will not know how to correct master data to ensure that payroll will run successfully and on time.

Recommendation

- 5.5.4 Incorporate additional process steps on what to do if payroll errors are encountered during a payroll run. The steps include cataloging a list of possible payroll errors found during integration testing that could occur during a parallel payroll cycle. The list and building process steps on how to correct the errors will assist Central Payroll in meeting its obligations of getting payroll out on time.

- 5.5.5 Maintaining the list will also assist in building a possible known-differences list in preparation for running the parallel payroll cycles. Building the possible known-differences list can also incorporate some of the more painful and known limitations in PeopleSoft. Getting a jump on building the list will expedite parallel payroll cycles.

Finding (One Payroll Area)

- 5.5.5 One payroll area has been configured, which is appropriate for the number of employees.

Impact

- None.

Recommendation

- 5.5.6 None.

Finding (Prenotifications)

- 5.5.6 Prenotification of an employee's pay to the bank has been configured. It includes a custom program to assist in ensuring that the prenotification occurs before payroll is run. This step is no longer necessary, because an employee's bank routing number is validated on InfoType 0009 – Bank Details.

Impact

- Unnecessary processing may complicate Central Payroll's payroll procedures when it is not required in SAP software.

Recommendation

- 5.5.7 Eliminate this unnecessary processing step, given that it is no longer required.

Finding (Garnishments)

- 5.5.7 During the workshop for Payroll processing, it became clear that the payroll team didn't understand how garnishment processing is automated in SAP software. An understanding of how garnishments are handled, prioritized, and deducted in SAP software is lacking. Garnishments are perceived as not meeting the business requirement of automating the very labor-intensive process currently experienced by the payroll staff.

Impact

- The business value of automating garnishment activities in SAP software will not be realized. The perception could persist that SAP software can't relieve the payroll department of its manual burden of calculating deductions each pay period, which it currently does due to limitations in PeopleSoft. This situation would be unfortunate, given that SAP software handles garnishment requirements for all vendors.

Recommendation

- 5.5.8 Train and educate the payroll staff on how garnishments work in SAP software. Identifying every possible type of garnishable deduction and assess the priority of each deduction according to vendor levy agreements and laws. Additional configuration may be needed to automate more of this functionality in SAP software once more thorough integration testing is performed.

Finding (Integration and Parallel Payroll Testing)

- 5.5.8 Central Payroll staff was quite vocal about how little integration testing had been done and that the quality of the testing was suspect. After reviewing the 55 master integration test scenarios and

the 19 actual executed HCM integrated test scripts, it appears that not enough content is covered for all flavors of collective bargaining agreement requirements (9 total bargaining units) to exercise the level of customization included in the payroll driver.

- 5.5.9 Due to the number of issues preventing the team from moving out of Integration Testing cycle 1, Integration Testing cycle 2 was never started. As a result, parallel payroll cycles were deferred. Although the payroll consultants noted that parallel payrolls were executed under a previous integrator, the amount of redesign done after the parallel payrolls means that cycles and their results were unknown to the team and to SAP QA analysts. As a result, we are treating this previous work as though it was invalidated due to the amount of configuration change that has been done since.

- 5.5.10 Consultants were the primary testers for Integration Testing cycle 1, with some limited monitoring by the payroll team. The resources assigned to the payroll team for this oversight are no longer on the project, so that the only knowledgeable resources concerning what was tested are the consultants. The payroll consultant lead is not on site, thereby restricting any ability to educate, train, and teach the employee resources who have been assigned to pick up where the others have left off. The discontinuity has significantly undermined the confidence of the solution, given that Central Payroll staff is insufficiently knowledgeable to assist in learning effectively how payroll works in the current design. This situation is one of the biggest risks to success.

Impact

- Unless the application design is retooled, there is no guarantee exists that the team will ever move out of Integration Testing cycle 1, and consequently, never finish its portion of the project. Unless risks are mitigated and finance and logistics are removed from dependency on HCM and payroll, the whole project timeline is in jeopardy.

Recommendation

- 5.5.9 Reduce the complexity of time evaluation and payroll by retooling the design to eliminate many of the complexities preventing the team from moving forward. The reduction does imply reworking the master test scenarios and test scripts because the design solution would change. But the content and intent of testing the application for satisfaction of the business requirements still remains viable.

Finding (Payroll and Desktop Procedures)

- 5.5.11 The Central Payroll staff has numerous and very detailed procedures defining its tasks for a payroll cycle. The procedures will be instrumental in building an effective and accurate batch and program run-book of processes to be executed in a payroll cycle. This will be required to ensure all deadlines and obligations are met to ensure proper and accurate payments.

Impact

- None.

Recommendation

- 5.5.10 None.

Finding (FLSA Classification of Exempt Employees)

- 5.5.12 The Central Payroll and HR teams were quite vocal on how they have struggled to classify certain employees who are exempt but qualify for overtime (OT) – a late-breaking business requirement unknown to the Central Payroll team. What is at issue is the perception that SAP software can't handle this classification because of not having two fields to define these individuals. The identification of these employees in PeopleSoft has been difficult and this classification has caused data conversions to fail in SAP software. What is important to note is that the enterprise structure in SAP software may be improperly designed to accept these exempt but OT-eligible employees. The concept of two fields is irrelevant to this data structure design if the enterprise structure has been properly defined.

Impact

- The employees who are exempt but OT-eligible may not be converted properly unless a work-around is designed or the enterprise structure properly defined. Accordingly, they may not be properly evaluated in time evaluation or payroll, and their pay could be compromised.

Recommendation

- 5.5.11 Understand the new business requirement and see how it contradicts the current data structure definition. Since the current design cannot accommodate converting the employees who are classified as exempt but OT-eligible, a work-around might be needed to accommodate an inadequate data structure as a shortcut to getting around the issue. This situation can further complicate an already complex and unworkable design.

- 5.5.12 Retool the enterprise data structure to accommodate employees who are exempt but OT-eligible. This exercise is not trivial, and because it is the foundation of how employees are processed in payroll, a design change at this elemental level will cause downstream affects in all HCM components, especially time evaluation and payroll.

Finding (Renegotiation of Collective Bargaining Agreements)

- 5.5.13 Some of the nine collective bargaining units have renegotiated their contracts during the project. This situation has caused numerous rewrites of complicated processes, impacting the

design, testing, and interpretations of the contracts. A great deal of rework has been undertaken in time evaluation and payroll to accommodate these changes. The rework has affected the solution build and design to an extent that testing has slipped and project timelines have been affected.

Impact

- Retooling the solution design and build with the multiple bargaining-unit changes has caused discontinuity and complexity. It has also delayed testing and project timelines to accommodate the changes. This practice will continue unless a concerted effort is made to work with the bargaining units to gain their support of the project as it is in progress. This approach doesn't mean the contracts won't be renegotiated at a future date, but it does mean they could support the project for union members.

- Unless this adjustment and compromise is sought, the bargaining units that have not renegotiated their contract could be in line and expect to renegotiate them during the remainder of the project. Another set(s) of changes could further complicate an already complex solution design and build and further jeopardize ongoing work.

Recommendation

- 5.5.13 Garner support from the project's executive steering committee and labor relations to work with the nine bargaining units to delay any changes that can jeopardize the project. This approach doesn't mean that changes aren't allowed, but that they can be agreed to at a future date after the project has gone live, with a retroactive effectiveness. This process has worked well at other customers where collective bargaining agreements have a strong presence. It is in the best interest of the bargaining units to work with the Municipality to ensure that paychecks are correct.

Finding (Public Employees Retirement System – PERS)

- 5.5.14 Configuration in the payroll schema exists to handle PERS contributions as deductions from an employee's paycheck, with subsequent file export from SAP software to be imported into PERS. This process has not been fully tested, although an integration test script for this purpose is available. What has been tested is unclear, with numerous defects having been recorded. These defects have been worked, but confidence in this process is waning.

Impact

- Unless this interface report is fully exercised with validation and verification of the amounts being applied in PERS, an employee's contributions to their retirement accounts may have inaccurate amounts, resulting in a correction in PERS.

Recommendation

- 5.5.14 Test this process, interface, and report to ensure that PERS amounts are deducted accurately as contributions to PERS.

Finding (Calculation of Retiring Employees, Firefighters and Police Is Another Customization Not Fully Tested)

- 5.5.15 Configuration exists in the payroll driver to process retirees, particularly firefighters and police, which is another area of disagreement. It is unknown how much, if any, testing has occurred in this area. The business process is a bit convoluted in that the police, fire, and retirement medical trust gives beneficiaries the opportunity to purchase their insurance using a benefit from an endowment that fronts some money for the insurance. It was the understanding of the payroll team that benefits couldn't handle this and, as a consequence, payroll was asked to configure for this calculation.

    - **5.5.15 Response: Need More Information**

Impact

- Calculation of retirees' benefits for this retirement fund may be inadequate or inaccurate unless testing is performed.

Recommendation

- 5.5.15 Conduct a knowledge-transfer session from the payroll consultant to the payroll team to give the team some confidence and comfort that this process is working as expected.

- 5.5.16 Identify a master integrated test scenario to ensure that a test script is written to exercise this configuration.

Finding (Use of InfoType 0554)

- 5.5.16 InfoType 0554, Hourly Rate per Assignment, is typically used in situations within the public sector for employees who hold more than one position that has a different rate of pay concurrently with a second, third, or more assignments. The Municipality of Anchorage does not support concurrent positions for its employees. The use of this InfoType for another purpose, although it supports the intent of storing a different rate of pay for a period of time to support working out of class and acting pay, may conflict in the future if concurrent employment becomes a part of personnel policy.

Impact

- The impact is unknown until the Municipality opts to offer concurrent employment. At that time, an assessment of using this InfoType for that purpose would be needed to see how it may conflict with repurposing it for the current practice.

Recommendation

- 5.5.17 Note that as long as the Municipality intends to support only one position for each employee, repurposing the InfoType will support the process. But if the Municipality alters this approach, the InfoType may not work as expected. A further review of this process would be necessary to see how it will continue to work with concurrent employment, coupled with how to identify employees who work out of class and are eligible for acting pay.

Finding (Conversion of YTD Payroll Results)

- 5.5.17 Conversion programs for YTD payroll results have been written and tested for quarter-end processing. HR and Payroll have validated the extracts from PeopleSoft, but have not been exposed to validation of that data once loaded into SAP software, including the running the ULK9 payroll schema for populating the payroll results cluster with the converted PeopleSoft results.

Impact

- Unless Central Payroll and HR staff is exposed to how to validate the results of data conversion, a risk exists to go live without confirmation that the data conversion programs worked as expected.

Recommendation

- 5.5.18 Include an integrated test scenario that identifies how to validate the converted PeopleSoft payroll results for the HR and payroll teams to gain confidence in the data conversion process.

Finding (HR Financial Postings of Payroll)

- 5.5.18 A cross-walk exists that maps wage types to financial accounts in GL. It is currently maintained as a core maintenance document (based on Microsoft Excel).

- 5.5.19 Some limited unit testing has occurred, but due to the incomplete integration cycle one, more thorough testing has not been done between HR and financials (FI).

- 5.5.20 Not all wage types currently configured have been maintained in SAP software for HR financial postings, especially in the area of Kelly Firefighters and Tour trade donations and receipts.

Impact

- Unless the wage types are configured in the HR financial-posting configuration tables, the actual FI documents from HR will not post to the general ledger (GL) correctly; payroll results may not be in balance to generate the FI documents, and the GL will not reflect the actual financial commitments for labor correctly.

Recommendation

- 5.5.19 Continue maintaining the core mapping document for new wage types. Update the configuration for the HR financial posting of wage types in the area for Kelly Firefighters and Tour trade donations and receipts. If the Municipality goes forward with a reconciliation of wage types, the HR financial postings configuration would also need to be reconciled with the changes made to wage-type configuration.

- 5.5.20 Design and construct test scripts, including master test scenarios, that incorporates a full end-to-end test sequence of recording time worked and time off in the external time-collection systems, and transfer that data to SAP software as evaluated and processed through payroll. Include all additional post payroll processing steps to evaluate and generate the HR posting documents to FI. Continue execution of posting the documents to FI and evaluate the journal entries after posting completes. One of the test scripts must include a retroactive master data adjustment that would trigger a reallocation movement of pay results in the GL.

Finding (Monthly Payroll Accruals)

- 5.5.21 The current practice for identifying compensated absences to the non-SAP general ledger is based on a full accrual method, which is typically a problem for the Municipality. Currently, the Municipality is updating the monthly accrual method to be a modified accrual instead of a full accrual. Configuration is still outstanding in this area based on a decision to move forward with a modified accrual approach in 2015.

    - **5.5.21 Response: Reject with Comment**

        - MoA is not aware of any decision to move to just a modified accrual approach. MoA is currently using and has configured to use both a modified and full accrual approach.

Impact

- Unless configuration is started to realize the modified accrual method, estimating labor expense for compensated leave will not be posted to the GL.

Recommendation

- 5.5.21 Continue with the decision to move to a modified accrual approach in SAP software with the corresponding configuration to support this decision.

5.6. Process Off-Cycle Payroll

Overall Risk: MEDIUM
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: LOW

Finding (Severance Payments)

- 5.6.1 Central payroll staff discussed the need for capturing severance payments using the off-cycle workbench. It is unclear if the workbench has been configured to handle severance payments. Complexities also exist if crossing year-end for processing these payments, in that business requirements exist around extending benefits at the beginning of the next month after the severance has been issued.

Impact

- Unless the off-cycle workbench is used, these payments would need to be made through accounts payables with manual adjustments on InfoType 0221 to account for the earnings, tax deductions, and other deductions as expected.

Recommendation

- 5.6.1 Use the off-cycle workbench to handle these payments. It will help Central Payroll automate the payment of packages that occur infrequently.

Finding (Advance Payments, Involuntary Terminations, Reversals, and Replacements)

- 5.6.2 Central Payroll staff is obligated to issue advanced payments at the employee's request if an employee is not on direct deposit and will be on leave on the scheduled payday. Central Payroll staff is unsure of how to use the off-cycle workbench to process these payments.

- 5.6.3 Central Payroll staff is obligated to pay employees who have been involuntarily terminated with the off-cycle workbench. The staff is unclear about how to do so.

- 5.6.4 Central Payroll staff has not been exposed to how to reverse an incorrect pay result and does not know how to replace a paycheck that has been lost for any reason. The staff is unclear about how to do so.

Impact

- When situations occur in which Central Payroll needs to process advanced payments, pay involuntarily terminated employees their last paycheck, or reverse or replace payroll results, the staff will be unable to perform the tasks without a proper understanding of how to use the off-cycle workbench.

Recommendation

- 5.6.2 Train and educate Central Payroll staff on how to use the off-cycle workbench to process advanced payments, perform payroll results reversals, payment replacements, and bonus payments

5.7. Time Management

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: HIGH

Finding

- 5.7.1 The Time Management team consists of one Municipality employee (who is also a member of the Payroll team) and one consultant who was added to the project about three months ago.

- 5.7.2 The implementation team is unstable. Most decisions were made by team members and consultants who are no longer on the project. Knowledge transfer at the time of transition was minimal or nonexistent.

- 5.7.3 No central payroll employees are currently on the implementation team. No super users are being utilized for testing or review.

- 5.7.4 Project information is not disseminated to Municipality super users or any other personnel outside of the implementation team, and no advice and agreement with report design or configuration decisions is provided.

Impact

- The current Time Management team is short-handed and staffed by people who had little if anything to do with the decisions made and configuration completed so far in the project. There has been little to no knowledge transfer from the previous team members. This situation makes progress difficult. If the team doesn't even know where the project is, it is difficult to plan and proceed to the end goal.

- Not keeping Municipality super users or any other personnel outside of the implementation team involved in the project may lead to user rejection of the system, the discovery of new requirements, or a failure to meet user needs. These may be discovered late in the implementation process or after going live leading to project delays or production errors.

Recommendation

- 5.7.1 Add at least one additional Municipality employee to the Payroll and Time Management implementation team.

- 5.7.2 Provide training on SAP software for team members in their area of responsibility.

- 5.7.3 Involve Municipality super users in integration and parallel testing. Get Municipality super user sign-off on report design and functionality.

- 5.7.4 Issue a periodic e-mail (every two weeks) updating the users on progress and highlighting system improvements and features. This information will help build project acceptance and ownership. The intent is that Municipality project team members, super users, and, eventually, employees view the system as their own.

Finding

- 5.7.5 Upgrade and support packs from SAP, which are required before going live, will invalidate integration testing.

- 5.7.6 External timekeeping system(s), such as MOA Kronos, MLP Kronos, Work Tech Time, and TeleStaff, must be upgraded to interface with new functions in SAP software.

Impact

- Applications of upgrades and support packages are implementations of modifications to standard SAP software. Sometimes these changes will modify the functionality configured in the SAP software. Implementing the changes after integration testing may invalidate some of the test results.

Recommendation

- 5.7.5 Develop and document a process for testing and implementing upgrades and support packages from SAP. This should be an ongoing process after going live.

- 5.7.6 Bring upgrades and support packages up to date as soon as possible. Now is a good time – while testing is on hold for configuration updates.

- 5.7.7 Bring required external system upgrades to MOA Kronos, MLP Kronos, Work Tech Time, and TeleStaff up to date as soon as possible.

- 5.7.8 Restart integration testing from the beginning to incorporate all applied upgrades and support packs.

Finding

- 5.7.7 Detailed configuration requirement documents do not exist.

- 5.7.8 Detailed configuration documentation for configuration done does not exist.

- 5.7.9 Business process flows are still being developed and changed. Business process flows are **replacing** the blueprint. (Note: The word “replacing” is used in this finding rather than “replaced” because the business process flows had not been completed at the time of the Review. As the first sentence states, some were still being written. Therefore, the business process flows are in the process of replacing the blueprint. The distinction is important because it shows that the blueprint is not complete or signed off, but that the project nevertheless has begun integration testing. No proper methodology is being followed.

Impact

- It is impossible to determine if time management was configured to meet the requirements of the Municipality because what was supposed to be done or what was done is not documented. This situation will lengthen time required for maintenance and error-correction and make it difficult to be sure that modifications do not affect other areas of configuration.

- The business process flows do not provide the detail necessary for the project team to configure or determine if configuration is complete to Municipality specifications.

Recommendation

- 5.7.9 Develop detailed configuration documentation. The system must be documented as currently configured, and the documentation must be maintained with all future modifications and additions to configuration.

- 5.7.10 Review configuration documentation when it is complete for understandability and for content, identifying for special testing any areas of configuration that might not meet Municipality requirements.

Finding

- 5.7.10 No concise integration test plan exists.

- 5.7.11 The time management system is not being completely tested in a logical manner.
- 5.7.12 Integration test one (ITC1) was written and executed by the integration partner consultants. This approach was due in part to a lack of available Municipality resources to complete the process.
- 5.7.13 Configuration is still in process. Some configuration decisions have yet to be made. New requirements are still being presented.

Impact

- Integration testing will not test the configured functionality properly and completely. This opens the door to additional errors in parallel testing and even after going live.

Recommendation

- 5.7.11 Develop a comprehensive integration-test plan. Integration testing should be an end-to-end test of Municipality business practices, including all significant variations, tested sequentially.
- 5.7.12 Develop integration-test scripts to support the end-to-end integration test plan. Test scripts should flow from start to finish of the SAP ERP Human Capital Management (SAP ERP HCM) solution, working in concert with each other to test all vital functionality and as many variations as possible.
    - 5.7.12.a Have Municipality team members write integration-test scripts. Supervision, consultation, and review should be provided by implementation consultants. Municipality management should sign-off before integration testing.
    - 5.7.12.b Ensure that integration test scripts are written with future regression testing use in mind. The same scripts should be used in each phase of integration testing and saved for future use to test upgrades and support packages.
- 5.7.13 Have Municipality team members execute integration test scripts with supervision, consultation, and review by implementation consultants. Successful completion of individual tests should be signed off by the Municipality employee. Successful completion of integration testing should be signed off on by Municipality project management.
- 5.7.14 Integration testing should not start until configuration is complete and signed off on by Municipality project management.

5.8. Enter or Correct Time

Overall Risk: HIGH
Design Build Completeness Risk: HIGH

Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: HIGH

Finding

- 5.8.1 Four different subsystems exist to collect time entry: MOA Kronos, MLP Kronos, Work Tech Time, and TeleStaff. TeleStaff will interface to Kronos. The other three will interface to table CATSDB in SAP software.

- 5.8.2 Interfaces of employee master data related to time collection will be required from SAP software (at least daily) to keep each time collection subsystem's employee data up to date.

- 5.8.3 Interfaces of organization structure data will be required from SAP (at least daily) to keep each time entry collection subsystem's organization structure up to date for supervisor time approvals.

- 5.8.4 Interfaces of quota balance-data will be required from SAP software (after quotas are accrued) to keep each time entry collection subsystem's leave-quota balances up to date for absence entry and processing.

Impact

- Multiple time-entry systems require significantly increased time and effort for system maintenance. Multiple interfaces result in troubleshooting and maintenance complexity, leading to multiple points of failure.

Recommendation

- 5.8.1 Condense the multiple time-entry systems to a single system. This will provide a single point of entry to support all employees. Troubleshooting, maintenance and, interfaces will be minimized reducing future costs and errors.

Finding

- 5.8.5 A separate set of absence and attendance codes is configured for each union to use in its employees' time entry.

- 5.8.6 The Municipality has configured 1,350 absence and attendance codes. Not all codes have been unit-tested in the system. Not all codes are included in integration testing.

- 5.8.7 An interface of attendance and absence codes will be required from SAP software (probably monthly) to keep each time collection subsystem's foundational data up to date.

    - **5.8.7 Response: Agree with Comment**

- MoA is evaluating the best solution.

- 5.8.8 All absence and attendance codes in SAP software are currently configured in the same groupings, so they are available for all employees. It is undecided if they need to be grouped to separate them by union as well.

Impact

- By the end of the process, every code is translated into a wage type that is used in calculating the employee's pay. The large catalog of absence and attendance codes requires significant configuration and testing to be sure that pay is ultimately calculated correctly.

Recommendation

- 5.8.2 Unit-test each of the configured absence and attendance codes to be sure it is evaluated properly and that it produces the correct wage type for payroll.

- 5.8.3 Ensure that integration-test scripts include as many of the absence and attendance codes as possible.

- 5.8.4 Separate the absence and attendance codes in SAP software into groupings to support the limitations on code usage for each union and the interface that keeps the timekeeping systems up to date on usage restrictions.

Finding

- 5.8.9 For parallel testing, the test plan calls for two methods of time input into the parallel testing environment with SAP software.

    - 5.8.9.a For the timekeeping set of employees, Municipality staff will enter time for the approximate 300 employees directly into Kronos or WTT.

    - 5.8.9.b For the nontimekeeping set of employees, the project technical team will translate the PeopleSoft time results to the related cost objects in SAP software, utilizing the available cross-walks, and create a file that can be processed by the time interface.

Impact

- For the nontimekeeping set of employees, translating the time results from PeopleSoft bypasses the true source of the time data being provided to SAP software when SAP ERP HCM goes live. This process limits the majority of the parallel test to a payroll test and does not test the entire process.

Recommendation

- 5.8.5 The best practice for testing is to perform a beginning-to-end test of the entire payroll. The reason given by the project for not performing this test is a lack of personnel to enter the time in the external time-collection systems.
    - 5.8.5.a Use as many super users of SAP ERP HCM as are available to enter time in their staff's external timekeeping system. This approach will provide additional hands, and just as important, provide a training opportunity for the super users to become familiar with the new payroll process.
    - 5.8.5.b Devise a way to collect preevaluated time-clock entries in the external timekeeping systems if there are still not enough personnel as suggested above. Load the time punches into the parallel test systems so that testers can perform evaluations and create the results, pushing them to SAP software. This will help to replicate a live payroll.

5.9. Evaluate Time

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: HIGH

Finding

- 5.9.1 Time evaluation will be split between the two Kronos time-collection systems and SAP software. SAP software will evaluate call-back functionality, some Kelly shift-overtime functionality, and quota accrual functionality and create wage types for payroll processing. Kronos will do the rest (overtime, holiday, Kelly shift, 9/80 processing, and so on).
- 5.9.2 TeleStaff will interface time entries to Kronos for evaluation.
- 5.9.3 Work Tech Time will not be evaluated by the external timekeeping systems. Instead, time will be entered manually pre-evaluated.
- 5.9.4 External time systems will interface evaluated time to table CATSDB using absence and attendance codes in SAP software to identify the hours.
- 5.9.5 Kronos time results are currently manipulated before manual entry into PeopleSoft (payroll specialists interpret contracts in a manner that differs from the results generated by Kronos). This data will be fed automatically into SAP software.

  - 5.9.5.a Kronos results are currently printed and entered into PeopleSoft for processing. This approach allows payroll specialists to manipulate the Kronos data to ensure that employees are paid properly. When the SAP software is implemented, the Kronos results will be interfaced directly into the CATS database in SAP software, transferred to the time infotypes in SAP software, further evaluated by time evaluation, and processed by payroll in SAP software.

- 5.9.6 Municipality staffing is inadequate to make the necessary corrections in Kronos.

- 5.9.7 Municipality team members are unsure that the external timekeeping systems were updated with the new and changed requirements from the most recent union contracts.

  - 5.9.7.a This item refers to the Kronos production timekeeping system, and, by extension the Kronos system(s) being used to test the new SAP solution. Because it is necessary to manipulate the Kronos results before processing them in PeopleSoft, something in the Kronos production system has not been updated. The Municipality team is unsure which union contract changes have been updated and which have not been updated.

- 5.9.8 Time evaluation is being configured with a series of data validations to try to catch bad data from Kronos.

Impact

- Pay results will be different between the SAP software and legacy systems in parallel testing. In the best-case scenario, the manipulations to the Kronos results will cause known differences in the test. In the worst-case scenario, differences may not be understood and the impact not uncovered until after go-live.

- Potentially, there will be differences in the employee's live payrolls leading to possible grievances and poor user satisfaction with the new payroll system.

Recommendation

- 5.9.1 Implement a solution using Kronos (or another vendor's) time clocks to collect time punches (interfaced to infotype 2011), cross-application time sheet (CATS) to collect exceptions, time evaluation to evaluate time, and payroll to pay the employees. This architecture offers many advantages:

  - 5.9.1.a The process provides ease of use, ease of maintenance, continuity of solution, and a single source of processing for each task in the process.

  - 5.9.1.b Time evaluation occurs in one system for all employees, replacing two Kronos evaluations and manual evaluation prior to entry for Work Tech Time.

- 5.9.1.c The Municipality is purchasing and implementing an integrated human resources system and not using powerful software that is a key part of the functionality. Instead, complexity is being added by using multiple external time-evaluation systems requiring multiple interfaces to maintain data and transfer results.
- 5.9.1.d The IT group runs small and light. By utilizing the capabilities of the integrated SAP software, the technical expertise required to support the system will be reduced as multiple interfaces and multiple systems of time evaluation will be eliminated.
- 5.9.1.e By eliminating multiple interfaces and multiple systems of record, the payroll process will be smoother and simpler for the users to execute.
- **5.9.1 Response: Accept with Comment**
  - MoA is evaluating how to best implement this recommendation. This applies to all of the above sub bullets.

- 5.9.2 Note that if the Municipality does not implement the time-evaluation recommendation above, effort must be invested to correct errors and bring Kronos time evaluation up to date to eliminate the need for payroll specialists manipulating results prior to entry into PeopleSoft. The only way for an accurate parallel test and ultimately an accurate payroll is to process time results from the time-evaluation system untouched.
- 5.9.3 Acceptance of this recommendation replaces previous recommendations related to a multisystem time entry and time evaluation solution.

Finding

- 5.9.9 Unit-testing of all absence and attendance evaluation is incomplete.
- 5.9.10 Integration testing does not test the full slate of absence and attendance evaluations used in a full life cycle.

Impact

- Some absence and attendance codes will enter parallel testing and possibly go live untested. This creates a significant risk of improper evaluation, code translation, and wage-type creation.

Recommendation

- 5.9.4 Unit-test each one of the configured absence and attendance codes to be sure it is evaluated properly and that it produces the correct wage type for payroll.

- 5.9.5 Ensure that integration-test scripts include as many of the absence and attendance codes as possible to be sure all codes are evaluated properly, translate to the correct code in SAP software, and produce the correct wage type.

5.10. Payroll – Modify Employee Data

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding (Data Validations for Conversions)

- 5.10.1 Both the Central Payroll and HR teams noted that the data exported from PeopleSoft was validated but was inconsistent in SAP software.

    - **5.10.1 Response: Disagree with Comment**

        - There are discrepancies between PeopleSoft and SAP, but the data are internally consistent within SAP.

Impact

- Unless the consistency of the data is assured, the defective data conversion routines won't be known until payroll runs, when it will too late to correct them.

Recommendation

- 5.10.1 Ensure that both teams are given ample enough time to validate data from PeopleSoft and validate what has been converted in SAP software. Offer proper instruction on what to look for and how to validate in SAP software to ensure that data is accurate after conversion tasks have completed. Continue the practice of providing data conversion cross-walks and translation tables to assist in this effort.

Finding (History Conversion)

- 5.10.2 No history will be converted from PeopleSoft to SAP software.

Impact

- This approach will reduce the amount of data conversion complexity and also eliminate extra configuration to account for a historical trail of transactions coming from PeopleSoft. It is considered the leading practice for data conversions.

Recommendation

- 5.10.2 Continue with this approach.

Finding (Direct Deposit Conversion)

- 5.10.3 The technical team had issues when converting direct deposit information from PeopleSoft into SAP software.

Impact

- Unless the issues are corrected, the employee's bank information will be incorrect and payments will need to be corrected once InfoType 0009 Bank details is updated with the correct information.

Recommendation

- 5.10.3 Identify what the issues were in converting this data. Adjust program to account for the differences or defects in converting and retest the conversion into SAP software.

Finding (Direct Deposit in ESS)

- 5.10.4 The technical team had included an enhancement to ensure that the effective change made by an employee in employee self-service (ESS) for direct deposit becomes effective at the start of the next pay period, so that the current payment is not jeopardized in payroll. This enhancement is outdated and is accounted for in a later enhancement pack.

Impact

- None.

Recommendation

- 5.10.4 Remove the enhancement after the upgrade to SAP enhancement package (EHP) 7 is complete.

5.11. Time – Manage Quota

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 5.11.1 Quota balances are accrued in the schema from SAP. This area is one of the “big five” that caused integration testing to cease. Reconfiguration based on the updated requirements is in process.

- 5.11.2 Minimum and maximum processing of quota balances is also being performed in the schema from SAP. This area is one of the “big five” that caused integration testing to cease. Reconfiguration based on the updated requirements is in process.

- 5.11.3 At year-end, the legacy system migration workbench (LSMW) will mass load to infotype 2012 adjustments for up to 80 hours over the maximum leave balance to be converted to cashable sick leave.

- 5.11.4 Anything more than 80 hours over maximum would be paid out using wage types to payroll.

- 5.11.5 Quota balances will be interfaced from SAP software to the external timekeeping system after accruals occur at the end of each pay period.

- 5.11.6 Timekeepers can make adjustments in the external timekeeping systems for leave donations. The adjustments are necessary after SAP software is updated with the leave donation but before the interface runs to update leave accruals at the end of each pay period.

Impact

- Once complete, configuration to the new requirements will accrue and maintain quota balances for the Municipality system.

Recommendation

- 5.11.1 Start integration testing cycle one at the beginning, only after the configuration is completed, previously identified defects are corrected and signed off, and the new solution is fully unit-tested.

- 5.11.2 Document new requirements and new configuration thoroughly and obtain sign-off from Municipality project management.

Finding

- 5.11.7 Each union has a leave bank. Balances are maintained on spreadsheets. Donations and withdrawals are processed using standard quota-balance adjustment functionality in SAP software.
- 5.11.8 Donations to individuals in need are supported by standard quota balance-adjustment functionality in SAP software. Individual donations are transferred on an as-needed basis. A donation list is maintained on a spreadsheet.
- 5.11.9 Some unions have mandatory donations to the leave bank.
- 5.11.10 Any taxation of donations or withdrawals is handled with wage types sent to payroll.

Impact

- Union leave banks and donations to individuals are maintained using a simple, although somewhat manual, process.

Recommendation

- 5.11.3 Configure mandatory donations in the time-evaluation schema.
- 5.11.4 Document the leave bank process thoroughly and sign-off by Municipality project management.

5.12. Time – Create or Change Work Schedules

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 5.12.1 More work schedules are set up on SAP software and on Kronos than the number of employees being paid.
- 5.12.2 Employees change work schedules frequently. Changes are from one day to a period of time.
- 5.12.3 No decision has been made on the accuracy of work schedules that is required in SAP software. The choice is between matching the Kronos system one-to-one or using generic work schedules.

- 5.12.4 The only reason for specific work schedules is to support time-evaluation requirements. No evaluation is performed in SAP software that requires specific work schedules.

- 5.12.5 Interfacing time results from Kronos time evaluation does not contain start and stop times, so exact times in work schedules are meaningless.

- 5.12.6 Work schedule management in manager self-service will require accurate work schedules, which is not likely with the current process.

Impact

- Work schedules must be accurate in Kronos due to the obligations of collective bargaining agreements. The maintenance effort is at least doubled if the same accuracy is required in SAP software.

Recommendation

- 5.12.1 Set up generic work schedules based on the number of hours worked in a day in the SAP software. There is not sufficient benefit for all of the maintenance required for accurate work schedules. A form should be developed to use when requesting a work schedule change in the Kronos system. Work schedule changes in SAP software will be rare, but if necessary, can also be requested by a form. Modify the business process flow document to identify the process using generic work schedules based on the number of hours worked in a day in the SAP software.

5.13. OM – Enterprise Structure Definition

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 5.13.1 During creation of the enterprise structure, the Employee Relations (ER) team did not have baseline knowledge of the SAP ERP Human Capital Management (SAP ERP HCM) solution. Additionally, the ER team received improper guidance, which resulted ineffective configuration of the definitions of the enterprise personnel area (PA), personnel subarea (PSA), employee group (EG) and employee subgroup (ESG).

- 5.13.2 The Municipality defined the PA to resemble the organizational reporting structure, not a unique entity within personnel administration. The PA consists of department, division, section, and

unit, which resulted in the need to build rational or smart coding of the four-character PA codes to segregate the department, division, section, and the unit.

- 5.13.2.a The PA code that represents the department is formatted with an alphabetic character or single numeric value followed by three zeroes. For example X000 = Solid Waste, 1000 = Internal Audit, and so on.
- 5.13.2.b The PA code that represents division is formatted with an initial department character followed by a three-digit numeric value. For example, X001 = Administration.

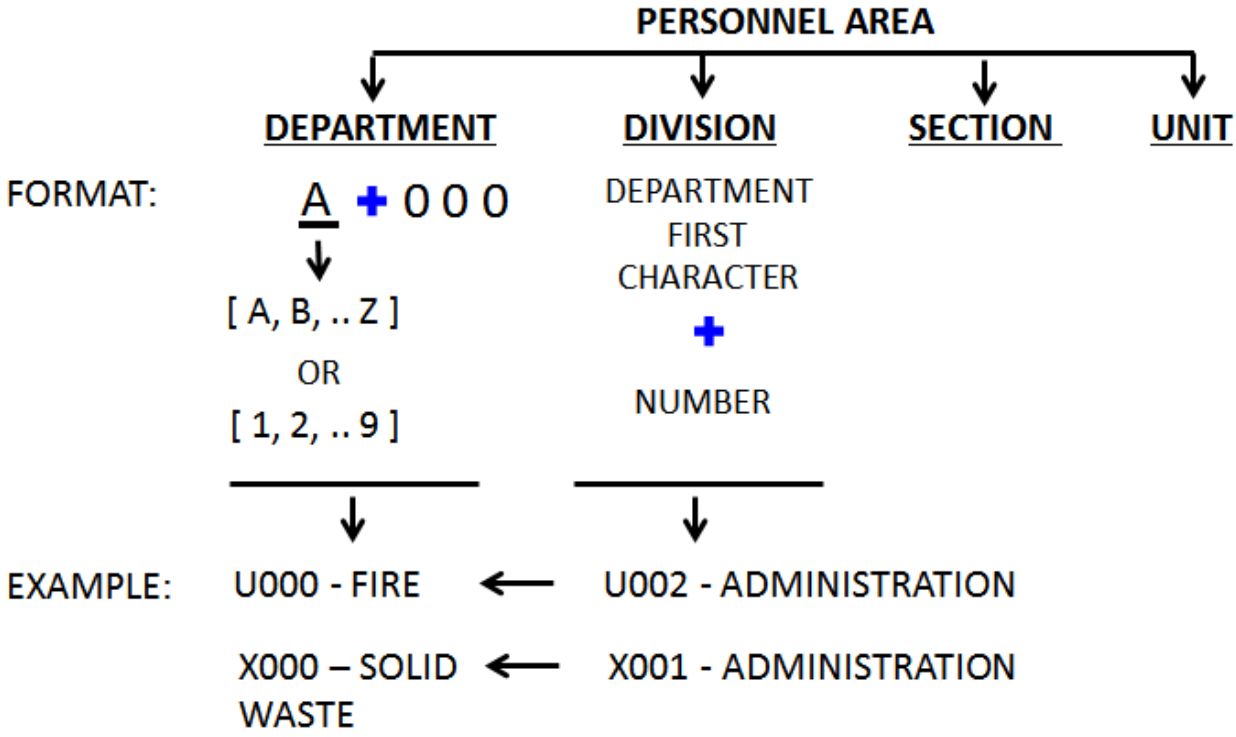


Figure 1: Personnel Area Organization Structure

- 5.13.3 The PSA is defined as each bargaining unit contract and each non-rep employment grouping.
- 5.13.4 The employee grouping definition focused on benefit eligibility criteria, work schedule, and pay method.
- 5.13.5 No business design documentation describes the baseline business requirement that derives definition of the enterprise structure.

Impact

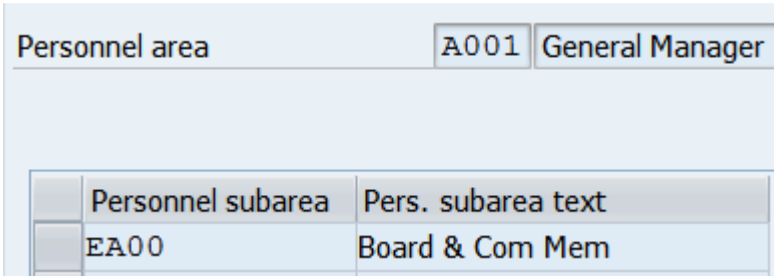
- Some 26 alphabetic characters and numeric values 1–5 have been used to define the PA for department types. Only four numeric values remain that can be used to define new PAs. Unless this approach is taken, no new departments can be added to the enterprise structure.

- Duplicate PA definitions around divisions resulted in maintenance difficulties for the ER analyst, particularly in terms of the enterprise structure assignment on the organizational unit. These duplications result from a PA focus on department, division, section, and unit classification.

PA	Personnel Area Text	CoCd
D001	Administration	MUNI
J001	Administration	MUNI
L001	Administration	MUNI
Q001	Administration	MUNI
T002	Administration	MUNI
U002	Administration	MUNI
X001	Administration	MUNI
Y001	Administration	MUNI
Z001	Administration	MUNI
P001	Administration Division	MUNI
G003	Administration Services	MUNI
D004	Administrative Hearing	MUNI
R002	Adult Services	MUNI
R003	Adult Services Temp Pool	MUNI
Y003	Airport Development	MUNI
A000	ANC WATER & WASTEWATER	MUNI
I001	Assembly	MUNI
I000	ASSEMBLY	MUNI
J004	Benefits	MUNI
T004	Cemetery	MUNI
N000	CHIEF FINANCIAL OFFICER	MUNI
S001	Chief of Police	MUNI
B001	Chief of Staff	MUNI

Figure 2: Personnel Areas

- Redundancy and duplication of PSA, EG, and ESG definitions exist. For example, board and committee is defined twice, one is covered by PSA code EA00 and the other by EG code E.



Personnel area	A001	General Manager

Personnel subarea	Pers. subarea text
EA00	Board & Com Mem

Figure 3: Personnel Subarea – Board and Committee Configuration

Employee group	Name of employee grp
E	Board & Comm

Figure 4: Employee Group – Board and Committee Configuration

- Duplication also appears on the ESG definition configuration. For example: ESG code “No-IN&LV&Retire” is defined twice; one is covered by EG code 1U and the other by ESG code 3U.

Data Browser: Table T503T

Check Table...

ESgrp	Name of EE subgrp
2K	Gentile Command
2H	Gentile Fire Post
2G	Gentile Fire Pre
2J	Gentile Police Post
2I	Gentile Police Pre
1U	No-IN&LV&Retire
3U	
2F	Non employee
2L	PF Med Ret Fire
2M	PF Med Ret Police
2N	Stipend
1W	w/ENGPEN No-IN&LV
1Y	w/HW&PEN & LV
1X	w/HW&PEN no LV
1Q	w/IN&LV No Retire
3Q	
1O	w/IN&LV&IBEPEN
1Z	w/IN&LV&IBEPEN no401
1P	w/IN&LV&OP ENG PEN
1A	w/IN&LV&PERS ALLDB
3A	
1B	w/IN&LV&PERS ALLDC
3B	
1C	w/IN&LV&PERS PSDB
3C	
1E	w/IN&LV&PERS PSDB F
1G	w/IN&LV&PERS PSDB P
3G	
1D	w/IN&LV&PERS PSDC
3D	
1F	w/IN&LV&PERS PSDC F
1H	w/IN&LV&PERS PSDC P
1I	w/IN&LV&PFRS II

Figure 5: Employee Subgroup

- 1174 PA and PSA assignments are configured to represent 2,755 employees, which means that some combinations are redundant and require adjustment.

- The lack of business design documentation makes it difficult to understand the enterprise structure definition and smart coding/intelligent keys at the Municipality. This understanding is critical to support configuration maintenance.

- The current enterprise structure setup creates unnecessary complexity in setting up the proper configuration for current benefits, time, and payroll. Additionally, it may also affect headcount and executive or management reporting.

Recommendation

- 5.13.1 Redefine and reconfigure the enterprise structure of SAP ERP HCM with the assistance of an experienced consultant who has done enterprise structure design and configuration. The enterprise structure should represent unique personnel administration components as well as employment types used for assigning, grouping, processing, and managing employee records, benefits, work schedules, and pay. These types should comply with organizational guidelines, procedures, and common practice.

- 5.13.2 Create a business design document that can be used for future communication and reference.

5.14. General Process Design for Organizational Management and Personnel Administration

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 5.14.1 The administration of organizational and employee records are centralized. The ER department is taking over the ownership of and the responsibilities for performing the daily administration of the organizational component and employee master data.

Impact

- The centralized ER strategy simplifies the security settings, the employee administration communication, and the business practice procedure. It is a very effective shared-service model.

Recommendation

- 5.14.1 Create a BPP document that describes the centralized ER operation and communication policy for each ER work stream.

5.15. OM – Create and Maintain Organizational Unit

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 5.15.1 Overall, process flow HCM-OM-01 Create or Modify Org Unit was designed effectively. The business process flow diagram must be refined with department director approval details, new PA creation detail steps, and integration with the Org Publisher interface.

- 5.15.2 The custom online forms and workflows are well-designed and developed solutions. The custom solutions will assist the ER team in managing the daily administration of organizational units effectively.

- 5.15.3 The organizational structure conversion on QE1 – client 100 was done properly and validated. Upon completion of conversions, the Municipality analyst continued to maintain the organization structure to be as current as PeopleSoft. The analyst also set the organizational structure in QE1-100 as the production version and, by default, QE1 client 100 therefore became the golden client for HR – organization management.

- 5.15.4 Custom program ZUT_ORG_SYNC was developed to copy the production version organizational structure from QE1-100 to other clients, other systems, and, eventually, the production system.

- 5.15.5 No blueprint or functional specification documents exist that can be utilized to describe the business process flow, business requirements, configuration, and custom development functionalities.

    - **5.15.5 Response: Disagree with Comment**

        - Some of the documentation does exist but it is incomplete and/or inadequate (page 394 of QA Assessment shows business blueprint V 3.0 Draft).

- 5.15.6 Testing scenarios are missing for organization creation, changes and approvals.

- 5.15.7 The number range configuration for organization unit is incorrect. Internal number assignment is set to a 70 range, which does not meet business expectations.

- 5.15.8 The ER manager and team defined and submitted the security role definitions and requirements for organizational management users and administrators to the Security team.

- 5.15.9 The Functional team performed unit-testing with the developer. Consultants performed integration test cycle (ITC) 1; the Functional team shadowed and validated the workflow-approval functionality. Integration testing did not incorporate other functionalities; it concentrated on testing the process to create and maintain organizational unit.

- 5.15.10 The consultants created the test scripts and executed ITC 1 without security profile user IDs. The Functional team is expected to create and execute the test scripts in integration test cycle 2.

    - **5.15.10 Response: Agree with Comment**

        - For ESS and MSS testing, role based user ID's were used. For ECC testing security roles were not available.

- 5.15.11 Report requirements are being gathered for all functionalities.

Impact

- Due to missing documentation, the Municipality Functional team, the developer, and the consultants are uncertain about the custom forms and workflows implemented for some functionality.

    - The developer had to examine the code to clarify the department director approval requirements prior to OMB review. The process flow does not reflect clarification of the department director approval requirement if the initiator is not the director, the overall custom form, or the corresponding error-handling workflow.

    - The custom form names, MS-SPF-Create Org Unit and MS-SPF-Maintain Org Unit, are not provided on the process flow. They are important for the reader.

    - The initiator is indicated only as manager self-service (MSS), which must be defined further. For example, it might be the department manager instead of MSS.

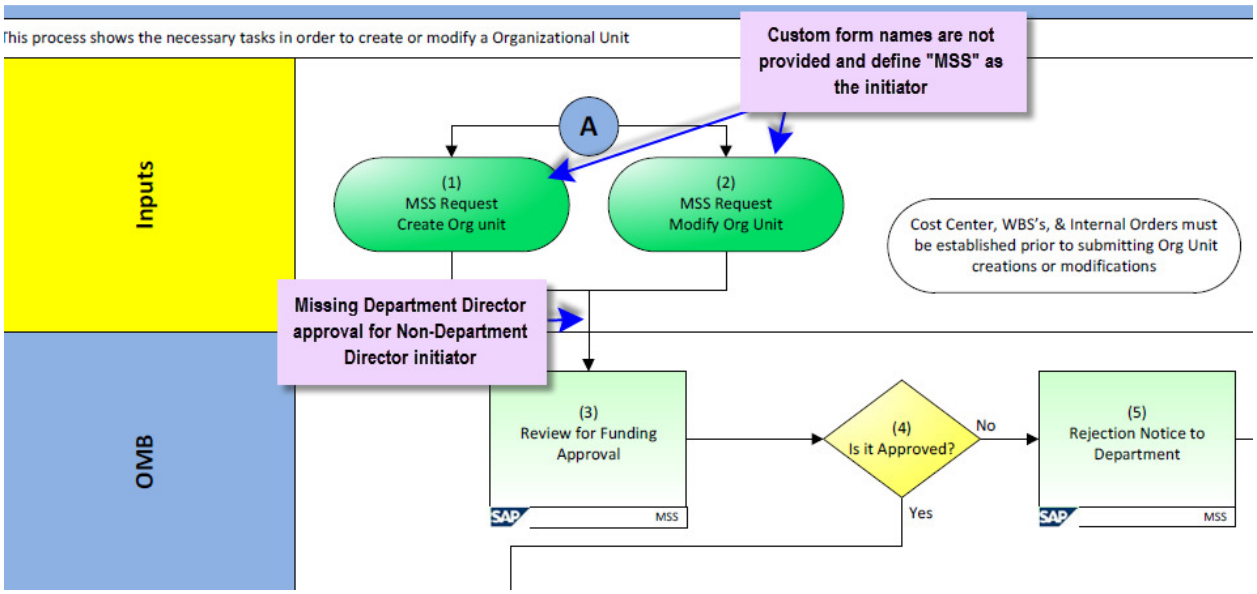


Figure 6: Creation and Modification of Organizational Unit

- No detail functional documentation exists that can be used to describe the step to update the enterprise structure in the NEOGOV system. This enterprise update in the NEOGOV system must also be precisely defined on the process flow.

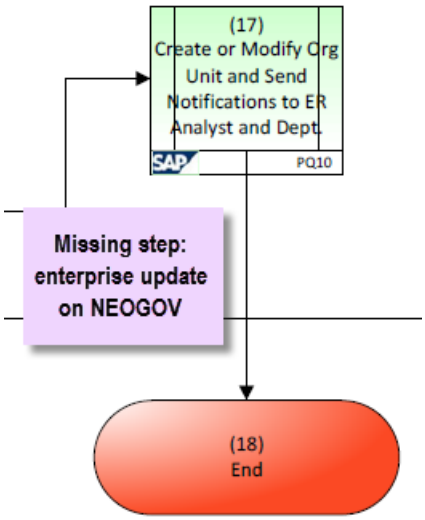


Figure 7: Missing Step

- The Functional team and consultants are not fully aware of the implemented configurations that were performed by the previous system integrator. For example, the configured internal number assignment, 70000000–99999999, does not meet the defined business requirements for number range. As result, the number range configuration in QE1-100 must be fixed and tested thoroughly to ensure that the fix does not change the existing production version organizational structure.
- QE1 – client 100 is to be secured so that only authorized users may delete master data. If not done, a risk of inadvertent master data deletions exists.
- The workload for the ER analyst is increased because of the need to keep the organization structure in the production version as current as it is in PeopleSoft.
- The production version – organizational structure has to adapt to any configuration changes that affect the OM objects (org unit, job, and position).
- Each team focuses only on its responsibility area, without communication with other teams, resulting in a lack of business understanding and possibly an improper design of an integrated solution that should flow from the HR department and extend to finance.

Recommendation

- 5.15.1 Refine the process design flows with additional details to show the true process steps and system solution flow details. Remove any duplicate steps to avoid any redundancy.

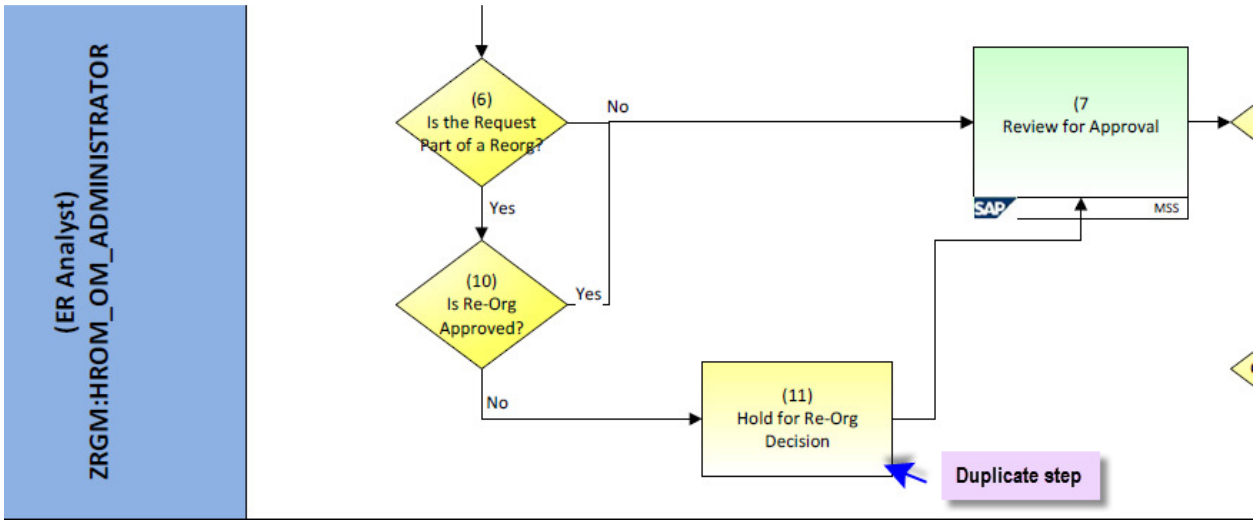


Figure 8: Create and Maintain Organization Unit Process Design

- 5.15.2 Review and document every custom solution and configuration to help understand the implemented functionality and provide for effective future maintenance.
- 5.15.3 Involve the business owner in system design discussions and acquire business owner sign-off on the solution design to ensure that the system functions as expected.
- 5.15.4 Update the WRICEF master list with development objects and the categories of must have, post-go-live, nice to have, and so on.
- 5.15.5 Create integration HR life cycle – hire to retire – test scenarios that include organizational management as the starting process to ensure that system integration fully meets business requirements and that HR subject matter experts and business owners fully understand the impact and the key integration points of the implemented solution.
- 5.15.6 Revisit the requirements for custom forms and workflows to ensure that the implemented solution handles all business scenarios and provides proper error-handling.
- 5.15.7 Revise the number range configuration – internal and external range – to meet business requirements as defined verbally by the Functional team.

5.16. OM – Create and Maintain Job

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 5.16.1 The "PFD-HCM-OM-04 Create or Modify Job" business process flow (BPF) document captures the main steps required to create or modify a job; however, the steps to update the job description in NEOGOV and the MUNI network still need to be added to the BPF.

- 5.16.2 No business process design (BPD) document to complement the process flow exists.

- 5.16.3 All job objects of SAP ECC HCM are being assigned with an external number assignment based on the specific occupational code(s) specific to an employee grouping and/or a collective bargaining unit. The follow table is an example of the job object numbering.

First 3 digits		4th digit		5th digit		6th, 7th, 8th digits Consecutive beginning with 1 and ending with 631
301	AMEA					
302	APDEA	1	PDA			The first 5 digits of the next new job code are decided by the specific criteria; the last 3 digits of the next new job code begins with 632 (XXXXX632)
		2	PDB			
303	Executives	1	Exec Non Exempt			
		2	Exec Exempt			
304	IAFF	1	F40			
		2	F56			
		3	AUX			
						625 - Construction Engineer
305	Non Represented	1	Non Rep Non Exempt			- Evidence Tech II PDA
		2	Non Rep Exempt			
		3	Election			
306	Trades	1	L71			
		2	Op-Eng 302			
		3	IBEW	1	MLP	
				2	MOA	
				3	NECA In	
				4	NECA Out	
		4	Mechanics			
		5	Plumbers			
		6	Teamsters			

PeopleSoft - SAP Job Data | Cheat Sheet

Figure 9: Numbering of Job Objects

C_Peoplesoft_and_SAP_Job_Master 05-05-13.xls, delivered separately, lists the number schemas being used for the job objects.

- 5.16.4 The ER analyst interviewed was not aware of the standard inheritance characteristics within organization management (OM) objects (organization unit, job, and position). Based on the current business process, the ER analyst will manually maintain the salary grade and scale on the job object and the position object over data entry. Performing data entry for the position with this data will be redundant, because the data can be inherited from the job object.

- 5.16.5 The Functional team executed the functional unit tests with developer. The system integrator (SI) consultant executed the test scripts for integration testing cycle (ITC) 1; while the functional team was shadowing and validating the test script execution and workflow approval functionality. The integration testing scenarios and test scripts did not incorporate the integration with other SAP software. The ITC1 scenarios and scripts were specific to the OM objects.

- 5.16.6 The ITC1 test scripts were executed without utilizing the security authorization user roles being assigned to the user IDs. The current testing strategy is to have the functional team members executing test scenarios and test scripts during ITC 2.

Impact

- As a result of missing requirements and business process design (BPD) documentation; the Municipality ER analysts and HCM consultants displayed uncertainty related to several business process steps within the BPF.

    - Step 3 (see Figure 10), “Create / Modify Word Document”, does not include the name and type of Microsoft Word document indicated in the process step. In addition, the expected output for creating or modifying the document is not clarified.

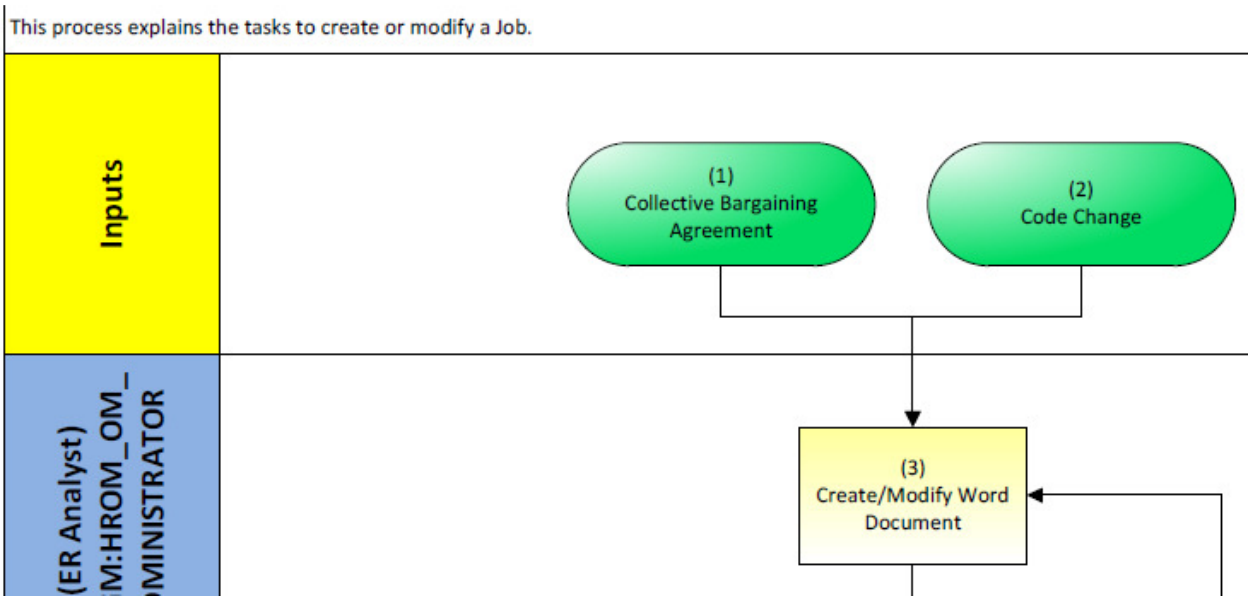


Figure 10: PFD-HCM-OM-03

- Business process flow PFD-HCM-OM-03 is missing two steps:
  - The step to update NEOGOV with salary structure and job description manually
  - The step to update the network paper file with the new job description

Based on the review of the business process, these steps should be incorporated after the "Create / Modify / Validate job and Attach Document" step (Step 6).

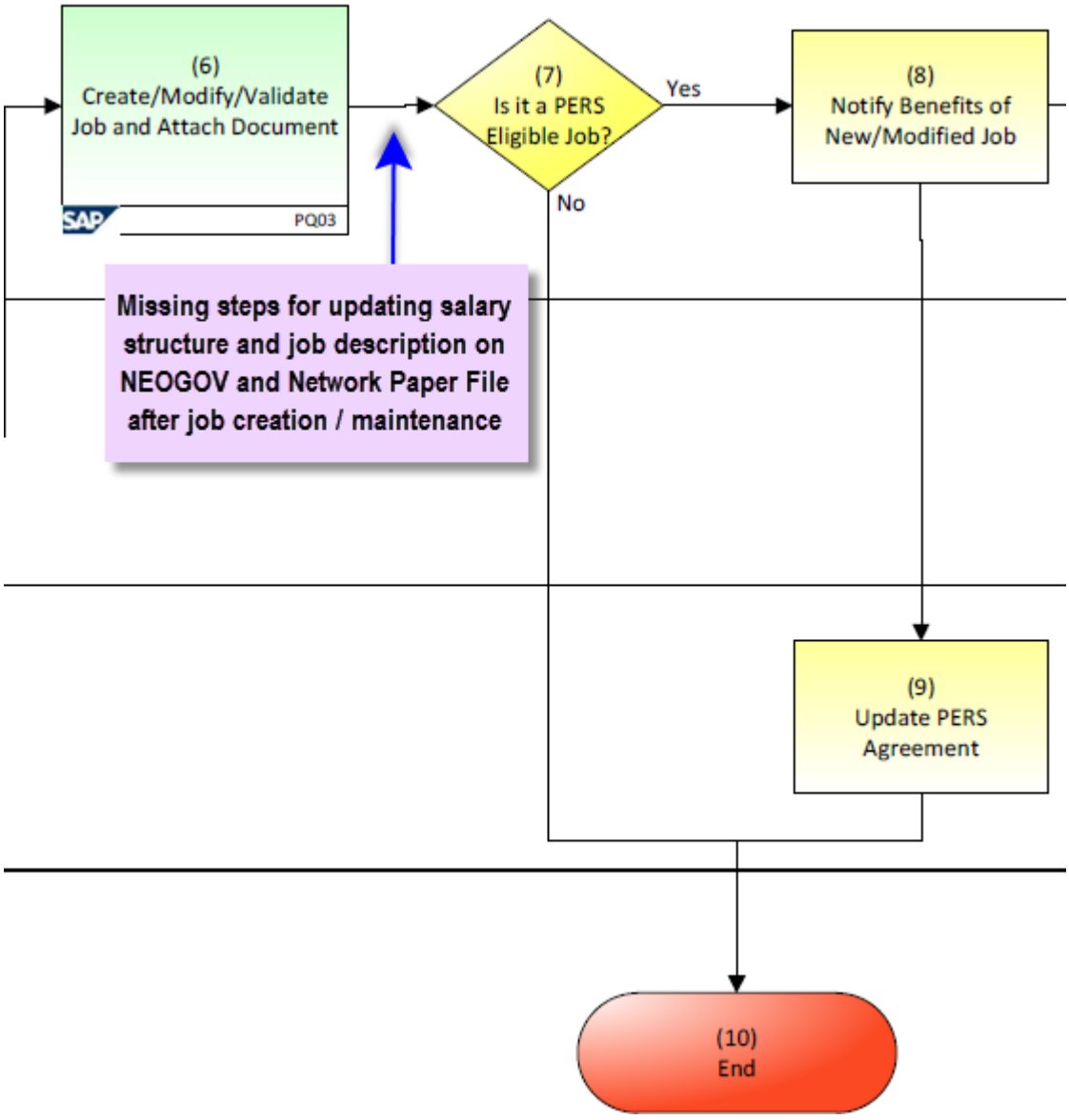


Figure 11: Create and Modify Job

- Redundancies associated with maintaining salary grade and scale on the job object and on the position object can increase the chances human error during data entry and result in salary grade and scale inconsistencies.

Recommendation

- 5.16.1 Maximize utilization of the standard inheritance functionality in SAP software for organization management (OM) and personnel administration (PA) to prevent unnecessary or redundant master data entry and maintenance.

- 5.16.2 Create business process procedure (BPP) documents for each of the BPF. The BPPs will further describe the business processes and procedures associated with the steps in the business process flow. The BPPs are important for referencing in the future when changes to the business process or system are required.

- 5.16.3 Revise process flow BPF PFD-HCM-OM-03:

    - 5.16.3.a Revise Step 3 ("Create / Modify Word Document"), with the type and name of Word document.

    - 5.16.3.b Provide additional process steps to clarify the manual update on NEOGOV for salary structure and job description and the network paper file for the job description document sharing.

- 5.16.4 Create end-to-end integration test scenarios to capture the employee life cycle 'Hire to Retire'. Include organizational management (OM) processes. OM processes create/maintain org unit and create/maintain position must be used to start the employee lifecycle end-to-end integration testing scenarios. End-to-end integration testing scenarios ensure that the business requirements and system integration is fully tested. Additionally, full integration testing helps HR subject-matter experts (SMEs) and business owners fully understand the key integration points of the designed solution.

5.17. OM – Create and Maintain Position

Overall Risk: HIGH
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: MEDIUM

Finding

- 5.17.1 The SAP Interactive Forms software by Adobe, MS-SPF-Create Position, and MS-SPF-Maintain Position, are well designed and developed solutions. SAP Interactive Forms will assist the ER analyst or administrator with daily administration related to managing the Municipality's organizational structure.

- 5.17.2 The Municipality position number assignment is inconsistent across the three position categories. The working out of class and retiree positions numbers are assigned manually and the remaining positions are assigned by the system. The retiree position numbers start with number 65 and the working out of class position numbers start with 66.

- 5.17.3 Employees who have given their resignation notice will be placed in a temporary position. The temporary position is identified by the position short and long description titles, which will contain “TMP PCN”.

- 5.17.4 The outbound interface program from SAP software to NEOGOV considers only the hiring readiness of a vacant position based on the standard “Open” radio button indicator in infotype 1007 of the position. Based on the position funding constraint and the outbound interface to NEOGOV vacant requirement, only funded and vacant positions can be set to “Open” on infotype 1007. Otherwise, infotype 1007 is set to “Vacancy Filled”.

- 5.17.5 The “PFD-HCM-OM-04 Create or Modify Position” BPF is comprehensive. However, the business process flow diagram needs refinement to include the department director approval routing, the reclassification position detail process, and error handling.

- 5.17.6 No detailed blueprint and functional specification documents were provided. These types of documents are critical for describing the business process, the custom design solution, the system configuration, and the custom interface functionalities. Based on the discrepancies discovered related to the master WRICEF list; it is clear that the WRICEF master list is not being kept up to date through the change control management process.

- 5.17.7 The employee conversion on QE1 – client 100 was done properly and validated. As a matter of process, the Municipality has decided to utilize the converted organizational structure in QE1-100 as the production version, and therefore requiring an ER analyst to maintain the organizational structure manually by creating and maintaining all position categories in this golden client, in lieu of executing additional conversions prior to entering an integration testing cycle.

- 5.17.8 As noted for the organizational unit numbering range procedure; the number range configuration for position will utilize the internal number assignment, in which the configuration is set to the“70” range, which does not meet business expectation as explained verbally to the Review team.

- 5.17.9 The Functional team executed the functional unit tests with the developer. The system integrator (SI) consultant executed the test scripts for integration testing cycle (ITC) 1; the Functional team was shadowing and validating the test script execution and workflow approval functionality. However, the integration testing scenarios and test scripts did not incorporate the integration with other SAP software. The ITC1 scenarios and scripts were specific to the OM objects.

- 5.17.10 The ITC1 test scripts were executed without utilizing the security authorization user roles being assigned to the user IDs. The current testing strategy is to have the Functional team members executing test scenarios and test scripts during ITC 2.

Impact

- The ER analyst will have additional work associated with maintaining external number ranges. Additionally, the analyst will need to ensure the position number range 65 and 66 are not consumed by the system numbering and manually keep track of the next available number for the 65 and 66 range.

- The ER analyst will have to remember to flag the position short and long titles with “TMP PCN’ for the temporary positions. Additionally, the ER analyst has to ensure these temporary positions are not included as part of position budgeting process. These manual processes can lead to errors.

- While the outbound SAP interface program to NEOGOV uses the “Open” radio button on the position vacancy infotype 1007 as the indicator to send the approved and funded vacant position to NEOGOV, the “Open” radio button cannot be set with standard delivered functionality through PA integration. As a result, this button must be manually maintained.

- With the BPF document being the only business requirement documentation, a new ER analyst will experience difficulties on processing the creation and maintenance of each type of position. The items below will increase the likelihood of errors in production.

    - The process flow does not indicate the specific on-line form that must be executed to request a specific type of position.

    - There is no process to request working out of class (WOC) or retiree position.

    - No BPF for position reclassification exists.

- Due to the lack of functional specifications, the custom online forms functionality and the associated workflows are not clearly understood and therefore not being fully tested, including error-handling. This situation exist because the functionality has been only verbally communication between the implementation team members. Without full testing, errors in production are certainly possible.

- As noted, the HR business owner and ER analysts are not fully aware of the different forms that are completed, outstanding, and in or out of scope for after going live. This situation may create integration concerns that lead to errors in production and unmet requirements.

Recommendation

- 5.17.1 Update the process design flows with additional details that include the on-line form name to request the specific position type, the true approval process (include department director review), and the steps to create WOC or retiree position. Additionally, step 11, “Hold for Reorg Decision”, is redundant so that the process flow must be adjusted.

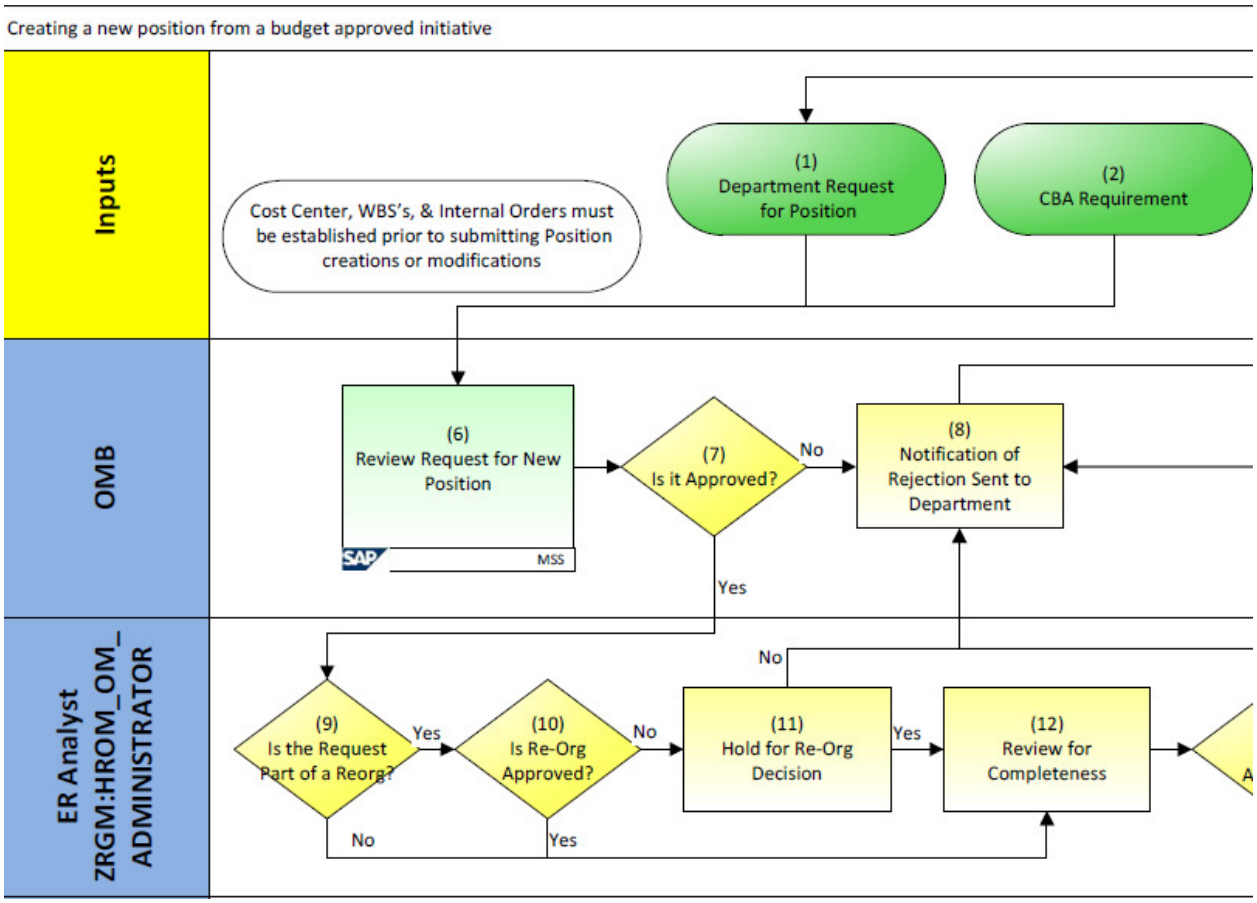


Figure 12: Create and Maintain Position

- 5.17.2 Consider enhancing infotype 1007 by adding a custom field to use as the indicator for triggering the hiring process and indicating that the position is vacant and ready for recruitment. Additionally, if the infotype is enhanced to include a custom field, the SAP to NEOGOV interface program will need to be modified. Then the OM and PA integration for setting the position to vacant can be processed according to standard delivered functionality.

    - **5.17.2 Response: Accept with Comment**

        - MoA will evaluate.

- 5.17.3 Develop the BPFs for position reclassification for the tested SAP Interactive Forms to include "Re-classification of VACANT Position" and "Re-classification of FILLED Position", including the corresponding workflows.

- 5.17.4 Document the business process procedures (BPP) for SAP Interactive Forms and workflows; “Create and Maintain Positions”, “Reclassification Vacant Positions”, and “Reclassification Filled Position”, to execute the custom solution according to business requirements properly.

- 5.17.5 Involve the business owner in system design solution discussions and acquire business owner sign off on the implemented solution to ensure the system is functioning as expected.

- 5.17.6 Update the WRICEF master list with SAP Interactive Forms – Re-classification of VACANT Position and Re-classification of FILLED Position and the corresponding workflows development objects.

- 5.17.7 Revisit the SAP Interactive Forms and workflows requirements to ensure the implemented solution handles all of business scenarios and provides the proper error handling.

- 5.17.8 Revise the position number range configuration – internal range to meet business requirements.

    - **5.17.8 Response: Accept with Comment**

        - MoA will evaluate.

- 5.17.9 Create end-to-end integration test scenarios to capture the employee life cycle ‘Hire to Retire’. Make sure that these include organizational management (OM) processes. The OM processes, create/maintain org unit and create/maintain position, must be used to start the employee lifecycle end-to-end integration testing scenarios. End-to-end integration testing scenarios ensure that the business requirements and system integration are fully tested. Additionally, this testing will help ensure that HR subject matter experts (SMEs) and business owners fully understand the key integration points and operation of the designed solution.

5.18. OM – Create and Maintain Relationships

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 5.18.1 Some 25 configured custom relationships exist to assist with workflow approvals in finance, SAP SRM, and SAP ERP HCM.

Z01	Reports (line) to -Test	Is line suprvsor of -Test
Z51	AR Billing Reviewd by	AR Billing Reviewer Of
Z52	AR Billing Reviwer of	AR Billing Reviwed By
Z53	AR Billing Printer of	AR Billing Printed by
Z54	AR Airport Agr Reviwed by	AR Airport Agr Reviwer Of
Z55	AR Airport Agr Approvd by	AR Airport Agr Approvr of
Z56	AR Arpt Agr/bill Aprvd by	AR Arpt Agr/bill Aprvr of
Z57	AR Art Agr/bill Fnl Ap by	AR Art Agr/bill Fnl Ap of
Z58	AR Cust M Reviwer Of	AR Cust M Reviwed by
Z59	AR Cust M Fnl Approver Of	AR Cust M Fnl Approved by
Z65	Is Cashier Supervised By	Is Cashier Supervisor of
Z66	Is Deposit Verified By	Is Deposit Verifier Of
Z67	Is Treasury Cash Procs Of	Is Treasury Cash Procs by
Z71	WOC assignment	WOC assignment
Z81	Has Time Approver	Is Time Approver For
Z82	Is GL Approved by	Is GL Approver of
Z90	Is ER Records of	Is ER Records by
Z91	Is SRM Supervised by	Is SRM Supervisor of
Z92	Is SRM Fund Mang by	Is SRM Fund Mng of
Z93	Is SRM Div Mang by	Is SRM Div Mng of
Z94	Is SRM Directed by	Is SRM Director of
Z96	Is Payroll Admined of	Is Payroll Admin by
Z97	Is ER Admined of	Is ER Admin by
Z98	Is ER Analyst of	Is ER Analyzed by
Z99	Is ER Manager of	Is ER Managed by

Figure 13: Custom Relationships

- 5.18.2 The ER business owner has agreed to take ownership of the master data maintenance of this relationship assignment in the organization structure. There is, however, no BPP for SAP SRM, finance, time management, and payroll to assist the ER analyst keep the relationship assignment current.

- 5.18.3 The Functional team executed the functional unit tests with the developer. The system integrator (SI) consultant executed the test scripts for integration testing cycle (ITC) 1; while the Functional team was shadowing and validating the test script execution and workflow approval functionality. However, the integration testing scenarios and test scripts did not incorporate the integration with other SAP software. The ITC1 scenarios and scripts were specific to the OM objects.

    - **5.18.3 Response: Agree with Comment**

- Relationships were not part of the Integration test scripts.

- 5.18.4 The ITC1 test scripts were executed without utilizing the security authorization user roles being assigned to the user IDs. The current testing strategy is to have the Functional team members executing test scenarios and test scripts during ITC 2.

    - **5.18.4 Response: Agree with Comment**

        - For ESS and MSS testing, role based user ID's were used. For ECC testing, security roles were not available.

Impact

- The ER analyst will not be aware if there are any changes to custom relationship assignment which will cause the workflow to function improperly for the SAP SRM, finance, time management, and payroll due to:

    - Missing BPP that shows the integration of ER, SAP SRM, and FINANCE dependencies on the relationship maintenance.

    - No test integration or positive and negative testing of the various scenarios that will likely occur in production has been performed.

Recommendation

- 5.18.1 Define the business procedure surrounding the custom relationship assignment. Communicate the procedure requirements to SRM, finance, time management, and payroll to keep the master data current and the workflows functioning properly.

- 5.18.2 Coordinate and execute the integration testing scenarios that cover all these custom relationship dependencies and impact on SAP ERP HCM (OM, PA, benefits, time, and payroll), finance, and SAP SRM. The integration test script development and the test execution should be completed by Municipality functional resources.

5.19. OM – Delimit Organizational Unit

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 5.19.1 BPF PFD-HCM-OM 06 Delimit Org Unit, describes the end-to-end process for delimiting the org unit. The delimit organization unit process occurs in the event of re-organization. The Municipality ER team has decided to process the re-organization manually with a paper form.

- 5.19.2 No business process design (BPD) document to complement the process flow was provided or exists.

- 5.19.3 The Functional team executed the functional unit tests with developer. The system integrator (SI) consultant executed the test scripts for integration testing cycle (ITC) 1; while the Functional team was shadowing and validating the test script execution and workflow approval functionality. However, the integration testing scenarios and test scripts did not incorporate the integration with other SAP software. The ITC1 scenarios and scripts were specific to the OM objects.

    - **5.19.3 Response: Agree with Comment**

        - Delimit organizational unit was not part of integration test scripts.

- 5.19.4 The ITC1 test scripts were executed without utilizing the security authorization user roles being assigned to the user IDs. The current testing strategy is to have the Functional team members executing test scenarios and test scripts during ITC 2.

    - **5.19.4 Response: Agree with Comment**

        - For ESS and MSS testing, role based user ID's were used. For ECC testing, security roles were not available.

Impact

- Because process flow PFD-HCM-OM 06 Delimit Org Unit is the only documentation, future ER analysts may experience difficulties executing the steps and understanding the expected results from the system. This leads to support delays and unnecessary support costs. For example:

    - Process flow Input is only described by “MSS Request” (Step 1). Since the delimit organizational unit is manually done over a paper form, step 1, “MSS Request” must be

revised to match the manual process to request a reorganization and include the specific paper form name in the process step.

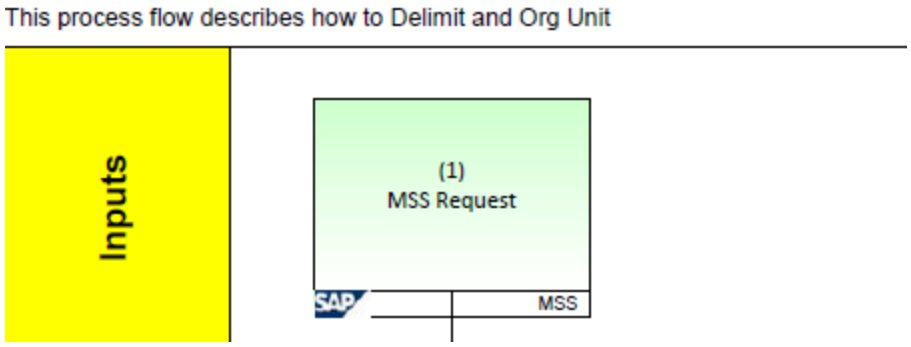


Figure 14: PFD-HCM-OM 06

- Upon completion of “Delimit Org” (Step 9) in SAP, the ER analyst has to “Maintain NEOGOV” (Step 12). Since the step 12 does not have the activity detail, and a business design document (BPD) does not exist, the ER analyst will have difficulties understanding how to execute the procedure in order to complete the process flows. Particularly since the “Maintain NEOGOV” step does not appear in the Org Unit Creation process flow.

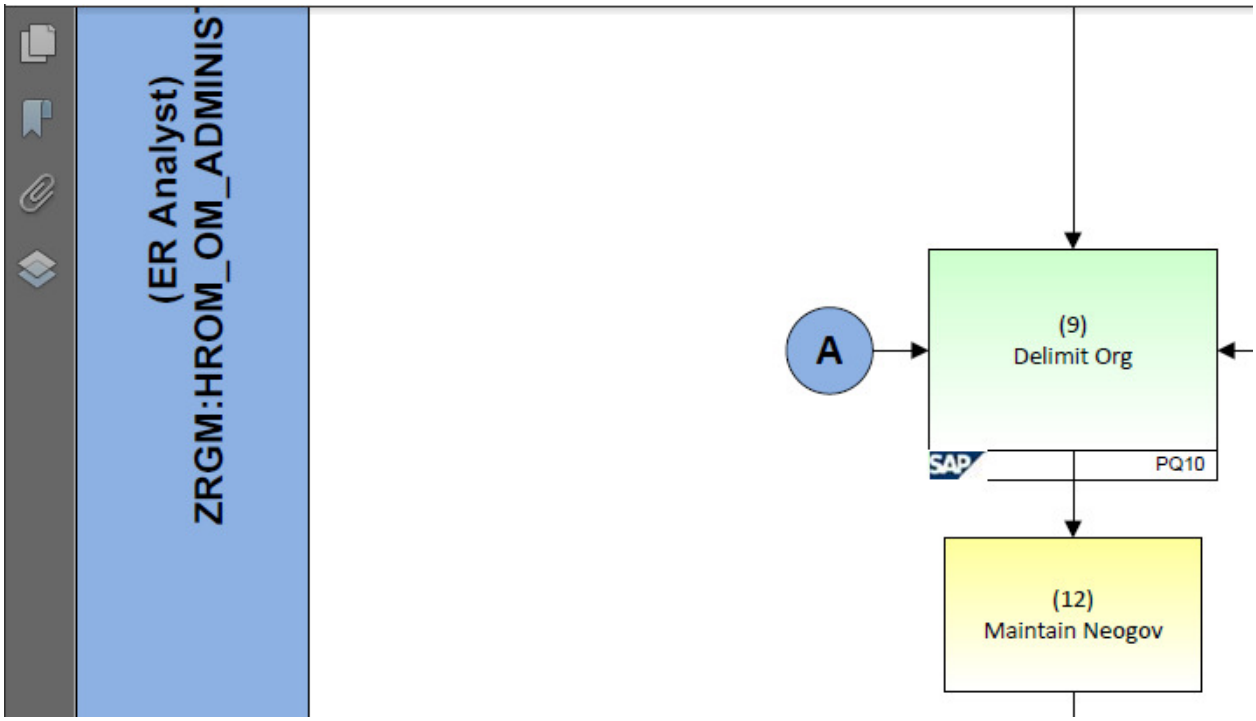


Figure 15: Delimit Organization Unit

Recommendation

- 5.19.1 Thoroughly test "PFD-HCM-OM 07 Delimit Org Unit", to ensure the integration components and associated functionalities work as expected. Create end-to-end integration test scenarios and test scripts for testing the organization restructuring process. Make sure that the test cases include organizational movements which will impact subordinate positions and the subordinate organization units. Ensure the HR business SMEs and business owners agree and understand the impact and the key integration points of the designed solution.

- 5.19.2 Create BPP documents for each of the BPF. The BPPs will further describe the business processes and procedures associated with the steps in the business process flow. The BPPs are important references in the future when changes to the business process or system are required.

- 5.19.3 Enhance and revise the steps on process flow with the correct execution method, the correct transaction, the expected user function, and the expected output. This work will assist the audience in their understanding of each process step from the beginning to the end of the process.

5.20. Organizational Management (OM) – Delimit Job

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 5.20.1 Process flow PFD-HCM-OM 06 Delimit job describes the end-to-end process for delimiting job objects. It covers the approvals, the maintenance of affected positions, the job description updates on the network and NEOGOV, and the execution of the delimit transaction.

- 5.20.2 No BPD document to complement the process flow exists.

- 5.20.3 The Functional team executed the functional unit tests with the developer. The system integrator (SI) consultant executed the test scripts for integration testing cycle (ITC) 1; while the Functional team was shadowing and validating the test script execution and workflow approval functionality. However, the integration testing scenarios and test scripts did not incorporate the integration with other SAP software. The ITC1 scenarios and scripts were specific to the OM objects.

    - **5.20.3 Response: Agree with Comment**

- Delimit job was not part of integration test scripts.

- 5.20.4 The ITC1 test scripts were executed without utilizing the security authorization user roles being assigned to the user IDs. The current testing strategy is to have the Functional team members executing test scenarios and test scripts during ITC 2.

    - **5.20.4 Response: Agree with Comment**

        - For ESS and MSS testing, role based user ID's were used. For ECC testing, security roles were not available.

Impact

- Without BPD or BPP documents, future ER analysts that were not part of the implementation project will experience difficulties executing the steps in the process. For example:

    - Upon completion of “Delimiting Job” (Step 9) in SAP software, the ER analyst has to “Maintain NEOGOV” (Step 12) and “Maintain Network/Paper Files” (Step 13) (see Figure 16). Since the steps do not have the detail activities and a BPD document does not exist for referencing, the ER analyst will have difficulties understanding the details of the execution steps and the expectations for completing the process flow. This is especially true since these two steps are not mentioned on the Job Creation BPF.

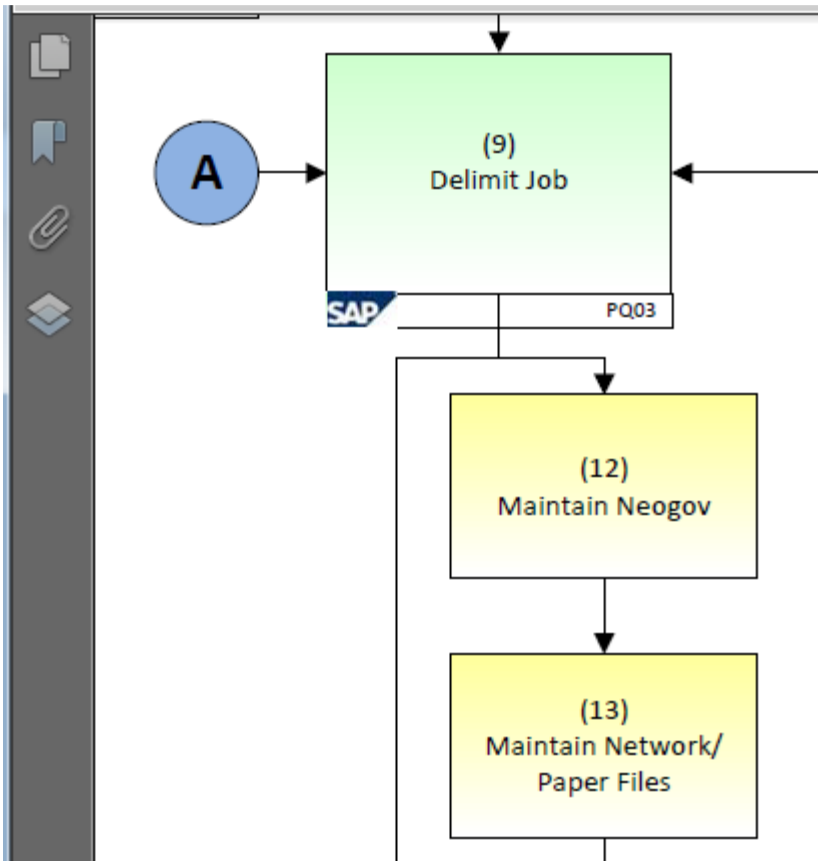


Figure 16: Delimit Job

Recommendation

- 5.20.1 Create BPD and BPP documents describing the business process details, procedure details, and or policy as it relates to the process flow steps in the BPF.
- 5.20.2 Enhance the steps on BPF with additional detailed information so the intended audience can understand the activity and what is needed to execute the step(s).
- 5.20.3 Thoroughly test “PFD-HCM-OM 06 Delimit Job”, to ensure the integration components or associated functionalities work as expected. Create end-to-end integration test scenarios and test scripts for testing the delimiting of the job object process. Ensure that the HR business SMEs and business owners agree and understand the impact and the integration key points of the designed solution.

5.21. OM – Delimit Position

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 5.21.1 Process flow "PFD-HCM-OM 08 Delimit Position" describes the end-to-end steps for delimiting a position. A paper-form is used to request that a position be delimited. A form created in SAP Interactive Forms is unavailable for delimiting a position.

- 5.21.2 No BPP document to complement the process flow exists.

- 5.21.3 The Functional team executed the functional unit tests with developer. The system integrator (SI) consultant executed the test scripts for integration testing cycle (ITC) 1; while the Functional team was shadowing and validating the test script execution and workflow approval functionality. However, the integration testing scenarios and test scripts did not incorporate the integration with other SAP software. The ITC1 scenarios and scripts were specific to the OM objects.

    - **5.21.3 Response: Agree with Comment**

        - Delimit position was not part of integration test scripts.

- 5.21.4 The ITC1 test scripts were executed without utilizing the security authorization user roles being assigned to the user IDs. The current testing strategy is to have the Functional team members executing test scenarios and test scripts during ITC 2.

    - **5.21.4 Response: Agree with Comment**

        - For ESS and MSS testing, role based user ID's were used. For ECC testing, security roles were not available.

Impact

- BPF "PFD-HCM-OM 06 Delimit Position" is the only business process documentation. Future ER analysts will experience difficulties executing the steps and understanding the expected results from the system. This is likely to lead to errors in production. For example:

    - In process flow input "Request from Department in MSS" (Step 1), the process flow should be revised with the expected user function/role that would execute the input. The name of

the offline paper form as the tool to request for a position to be delimited should be documented. This cannot be an on-line form (SAP Interactive Forms), as noted.

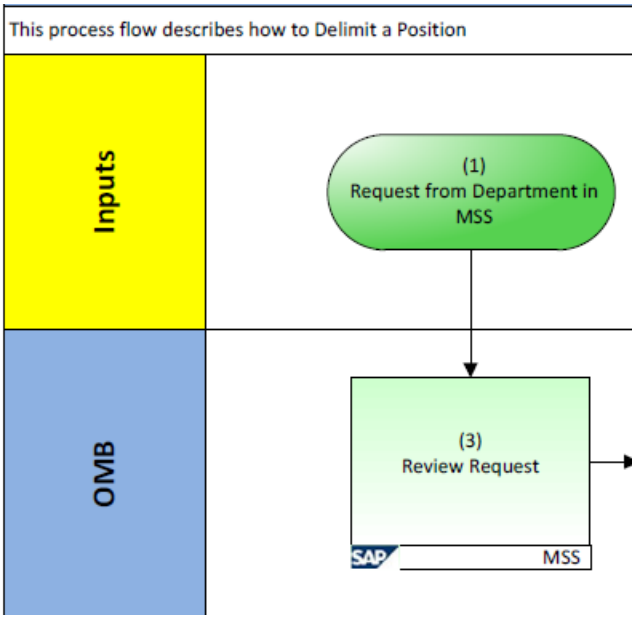


Figure 17: Delimit Position

- Upon completion of “Delimit Position” (Step 7) in SAP software, a step to maintain or delimit a vacant position in NEOGOV must be added.

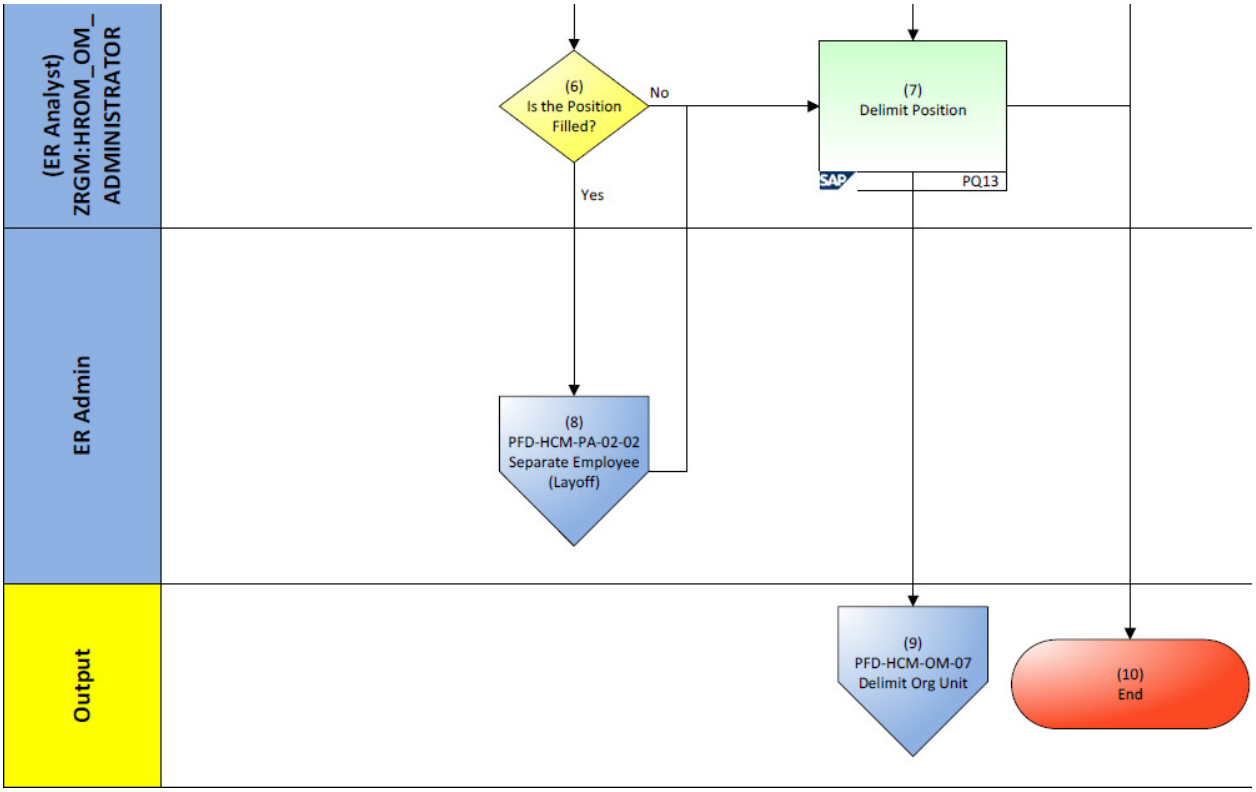


Figure 18: Delimit Position (Detail)

Recommendation

- 5.21.1 Thoroughly test “PFD-HCM-OM 08 Delimit Position” to ensure that the integration components and associated functionalities work as expected. Create end-to-end integration test scenarios and test scripts for testing the delimit vacant position process. Include test cases that include the position that has been posted in NEOGOV, to ensure that the system integration requirements are met. Ensure that the HR business (SMEs) and business owners agree and understand the impact and the integration key points of the designed solution.

- 5.21.2 Create BPD and BPP documents describing the business process details, procedure details, and or policy as it relates to the process flow steps in the BPF.

- 5.21.3 Enhance the step on process flow with additional detail information to assist the audience with understanding the activity being executed.

5.22. PA – Hire Employee

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 5.22.1 Delivery of the two WRICEF objects, MS-SPF-Request for Hire Waiver and MS-SPW-Request for Hire Waiver, are postponed until after the go-live. The manager will request hiring to staff a vacant position through a paper form which will eventually be developed into a future hiring process that will be processed through NEOGOV over an interface.

- 5.22.2 Hiring process flow PFD-HCM-PA-01-01 Hire Employee describes the business steps to hire, re-hire, transfer, and promote employee within Municipality organization. The process diagram includes the NEOGOV recruiting application process steps and the follow up manual hiring action process to complete the transaction.

- 5.22.3 The inbound NEOGOV interface program to SAP software does not include any error-handling or error report details for the records being processed. The ER administrator will run two separate reports on NEOGOV and SAP software and manually reconcile these two reports to ensure the expected hiring transactions are processed correctly.

- 5.22.4 No detailed business process design (BPD) document to accompany the process flow steps exists. Functional specifications or configuration documents capturing the system configuration and the enhancements required to meet business requirements do not exist. No functional specification document to describe the custom solution for the NEOGOV interface exists.

- 5.22.5 The business owner was not involved in reviewing the WRICEF object functional specification and design sign off. This situation has resulted in the business owner's expectations not being met in the final design solution. For example, the business owner discovered that the delivered NEOGOV PAF (personal action form) is not functioning effectively for the department managers.

- 5.22.6 The employee conversion done on QE1 was done properly and validated. The employee definition shows the same definition as in the current Municipality PeopleSoft HR system.

- 5.22.7 The Functional team executed the functional unit tests with the developer. The system integrator (SI) consultant executed the test scripts for integration testing cycle (ITC) 1; while the Functional team was shadowing and validating the test script execution and workflow approval functionality. However, the integration testing scenarios and test scripts did not incorporate the

integration with other SAP software, or other application, such as benefits, time, payroll, and SAP SRM. It was a PA-hiring-event-specific scenario.

- **5.22.7 Response: Agree with Comment**

  - Integration testing was done with BN, TM and PY. SRM was not part of testing at the time.

- 5.22.8 The ITC1 test scripts were executed without utilizing the security authorization user roles being assigned to the user IDs. The current testing strategy is to have the Functional team members executing test scenarios and test scripts during ITC 2.

  - **5.22.8 Response: Agree with Comment**

    - For ESS and MSS testing, role based user ID's were used. For ECC testing, security roles were not available.

- 5.22.9 The inbound NEOGOV interface to SAP software is expected to run three times a day (10:00 a.m., 2:00 p.m., and 6:00 p.m.), except where manual interface execution is needed for an immediate hire condition. The batch schedule process procedure has not been established or communicated to the entire implementation project team yet.

Impact

- Given that the inbound NEOGOV interface program does not provide the processed record report, the ER administrator will experience difficulties on researching the root cause of any data that is not processed correctly. The record processing error can happen due to the OM record locking, configuration oversight, outdated program logic, etc. This will delay processes and may induce errors into the system.

- Due to the missing integration testing scenarios, the communication to other modules upon hiring completion has not yet been tested. SAP ERP HCM is expected to send an e-mail notification to Kronos, benefits, payroll, help desk, and so on upon completion of a hiring event. Due to missing functional specification documentation and the lack integration testing, the ER team cannot confirm the email notification functional requirements related to process flow step 34, “Notify External Parties via Email”. This means that the system may go live with errors.

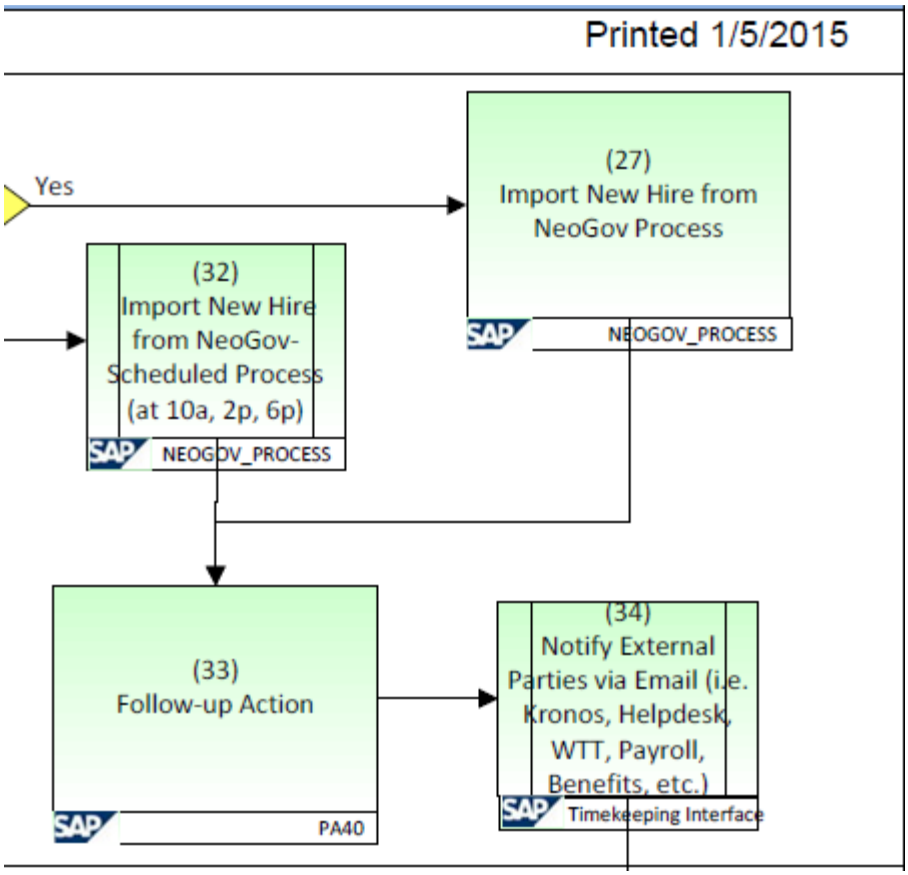


Figure 19: Hire Employee

Recommendation

- 5.22.1 Document every implemented or approved WRICEF object and all configuration to ensure the expected functionalities are realized correctly. This will assist with future communication and end user training.
- 5.22.2 Request that the business owner sign off on every approved WRICEF object to ensure that the custom solution meets the business requirements. This will also assist with gaining user acceptance.
- 5.22.3 Revisit the inbound NEOGOV interface to SAP software to ensure the program provides a report of each processed record, whether successful or unsuccessful. This report will help the ER administrators identify any processing issues with the interface.
- 5.22.4 Revisit the delivered NEOGOV PAF (personal action form) solution to ensure that the form works effectively and can be utilized to assist department managers in processing the hiring candidate.

- 5.22.5 Thoroughly test “PFD-HCM-PA-01-01 Hire Employee” to ensure that the integration components and associated functionalities work as expected. Create end-to-end integration test scenarios and test scripts for testing the hiring process. Include test cases that include the email notification upon hiring transaction completion, to ensure that the system integration requirements are met. Ensure the HR business SMEs and business owners agree and understand the impact and the key integration points for the designed solution. Additionally, perform the hire-to-retire testing including OM update, FI posting, and replication in SAP SRM to ensure that tall applications are integrated correctly.

- 5.22.6 Create BPD and BPP documents describing the business process details, procedure details, and or policy as it relates to the process flow steps in the BPF.

- 5.22.7 Enhance the steps on the BPF to add additional detail and information to assist the reader’s understanding of the activity to be executed. For example, step 16, “Transfer EE into Non Budgeted PCN”, must specify the employee’s assignment to a temporary position that cannot be considered in the position budget application.

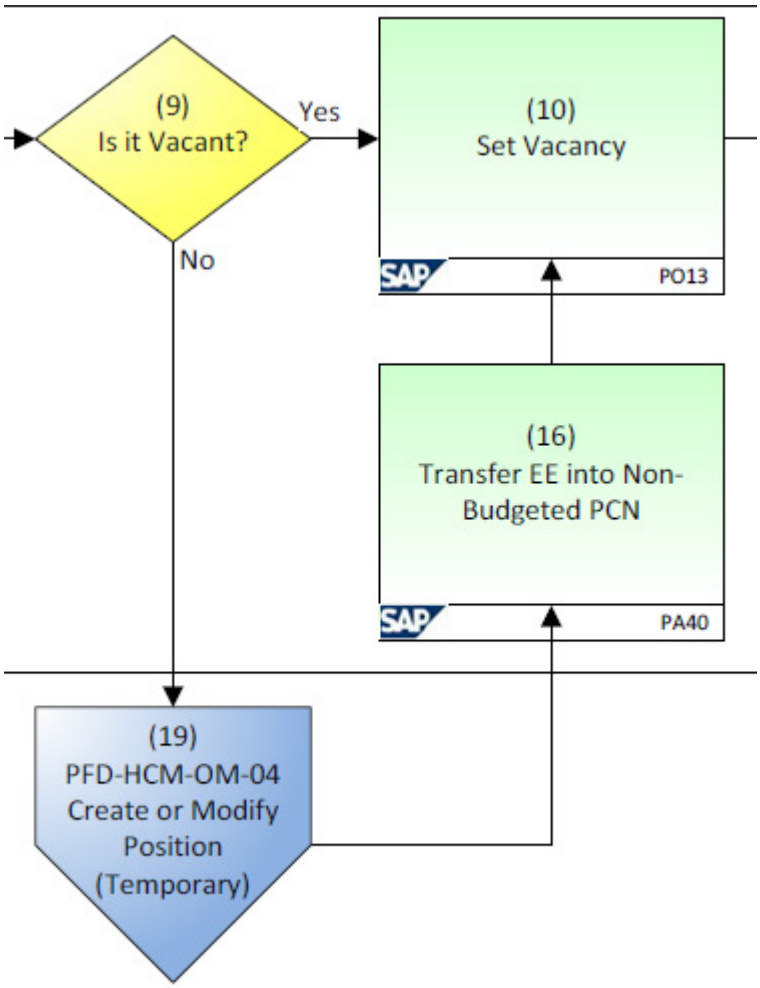


Figure 20: Hire Employee (Detail)

5.23. PA – Hire Unpaid

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 5.23.1 Process flow PFD-HCM-PA-01-02 Non-Employee Tracking describes the step to record nonpaid employees in custom table ZHRPA_NONPAID.

- 5.23.2 The unpaid employee (usually temporary or contracted workers) is only recorded in the custom table ZHRPA_NONPAID. That employee, therefore, will not be hired and hold a position in the organization structure of SAP ERP HCM.

- 5.23.3 No BPD document to complement the process flow exists.

Impact

- Unpaid employees (temporary or contracted workers) who are responsible for working in SAP software maintaining records will not be part of workflow approvals because this worker is not assigned to a position in the organizational structure (OM). This will require process deviations that allow for errors and delays.

- The BPF does not provide the activity detail related to each process step. This means that an implementation project team member will have to explain the process flow every time there is a question. For example, the process input is “Notification Sent to Records (Step 1). The reader will question the notification details needed to be provided to send the notification and who is expected to execute the notification sending step. This is time consuming and error-prone.

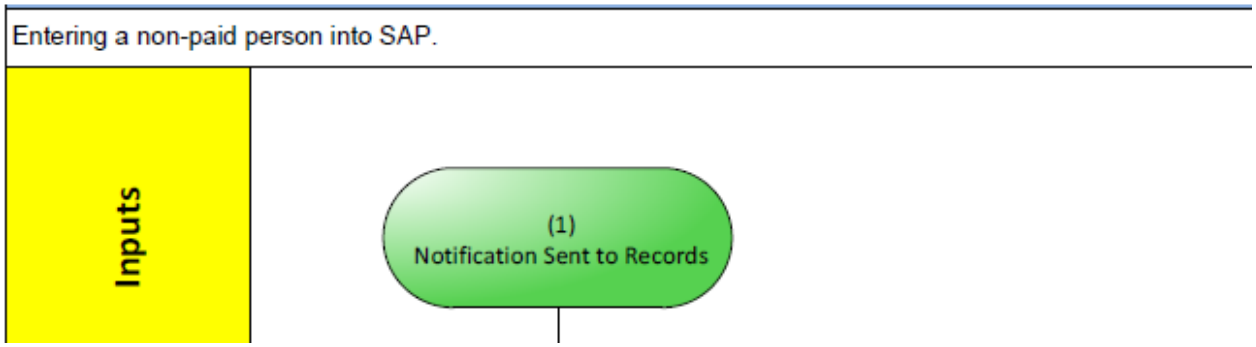


Figure 21: Hire Unpaid Employee

Recommendation

- 5.23.1 Revisit the recording of unpaid employees’ data as to whether they should be included as part of the Municipality position structure. Analyze the business impact of the possible change.

- 5.23.2 Create a BPP document that describes and relates the process flows to the business practice. This can then be used for future training, communication, and reference.

    - **5.25.2 Response: Accept with Comment**

        - MoA will evaluate.

- 5.23.3 Enhance the steps in the BPF with the additional details and information needed to assist the reader's understanding of the activity process execution.

5.24. Maintain Employee Information

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 5.24.1 Process flow PFD-HCM-PA-02-01 Modify Employee Information describes the employee information maintenance that can be requested by employee through employee self-service or by a manager through manager self-service.

- 5.24.2 Managers can request employee information changes that are processed through custom forms MS-SPF-Acting Assignment, MS-SPF-Education and Licensing, Employee Work Schedule, Tour Trades, and MS-SPF-Working out of Class.

- 5.24.3 No BPD document to complement the process flow exists.

Impact

- Because the documentation provides minimal details on the process steps it will be difficult to understand process flow PFD-HCM-PA-02-01 Modify Employee Information. For example, the input does not specify the online forms being utilized by managers to process a specific type of employee record change. This slows issue resolution in the future increasing support cost. It also raises the possibility that process defects will not be identified during testing.

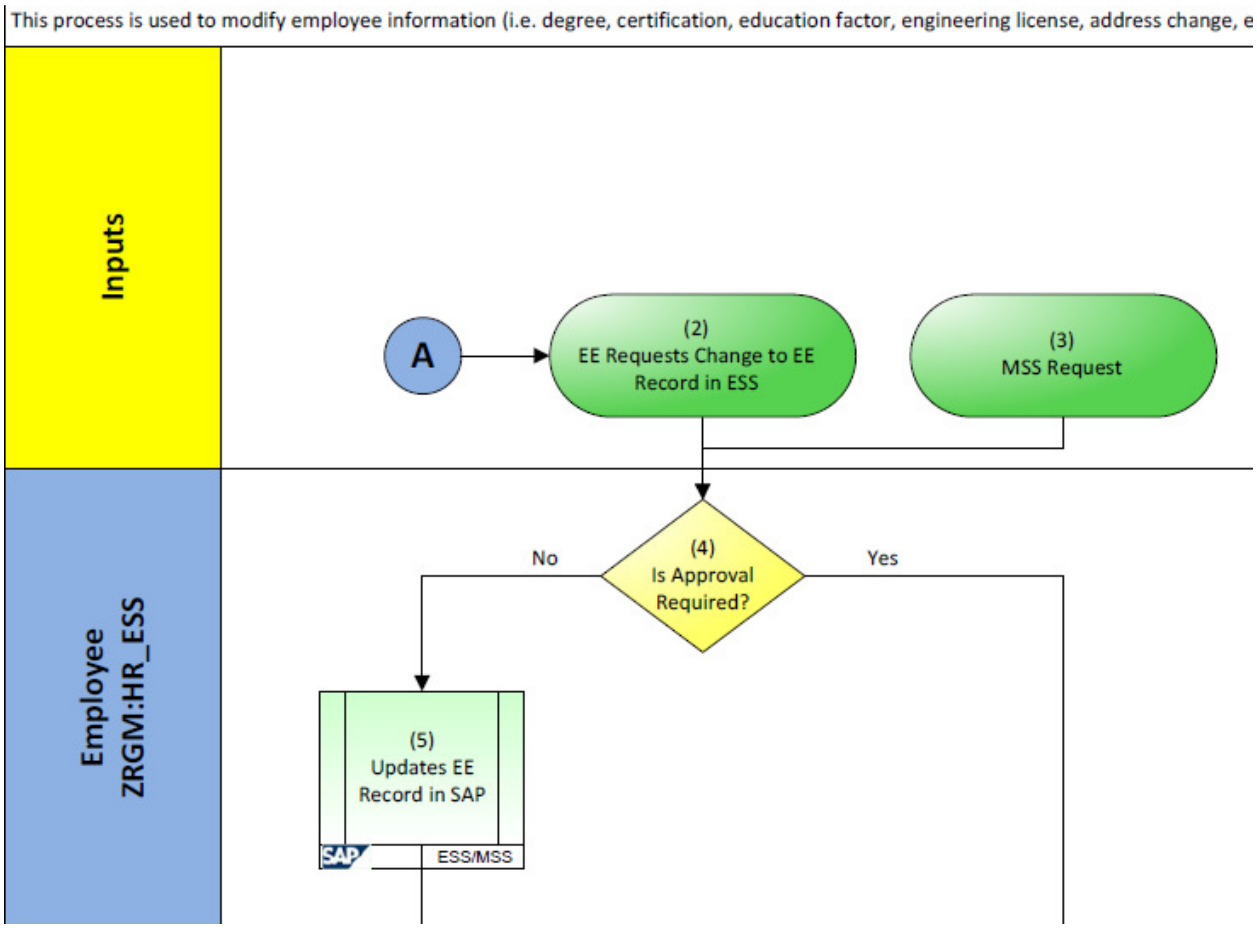


Figure 22: Modify Employee Information

Recommendation

- 5.24.1 Refine the process flow, PFD-HCM-PA02-01 Modify Employee Information, to include the online form name on step “MSS Request” (Step 3).
- 5.24.2 Thoroughly test PFD-HCM-PA-02-01 Modify Employee Information to ensure the integration components or associated functionalities work as expected. Create end-to-end integration test scenarios and test scripts for testing the modifying employee information process. Include test cases that include the e-mail notification upon transaction completion. Ensure the HR business SMEs and business owners agree upon and understand the impact and the key integration points of the designed solution.
- 5.24.3 Perform the integration hire-to-retire testing scenario to ensure the employee record can integrate correctly with other impacted areas, such as payroll.

- 5.24.4 Create a business process document that describes and relates the process flows with business practices. This can be utilized for future training, communication, and reference.

5.25. Personnel Administration (PA) – Manage Employee – No Show

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 5.25.1 Process flow PFD-HCM-PA-04 Manage Employee – No Show describes the process followed for a newly hired employee who did not show up on the first day (orientation), or showed up, but did not return to work after the first day (orientation).

- 5.25.2 The process flow does not cover the no-show prior to the NEOGOV interface, hiring execution. This is because the interface is expected to complete the hiring event in SAP HCM prior to the Monday or first day of orientation.

- 5.25.3 The ER team will delete the hired employee record in SAP ERP HCM if the employee does not show up on the first day (orientation). If the employee shows up only the first day and does not return on the next day, the ER administrator will process the separation action on the employee record.

- 5.25.4 There is no step process to flag the employee as a “no-show” and eligibility for rehire in NEOGOV

- 5.25.5 No BPD document to complement the process flow exists.

Impact

- Process flow PFD-HCM-PA-04 Manage Employee – No Show does not include the step to indicate the employee as no-show and eligibility for re-hire in NEOGOV. As a result, there is no reference for the ER administrator and manager that the employee was hired in the past but was no-show. Not having this information available means that the Municipality may inadvertently try to rehire this individual.

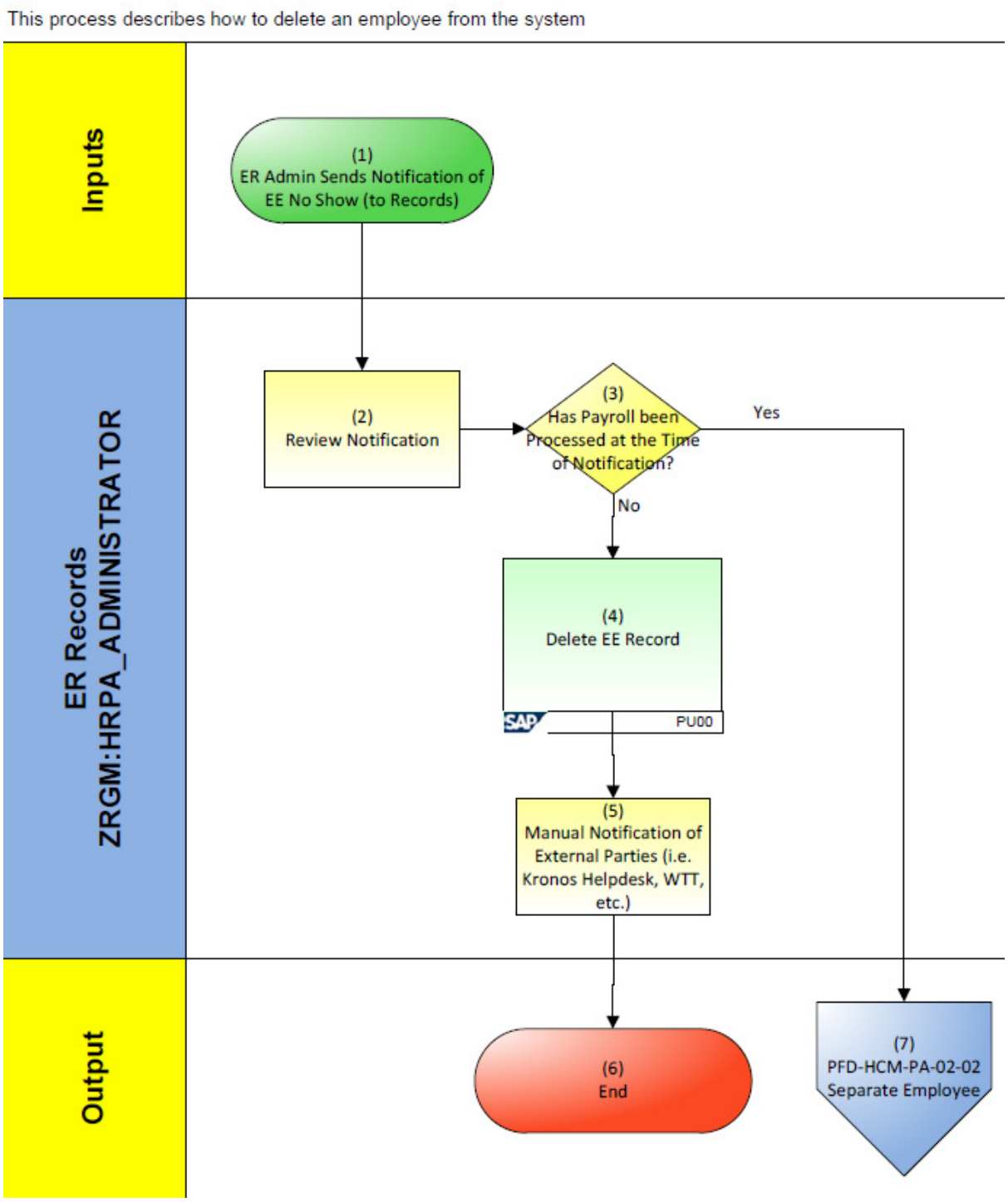


Figure 23: No-Show Employee

Recommendation

- 5.25.1 Update process flow PFD-HCM-PA-04 Manage Employee – No-Show with the steps for the ER administrator to flag the hired employee with eligibility for rehire and the no-show for future candidacy reference.

- 5.25.2 Consider revisiting the no-show process solution for the employee who does show up on the first day. Instead of deleting the employee record, keep the employee hiring action and reassign the employee to the default (or unpaid) payroll area. In this way, the employee will not be processed by payroll. Process the separation action with the next day as the effective date. This design process will record the employee history properly in the system for future reference.

- 5.25.3 Thoroughly test "PFD-HCM-PA-04 Manage Employee – No Show" to ensure that the integration components and associated functionalities work as expected. Create end-to-end integration test scenarios and test scripts for testing the manage employee – no-show process. Include test cases that include the e-mail notification upon transaction completion. Ensure the HR business SMEs and business owners agree and understand the impact and the key integration points of the designed solution. Integration testing with other areas such as benefits, time, payroll, FI, and SAP SRM are critical to confirm that the integrated processes operate properly.

- 5.25.4 Create a business process document that describes and relates the process flows with the business practice. This can be utilized for future training, communication, and reference.

5.26. PA – Manage Employee Transfer or Leave of Absence

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 5.26.1 The employee transfer process flow is included as part of the hire process flow, PFD-HCM-PA-01-01 Hire Employee.

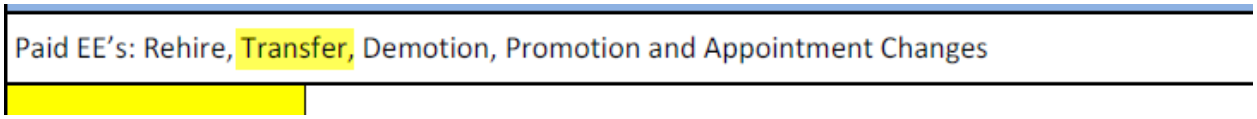


Figure 24: Hire Employee (Detail)

- 5.26.2 Kronos is the system record to administer employee leave.
- 5.26.3 SAP ERP HCM is not the system of record for employees on leave, whether paid or unpaid. This decision was made because the business requirement to allow inactive employees on unpaid leave access to employee self-service (ESS) was misunderstood.
- 5.26.4 The Security team confirmed that as long as the employee holds the position, the employee will be able to access ESS.
- 5.26.5 No process flow describes the business steps on administering employee leaves. No document identifies the integration, the required interfaces, and the communication among impacted groups, such as Kronos, benefit, and payroll.

Impact

- Due to the lack of business design document in employee leave administration, each business analyst who supports the respective modules, Kronos, benefits, and payroll, does not have knowledge of the impact and integration requirements that will process employee leave effectively and correctly. This is a good example of how the lack of documentation and understanding has resulted in poor implementation decisions.

Recommendation

- 5.26.1 Revisit the business process design if the employee leave needs to be tracked in SAP ERP HCM. Include all affected groups, including security, in this process.
- 5.26.2 Create the process flow that describes the integration and communication steps that cover leave, benefits, time, and payroll departments for administering employee leaves.

5.27. PA – Separate Employee

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 5.27.1 BPF "PFD-HCM-PA-02-02 Separate Employee" describes the high-level process design and includes the distinction between the voluntary and involuntary separation steps.

- 5.27.2 The custom on-line form, MS-SPF-Termination, and the workflow approval, MS-SPW-Termination, are well designed and developed solutions. This custom solution will assist the Municipality ER team with managing employee separations.

- 5.27.3 There is no detail blueprint and functional specification documents that can be utilized to describe the business process, the custom designed solution, the system configuration, or the custom interface functionalities. The master WRICEF list is not up to date.

Impact

- Business process flow PFD-HCM-PA-02-02 Separate Employee is the only documentation available to an ER analyst. Based on this document, the analyst may experience difficulties executing the steps and understanding the expected results from the system. For example:

    - Process flow inputs "Voluntary Separation (Dept. Manager in MSS)" (Step 2) and "Involuntary Separation (Dept. Manager)" (Step 1) do not mention the custom online form, MS-SPF-Termination, or the name of offline paper form that must be used by a department manager to request processing of the voluntary or involuntary separation.

Figure 25: Separate Employee

- Process steps “Flag EE Ineligible for Rehire” (Step 6 and Step 12) must be added with the mechanism for setting the re-hiring eligibility on employee record. Define if this is an off-line file or within the SAP ERP HCM record. Additionally, the process flow does not mention the step to update the rehire eligibility indicator in NEOGOV.

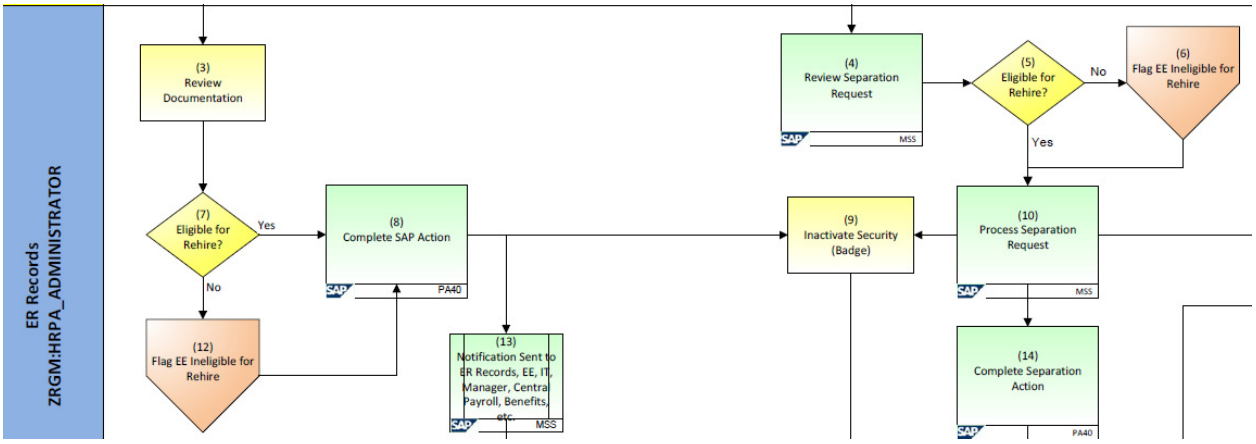


Figure 26: Separate Employee (Detail)

Recommendation

- 5.27.1 Refine the process flow diagram to include the on-line form that is used to perform the voluntary separation, the off-line paper name to process the involuntary separation, the mechanism to flag the rehire eligibility on the employee record, and the step to set the rehire eligibility in NEOGOV.

- 5.27.2 Thoroughly test "PFD-HCM-PA-02-02 Separate Employee" to ensure the integration components and associated functionalities work as expected. Create end-to-end integration test scenarios and test scripts for testing the separation process. Ensure the HR business SMEs and business owners agree upon and understand the impact and the key integration points of the designed solution. Integration testing with other areas, benefits, time, payroll, FI, and SAP SRM will be critical to confirm that the integration functionalities are executed properly.

- 5.27.3 Create a BPP document that describes and relates the process flows to the business practices. This can be utilized for future training, communication, and reference.

5.28. PA - Changes Due to CBA, Compensation Changes, or CPI

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 5.28.1 Non-rep employees' salary adjustments will be processed manually outside SAP ERP HCM.

    - **5.28.1 Response: Disagree with Comment**

        - Salary adjustments for non-rep employees will be processed within SAP using the standard transaction PA40.

- 5.28.2 CBA employees' salary adjustment will utilize the standard SAP program, Simple Pay Scale Increase for Indirect Wage Types (RPU510N0). The program has not yet been tested.

- 5.28.3 Salary structures in SAP software will be updated manually in NEOGOV.

- 5.28.4 No business design document supports the steps defined in the process flow.

Impact

- The dual maintenance of salary structures in NEOGOV and SAP software may create inconsistencies due to human error.

- The standard program, "Simple Pay Scale Increase for Indirect Wage Type", has never been tested for the bargaining unit salary adjustment. Therefore the ER team cannot confirm that the program will meet the business requirements.

Recommendation

- 5.28.1 Evaluate and test the following standard SAP programs in order to process the proper pay scale increase for collective bargaining unit employees:
    - 5.28.1.a Program “Simple Pay Scale Increase for Indirect Wage Types” (RPU510N0) is used to adjust the pay scale amount in the configuration table T510 based on certain percentage increase. This new percent adjustment will be reflected as indirect valuation on employee’s base pay record (infotype 0008).
    - 5.28.1.b Program “Pay Scale Reclassification” (RPIPSR00) is used to update the pay scale group (or grade) and the pay scale level of employee’s base pay record (infotype 0008).
- 5.28.2 Perform integration testing with other areas, benefits, time, and payroll, to confirm the integrated functionality works as expected.
- 5.28.3 Request that the outbound SAP software to NEOGOV interface program automatically update salary structures to eliminate dual entry into NEOGOV and to reduce errors.
    - **5.28.3 Response: Accept with Comment**
        - MoA accepts this recommendation but needs to investigate further to see if NeoGov can accommodate changes via an interface.

5.29. Modify Benefits Plan

Overall Risk: MEDIUM
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: LOW

Finding

- 5.29.1 Overall, the benefits area is in good condition based on its current status and place in the implementation and realization.
- 5.29.2 In terms of resource (personnel staffing) retention and staffing, key resource(s), or subject-matter expert(s) (SME) have left the Municipality since the start of the implementation project, resulting in knowledge gaps in this process area.
- 5.29.3 Documentation on business process flows (BPF) or procedures (BPP) is insufficient or nonexistent.

Impact

- Potential schedule delays related to restaffing or knowledge ramp-up.

Recommendation

- 5.29.1 Capture the procedures for modifying the configured benefit plans and document in BPFs and BPPs.

- 5.29.2 Identify resource(s) to backfill functional or business process area temporarily and conduct knowledge-transfer sessions with departing implementation project resources using BPFs or BPPs. Identify SAP Education offerings by functional area or business process area, and, if feasible, schedule new staff members for SAP Education offerings.

5.30. Benefits Billing – Reconciliation and Remittance

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 5.30.1 Overall, the benefits area is in good condition based on its current status and place in the implementation and realization.

- 5.30.2 Business process gaps exist surrounding the end-to-end business process and BBPs for leave of absence (LOA), paid LOA, and unpaid LOA. The current business process identified for managing employees going on and returning from an LOA is to enter the LOA in the Kronos Time Entry system. Based on this process, assumptions were made that additional processes or procedures were not needed in SAP software. The potential issue(s) is related to any employees who are placed on an unpaid LOA and are enrolled in benefit or savings plans. When an employee is in an unpaid status, the employee's cost portion and contribution will not be deducted and, in essence, will be calculated as negative or in arrears. This process crosses multiple business functional areas and teams, making the process owner of the entire business process unclear. Therefore, no BPF exists, which has resulted in this area not being tested. Additionally, the process or procedure for how an employee's cost portion and contribution will be collected and accounted for in the system has not been defined.

    - 5.30.2.a Note: Ensure that the wage-type mapping to the general ledger matches the business process for unpaid LOA.

- 5.30.3 In terms of resource (personnel staffing) retention and staffing, key resource(s), or subject-matter expert(s) (SME) have left the Municipality since the start of the implementation project, resulting in knowledge gaps in this process area.

- 5.30.4 Documentation on BPFs or BPPs is insufficient or nonexistent.

Impact

- The end-to-end business process for LOA will not be fully tested because the integration-test scenarios and test scripts are being created based on the BPFs. It is critical to understand and test how benefits and savings plans arrears will be handled for employees out on an unpaid LOA. Payment to vendors for the employee's cost share could result in the employee's benefits being dropped or suspended. Pay issues could arise when the employee returns from an unpaid LOA, because the payroll functionality will continue to calculate the amount of money the employee owes (in arrears; negative amount) and will reduce the employee's pay (recuperate) based on the amount the employee owes the business.

- Potential schedule delays related to restaffing or knowledge ramp-up.

Recommendation

- 5.30.1 Capture the procedures for placing employees on an LOA, to include how the employee's benefit costs and contribution share will be handled in payroll, FI posting, map to the general ledger, and vendor payments.

- 5.30.2 Identify resource(s) to backfill functional or business process area temporarily and conduct knowledge-transfer sessions with departing implementation project resources using BPFs or BPPs.

5.31. Benefits Enrollment

Overall Risk: MEDIUM
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 5.31.1 Overall, the benefits area is in good condition based on its current status and place in the implementation and realization.

- 5.31.2 In terms of resource (personnel staffing) retention and staffing, key resource(s), or subject-matter expert(s) (SME) have left the Municipality since the start of the implementation project, resulting in knowledge gaps in this process area.

Impact

- Potential schedule delays related to restaffing or knowledge ramp-up.

Recommendation

- 5.31.1 None.

5.32. Benefits – Life Changes

Overall Risk: MEDIUM
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 5.32.1 Overall, the benefits area is in good condition based on its current status and place in the implementation and realization.

- 5.32.2 In terms of resource (personnel staffing) retention and staffing, key resource(s), or subject-matter expert(s) (SME) have left the Municipality since the start of the implementation project, resulting in knowledge gaps in this process area.

Impact

- Potential schedule delays related to restaffing or knowledge ramp-up.

Recommendation

- 5.32.1 Perform the remaining testing.

- 5.32.2 Conduct knowledge transfer and ramp up resources.

5.33. Benefits Termination

Overall Risk: MEDIUM
Design Build Completeness Risk: LOW

Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 5.33.1 Overall, the benefits area is in good condition based on its current status and place in the implementation and realization.
- 5.33.2 In terms of resource (personnel staffing) retention and staffing, key resource(s), or subject-matter expert(s) (SME) have left the Municipality since the start of the implementation project, resulting in knowledge gaps in this process area.

Impact

- Potential schedule delays related to restaffing or knowledge ramp-up.

Recommendation

- 5.33.1 Conduct knowledge transfer and ramp up resources.
- 5.33.2 Perform the remaining testing.

5.34. MoA Additions

- As a result of this quality assessment, MoA has identified some areas where they would like further guidance from SAP. These are
  - Usage of Infotype 8.
  - Email notification in the hire action.
  - The ESS/MSS portal.

Document Guidance Regarding MoA Responses

- The MOA responded to “Findings” with one of the following designations and provided commentary where applicable:
    - Agree
    - Agree with Comment
    - Disagree
    - Disagree with Comment
    - Need More Information

- The MOA responded to “Recommendations” with one of the following designations and provided commentary where applicable:
    - Accept
    - Accept with Comment
    - Reject
    - Reject with Comment
    - Need More Information

Responses are inserted immediately following the relevant paragraph and shaded in light gray for emphasis.

If there is no response after a finding or recommendation, the response from the MoA is Agree or Accept.

6. SAP BUSINESS WAREHOUSE (SAP BW) AND SAP BUSINESSOBJECTS SOLUTIONS

6.1. SAP BUSINESS WAREHOUSE (SAP BW) AND SAP BUSINESSOBJECTS SOLUTIONS – SCORECARD

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
General Design Concept for SAP BW	HIGH	HIGH	HIGH	MEDIUM
Use of Standard Content for SAP BW	HIGH	HIGH	HIGH	MEDIUM
SAP BW – System Landscape	MEDIUM	LOW	HIGH	MEDIUM
Overall Solution Landscape – Transition from SAP BEx to SAP BusinessObjects Solutions	MEDIUM	MEDIUM	MEDIUM	MEDIUM
SAP BW – Transport Concept	HIGH	HIGH	HIGH	LOW
SAP BW – Authorizations	LOW	LOW	LOW	LOW
Logical Interfaces	LOW	LOW	LOW	LOW
Functional Specifications	HIGH	HIGH	HIGH	MEDIUM
Data Modeling – LSA	HIGH	HIGH	HIGH	MEDIUM
Data Sourcing	HIGH	HIGH	HIGH	MEDIUM
Data Storage	HIGH	HIGH	HIGH	MEDIUM
Data Transformation	HIGH	HIGH	HIGH	MEDIUM

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
SAP BW – Business Content Extractors	HIGH	MEDIUM	LOW	MEDIUM
Content Enhancements	HIGH	HIGH	HIGH	MEDIUM
Non-SAP Data Sources	LOW	LOW	LOW	LOW
Master Data Process Chain	MEDIUM	HIGH	MEDIUM	MEDIUM
Text and Hierarchy Process Chain	MEDIUM	HIGH	MEDIUM	MEDIUM
Transaction Data Process Chain	MEDIUM	HIGH	MEDIUM	MEDIUM
Query Definition	MEDIUM	MEDIUM	MEDIUM	MEDIUM

6.2. General Design Concept for SAP BW

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: MEDIUM

Finding

- 6.2.1 No layered scalable architecture (LSA) is followed
- 6.2.2 No naming standards are used.
- 6.2.3 No design documents are present.
- 6.2.4 No formal gap analysis took place.
- 6.2.5 No strategy for report validation is available.
- 6.2.6 No strategy to handle system refresh or source-system refresh is available.
- 6.2.7 Multiple versions of some documents exist.

Impact

- Maintenance, administration, and operation will be difficult, resulting in additional cost and possible support delays.
- Scalability is limited.

Recommendation

- 6.2.1 Ensure LSA standards are followed in SAP BW.
- 6.2.2 Ensure that a proper naming convention followed in all development in the system.
- 6.2.3 Ensure that all documentation is complete and updated.

6.3. Use of Standard Content for SAP BW

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: MEDIUM

Finding

- 6.3.1 Minimal business content is installed in SAP BW. Examples include asset accounting, the new general ledger, and project system. Procurement InfoProviders and queries are not installed.

Impact

- Business users at the Municipality are under the impression that SAP has no delivered reports in SAP BW.

Recommendation

- 6.3.1 Ensure that all relevant business content is installed. This is likely to result in reports being written from scratch when standard content is available.
- 6.3.2 See the following:
    - 6.3.2.a http://help.sap.com/saphelp_nw74/helpdata/en/c8/28ba0f00c34f299da32bd91d286fc0/frameset.htm
    - 6.3.2.b http://help.sap.com/saphelp_nw74/helpdata/en/2e/70895360b93d58e10000000a174cb4/frameset.htm

6.4. SAP BW – System Landscape

Overall Risk: MEDIUM
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: MEDIUM

Finding

- 6.4.1 The SAP BW application is currently running release 7.0 of the SAP NetWeaver technology platform, SAP enhancement package (EHP) 2, and support package stack (SPS) level 14. The most recent version of the SAP BW application is SAP NetWeaver 7.4.

Impact

- SAP regularly provides system fixes with SPSs. The SPSs improve system performance and resolve system-error bugs found by the SAP installed base. It is more risky to fix system bugs by applying an individual SAP Note than applying an SPS, primarily because the SPSs are tested as a group of fixes.
- The new standard functionality is not completely available if the version of SAP BW is not kept current.

Recommendation

- 6.4.1 Upgrade to the most recent version of SAP BW.
- 6.4.2 Develop a documented approach for patching the system regularly.

6.5. Overall Solution Landscape – Transition from SAP BEx to SAP BusinessObjects Solutions

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 6.5.1 SAP BusinessObjects solutions are not installed and integrated with SAP BW.
- 6.5.2 Reporting tools are not yet identified.
- 6.5.3 External access is not enabled in the *Advanced* tab of query definition.

Impact

- Checking *External Access* enables availability of a query to SAP BusinessObjects solutions. Unless it is checked, SAP BusinessObjects solutions cannot see the queries. As the system currently exists, they can run in SAP BEx but not in SAP BusinessObjects solutions.

Recommendation

- 6.5.1 Re-evaluate the data models and functional specifications after identifying the reporting tool(s).
- 6.5.2 Ensure that the LSA is incorporated in the data models with proper naming standards.

6.6. SAP BW – Transport Concept

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: LOW

Finding

- 6.6.1 No documented transport strategy specific to SAP BW exists.

Impact

- Without a proper transport strategy and approval process, transports in SAP BW can be unsuccessful, leading to incorrect reports in production, delayed support, and additional support cost.

Recommendation

- 6.6.1 Develop a plan for transports that includes the order in which they should be collected and imported. Include a quality check for all the transports that are moving to the next instance to make sure that all necessary objects in the dataflow are included and that none of the irrelevant objects are moved to the quality and production systems.

6.7. SAP BW – Authorizations

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 6.7.1 No current documentation on standard authorizations in SAP BW is available.
- 6.7.2 No analysis authorizations are maintained in AP BW because of the decision made by Municipality not to have data-level restrictions.

Impact

- Standard authorizations cannot be accessed due to a lack of documentation.
- Business users will have access to view all the data in the reports, including sensitive data.

Recommendation

- 6.7.1 Plan and maintain proper back-end (standard) authorizations. Standard authorizations are required by all users who work in the data warehouse workbench.

6.8. Logical Interfaces

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 6.8.1 SAP BW is logically interfaced to SAP ECC and SAP SRM.

Impact

- The interface setup is appropriate.

Recommendation

- 6.8.1 Continue with the design as planned.

6.9. Functional Specifications

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: MEDIUM

Finding

- 6.9.1 Some functional specifications are incomplete and do not capture detailed information, such as vendor listings and FERC reports.

- 6.9.2 Functional specification documents for the comprehensive annual financial report (CAFR) do not exist. The current functional team does not have the band width to complete this task.

Impact

- Without a completed and signed-off functional specification, development of and validation of the report will not be optimal. Multiple iterations of changes to the data models and reports can arise with errors or inefficient report design.
- Without proper functional specification documentation, gap analysis or report validation will be difficult, leading to errors in the production environment.

Recommendation

- 6.9.1 Ensure that all the functional specifications are updated and include detailed information with respect to the report.
- 6.9.2 Ensure that the all the relevant functional users and consultants are included when gathering functional specifications.

6.10. Data Modeling – LSA

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: MEDIUM

Finding

- 6.10.1 Some InfoProviders contain an improper percentage of the relationship of dimension tables to fact table rows at the present time. Example – ZPU_C02 (/BIC/DZPU_C026) is 19% to the fact table.
- 6.10.2 The vendor listing analysis InfoCube (ZVEND_C1) is modeled to have full loads every day, combining contracts management line items, purchase order line items, general ledger line items, accounts payable line items, check register line items, partner functions, and purchasing account assignments.
- 6.10.3 No performance-tuning measures are planned or performed, including indexes, aggregates, and compression of cubes.

Impact

- Query performance is adversely affected by dimension tables that are greater than 10% of the InfoCube's fact table.

- Drop and reload of contract management, purchase order, general ledger, accounts payable, check register, partner functions, and purchasing account assignments into the cube will be time consuming. Reconciliation of the data will be difficult.

Recommendation

- 6.10.1 Re-evaluate the data models, paying special attention to the percentage of records in each dimension compared to the size of the fact table. Make needed adjustments to the data models to eliminate the errors found.

- 6.10.2 Re-evaluate the data model design and functional specification for the vendor listing report. Check the business content of the related functional areas. Perform gap analysis and make the necessary enhancements.

- 6.10.3 Plan and complete all the common practice performance-tuning measures. Review the SAP Note provided for more information on performance tuning (https://websmp130.sap-ag.de/sap(bD1lbiZjPTAwMQ==)/bc/bsp/sno/ui_entry/entry.htm?param=69765F6D6F64653D3030312669765F7361706E6F7465735F6E756D6265723D39343830363626).

6.11. Data Sourcing

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: MEDIUM

Finding

- 6.11.1 Enhancement of data sources is inconsistent.

Impact

- Maintenance and support activities of the system would be difficult.

Recommendation

- 6.11.1 Ensure that all the enhancements leverage BADIs and use proper naming conventions.

6.12. Data Storage

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: MEDIUM

Finding

- 6.12.1 More data than necessary is being stored. For example, some InfoProviders contain an improper percentage of the relationship of dimension tables to fact table rows at the present time. For example, ZPU_C02 (/BIC/DZPU_C026) is 19% to the fact table.

- 6.12.2 Additionally, InfoProviders that have large storage requirements need performance tuning. However, no performance-tuning measures are planned or performed, including indexes, aggregates, and compression of cubes.

Impact

- Query performance is adversely affected by dimension tables when the size of data stored is greater than 10% of an InfoCube's fact table.

- InfoProviders that are not tuned for performance will require more time for report execution. Poor system performance is known to frustrate end users.

Recommendation

- 6.12.1 Re-evaluate the data models, paying special attention to the percentage of records in each dimension compared to the size of the fact table. Make any needed adjustments to the data model.

- 6.12.2 Plan and complete all the common practice performance-tuning measures. Review the SAP Note linked here for more information on performance tuning (https://websmp130.sap-ag.de/sap(bD1lbiZjPTAwMQ==)/bc/bsp/sno/ui_entry/entry.htm?param=69765F6D6F64653D3030312669765F7361706E6F7465735F6E756D6265723D39343830363626).

6.13. Data Transformation

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: MEDIUM

Finding

- 6.13.1 InfoSets are used to combine data and load to the vendor listing cube.

Impact

- The use of InfoSets as a data source leads to dropping and reloading data every day rather than loading delta records. This approach leads to increased load times and inefficient use of system resources.

Recommendation

- 6.13.1 Re-evaluate the transformations and consider using data store objects (DSO) for the transformation layer instead of InfoSets. This approach will ensure that the delta load capability is utilized.

6.14. SAP BW – Business Content Extractors

Overall Risk: HIGH
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 6.14.1 Not all relevant business content extractors are installed in SAP BW. Many extractors that could be used. For example, asset accounting data sources 0FI_AA_11, 0FI_AA_12, project system data sources, and procurement data sources.

Impact

- Business users are under the impression that SAP has no delivered content in SAP BW. This understanding results in requests for custom reports that are already available as standard content. The ultimate impact is that effort is wasted creating reports that already exist.

Recommendation

- 6.14.1 Ensure that business content extractors are used and create a custom extractor only when no standard extractor exists.

6.15. Content Enhancements

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: MEDIUM

Finding

- 6.15.1 Accounts payable data sources are enhanced in customer exists (CMOD); funds management data sources are enhanced in business add-ins (BAdI).

Impact

- CMOD is a rather old method of enhancement. BAdIs are more efficient and performance is better than CMOD.

Recommendation

- 6.15.1 Ensure that all the enhancements leverage BAdIs and use proper naming conventions.

6.16. Non-SAP Data Sources

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 6.16.1 Flat files are loaded into the development system of SAP BW.

Impact

- Lack of validity-checking in flat-file loads could result in loading bad data while loading directly into SAP BW. This situation would impact reporting, create support issues, and result in unnecessary support costs.

Recommendation

- 6.16.1 Continue as planned, without using flat-file loads in the quality and production systems.

6.17. Master Data Process Chain

Overall Risk: MEDIUM
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 6.17.1 The master data process chain is incomplete. Master data objects for attribute loads are unidentified.

Impact

- Reports will display incorrect or missing master data.
- Reports will be incorrect.

Recommendation

- 6.17.1 Maintain a master list of all the master data objects and complete the master data process chain.

6.18. Text and Hierarchy Process Chain

Overall Risk: MEDIUM
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 6.18.1 Text and hierarchy process chains are incomplete. Objects for text and hierarchy loads unidentified.

Impact

- Reports will display incorrect or missing master data.

- Reports will be incorrect.

Recommendation

- 6.18.1 Maintain a master list of all the master data objects and complete the text and hierarchy process chains.

6.19. Transaction Data Process Chain

Overall Risk: MEDIUM
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 6.19.1 Transaction data process chains are incomplete. Dependencies of transaction loads are not identified.

Impact

- Reports will display incorrect or missing master data.
- Reports will be incorrect.

Recommendation

- 6.19.1 Ensure that all the dependencies are listed and counted while building the process chains.

6.20. Query Definition

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 6.20.1 The queries reviewed included selection criteria with an inclusion selection in the filter.
    - **6.20.1 Response: Agree with Comment**
        - Should be "exclusion" rather than "inclusion."

- 6.20.2 External access is not enabled in the queries for access to SAP BusinessObjects solutions.

Impact

- Query filtering using exclusion forces a full table scan and, as a result, the reports run more slowly than they should.
- Reporting tools in SAP BusinessObjects solutions cannot access the queries with the external access unchecked.

Recommendation

- 6.20.1 Ensure that all queries include only inclusion filters and not exclusion filters.
    - **6.20.1 Response: Accept with Comment**
        - Exclusion filters will only be used when reasonably necessary.
- 6.20.2 Ensure that external access is enabled in each query defined so that reporting tools in SAP BusinessObjects solutions can access the queries.

Document Guidance Regarding MoA Responses

- The MOA responded to “Findings” with one of the following designations and provided commentary where applicable:
  - Agree
  - Agree with Comment
  - Disagree
  - Disagree with Comment
  - Need More Information

- The MOA responded to “Recommendations” with one of the following designations and provided commentary where applicable:
  - Accept
  - Accept with Comment
  - Reject
  - Reject with Comment
  - Need More Information

Responses are inserted immediately following the relevant paragraph and shaded in light gray for emphasis.

If there is no response after a finding or recommendation, the response from the MoA is Agree or Accept.

7. PROJECT SYSTEM

7.1. PROJECT SYSTEM – SCORECARD

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
Investment Management	HIGH	MEDIUM	MEDIUM	MEDIUM
Project Initiation – Capitalized Projects	LOW	LOW	LOW	LOW
Project Initiation – Expense Projects – Construction	N/A	N/A	N/A	N/A
Project Initiation – Expense Projects – Nonconstruction	N/A	N/A	N/A	N/A
Maintenance and Operations Projects	LOW	LOW	LOW	LOW
Project Creation – Project Structures	LOW	LOW	LOW	LOW
Project Creation – Project Numbers	LOW	LOW	LOW	LOW
Project Definition and WBS Element Data Fields	LOW	LOW	LOW	LOW
Custom Data Fields	MEDIUM	LOW	MEDIUM	MEDIUM
Project Planning and Budgeting – Cost Estimating and Planning	LOW	MEDIUM	LOW	MEDIUM
Project Planning and Budgeting – Scheduling	LOW	LOW	LOW	LOW
Project Planning and Budgeting – Billing and Reimbursement Planning	LOW	LOW	LOW	LOW
Project Execution – Project Statuses	LOW	LOW	LOW	LOW

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
Project Execution – Billing (Reimbursements), Down Payments, Procurement (Purchase Requisitions and Purchase Orders), Invoicing, and P-Card Processes	MEDIUM	MEDIUM	HIGH	MEDIUM
Project Execution – Payroll and Labor Process	MEDIUM	LOW	LOW	MEDIUM
Project Execution – Cost Collection and Overhead Allocations	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Project Execution – Change Orders	LOW	LOW	LOW	LOW
Project Execution – Period-End Tasks	LOW	LOW	LOW	LOW
Project-Close Checklist	LOW	LOW	LOW	LOW
Status Updates – TECO, CLSD, and Lessons Learned	LOW	LOW	LOW	LOW

7.2. Investment Management

Overall Risk: HIGH
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 7.2.1 Investment management (IM) requires additional work before it will be ready for implementation. The design for IM was started later than project system (PS) and was done only for AWWU. Nevertheless, the design is largely in place for appropriation requests, the IM hierarchy, the distribution of budget positions to projects, and the budgetary oversight and control across AWWU. The creation of projects based on appropriation requests is not in place as desired, and more work is required to review the standard IM reports and to identify, design, develop, and test any custom IM reports that will be needed to meet AWWU management requirements. In addition, knowledge transfer from an expert IM consultant to the in-house staff handling IM is especially needed to bring the level of knowledge up to an adequate point. For these reasons, the risk for implementation of IM is high.

- 7.2.2 The conversion strategy for IM must be finalized and documented. It must be oriented to the annual budgeting cycle and capture the six-year long-term capital plan.

- 7.2.3 Some testing has been completed for IM, but more is needed once the final design is in place. It is important to do a full integration test with PS, including an annual budgeting cycle scenario and end-to-end tests from IM right through projects to asset creation and management in asset accounting.

Impact

- Medium effort is required to complete the IM design with documentation, to design and provide the custom reports required, to redo the unit and integration testing; and to execute the IM cut-over tasks.

Recommendation

- 7.2.1 Obtain the services of an expert IM consultant for three months to assist with the completion of IM design; to help with the identification, design and development of custom IM reports and with testing; and to provide knowledge transfer to in-house personnel.

- 7.2.2 Continue with realization, including documentation development and sign-off, final integration tests, custom reporting specification, development, and testing.

- 7.2.3 Consider the inclusion of the Municipality in the initial IM implementation. However, if the Municipality does not go ahead now, it can be added to IM after going live during one of the annual budgeting cycles.

7.3. Project Initiation – Capitalized Projects

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 7.3.1 The design for project initiation for capitalized projects is complete and the design is good. The integration with IM (AWWU only) requires work to complete and test the integration with PS. See section 7.2.

- 7.3.2 Testing is advanced, but incomplete. Final integration testing is still to be done.

- 7.3.3 Standard reports are in place and working, but custom reports are undefined or not yet fully specified.

- 7.3.4 Business process flow PFD-FIN-PS-01 was reviewed and is in good shape.

- 7.3.5 Custom workflow PS-SPW- Project Master Workflow was reviewed. It is used for initial project approval and goes through four approval steps – from initiator to department approver, to accountant 1, then to accountant 2, and back to the initiator. Workflow development is completed for the initial project approval. However, a simple workflow for secondary project approval has been requested (and is not yet developed) to handle the addition of a new WBS to an existing project or the approval of a project change request. The secondary workflow would bypass the higher levels of approval and would simply involve having the initiator send a notification of the project change to all parties.

Impact

- None.

Recommendation

- 7.3.1 Continue with realization, including documentation development and sign-off, final integration tests, custom reporting specification, development, and testing.

7.4. Project Initiation – Expense Projects – Construction

- 7.4.1 See section 7.3.

7.5. Project Initiation – Expense Projects – Nonconstruction

- 7.5.1 See section 7.3.

7.6. Maintenance and Operations Projects

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 7.6.1 The design for maintenance and operations projects is complete and the design is good. Specific project templates have been created and tested for capital maintenance projects. However, documentation for the maintenance process steps where they specifically differ from the normal capital process is missing.
- 7.6.2 Testing is advanced, but incomplete. Final integration testing is still to be done.
- 7.6.3 Standard reports are in place and working, but custom reports are undefined or not yet fully specified.

Impact

- Documentation is needed for sustaining the system and training end users.
- Errors may occur in the production environment without adequate testing.
- Custom reports need to be defined to ensure they are in the work queue with enough time for development.

Recommendation

- 7.6.1 Continue with realization, including documentation development and sign-off, final integration tests, custom reporting specification, development, and testing.
- 7.6.2 Complete the process documentation where it differs from the normal capital process.

7.7. Project Creation – Project Structures

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 7.7.1 The design for project structures is complete and the design is good. There is good integration of capital WBSs with asset accounting and expense WBSs with cost center or internal order (AWWU)

settlement. Extensive template development work has produced a particularly strong set of project templates (174) for use in project creation. They have been extensively tested and evaluated to ensure a correct balance with not too many templates (which makes it difficult for project managers to choose the correct ones) and not too few templates (so that the match with operational projects is close and substantially reduces the number of adjustments requires during project creation).

Impact

- The project structures are ready for implementation.

Recommendation

- 7.7.1 None.

7.8. Project Creation – Project Numbers

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 7.8.1 The design for project numbers is complete and the design is excellent. The project numbers have been thoroughly tested and found to meet requirements well.

Impact

- Project numbers are ready for implementation.

Recommendation

- 7.8.1 None.

7.9. Project Definition and WBS Element Data Fields

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 7.9.1 The design for project definition and the standard WBS element data fields, including the user defined fields, is complete and the design is good.

Impact

- Project definition and the standard WBS element data fields are ready for implementation.

Recommendation

- 7.9.1 None.

7.10. Custom Data Fields

Overall Risk: MEDIUM
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 7.10.1 The enhancement for a multifunds tab in the WBS element data screen is mostly complete and has been tested extensively in unit- and integration-testing. However, the new fund data fields are not being properly edited. Users can enter incorrect data with no validation at the time of entry. Edits must be added to the fields to ensure that correct fund data is being entered – the edits must be against the live fund tables.

Impact

- Without proper edits, incorrect data can be entered and stored in the multifunds enhancement Z-table. Errors would not be caught until a later point in the project process, at which time extra effort would be required to determine that an error exists, to notify the project manager or accountant to correct the error, and to rerun the step where the process was interrupted.

- This lack of upfront custom data field edits is unacceptable.

Recommendation

- 7.10.1 Fix the multifunds enhancement program by adding a complete set of edits on the custom fields, and repeat unit and integration testing of the enhancement using a complete range of data field value scenarios.

7.11. Project Planning and Budgeting – Cost Estimating and Planning

Overall Risk: LOW
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 7.11.1 The design for project planning and budgeting is adequate, but the use of plan versions to record historical plan copies for later comparisons with a later current plan or with budget has not been thoroughly thought-through or documented. The project budget is not critical for availability control, since it is handled in grants and funds management, and additional budget availability control is not needed at the project level.

- 7.11.2 Testing is advanced, but incomplete. Final integration testing with IM is still to be performed and is important to ensure smooth integration during the annual planning and budgeting cycles.

- 7.11.3 Standard reports are in place and working, but custom reports and the specific requirements for project plan and budget reporting rather than commitments and actuals are undefined or not yet fully specified.

Impact

- It is important to record and track versions of the project plan and changes to the project budget as change orders occur.

- Errors discovered in the production environment may create an unstable environment.

Recommendation

- 7.11.1 Continue with realization, including final design and documentation development and sign-off; final integration tests; and custom reporting specification, development, and testing.

- 7.11.2 Fully define the use of plan versions and budgets in the project planning phase, in execution, and in the monitoring and reporting of project progress.

7.12. Project Planning and Budgeting – Scheduling

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 7.12.1 Project scheduling is not performed in project system. Microsoft Project (Municipality) and Primavera (AWWU) are used for project scheduling where the project is judged to be complex enough that detailed scheduling is required. Start and end dates on the overall project will be stored on the project definition and are available on each WBS element for information.

Impact

- None.

Recommendation

- 7.12.1 None.

7.13. Project Planning and Budgeting – Billing and Reimbursement Planning

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 7.13.1 The design for capitalized projects is complete and the design is good. Integration with asset accounting using AUC is good. Design documentation for capitalized projects explaining the various project types is unavailable.

- 7.13.2 Testing is advanced, but incomplete. Final integration testing is still to be done.

- 7.13.3 Standard reports are in place and working, but custom reports are undefined or not yet fully specified.

- 7.13.4 The conversion strategy is complete and main testing is finished; final conversion testing is still required.

    - **7.13.4 Response: Disagree with Comment**

- MoA has not completed the conversion strategy.

Impact

Recommendation

- 7.13.1 Continue with realization, including documentation development and sign-off, final integration tests, custom reporting specification, development, and testing. Update the project conversion spreadsheets to the new cut-over date to include new projects and changes from the current versions.
- 7.13.2 Complete the design documentation and integration testing; to complete the specification, development, and testing of custom reports in SAP BW; to perform final conversion testing; and to execute the cut-over tasks.

7.14. Project Execution – Project Statuses

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 7.14.1 The design for capitalized projects is complete and the design is good. Integration with asset accounting using AUCs is good. Design documentation for capitalized projects explaining the various project types is unavailable.
- 7.14.2 Testing is advanced, but incomplete. Final integration testing is still to be done.
- 7.14.3 Standard reports are in place and working, but custom reports are undefined or not yet fully specified.
- 7.14.4 The conversion strategy is complete and main testing is finished; final conversion testing is still required.

- **7.14.4 Response: Disagree with Comment**

- MoA has not completed the conversion strategy.

Impact

Recommendation

- 7.14.1 Continue with realization, including documentation development and sign-off, final integration tests, custom reporting specification, development, and testing. Update the project conversion spreadsheets to the new cut-over date to include new projects and changes from the current versions.

- 7.14.2 Complete the design documentation and integration testing; the specification, development, and testing of custom BW reports; final conversion testing; and to execute the cut-over tasks.

7.15. Project Execution – Billing (Reimbursements), Down Payments, Procurement (Purchase Requisitions and Purchase Orders), Invoicing, and P-Card Processes

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: MEDIUM

Finding

- 7.15.1 The design for project execution is advanced but incomplete.

- 7.15.2 The main concern with incomplete design is in results analysis, functionality in PS that is used whenever revenue in a project is received in addition to project costs. Results analysis is run monthly to analyze the results of the period, to study revenue versus costs against plan and budget, and to calculate and automatically post general ledger account entries. The configuration for results analysis is mostly in place, but is incomplete. Limited testing has been done with inadequate results so far. Further design, configuration and testing is required to complete the results analysis work.

- 7.15.3 A second area of concern is the design for project purchasing. Room for improvement exists in the interfacing with the SAP Supplier Relationship Management application. Shopping carts in SAP SRM are manually created for all project purchases. Each shopping cart then creates a purchase requisition that is processed by purchasing to create the purchase order with the vendor. This method works, but requires significant manual time for the shopping cart entries and subsequent interaction with purchasing when changes occur.

- 7.15.4 A third area of concern is with the large number of interfaces required with PowerPlan and Maximo. The PowerPlan interfaces for ML&P have been developed with the assistance of a PowerPlan consultant to be consistent with what has been done at other utilities. The interfaces are complete and extensively tested. The concern is with the future requirement for maintaining and adjusting the interfaces because upgrades are implemented on both the PowerPlan and SAP sides. Extensive changes and retesting may be required

to the PowerPlan interfaces over time. Also, since the PowerPlan interfaces dictate, to a certain extent, the options for project structures (the use of network components for cost interfacing, for example), and any future improvements to the use of project networks in SAP for ML&P are severely restricted. On the Maximo side (AWWU and Municipality), the interfacing is not as well developed. The general view is that only half of the required interfaces are in place and that future complex interfaces will be required after going live. For this reason, the future risk for this area is high.

- **7.15.4 Response: Agree with Comment**
  - MoA does not use Maximo. Future interfaces are not considered complex.

- 7.15.5 The outbound interface for Primavera P6 is incomplete and only a stopgap until the real interfacing requirements can be addressed through use of a third-party interfacing tool from SAP software to Primavera. The future risk of extensive work being required to this interface is also high.

- 7.15.6 The billing interface with billing in sales and distribution (SD) is well designed and extensively tested. The resource-related billing (RRB) configuration (including the dynamic item processor (DIP profiles) is complete and adequate for the billing requirements for reimbursable projects.

  - **7.15.6 Response: Disagree with Comment**
    - MoA has not extensively tested the interface.

- 7.15.7 Project execution testing is advanced, but incomplete. Final integration testing is still to be done.

- 7.15.8 Standard reports are in place and working, but custom reports are undefined or not yet fully specified. Some of the suggestions for custom PS reports that were provided during the review sessions include:
  - 7.15.8.a Projects with no activity – to identify projects not being updated in a timely fashion
  - 7.15.8.b Capital reporting for CWIP
  - 7.15.8.c JProject financial details report showing plans, budgets, commitments, and actuals
  - 7.15.8.d Project overview report
  - 7.15.8.e SAP–PowerPlan custom balancing report – to ensure balance between the two systems

- 7.15.9 Two custom project master data conversions have been developed and extensively tested: PS-SPC-Project Master Data Conversion and PS-SPC- WBS Element Conversion. Both are in good shape. However, a third conversion for project and grant historical data (inception to date) is still being discussed. A decision document for this conversion has been prepared and is going through approvals. The exact design of the project history conversion must be finalized, documented, developed, and tested.

Impact

- Without more results analysis work, manual month-end tasks will be needed to calculate and enter the general ledger journal entries for recognized revenue and so on.

Recommendation

- 7.15.1 Obtain the services of a specialized results analysis consultant to evaluate and update the current design and to complete the final results analysis configuration, documentation, unit-testing, and integration testing.

    - **7.15.1 Response: Accept with Comment**

        - MoA will evaluate.

- 7.15.2 Consider an alternate standard approach for project purchasing, involving the use of network activities. Specifically, consider external activities that integrate more tightly with materials management (MM) procurement and require less manual effort to create and populate with the required material or service masters, purchase quantities, and required due dates. In addition, when the project dates are changed in the network activities, the date changes are reflected immediately in the MM purchase required dates. MM interfaces automatically with SAP SRM for purchase requisitions and purchase orders.

- 7.15.3 Continue with realization for project execution including documentation development and sign-off, final integration tests including conversion testing, and custom reporting specification, development, and testing.

- 7.15.4 Complete the results analysis design and documentation and integration testing; to complete the specification, development, and testing of custom reports in SAP BW; to complete the project and grant history conversion program design, development, and testing and to perform final conversion integration testing; and to execute the cut-over tasks.

7.16. Project Execution – Payroll and Labor Process

Overall Risk: MEDIUM
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 7.16.1 The design for the collection of payroll and labor costs in projects is complete and will provide extensive, detailed labor cost information to project managers in project system. Strong integration with

payroll is provided through an interface from the time recording systems into the cross-application timesheet (CATS) in SAP software. However, some concerns still exist with payroll being ready for implementation without some adjustments being required for the interfacing from the multiple timekeeping systems currently in place. See the sections 5.10–5.12 on payroll and time recording. Once the payroll interface is finalized, further integration testing is needed with project system to verify that the correct labor charges are being recorded in project WBSs. This situation places the overall risk at medium.

- 7.16.2 Testing is advanced, but incomplete. The payroll interface is still being tested and a complete integration test is required to ensure that labor data is received and updated correctly across the whole range of projects being converted.

Impact

- Incomplete testing can result in finding errors in the production environment after going live.

Recommendation

- 7.16.1 Continue with realization, including the final payroll integration tests.

7.17. Project Execution – Cost Collection and Overhead Allocations

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 7.17.1 The design for cost collection into projects is complete and the design is generally good. However, room for improvement remains in the procurement interfacing with SAP SRM Shopping carts in SAP SRM are manually created for all project purchases. Each shopping cart then creates a purchase requisition that is processed by purchasing to create the purchase order with the vendor.

- 7.17.2 Overhead design is good and extensive testing has been completed.

- 7.17.3 Interest design is in place and the option to not apply interest to a WBS element has been tested. However, more extensive testing is required to ensure that the correct interest amounts are generated everywhere needed by the month-end run.

- 7.17.4 P-card costs are rarely needed for projects since they are allowed only for small item purchases. They are more common for maintenance projects and have been tested.

- 7.17.5 Other miscellaneous costs charged to projects have been tested using journal entries posted directly to WBS elements – permits and fees, equipment charges for rental per hour, and so on.

- 7.17.6 Cost transfers between projects and WBSs to correct charging errors have been tested.

    - **7.17.6 Response: Disagree with Comment**

        - MoA has not tested this.

Impact

Recommendation

- 7.17.1 Consider an alternate standard approach for project purchasing, involving the use of network activities, Specifically, examine external activities that integrate more tightly with materials management (MM) procurement and require less manual effort to create and populate with the required material or service masters, purchase quantities, and required due dates. In addition, when the project dates are changed in the network activities, the date changes are reflected immediately in the MM purchase required dates. MM interfaces automatically with SAP SRM for purchase requisitions and purchase orders.

- 7.17.2 Continue with realization, including documentation development and sign-off, final integration tests, and custom reporting specification, development, and testing.

- 7.17.3 Complete the documentation cost collection and overheads and interest allocations and to complete integration testing.

7.18. Project Execution – Change Orders

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 7.18.1 The design for change orders is complete and the design is good. The understanding of how to manage the project budget when change orders occur and to move budget funds between WBSs as necessary is good. The approval process for changes that require new WBSs or reapproval of budget for substantial increases or decreases is in place.

- 7.18.2 Testing is advanced, but incomplete. Final integration testing is still to be done.

- 7.18.3 Standard reports are in place and working, but custom reports to help with tracking and monitoring changes to budgets and WBSs are undefined or not yet fully specified.

Impact

- Minimal impact.

Recommendation

- 7.18.1 Continue with realization, including documentation development and sign-off; final integration tests; and custom reporting specification, development, and testing.

7.19. Project Execution – Period-End Tasks

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 7.19.1 The design for period-end tasks is complete. The design is good for the three major month end tasks in Project System: overheads, interest, and settlement. The month-end runs are run in "Test" mode first to determine if there are any errors to be fixed. The errors are resolved, and the final runs are done in "Real" mode to update the production files. Processes are in place to reverse the month-end runs and re-run them, if this becomes necessary. The month-end business process documentation (PFD-FIN-PS-04) was reviewed and it needs some updating to provide more detail on the interest runs.

- 7.19.2 The month-end cockpit is not being used to plan, execute, monitor, track, and record the month-end run process.

- 7.19.3 Month-end testing has been done in integration testing, but is incomplete, notably for the interest run. Final integration testing still needs to be done, to include several month-ends with a variety of transactions and month-end scenarios.

Impact

Recommendation

- 7.19.1 Implement the month-end cockpit for the PS month-end as part of the overall finance month-end discussed in section 3.5.

- 7.19.2 Continue with realization, including documentation development and sign-off, final integration tests, custom reporting specification, development, and testing.

- 7.19.3 Complete the PS month-end documentation; the inclusion of the PS month-end runs in the finance month-end cockpit specification, and to complete integration testing.

7.20. Project-Close Checklist

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 7.20.1 The design for project close is complete and the design is good. The project-close tasks are well understood. The project-close business process flow, PFD-FIN-PS-05, is complete.

- 7.20.2 A standard check list for project close does not exist to assist the project managers and project finance personnel with closings.

Impact

- The check-list documentation is necessary for training and to sustain the system

Recommendation

- 7.20.1 Develop and formally document a standard check list for project close to assist the project managers and project finance personnel with closings.

- 7.20.2 Continue with realization, including the check-list documentation development and sign-off.

- 7.20.3 Include specific training on the check-list in the PS training before go-live.

7.21. Status Updates – TECO, CLSD, and Lessons Learned

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 7.21.1 The design for project-close status updates is complete, including a CLSD user status that can be set to enable the interface with PowerPlan to work without interface errors occurring unnecessarily. Since the project status of CLSD is not yet set, financial updates can still be posted in SAP software from the PowerPlan interface without errors.

- 7.21.2 No formal lesson-learned process is currently documented. It would be useful for identifying things that are learned during a project that can be reused in future projects and to have a mechanism in place for requesting updates to project templates or even new templates when these are beneficial as improvements to the existing structures.

Impact

- A lessons-learned process provides continuous improvement.

Recommendation

- 7.21.1 Continue with realization, including development of lessons-learned documentation and sign-off

Document Guidance Regarding MoA Responses

- The MOA responded to “Findings” with one of the following designations and provided commentary where applicable:
    - Agree
    - Agree with Comment
    - Disagree
    - Disagree with Comment
    - Need More Information

- The MOA responded to “Recommendations” with one of the following designations and provided commentary where applicable:
    - Accept
    - Accept with Comment
    - Reject
    - Reject with Comment
    - Need More Information

Responses are inserted immediately following the relevant paragraph and shaded in light gray for emphasis.

If there is no response after a finding or recommendation, the response from the MoA is Agree or Accept.

8. FERC

8.1. FERC – SCORECARD

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
FERC – Master Data	LOW	MEDIUM	LOW	LOW
FERC Parameters	LOW	MEDIUM	LOW	LOW
CO Variance Allocation	N/A	N/A	N/A	N/A
Trace Posting Accounts	MEDIUM	MEDIUM	LOW	LOW
Direct Posting Accounts	MEDIUM	MEDIUM	LOW	LOW
Trace Accuracy	HIGH	HIGH	MEDIUM	HIGH
FERC – Drill-Down	MEDIUM	MEDIUM	LOW	MEDIUM
Secondary Costs to Be Excluded	N/A	N/A	N/A	N/A
Embedding FERC into Numbering Scheme	LOW	LOW	LOW	LOW
Maintain FERC Data	LOW	MEDIUM	LOW	LOW
FERC Month-End	HIGH	HIGH	MEDIUM	HIGH

8.2. FERC – Master Data

Overall Risk: LOW
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 8.2.1 The FERC range of accounts for compliance with the National Association of Regulatory Utility Commissioners (NARUC) and Federal Energy Regulatory Commission (FERC) has been finalized for both utility units: Anchorage Water and Wastewater Utility (AWWU) and Municipal Light and Power (MLP) and set up in SAP software according to verbal requirements from business users. The configuration of master data reflects common practices and business requirements.

- 8.2.2 Two document types have been defined for trace and direct posting.

- 8.2.3 FERC indicators have been defined for trace cost-posting according to business needs.

- 8.2.4 None of these items have been documented. No blueprint or design rationale or configuration document exists for FERC, but the master data follows standard practices.

    - **8.2.4 Response: Agree with Comment**

        - The configuration document exists and has been provided to SAP.

Impact

- The FERC master data setup is designed to work as required.

Recommendation

- 8.2.1 Document all the business requirements and the design rationale in a blueprint document.

- 8.2.2 Document all the configuration settings.

8.3. FERC Parameters

Overall Risk: LOW
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 8.3.1 Cost centers, work breakdown structure (WBS) elements, and internal orders have been chosen as final cost objects for FERC reporting.
- 8.3.2 FERC indicator assignment fields have been identified for maintenance in the cost center, internal order, and WBS master data as required to meet business needs.
- 8.3.3 FERC indicator values have been maintained in appropriate final cost objects. Specific clearing cost object assignments have been made for AWWU overhead internal orders.
- 8.3.4 Offset accounts for regulatory postings have been maintained.
- 8.3.5 These items have not been documented in a blueprint, but follow standard practice.

Impact

- Continue with the current approach. FERC parameters are designed to generate FERC month-end postings as required by the business.

Recommendation

- 8.3.1 Document the business requirements and design rationale in a blueprint document.

8.4. CO Variance Allocation

Finding

- 8.4.1 Not assessed. CO variance allocation is not part of the business requirements.

Impact

- None.

Recommendation

- 8.4.1 None.

8.5. Trace Posting Accounts

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 8.5.1 Trace posting accounts have been identified. Their mapping to FERC accounts in conjunction with FERC indicators has been finalized; however, the mapping has not been documented.
    - **8.5.1 Response: Disagree with Comment**
        - This mapping has been documented.
- 8.5.2 The mapping has not been tested with all possible business scenarios.

Impact

- The mapping of the FERC trace posting accounts is designed to work as required in month-end processing and follows standard practices.

Recommendation

- 8.5.1 Document the business requirements in a blueprint.
- 8.5.2 Test the trace cost account mapping as part of a comprehensive integration testing.

8.6. Direct Posting Accounts

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 8.6.1 Direct-posting accounts and their mapping to FERC accounts have been defined and maintained in the FERC_C9 table according to verbal business requirements provided by end users. The setup in SAP software for direct posting accounts follows standard practices.
- 8.6.2 Certain balance sheet accounts designated for specific business areas are available for posting by other business areas.

Impact

- Users might choose a balance sheet account during document entry that belongs to other business areas.
- Regulatory account postings are expected to occur as required when the users choose the correct direct posting accounts during document entry.

Recommendation

- 8.6.1 Configure validation to restrict use of balance sheet accounts designated for specific business areas.
- 8.6.2 Develop a volume-test plan to include all balance-sheet and revenue direct-post accounts.
- 8.6.3 Document requirements in a blueprint.

8.7. Trace Accuracy

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: HIGH

Finding

- 8.7.1 FERC reports generated with intergovernmental charges (IGC) do not reconcile with controlling. The FERC trial balances generated with IGC postings do not add up to zero.
- 8.7.2 Comprehensive end-to-end integration testing has not been executed.
- 8.7.3 The data used in integration testing does not reflect all the business scenarios.

Impact

- Without comprehensive, end-to-end integration testing using data representing actual business scenarios, the business cannot validate FERC configuration and its integration with controlling.

Recommendation

- 8.7.1 Execute comprehensive, end-to-end integration testing with real business scenarios and reconcile the FERC trial balance that is generated.

- 8.7.2 Determine if CO and FERC reconciliation continues to be a significant issue. If so, consider treating selected secondary cost elements as primary or using distribution cycles instead of the assessment cycle for IGC charges. The distribution cycle approach would enable the allocation process to reflect the original cost element in all cost objects from start to finish.

8.8. FERC – Drill-Down

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 8.8.1 FERC drill-down functionality works as required by verbal business requirements and it follows standard practices. However, no drill-down report has been generated with full-fledged integration testing.

Impact

- Without proper integration testing, the business is unable to validate the drill-down functionality.

Recommendation

- 8.8.1 Execute integration testing with all possible real scenarios applicable for Municipality of Anchorage, AWWU, and MLP, including IGC, overhead calculations, and so on, and generate FERC drill-down reports.

8.9. Secondary Costs to Be Excluded

Overall Risk: N/A
Design Build Completeness Risk: N/A
Future Fit or Impact on Scalability Risk: N/A
Remaining Effort: N/A

Finding

- 8.9.1 There is no business requirement for “secondary costs to be excluded.” All secondary cost elements are included in the FERC trace. Hence, it was not assessed as part of the QA Review and no risk assessment was provided for this topic.

Impact

- None.

Recommendation

- 8.9.1 None.

8.10. Embedding FERC into Numbering Scheme

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 8.10.1 FERC accounts have been assigned a specific number range starting with “9”.
- 8.10.2 The accounts have been set for automatic posting only.

Impact

- FERC postings will be segregated from natural account postings.

Recommendation

- 8.10.1 Maintain the existing setup.

8.11. Maintain FERC Data

- See section 8.3, FERC Parameters.

8.12. FERC Month-End

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: HIGH

Finding

- 8.12.1 The FERC month-end process has not been tested with real data. Integration testing did not fully reflect actual business processes. Accordingly, FERC integration testing has not been completed.
- 8.12.2 No comprehensive test script exists for FERC.
- 8.12.3 Eight period-end FERC reports have been identified for the utility units. The functional specifications of the eight FERC reports do not contain all the latest information.
- 8.12.4 Development is incomplete for all the reports.

Impact

- The business is unable to validate the FERC design and processes, which results in an untested solution.
- Business is unable to generate period-end reports.

Recommendation

- 8.12.1 Conduct testing with all possible business scenarios of the business area. One option is to plan for the testing in conjunction with mock-close testing. Consider executing a mock close for a month in SAP software with data converted from legacy system prior to intergovernmental charges (IGC) allocation. Execute IGC allocations in SAP software; complete the month-end close and compare the FERC reports generated in SAP software with those in the legacy system.
- 8.12.2 Complete development and testing of the eight period-end FERC reports.
- 8.12.3 Update the FERC report functional specifications with the latest information, including the report validation methodology.

Document Guidance Regarding MoA Responses

- The MOA responded to “Findings” with one of the following designations and provided commentary where applicable:
    - Agree
    - Agree with Comment
    - Disagree
    - Disagree with Comment
    - Need More Information

- The MOA responded to “Recommendations” with one of the following designations and provided commentary where applicable:
    - Accept
    - Accept with Comment
    - Reject
    - Reject with Comment
    - Need More Information

Responses are inserted immediately following the relevant paragraph and shaded in light gray for emphasis.

If there is no response after a finding or recommendation, the response from the MoA is Agree or Accept.

9. SECURITY

9.1. SECURITY – SCORECARD

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
Security Plan	HIGH	MEDIUM	LOW	MEDIUM
HCM Roles and Authorization – Design Review	LOW	LOW	LOW	LOW
Finance and Billing Roles and Authorization – Design Review	LOW	LOW	LOW	LOW
Logistics and Inventory Roles and Authorization – Design Review	LOW	LOW	LOW	LOW
SAP Business Warehouse – Roles and Authorization – Design Review	LOW	LOW	LOW	LOW
Production Support Roles	MEDIUM	MEDIUM	LOW	MEDIUM
Quality Assurance of Roles and Authorizations	HIGH	HIGH	LOW	HIGH
Maintenance of Check Indicators and Proposal Values	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Portal Security	HIGH	MEDIUM	LOW	MEDIUM
User Access Management	MEDIUM	HIGH	LOW	MEDIUM
Authentication and Single Sign-On	LOW	LOW	LOW	LOW
Monitoring and Auditing	HIGH	MEDIUM	LOW	MEDIUM
Security Patches	HIGH	HIGH	LOW	MEDIUM
Role Mapping	HIGH	MEDIUM	LOW	HIGH

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
Securing Standard Users	HIGH	MEDIUM	LOW	MEDIUM
Access Risk Analysis	HIGH	HIGH	LOW	MEDIUM
Emergency Access Management	HIGH	HIGH	LOW	MEDIUM

9.2. Security Plan

Overall Risk: HIGH
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 9.2.1 The security plan for the Synergy project is currently in draft status. Too many sections of the plan are incomplete.
- 9.2.2 The following items are identified as gaps within the existing plan.
    - 9.2.2.a Central User Administration
    - 9.2.2.b Emergency Access Management (EAM)
    - 9.2.2.c Segregation of Duties (SoD) process and procedures
    - 9.2.2.d Network and Communications Security

Impact

- A security plan is the foundation for delivering secure systems and applications. The plan identifies security standards, policies, and procedures for all solutions implemented from an application, system, and infrastructure perspective. The systems and applications in Synergy contain sensitive data. Without the proper security measures in place, the sensitive data could be viewed and modified by unauthorized individuals.

Recommendation

- Complete the existing plan and include the following topics within the plan. This inclusion of the items below will further enhance the existing security plan.

- 9.2.1 Central User Administration (CUA) – CUA is a security administration tool that is used to centrally maintain user accounts and role assignments.
- 9.2.2 Emergency Access Management (EAM) – Better known as Firefighter, this security tool grants users emergency access for a limited time.
- 9.2.3 SoD process and procedures – These processes are required to detect, monitor, and report on SoD issues that may exist in security roles and/or the different combination of roles assigned to users.

- 9.2.4 Network and Communications Security – Identify the network and communications security plan in detail. This includes the use of HTTPs for secure communications over the network.
- 9.2.5 Sensitive Data Security – Identify the sensitive data that resides in the system and how the data is secured. Include approval processes that would be required to access the data.

9.3. HCM Roles and Authorization – Design Review

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 9.3.1 HCM security role builds are complete and have been developed for the following application areas: Employee self-service (ESS), manager self-service (MSS), time management, payroll, benefits, organizational management, and personnel administration.

- 9.3.2 The design of the HCM security roles is consistent with the recommended practice of a three-tier role design. The three-tier design model includes job, display/reporting, and general authorizations.

- 9.3.3 With the exception of the MSS role, all HCM roles are all central. No departmental- or organizational-level security is required.

Impact

- The three-tier design model for security roles, recommended by SAP, will reduce issues with SoD, reduce authorization maintenance, and assist with troubleshooting and reporting.

Recommendation

- 9.3.1 Continue to follow the SAP-recommended practice for security role design. The three-tier design includes job roles, which grant users access to transactions that update the system; display and reporting roles; and general access, which includes common access that everyone would need in the system.

9.4. Finance and Billing Roles and Authorization – Design Review

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 9.4.1. Finance and billing security role builds are complete and have been developed for the following application areas: General ledger, sales and distribution, accounts payable, accounts receivable, cash management, asset management, controlling, grants management, and project system.

- 9.4.2 The design of the Finance and Billing security roles is consistent with the recommended practice of a three-tier role design. The three-tier design model includes job, display/reporting, and general authorizations.

- 9.4.3 Departmental-level security is required for roles in sales and distribution and cash management.

- 9.4.4 Custom authorization objects exist for accounts payable postings and item categories for posting documents within account payable.

Impact

The three-tier design model for security roles, recommended by SAP, will reduce issues with SoD, reduce authorization maintenance, and assist with troubleshooting and reporting.

Recommendation

- 9.4.1 Continue to follow the SAP-recommended practice for security role design. The three-tier design includes job roles, which grant users access to transactions that update the system; display and reporting roles; and general access, which includes common access that everyone would need in the system.

9.5. Logistics and Inventory Roles and Authorization – Design Review

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 9.5.1 Logistics security role builds are complete and have been developed for the following application areas: Supplier relationship management and inventory management.
- 9.5.2 The design of the Logistics security roles is consistent with the recommended practice of a three-tier role design. The three-tier design model includes job, display/reporting, and general.
- 9.5.3 Purchasing and receiving functions are central and do not require departmental or organizational roles.

Impact

- The three-tier design model for security roles, recommended by SAP, will reduce issues with SoD, reduce authorization maintenance, and assist with troubleshooting and reporting.

Recommendation

- 9.5.1 Continue to follow the SAP-recommended practice for security role design. The three-tier design include Job roles, which grants users access to transactions that update the system; display and reporting roles; and general access, which includes common access that everyone would need in the system.

9.6. SAP BW – Roles and Authorization – Design Review

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 9.6.1 A single BW role exists and is complete. The role is restricted at the InfoArea level. There are no security requirements at the InfoObject level.

Impact

- The three-tier design model for security roles, recommended by SAP, will reduce issues with SoD, reduce authorization maintenance, and assist with troubleshooting and reporting.

Recommendation

- 9.6.1 Continue to follow the SAP-recommended practice for security role design. The three-tier design include Job roles, which grant users access to transactions that update the system; display and reporting roles; and general access, which includes common access that everyone would need in the system.

9.7. Production Support Roles

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 9.7.1 Production support roles exist for the SRM administrator, workflow administrator, and Security and Basis team members. These roles have been approved by role owners. Additional support roles will be required once the applications are live. These support roles should be based on the roles and responsibilities defined in the production support plan.

Impact

- Without the proper security roles defined for each production support team defined for Synergy, the support teams will not have the authorizations in the system to support the applications in a timely manner within Synergy.

Recommendation

- 9.7.1 Identify all production support team members with their roles and responsibilities. Once the support team members have been identified, the security team and functional leads will need to work together to define, build, and test the authorizations required for each production support team. This will ensure that everyone will have the appropriate authorization in production to support the solutions implemented.

9.8. Quality Assurance of Roles and Authorizations

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: HIGH

Finding

- 9.8.1 The transactions and applications defined in the FI/LO roles were security-unit tested by the security team but not fully unit tested by the functional team. This is not the recommended method for security unit testing. The recommended method for security unit testing involves the full execution of each transaction or application defined in each role by a team member familiar with business process and the expected results of each transaction.

- 9.8.2 Security unit testing has not been performed on the HCM roles. Complete security unit testing of the HCM and BW roles should be identified as an entrance criterion for ITC2.

- 9.8.3 No BW security unit testing has been performed.

- 9.8.4 Finance and Logistics business roles were tested during ITC2.

- 9.8.5 HCM roles have not been tested as part of integration testing. Business roles are the combination of individual roles that a user would require to perform her/his daily tasks within the system.

Impact

- Security roles contain authorizations that grant users access to execute transactions, reports, and applications within the system. As standard rule, 75% to 80% of the authorizations are identified when security builds each role. The remaining authorizations required within the security roles should be identified in security unit testing. If these missing authorizations are not identified during any of the testing cycles, end users will receive an authorization error and will not be able perform their intended task within the system.
- The security unit testing performed on the FI/LO security roles present multiple issues. Not all transactions are defined as part of the integration testing scenarios, so if the transactions have not been properly unit-tested, authorization errors will be identified by end users in production. Production is not a testing environment. The second issue is related to the complexity in troubleshooting and properly updating the roles defined in the business roles. Business roles contain a combination of single roles that grant users the ability to perform their daily tasks within the system. The different combinations of single roles defined in the business roles make troubleshooting much more complex.

Recommendation

- 9.8.1 Perform security unit testing on the transactions that are defined in the roles but not in the ITC2 test scripts. The testing should be performed by a team member familiar with the business process and the expected results of the transactions. The validation and security testing of the transactions will ensure all required authorizations are captured with the security roles and will, therefore, allow end users to successfully perform their daily tasks within the system. This will minimize the risk of authorization errors occurring in production.

- 9.8.2 Complete security unit testing before HCM ITC2 starts. The recommended method for security unit testing involves the full execution of each transaction or application defined in each role by a team member familiar with the business process and the expected results of each transaction. The completion of security unit testing should be identified as an entrance criterion for HCM ITC2.

9.9. Maintenance of Check Indicators and Proposal Values

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 9.9.1 In most cases, SU24 proposal values are maintained, but some roles contain authorization objects with a status manual or changed.

- 9.9.2 Proposal values are not maintained for all custom transactions.

Impact

- Transaction SU24 provides an automated and efficient method for managing authorization objects and values that are required to execute transactions and applications within the system. Proposal values for custom transactions should also be maintained in transaction SU24. The practice of manually maintaining the authorization objects and values provides no automation and would, therefore, increase security administrative costs required to properly maintain the security roles.

Recommendation

- 9.9.1 Maintain proposal values for authorization objects that are in manual or changed status. It is common practice to maintain the proposal values for standard and custom applications and transactions. The use of the proposal values in transaction SU24 will significantly reduce the

administrative overhead and complexity involved with maintaining the authorizations defined in the security roles.

- **9.9.1 Response: Accept with Comment**

  - We agree that maintenance of proposal values with SU24 is a “best practice” and will implement this recommendation going forward, except for firefighter roles and selected “restrictive” roles that contain no transactions. We may choose not to remediate all roles prior to go live if it introduces the need for substantial regression testing. We will not introduce any new manual proposal values into any of these roles.

9.10. Portal Security

Overall Risk: HIGH
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 9.10.1 The Portal uses the Active Directory (AD) as the user store. The Employee ID, an attribute within the AD, represents the Synergy user ID. The employee ID, along with the AD password, is used to authenticate access to the Portal.

- 9.10.2 The Portal security policy for user ID and password is not maintained and currently contains standard values that do not comply with Municipality security policies.

- 9.10.3 Custom Portal roles contain iViews that are specific to the implemented solutions. The iViews are what users see when they log on to the Portal. Users inherit Portal roles through the assignment to an AD group. The mapping between the AD groups and the Portal roles does not exist.

Impact

- Since a password is required to access the Portal, passwords are a vital component of system security. Therefore, the password policies for user IDs and passwords must be maintained to prevent potential hackers from easily guessing passwords.

Recommendation

- 9.10.1 Maintain the Portal security policy in development, quality assurance, and production based on the Municipality security password policy. The security policies for user IDs and passwords within

the Portal allow security administrators to define security settings based on customer requirements. A strong security password policy will make it more difficult for a hacker to crack passwords to gain unauthorized access to the system.

9.11. User Access Management

Overall Risk: MEDIUM
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 9.11.1 End users log on to the Portal by using their Active Directory (AD) password and Employee ID. The Employee ID is an attribute within the AD that is used to identify the user's Portal logon. The Employee ID is also used to log on to SAPGUI. A separate password is required for SAPGUI.

- 9.11.2 The Service Desk will have access to manage end user passwords and account locks.

- 9.11.3 Security roles are assigned to positions within the HCM organizational structure. Employees inherit the roles through the positions they hold within the organization. User management processes are missing. Position-based security is an efficient method of assigning roles, but all of the processes that support a positioned-based strategy must be taken into account.

- 9.11.4 Contractors will have access to the system. These contractors will not hold positions and, therefore, will require a formal process for requesting access. An access request process for contractors does not exist.

- 9.11.5 Portal roles are assigned to Active Directory groups. Portal roles contain content specific to the applications presented in the Portal. Users inherit the Portal roles through the assignment of an Active Directory group. A Portal role matrix does not exist. A Portal role matrix, at a minimum, should identify the mapping between Active Directory groups and Portal roles.

- 9.11.6 Workflow reviewers/approvers are maintained in custom workflow tables. Custom relationships are also required to ensure the proper routing of workflow items. The Employee Relations group will be responsible for maintaining the workflow relationships in Organizational Management. No one on the team has been identified as a resource to maintain the custom workflow tables.

- 9.11.7 Workflow reviewers/approvers have the ability to have the system forward their workflow items within the Universal Work List (UWL) to other people within the organization. No process has been defined to ensure the assignees of the workflow possess the proper authorizations to review/approve the forwarded workflow items.

Impact

- User management for Synergy is highly integrated. Therefore, processes must be identified and defined for different user mgmt. scenarios to support roles and responsibilities of each work stream involved of each affected work streams involved. Defining the user management processes will assist the support team members in understanding their roles and responsibilities within each process. From a security perspective, it will be extremely difficult to manage users and their access if these processes are not clearly defined.

Recommendation

- 9.11.1 Define the following processes that will support the position-based user access management strategy:
    - 9.11.1.a Hiring of a new employee into a position
    - 9.11.1.b Addition or removal of roles from an existing position
    - 9.11.1.c Deprovisioning of user accounts
    - 9.11.1.d Contractor access
    - 9.11.1.e Password reset
    - 9.11.1.f Locking and unlocking of user accounts

The definition of these processes, along with the definitions of the roles and responsibilities of each work stream defined in the processes, with ensure that the team is able to efficiently support end users and their access in the system.

9.12. Authentication and Single-Sign-

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 9.12.1 End users will be required to log on to the Portal and SAPGUI with a valid ID and password. The Portal password and SAPGUI password are two different passwords. Both the Portal and SAPGUI use the Employee ID as the logon ID.

Impact

- Users will require two separate passwords to log on to the system.

Recommendation

- 9.12.1 Consider using the Portal as the single point of entry for all applications.

9.13. Monitoring and Auditing

Overall Risk: HIGH
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 9.13.1 Quarterly and yearly security monitoring and validation processes are defined in the security plan, which is incomplete.

- 9.13.2 Auditing of critical activities within the system is missing.

Impact

- It is important for security to be able to monitor critical security activities within the system. Hackers could reside in the system for long periods of time without detection if ongoing monitoring procedures are not implemented.

Recommendation

- 9.13.1 Consider using the following monitoring and auditing tools provided by SAP within the system and establish procedures to monitor the system for unauthorized access and activities:
    - 9.13.1.a Change documents
    - 9.13.1.b Transaction SM19, Security Auditing
    - 9.13.1.c Table logging
    - 9.13.1.d Transport logging

9.14. Security Patches

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 9.14.1 Some critical security patches have not yet been implemented.
- 9.14.2 Security patch day occurs the second Tuesday of every month.

Impact

- System security is affected if security patches are not implemented. Issues could include theft of data, unauthorized execution of system functions, and unauthorized access to the system. Because the security gap is known after each patch day, it is presumable that misuse could take place.

Recommendation

- 9.14.1 Define a procedure to review and implement security patches. Establishing a procedure for implementing security notes will ensure the system is up to date with all of the known vulnerabilities. Sign up for SAP HotNews in SAP Security Marketplace to receive critical security patches.

9.15. Role Mapping

Overall Risk: HIGH
Design Build Completeness Risk: MEDIUM

Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: HIGH

Finding

- 9.15.1 Three iterations of role mapping have been completed. The last role mapping data contained 750 changes. The changes were a result of position moves, a better understanding of the roles, and SoD issues.

- 9.15.2 Change champions within each of the 35 department assists OCM in mapping end users to security roles. The role mapping data is reviewed by the functional leads for SoD issues. Twelve out of the 35 departments are having issues with the positioned-based security. These 12 departments are the smaller departments that have people performing multiple tasks within the system, which creates SoD issues.

- 9.15.3 Departments continue to map users to roles that they are not authorized to use.

Impact

- Identifying users and the required access they need to perform their jobs on a daily basis is key to going live. At go-live, improper role mapping will cause confusion and frustration from an end-user perspective. There are also downstream impacts to the data collected during role mapping. Training utilizes the data to identify training requirements.

Recommendation

- 9.15.1 Incorporate additional role mapping rules within each of the enterprise role design (ERD) for roles that are intended for specific departments and groups within the departments.

- 9.15.2 Meet with the department leadership to review role mapping data and develop mitigation controls for SoD violations.

- 9.15.3 Continue to help and educate the departments in understanding the different accesses that are defined for the roles.

- 9.15.4 Define a road map for HCM roles.

9.16. Securing Standard Users

Overall Risk: HIGH
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 9.16.1 Standard users are not secured, based on the recommended practice. Standard users and their passwords are public knowledge.
- 9.16.2 SAP* is not properly maintained.
    - **9.16.2 Response: Disagree with Comment**
        - The SAP* user role is properly maintained in all clients.
- 9.16.3 Passwords to some of the standard IDs have not been changed.

Impact

- SAP*, EARLYWATCH, and DDIC are standard system users that are created during the installation of a client. The IDs and their passwords are public knowledge. Leaving these system IDs unmaintained represents a critical security risk to the system. If the standard users are not maintained, someone with access to the network could log on with a standard ID and perform fraudulent activities, change configurations, and even take the system down.

Recommendation

- 9.16.1 Define a new super user ID.
- 9.16.2 Deactivate and remove authorizations from SAP*.
- 9.16.3 Assign SAP* to the group SUPER so that only administrators with access to the group SUPER can maintain the ID.
- 9.16.4 Reset the password for all standard users.
- 9.16.5 Set parameter login/no_automatic_user_sapstar value to 1.
- 9.16.6 Apply the recommend practices above in all clients and systems. This will secure the systems from unauthorized use of the standard IDs.

9.17. Access Risk Analysis

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: HIGH

Finding

- 9.17.1 A process and procedure to prevent and monitor segregation of duties (SoD) violations within the transactions and authorizations defined in the security roles are missing.
- 9.17.2 A process and procedures to prevent and monitor SoD violations based on the roles and authorizations assigned to users are missing.
- 9.17.3 The Municipality does not own a tool that would automate the detection and mitigation of SoD violations.

Impact

- Without an access risk analysis tool or manual processes in place to detect and prevent SoD violations, fraudulent activities could go undetected within the system.

Recommendation

- 9.17.1 In place of an access risk analysis tool, a manual policy and procedures need to be implemented to detect, monitor, and report on SoD violations. Consider using report RSUSR009 to detect users with critical authorizations.

9.18. Emergency Access Management

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 9.18.1 Emergency access management (EAM) is implemented within Synergy using the SAP Access Control application. EAM, better known as Firefighter, is a tool that grants users emergency access for a limited amount of time. The project plan for EAM is missing.

Impact

- Without a proper implementation plan, the EAM tool may not be available for use once the system is live. If this occurs, and manual processes are created to support a Firefighter process, errors could be introduced that may lead to unapproved use of a Firefighter ID.

Recommendation

- 9.18.1 Create a complete lifecycle implementation plan for EAM with detailed tasks, resources, and milestones.

Document Guidance Regarding MoA Responses

- The MOA responded to “Findings” with one of the following designations and provided commentary where applicable:
  - Agree
  - Agree with Comment
  - Disagree
  - Disagree with Comment
  - Need More Information

- The MOA responded to “Recommendations” with one of the following designations and provided commentary where applicable:
  - Accept
  - Accept with Comment
  - Reject
  - Reject with Comment
  - Need More Information

Responses are inserted immediately following the relevant paragraph and shaded in light gray for emphasis.

If there is no response after a finding or recommendation, the response from the MoA is Agree or Accept.

10. DATA

10.1. DATA – SCORECARD

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
Process of Data Migration	HIGH	N/A	N/A	MEDIUM
Data Organization – Roles and Responsibilities	HIGH	N/A	N/A	MEDIUM
Data Collection, Construction, and Extraction	HIGH	N/A	N/A	MEDIUM
Data Transformation, Cleansing, and Validation	HIGH	N/A	N/A	HIGH
Data Requirements – Development and Change Management	HIGH	N/A	N/A	MEDIUM
Review of Project Data-Mapping Documentation for Material Master, Vendor Master, and Others and Their Functional Specifications	MEDIUM	N/A	N/A	MEDIUM
Test Data Preparation	MEDIUM	N/A	N/A	MEDIUM
Preparation for and Transition to Data Governance	HIGH	N/A	N/A	HIGH
Data – Planning, Project Status, Timelines, Problem Identification, and Reporting	HIGH	N/A	N/A	MEDIUM
Data-Conversion Objects	HIGH	N/A	N/A	HIGH

10.2. Process of Data Migration

Overall Risk: HIGH
Design Build Completeness Risk: N/A
Future Fit or Impact on Scalability Risk: N/A
Remaining Effort: MEDIUM

Finding

- 10.2.1 Several documents exist that list the data migration objects in scope (for example, the two versions of the RICEFW tracker, version 3 of the data conversion strategy document, and the cut-over plans), but they list a different number of data objects. It is unclear which document is authoritative and exactly how many data migration objects are in scope.

- 10.2.2 The Municipality functional owner, the Municipality technical owner, and the system integrator (SI) partner owner are identified for data migration objects, which is consistent with leading practices.

Impact

- The exact scope for data migration is not clearly understood. Without a clear understanding of the scope, it is difficult to develop a data migration project plan and a cut-over plan.

Recommendation

- 10.2.1 Create an authoritative master tracker document that lists all data migration objects. Treat one data object at a time and then review and update the strategy for data migration as follows:

    - 10.2.1.a Categorize the data objects as master data or transactional data

    - 10.2.1.b Identify which functional areas (finance, controlling, funds management, asset accounting, project system, materials management, and so on) the objects belong to.

    - 10.2.1.c Identify whether the load method is automated or manual.
      Identify if the load program is standard ABAP, custom ABAP, or legacy system migration workbench (LSMW) and whether the load method is batch data communication, a BAPI programming interface, IDoc, or some other method.

    - 10.2.1.d Review whether the identified source systems are correct.

    - 10.2.1.e Review whether additional data cleansing is required and whether data construction is required.

    - 10.2.1.f Document the expected data volume.

- 10.2.1.g Review the functional specification for completion.
- 10.2.1.h Identify any special security requirements.
- 10.2.1.i Identify business criticality of data object.

Finding

- 10.2.3 Data is extracted from legacy source systems in .txt files that are read by programs written in ABAP that map, transform, and load the data into SAP software. For the data objects that need data construction, data is constructed in Microsoft Excel files and processed by custom ABAP and LSMW load programs.

Impact

- Extracted data is validated manually by the functional resources. Functional resources perform manual inspection of data and lookups in Excel. Since validation of extracted data is a cut-over activity, the manual time adds the duration of the cut-over.

Recommendation

- 10.2.2 Consider staging extracted data so that validation can be performed automatically, more frequently, and more efficiently. A leading practice is to stage the extracted data and run business rules to identify exceptions. The functional resources can then focus on reviewing only the exceptions, thereby cutting down on manual activities. Another benefit of running business rules on extracted data is that it makes the validation process repeatable, and the business rules can be run as many times as needed. With each validation run, the number of exceptions can be tracked to ensure that the trend is improving. Data staging and validation using business rules also enables validation using a more comprehensive set of rules each time validation is required than is possible with manual validation.

Finding

- 10.2.4 The following numbers of legacy data extraction programs have been built and tested – 19 for FILO and 20 for HCM.
- 10.2.5 The following numbers of load programs have been built and tested – 72 custom ABAP and 14 LSMW.
- 10.2.6 Only one data migration object of infotype 235 is loaded manually into SAP software, meaning that the data records are entered manually. This process takes less than two minutes because the data volume is very small. All other data migration objects are loaded using custom ABAP programs or custom LSMW recordings.

- 10.2.7 The data migration development on the SAP software side is mostly stable. The defects identified in the load programs were resolved during the previous test cycles, and the programs are stable. However, optimization of the custom ABAP load programs for performance was not addressed to ensure that the length of the cut-over is not negatively affected by poor performance of the load program.

- 10.2.8 Challenges on the legacy (PeopleSoft) side are mainly in the areas of projects and grants budgets and extraction of actuals data. This is caused by the fact the Grants module did not exist in PeopleSoft and the fact that the definition of what a project is has changed over the years in PeopleSoft.

Impact

- Future integration tests and mock conversion cycles should not encounter the defects already fixed in the previous cycles, however since end-to-end tests were not performed with converted data; new defects could be uncovered during the future test cycles.

Recommendation

- 10.2.3 Do not build custom ABAP programs for future development (after the Synergy project) for data migration. Software is available with pre-delivered content for SAP data migration across various modules in SAP software. Tools are available that leverage the developed business rules during data migration project for data validations and exception reporting, and those business rules in those tools can be reused for ongoing data quality monitoring as part of data governance activities. Custom ABAP program development is inefficient, costly, and prone to data-quality errors.

    - **10.2.3 Response: Accept with Comment**

        - The custom ABAP programs use BAPI to properly report business logic errors. We will continue to evaluate each load and determine the best approach.

- 10.2.4 Identify the slow load programs and fine-tune their performance, especially where it will optimize the cut-over.

10.3. Data Organization – Roles and Responsibilities

Overall Risk: HIGH
Design Build Completeness Risk: N/A
Future Fit or Impact on Scalability Risk: N/A
Remaining Effort: MEDIUM

Finding

- 10.3.1 Data migration does not have dedicated functional resources. The functional resources are highly leveraged across several Synergy activities, such as business process requirements, business process design, business process testing, data requirements, data design, data cleansing, data validations, reporting requirements, and training documentation review. They must also support Municipality operations.

Impact

- Analysis and design of data migration takes longer to complete.
- Data validations related to data migration take longer to complete.
- Data cleansing and data construction take longer to complete.

Recommendation

- 10.3.1 Ensure that specific functional resources are available and dedicated to data migration activities for the duration needed as defined in the data migration and cut-over plans.

Finding

- 10.3.2 Data migration does not have a Municipality resource in a data lead role.

Impact

- Several data-related decisions are being made as part of the Synergy project. Although Municipality functional resources are knowledgeable in their individual areas, cross-functional knowledge about the data requirements; design; integration; and the impact of poor-quality data on business processes, reporting, and regulatory compliance will be lost unless a Municipality resource serves in a data lead role.

Recommendation

- 10.3.2 Identify and assign a Municipality resource who will gain knowledge of the overall scope of cross-functional data conversion objects, cross-functional integration enabled by data, the data

standards being established in the Synergy project for how the Municipality will use the data in the SAP software, and the complexities of data migration for certain objects such as grants and projects.

- 10.3.3 This Municipality data lead resource can then be leveraged in a data governance role that enables an enterprise (cross-functional) view of master data in a support organization after going live.

Finding

- 10.3.3 No role exists in the current project team with specific responsibilities for data migration-related planning. A senior project manager role is responsible for development, Basis, and cut-over, but no one is specifically responsible for data migration.

- 10.3.4 resource has been identified and is about to start in a cut-over project manager role, but not in a data migration project manager role. It is unclear if the same resource will be utilized for data migration planning as well.

Impact

- The data migration plan is not prepared.

Recommendation

- 10.3.4 Identify and assign a resource with specific responsibility for preparing and tracking the data migration plan. Ensure that the data migration project manager (or the senior project manager for development) is involved in change control board meetings for the Synergy project to assess changes to data conversion requirements and design.

- 10.3.5 Create a responsible, accountable, consulted, and informed (RACI) matrix that clearly delineates the data migration responsibilities among Municipality resources, contractors, and the SI partner roles.

- 10.3.6 Plan for a back-up legacy data extraction resource that can help execute the cut-over activities in the absence of the primary resource. Both resources for legacy data extraction are part-time resources. The contractor resource is going to be off the project for an extended amount of time (several months).

Finding

- 10.3.5 A dedicated project manager resource is being staffed as a cut-over coordinator.

Impact

- None.

Recommendation

- 10.3.7 Continue this approach. It is consistent with the leading practice of having a dedicated resource for cut-over coordination.

Finding

- 10.3.6 Two technical resources (ABAP developers) are retained on the side of SAP software to support any defect resolutions and adjustments to the ABAP load programs as needed during future test cycles. Other ABAP resources have been released because the data conversion development on the side of SAP software is complete and has been unit-tested as well as tested during the integration testing and mock conversion cycles.

Impact

- None.

Recommendation

- 10.3.8 Continue the approach.

Finding

- 10.3.7 Ownership of data quality and business readiness of data among the functional lead resources are clear.

Impact

- Clarity of data ownership makes it easier to identify who owns a given data object. Clarity of ownership also makes it easier to get questions answered for data migration extraction, mapping, and transformation analysis and design. Clarity of ownership makes it easier to identify and assign resources for data validation and reconciliation and get help with data defect resolution.

Recommendation

- 10.3.9 Ensure that the clarity of ownership of the data quality is carried forward to the ongoing data governance operations after going live.

10.4. Data Collection, Construction, and Extraction

Overall Risk: HIGH
Design Build Completeness Risk: N/A
Future Fit or Impact on Scalability Risk: N/A
Remaining Effort: MEDIUM

Finding

- 10.4.1 Data extraction is performed using legacy extraction programs that produce .txt files. The extract files are required in the .txt format by the load programs, but the same files are used for extract data validation by the functional resources. Functional resources manually convert the .txt files to an .xls format.

Impact

- This is nonvalue-added manual activity for the functional resources who are highly leveraged. Since the activity of extract data validation is a cut-over activity, the manual nature of this activity adds to the time needed for cut-over

Recommendation

- 10.4.1 Create Excel files that are ready for functional resources to use for validations. Creation can occur in the legacy extract programs themselves or an outside utility that converts the .txt file to .xls.

Finding

- 10.4.2 Data extraction from all the required legacy sources for FILO and HCM takes just under two days to run.

Impact

- Since data extraction is a cut-over activity the time required to extract data directly impacts the cut-over. The longer it takes to perform all the required data extractions, the longer the cut-over will be.

Recommendation

- 10.4.2 Review the data extraction programs to improve the performance of the extract queries. Leverage job scheduling techniques so that extraction jobs can be run in a job stream to minimize the need to trigger the extraction program runs manually and individually according to their dependencies.

Finding

- 10.4.3 No determination of exactly how many data migration objects need data to be constructed could be made. However, several data migration objects needed data construction. Data construction was performed in Excel, no other tool was used.

Impact

- Constructing data in Excel has the risk that data integrity can be compromised due to edits that are not validated, unintentional edits or formatting.

Recommendation

- 10.4.3 Once the master data object tracker document is created, review how many data migration objects needed data construction. Determine if any data construction activities are still outstanding and include them in the overall data migration plan.

- 10.4.4 Ensure that data validation is performed thoroughly on the constructed data so that any typos or unintended edits to data values or inaccuracies are caught before the load into SAP. Obtain sign-off from a (often senior resource) functional resource on the constructed data different than the resource who built the data.

10.5. Data Transformation, Cleansing, and Validation

Overall Risk: HIGH
Design Build Completeness Risk: N/A
Future Fit or Impact on Scalability Risk: N/A
Remaining Effort: HIGH

Finding

- 10.5.1 Several data cleansing activities are completed and some are in progress. For example, de-duplication of customer master is completed. Unit of measure (UoM) values are standardized for converting open purchase orders (PO). Payment terms, addresses, and locations are cleansed. The buyer list and list of requesters have been cleansed. Cleansing of purchase order data in the legacy source is being worked on. However, no visibility exists into all the data cleansing activities that are in scope project-wide across all functional areas.

Impact

- It cannot be determined which cleansing activities are still in progress and which are still outstanding. No plan for data cleansing can be prepared. The length of time it will take to complete all remaining data cleansing activities cannot be determined.

Recommendation

- 10.5.1 Review the requirements and status of data cleansing for each data migration object in scope. Review how certain activities, such as de-duplication (material master, vendor master and customer master), were carried out or need to be carried out, what criteria should be used to identify duplicates, and so on.

- 10.5.2 Create a data cleansing plan for each data migration object in scope that requires data cleansing. Identify:

    - 10.5.2.a What cleansing activities are needed per data migration object

    - 10.5.2.b If the activities can be performed in the legacy source systems

    - 10.5.2.c Which functional resources will perform the activities

    - 10.5.2.d If any tools must be developed to help the functional resources perform the data cleansing activities

    - 10.5.2.e What the estimated duration would be to complete the identified data cleansing activity

    - 10.5.2.f If the identified functional resources can be committed for the required duration

- 10.5.3 Ensure that any new data records being created in the legacy system will also adhere to the new business rules, so that they don't have to be cleansed again, if data cleansing is performed in the legacy source system.

- 10.5.4 Integrate the data cleansing plan in the overall data migration plan so that the future integration or mock conversion test cycles can be planned with the input from the data cleansing and data migration plan. Report the progress of data cleansing metrics in the steering committee status reports.

Finding

- 10.5.2 Data validation is performed and sign-off obtained for the data extracted from legacy systems as well as after the data has been loaded into the SAP software. However no validation is performed

and no sign-off obtained for data that has been transformed that is load-ready but not yet loaded into SAP software.

- 10.5.3 Some validation checks are performed in the legacy extract program, and some checks are performed in the ABAP load program, checking to see if a vendor master exists before loading a purchase order, for example. The ABAP load programs can be run in test-only mode to check if the input file data can be converted and loaded successfully.

- 10.5.4 Data validation methodology (DVM) documents are created that outline the data validation procedures after being loaded into SAP software, but only for general ledger, accounts receivable, and grants. Grants have the most detailed documents. All functional resources are performing post-load data validation in their own way; no overarching strategy for business validation of data exists. In most functional areas, no secondary (backup) resource is identified to perform data validations in the absence of the primary resource.

Impact

- Any errors or business rules violations beyond what the load program checks are not caught before the data is loaded into SAP. This creates business readiness risk post go live. If the bad data is not corrected post go-live this could result into bad data getting into reports as well. If there are any errors in the mapping and transformation logic they are not caught before the data is loaded into SAP. Any missing configurations or missing required fields will be kicked out by the load program at the time of execution of the load program and will need to be reviewed after the load program execution and corrected in the next run of the data loads.

Recommendation

- 10.5.5 Define data quality–related business rules that the (master) data in SAP software should conform to across the data quality dimensions of completeness, accuracy, validity, referential integrity, and duplication. Once these business rules are defined, data can be validated after the transformation and before loading. The benefit is that the entire dataset is validated, whereas in an integration test or mock cycle, only a small fraction of the overall population of the data is tested. Validating the entire dataset greatly improves the confidence in the converted data quality and reduces the risk of operational efficiency after going live caused by converted data that is not business-ready. Other benefit is that the same business rules can be reused for ongoing data quality monitoring by the data stewards after going live.

- 10.5.6 Consider staging the post-transformation load-ready data into database tables, running validation business rules on that data, creating exception reports to be reviewed by the functional resources, creating validation reports and obtaining sign-off on the load-ready data from the functional resources prior to loading the data in SAP software. It is a common practice to stage,

validate, and obtain sign-off on the post-transformation load-ready data. This also helps the data migration audit.

- 10.5.7 Define an overarching data validation strategy that outlines the objectives of data validation and incorporates the following guidelines to ensure consistency of data validation across different functional areas -
    - 10.5.7.a Which database tables are used for validation?
    - 10.5.7.b Should any queries be used for validation?
    - 10.5.7.c Which transaction codes in SAP software are used for validation?
    - 10.5.7.d How can the record counts and control totals (quantity or dollar amount totals) be used for validation?
    - 10.5.7.e Which standard reports are available in SAP software that could be used for reconciliation?
    - 10.5.7.f What guidelines are available for manually inspecting a random sample of data records?
    - 10.5.7.g What guidelines for error-tolerance thresholds are available that would be acceptable for reconciliations?
- 10.5.8 Identify the critical data validations that consume the most time, are manually performed, and that are part of the cut-over critical path and develop ways to reduce or eliminate the manual activities.
- 10.5.9 Define detailed validation procedures (using the above guidelines) for the master data objects (projects, grants, funds, assets, customers, vendors, materials, and so on). When the data quality of highly shared master data objects is not up to the mark, the impact of the poor quality will be seen across several business processes.
- 10.5.10 Identify and train secondary resources to perform data validations according to the documented validation procedures.

10.6. Data Requirements – Development and Change Management

Overall Risk: HIGH
Design Build Completeness Risk: N/A
Future Fit or Impact on Scalability Risk: N/A
Remaining Effort: MEDIUM

Finding

- 10.6.1 The change request form for the Synergy project does not have a section to assess, document, and address data impacts.

- 10.6.2 The number of data migration objects has not changed much, and the requirements of data fields on the data migration objects has not changed much from test cycle to test cycle. The requirements in terms of number of data objects and of data fields have been relatively stable.

Impact

- Business process design and configuration changes in SAP software have an impact on data requirements and design. When business process and configuration decisions change, it is often required to check if changes are required to data requirements and design. If the impact to data is not considered up front, errors will be caught late in the process during testing, which adds time to the overall project schedule.

Recommendation

- 10.6.1 Add a section to the project change request form to capture impacts to data requirements and design.

Finding

- 10.6.3 The Municipality functional lead resources are very knowledgeable of the legacy source systems and the data, the business objectives of the Synergy project, and the reporting and data requirements expected from the Synergy project.

Impact

- The Data team believes that the functional resources have identified all the important data requirements necessary for the success of the Synergy project.

Recommendation

- 10.6.2 Ensure the presence of a conscious effort to translate business process, reporting, analysis, compliance, and audit requirements into data requirements. Make sure that the project design and build activities reflect the delivery of these data requirements to the business users.

Finding

- 10.6.4 The decision to convert project and grants data using a net budget or inception-to-date method changed during the FILO Mock Conversion 2 cycle.

Impact

- If the data needs to be converted using the inception-to-date method, it requires a significant effort for analysis, design, and manual data construction. If these decisions are changed midway through a mock conversion cycle, the testing must stop so that analysis, design and build can be completed.

Recommendation

- 10.6.3 Review the business requirements and the options to meet the requirements. Leverage a cross-functional committee to review the analysis, alternatives, implications, and the trade-off among the options. Make the final decision before beginning the next mock conversion or integration test cycle.

10.7. Review of Project Data-Mapping Documentation for Material Master, Vendor Master, and Others and Their Functional Specifications

Overall Risk: MEDIUM
Design Build Completeness Risk: N/A
Future Fit or Impact on Scalability Risk: N/A
Remaining Effort: MEDIUM

Finding

- 10.7.1 Data conversion documents (DCD) exist, and the ones for material master, grant master, budget, fund, vendor master, general ledger account, and asset master were reviewed. Most of them are one-page documents, some are a half page, and others are two pages long. They are mostly planning documents, not data migration functional specification documents.

- 10.7.2 Some SPC data conversion specifications were found, but they belonged mostly to the HCM areas of organizational management, personnel administration, payroll, and benefits and GL, CO AR areas of FILO. For most of the FILO areas, such as vendor master, material master, grants master, project master, asset master, and others, the SPC conversion specifications don't exist or were not

shared with the Review team. For the HCM SPC specifications that were reviewed, the source-to-target mapping table had only the target fields listed; the source-field mapping to the target fields were not identified.

- 10.7.3 When the FILO functional leads were asked whether they have seen the data migration functional specification documents and whether they reviewed and signed-off on them, most of them could not recall seeing or signing off on data migration specs. This situation could be because the functional specifications were written several months (or years) ago and have not been referenced since then.

- 10.7.4 Data-extraction specifications for legacy extract programs (SPY) have been written for most of the legacy extract programs, about 19 specs for FILO and about 20 for HCM. They were not reviewed or singed-off by the functional lead resources.

Impact

- If the data migration functional specs are missing or if the functional owners have not reviewed and signed-off on the data migration functional specifications, a risk is created for data quality and data audit.

- Cross-functional review and feedback of data-extraction selection logic is missed because the data extraction specifications were not reviewed by the functional lead resources. As a result, errors are caught late in the test cycles instead of being caught earlier in the design stage. This situation adds time to the overall duration of data migration. For example, some of the purchase orders could not be loaded because the vendor master data was missing. These vendors were missed because there was a difference between how AP defines active vendors and how purchasing defines active vendors. This issue could have been caught if both the AP and PO functional leads had reviewed the data extraction logic written in the data extraction (SPY) specification.

Recommendation

- 10.7.1 Ensure that the functional lead owners are clear on and agree with the number of source systems that should be considered for data extraction, selection logic of extraction for each source system, and any business rule checks performed in the legacy data extraction programs – for each data migration object.

- 10.7.2 Confirm that the functional owners understand and agree on how the data is mapped from the source to the target, which business rules are applied to which data fields in the transformation logic, if data values are derived or defaulted, and so on – for each data migration object. The purpose of a data migration functional specification is to document the analysis and design of how the data from the legacy source systems will be mapped and transformed to the meet the requirements of the target SAP software. Functional resources are the ones most knowledgeable in

the Municipality about the data in the legacy source systems and the requirements of the data in the target SAP software.

10.8. Test Data Preparation

Overall Risk: MEDIUM
Design Build Completeness Risk: N/A
Future Fit or Impact on Scalability Risk: N/A
Remaining Effort: LOW

Finding

- 10.8.1 Integration test cycles at the Municipality are focused on testing business functionality of the SAP solution, not on data conversions or testing with converted data. Mock conversion cycles are focused on practicing cut-over activities including data conversions and validating converted data. An exception is that accounts receivable (AR) did its integration testing using converted data.

Impact

- This approach sees business processes and data separately, which creates the risk that data may not be synchronized with the business processes and reporting requirements. This approach implies that the converted data is not tested in business process testing. It creates a risk to the efficiency of business operations after going live in that the data required for posting business process transactions may not exist in SAP software (incomplete) or might be inaccurate or invalid.

- Defects in converted data from integration test perspective will not be identified. Adjustments that are needed to extraction, mapping or transformation logic will not be identified.

Recommendation

- 10.8.1 Ensure that the data converted is tested in an end-to-end business process testing scenario. This approach ensures that different parts (attributes) of the master data record are tested and meet the business process requirements. For example, vendor master in SAP software has general, purchasing, and accounting data. Testing a converted vendor master record in an end-to-end purchase-to-pay integrated business process scenario from creation of a contract to purchase order, goods receipt, invoice, payment, and clearing of open items will ensure that the different attributes of that vendor master record are tested in different transactions. Integration with vendor self-service registration application and SAP SRM should also be tested to test the data aspects of the integration and ensure that the converted data will meet the business requirements of those systems outside of SAP ECC as well.

Finding

- 10.8.2 Grants master data (and to some extent project master data) is being dually maintained in PE1-100 golden client environment in addition to the legacy environment. Human capital management personnel administration (PA) organization structure data is being dually maintained in QE1-100. The reason for deciding to maintain the grants master data directly in SAP software before going live is that it is easier for the functional resources to maintain the data there rather than in Excel and then converting it to SAP software during cut-over.

- 10.8.3 Some master data that is static (for example, general ledger accounts, commitment items, funds, and others) and is copied from the golden client into the test client before the ITC testing begins, it is not converted into the test client. Organizational structure data in SAP ERP HCM is being synchronized from the golden client to the test client using a custom synchronization program in ABAP. Additional custom synchronization programs in ABAP are under consideration to synchronize other types of data.

- 10.8.4 Master data that is being dually maintained in an SAP software client is no longer converted data, it is live data before the actual go-live.

- 10.8.5 Different clients are being called as golden clients.

- 10.8.6 Different data conversion approaches exist for different master data objects, such as Excel upload, golden client copy, and an ABAP synchronization program.

Impact

- Different ways of converting data adds complexity to the cut-over and makes it difficult to control the process of data conversion.

- Calling different clients as golden clients creates risk of compromising data integrity.

- Unnecessary custom development in ABAP increases costs for the project.

Recommendation

- 10.8.2 Consider always converting data for test cycles. This ensures that all the checks and balances built in the conversion process are followed and that the conversion process is under control.

- 10.8.3 Leverage the test data migration server (TDMS) instead of writing custom programs in ABAP for synchronization of data between two systems or clients, after confirming that the TDMS can meet the requirements of data synchronization. If TDMS cannot be used, convert the data instead of using custom ABAP programs (that could be updating the data directly in SAP tables).

Finding

- 10.8.7 HCM has completed two mock conversion test cycles. No data defects are open from both of the test cycles. Less than 10% of the HCM Mock 2 errors were repeated from the Mock 1 cycle. HCM is still completing its first ITC cycle. The first HCM ITC cycle was stopped to resolve a few major design changes.

- 10.8.8 FILO has completed two ITC test cycles and has about two defects open from them. There are about 22 defects open from FILO Mock 2 cycle. Most of the bi-ticket defects from the FILO Mock 2 have to do with the inception-to-date decision for project and grant data conversion.

- 10.8.9 The data conversion team does have a dedicated client in SAP software to practice (unit test and functional unit test) data conversions. This approach is consistent with leading practices.

Impact

- Although there are not many data defects that are open at this time per the test cycle error log, since the testing was not carried out with the converted data and end-to-end tests were not performed, new data defects and changes could be encountered in the future test cycles.

Recommendation

- 10.8.4 Conduct integration test cycles with converted data.

Finding

- 10.8.10 In general, master data conversions have been tested and are working, including the master data for projects and grants. The main outstanding challenge is with the budget and actual transactional and historical data conversion for project and grants using an inception to date method.

Impact

- There might be a sense of comfort level with the master data conversions but the accuracy of the master data is not proven unless it is tested in business processes and reporting. Also, all transactional data must be converted to ensure that the associated master data is also converted.

Recommendation

- 10.8.5 See section 10.11.

- 10.8.6 Complete conversion of transactional data.

10.9. Preparation for and Transition to Data Governance

Overall Risk: HIGH
Design Build Completeness Risk: N/A
Future Fit or Impact on Scalability Risk: N/A
Remaining Effort: HIGH

Finding

- 10.9.1 Some exploration and discovery has been done with the help of Gartner regarding how to manage the data change requests after going live, but no plan exists for ongoing data governance after going live.

- 10.9.2 Master data maintenance (create, change, block, and unblock) process flows have been created for some data objects.

Impact

- Data quality will deteriorate after going live unless a conscious effort is made to manage and govern the data quality. Poor data quality affects operational business process efficiency, decision making support, and regulatory compliance.

Recommendation

- 10.9.1 Document data definitions, data standards, and business rules for the master data objects.

- 10.9.2 Define a data governance organization with roles and responsibilities across the business and IT. Define the structure of various data governance committees such as executive committee, steering committee, data domain committee, and so on. It is a leading practice to create a RACI matrix of data governance responsibilities across different roles and committees.

- 10.9.3 Explore the use of data quality tools that can be used to monitor the quality of the data on an ongoing basis by displaying data quality dashboards, scorecards, and lists of data records that violate the business rules.

- 10.9.4 Master data process flows have been created for some data objects but they do not take the roles specific to data governance into account. Review the process flows once the data governance roles are finalized.

- 10.9.5 Define the system of record for each critical enterprise data element and control its flow and where and how it is entered and changed.

- 10.9.6 Define security, audit, and privacy requirements for enterprise data and implement the corresponding changes to the security and authorizations in the systems.

- 10.9.7 Explore master data governance applications to control the creation and distribution of enterprise master data domains centrally and to enforce business rules at the time of data creation to achieve active data governance.

10.10. Data – Data Migration Planning, Status, Timelines, Problem Identification, and Reporting

Overall Risk: HIGH
Design Build Completeness Risk: N/A
Future Fit or Impact on Scalability Risk: N/A
Remaining Effort: MEDIUM

Finding

- 10.10.1 No project plan (schedule) specific to data migration activities exists.

- 10.10.2 Integration test cycles are not focused on capturing data defects; mock cycles are.

Impact

- Data migration activities cannot be planned. Questions such as “How long will it take to complete all the remaining data migration related activities before beginning the next round of integration or mock test cycle?” cannot be answered. Data migration related planning input is not available to the Synergy PMO leadership for planning the overall Synergy project.

Recommendation

- 10.10.1 Identify a project management resource responsible for creating a data migration plan. Create a data migration plan with all the remaining data migration activities (remaining data analysis, design, data cleansing, data construction, any open defects from prior test cycles, and any open change requests). Assign resources to the data migration activities, estimate durations and work effort, build dependencies among activities, and ensure assigned resources are not overloaded.

Finding

- 10.10.3 Separate cut-over plans exist for FILO and HCM. Although some activity durations were recorded during the previous mock conversion test cycles, several activities are missing durations. Dependencies are still being worked out for the cut-over activities. During the previous mock conversion cycles, not all the cut-over activities in the plan were executed. The execution of the mock conversion cycle was stopped when errors were encountered to fix the errors first. As a result,

the recorded activity durations are suspect in terms of whether they represent the actual time to execute that activity.

- 10.10.4 The cut-over plan has several manual activities with some activities not adding value.

Impact

- The cut-over plan in its current state cannot be used for planning the actual go-live cut-over. The outage window of cut-over cannot be estimated.

Recommendation

- 10.10.2 Validate that the entire scope of data migration objects is reflected in the cut-over plan. Validation can be accomplished once an authoritative master list of data migration objects (data object tracker) is prepared.

- 10.10.3 Additional mock conversion cycle(s) is (are) needed to execute the end-to-end cut-over plan, record the actual cut-over activity durations, and bring the end-to-end cut-over duration down to a manageable time.

- 10.10.4 Review all manual activities in the cut-over plan so that they can be eliminated or minimized. Recommendations to minimize certain manual activities and those that do not add value are made throughout this chapter. Establish clear guidelines and error-tolerance thresholds that would require manual intervention and deeper data analysis by business users when crossed to determine the extent of the problem and decide whether the cut-over can continue with known and acceptable issues or needs to stop to resolve issues first.

- 10.10.5 Analyze dependencies among activities in the cut-over plan to identify opportunities for running activities in parallel. Break down long-running activities into smaller steps if that will facilitate parallel run.

Finding

- 10.10.5 The Municipality is putting together a plan for data triage and hypercare after going live. The preliminary plan is to leverage the existing Synergy project resources for hypercare.

Impact

- Having a plan for hypercare after going live is critical to stabilize the data as soon as possible.

Recommendation

- 10.10.6 Identify and assign people who will play a specific role in the data triage activities as part of hypercare after going live. They should be the super users, functional resources, IT, Synergy project team resources, and help desk resources who have the knowledge, skill, experience gained from resolving data defects from the mock conversion and testing cycles. Ensure that these people have adequate security roles and authorization to execute their tasks such as mass updates in SAP ECC during hypercare.

- 10.10.7 Create and communicate the staffing plan for contractors and SI partner consultants that are needed for hypercare.

- 10.10.8 Train help desk to manage data defects after going live. All data defects must be logged through the help desk (as an example).

- 10.10.9 Ensure that the change management process that makes adjustments to business processes, solution design or configuration of SAP software after going live also considers the impacts and changes to data.

Finding

- 10.10.6 It is not clear how the data migration status is being reported to the Synergy steering committee.

Impact

- Synergy leadership does not have a clear understanding of data migration risks and opportunities and their impact on the overall schedule, cost and quality.

Recommendation

- 10.10.10 Report data cleansing status using metrics, data construction status, trending of changes to data requirements and design, issues with availability of resources, overall status of outstanding data migration work.

Finding

- 10.10.7 Data defects are logged in Excel and not tied to a test script or a requirement or a functional design.

Impact

- The ability to track, analyze, resolve, and report on the status of data defects might be limited.

Recommendation

- 10.10.11 Follow the same consistent approach project wide to use a common tool (such as SAP Solution Manager) to log and process data defects.

10.11. Data-Conversion Objects

Overall Risk: HIGH
Design Build Completeness Risk: N/A
Future Fit or Impact on Scalability Risk: N/A
Remaining Effort: HIGH

1. Finance and Billing

Finding – General Ledger, Accounts Receivable, Accounts Payable, and Controlling

- 10.11.1 Functional specifications for conversion objects for AR ad CO have been completed.
- 10.11.2 Midyear and fiscal-year conversion steps have been identified for financial transactions.
- 10.11.3 Vendor open items will not be converted since all open invoices in the legacy system will be paid before cut-over.
- 10.11.4 Data extraction programs that have been developed have been tested.
- 10.11.5 A baseline of data conversion process steps and sequence order has been developed. Additional knowledge transfer is required to ensure process times are recorded to build the cut-over plan.
- 10.11.6 Additional test scripts have not been developed to test business process with converted data. Examples include:
    - 10.11.6.a Bank reconciliation with migrated checks
    - 10.11.6.b Completion of the order to pay business process with converted data
- 10.11.7 Reconciliation procedure for transactional data has not been tested with converted data. Examples include:
    - 10.11.7.a Open Purchase Orders to Funds Management Encumbrance
    - 10.11.7.b Funds Management with Grants Management Budgeting
    - 10.11.7.c Reconciliation of General Ledger Account Groups

    - 10.11.7c1 Cash
    - 10.11.7c2 Asset Management
    - 10.11.7c3 Fund Balance
    - 10.11.7c4 Customers
    - 10.11.7c5 Miscellaneous Subledgers

- 10.11.8 Data conversion validation documents have been created for AR. With additional testing, the documents will require updates.
- 10.11.9 Data conversion process steps have not been merged with the project cut-over plan.
- 10.11.10 Sign-off procedure steps have been identified as well as the business owners.
- 10.11.11 A legacy system data-freeze procedure has not been developed.
- 10.11.12 Key legacy close procedure like year-end, audit, and CAFR has not been reviewed for impact on the cut-over resources.

Impact

- Business process changes cannot be finalized until the business process steps with converted data are tested.
- Repetitive data migration test runs confirm data quality and identify adjustments to the data validation and reconciliation process steps. The migration can be declared as a success once all entities have been signed off.
- The go-live date will determine if a midyear or fiscal year conversion approach will be used.
- A system freeze is critical and required component of the migration effort to establish conversion timelines.
- Key closing steps for the legacy system such as CAFR and audit review will affect available resources when data needs to be migrated.

Recommendation

- 10.11.1 Develop test scripts with converted data.
- 10.11.2 Perform additional dry-run (mock conversion) testing to complete the cut-over project plan.

- 10.11.3 Determine if additional sign-off steps are required if financial documents are parked before posting to improve reconciliation procedures.

- 10.11.4 Develop a legacy system freeze procedure for all application areas.

- 10.11.5 Evaluate availability of legacy system resources according to the cut-over schedule requirements for activities such as closing books in the legacy systems, doing CAFR, audit, and so on.

Finding – Grants Management

- 10.11.13 The Municipality has no way to extract grants from legacy. No such object exists. The Municipality has built spreadsheets manually to create this data. The Municipality has loaded this data into a client in SAP software that it calls the "golden master data client." The Municipality plans to maintain the golden client rather than maintain the input spreadsheets. The Municipality will then "replicate" this master data to new clients as needed and, finally, to the production client.

- 10.11.14 No conversion strategy for budget and balances of grants has been decided upon. Two options exist:

    - **10.11.14 Response: Agree with Comment**

        - MoA is evaluating all options.

    - 10.11.14.a Net budget: Load the remaining budget to the grant:

        - 10.11.14.a.1 Do not load inception-to-date expense balances and original budget, allowing the system to calculate the remaining budget.

        - 10.11.14.a.2 The source of data for this load has been defined; a grant report contains this data.

        - 10.11.14.a.3 It is relatively easy to get this data and build the source file for conversion.

            - **10.11.14.a.3 Response: Disagree with Comment**

                - Net budget requires significant effort.

        - Reports for the entire grant would be a combination of current legacy reporting and new reporting in SAP software.

    - 10.11.14.b Load inception-to-date expenses and budget to grant:

        - 10.11.14.b.1 Load expense and revenue totals to the grant.

- 10.11.14.b.2 Load total budget to the grant.
- 10.11.14.b.3 With these items, the system calculates remaining budget.
- 10.11.14.b.4 No derivation strategy for multifunded budget has been developed. The design for transaction processing identifies the current funding of a project from a list of funding sources. This approach will not work for conversion, because posting to any funding source is required. The current derivation for multifunding will have to be deactivated during conversion and the input data will have to include what funding to use.
- 10.11.14.b.5 This approach raises the same issue as master data conversion for grants. No such object exists in legacy, and therefore there is no way to pull the data out of legacy easily. The conversion files would have to be built manually.

Impact

- Master data approach for grants results in dual maintenance of master data:
  - By maintaining the golden client, the grants office will be entering grants into SAP software as well as PeopleSoft.
  - The effort to create the input spreadsheets is greater than the effort to enter the grants directly into SAP software.
  - The same people who create the spreadsheets could enter the data.
- No clear conversion strategy of grant balances jeopardizes the go-live.
- Net budget:
  - No inception to date balances for grants
  - Reporting to sponsors that requires inception to date could only partially be done in the grant
  - Fewer data will need to be converted. Grants can be renewed each year. Older years that have been closed would not be converted.
  - The load for multifunded projects would be simplified. No special derivation would be needed because no expense data would be loaded. Budget would be loaded directly on the grant and objects derived in financial transactions would be entered directly.
- Inception to date:

- Data cannot be cross-walked from legacy and would need to be built manually.
- Operational multifunding strategy would not work for conversions.
- This strategy lists funding options on projects.
- Active funding object is checked.
- Derivation always takes active funding object.
- Strategy to bypass this has not been defined.
- Most reporting to sponsors could be done out of SAP software with inception to date.
- The exception is that reports requiring detail transactions would need to be matched with legacy reports because no historical detail would be converted – only balances.

- No integration has been done using converted data.

Recommendation

- 10.11.6 Move forward with net budget load for grants.
  - 10.11.6.a Obstacles to getting inception to date data is high.
  - 10.11.6.b Reports requiring inception to date will have to be a combination of SAP reports and legacy reports:
    - 10.11.6.b.1 Define source of legacy portion of reporting.
    - 10.11.6.b.2 Develop training documentation or job aids to assist users in creating these reports.
  - **10.11.6 Response: Reject with Comment**
    - MoA is evaluating all options.
- 10.11.7 Redo a mock conversion for grants.
- 10.11.8 Redo an integration test for grants.

Finding – Funds Management

- 10.11.15 Fund master (246) data is loaded using LSMW. Fund center master (1042) data is loaded using LSMW. The commitment items (1890) are loaded via LSMW, additional loads or changes are

via export/import between different clients. Functional areas (173) are loaded using LSMW. Funded programs (769) are loaded using transaction code FMMDAUTO by copying from project definition. FM budget data is converted using an interface with the existing system TeamBudget.

Impact

- The above FM data conversions have been tested and are working.

Recommendation

- 10.11.9 Continue with the current approach.

Finding – Grants Management

- 10.11.16 Grant and project conversion strategy has not been decided:
    - 10.11.16.a It is impossible to pull source data from PeopleSoft. It must be built manually.
    - 10.11.16.b A golden conversion client is available and will be maintained with new grants and projects.
    - 10.11.16.c Master data will be replicated from golden client to new clients for testing.
    - 10.11.16.d A replication strategy for projects has not been defined.
    - 10.11.16.e Municipality is unable to build transactional data for inception to date balances. AWWU has already done this.
- 10.11.17 Conversion programs to load data into SAP software have been developed.
- 10.11.18 Derivation strategy for loading multifunded projects has not been developed.
    - **10.11.18 Response: Disagree with Comment**
        - MoA is using a derivation strategy when loading multi-funded projects.

Impact

- Lack of conversion strategy jeopardizes the go-live.
- Manual maintenance of client takes less time than building source documents for data.
- Without replication of projects it is not possible to replicate clients, thereby jeopardizing the go-live.
- Lack of clarity on balances makes it not possible to load data, thereby jeopardizing the go-live.

- Unable to load multifunded projects without derivation strategy.

Recommendation

- 10.11.10 Define and implement a conversion strategy.
- 10.11.11 Continue with manual maintenance due to time constrains.
- 10.11.12 Develop a strategy to replicate projects.
    - **10.11.12 Response: Reject with Comment**
        - MoA will evaluate how to proceed on conversion.
- 10.11.13 Determine balance conversion strategy and implement.
- 10.11.14 Develop and implement derivation strategy for converting multifunded projects.

2. Logistics and Inventory

Finding – Materials Management and Supplier Relationship Management

- 10.11.19 Open POs and contracts are converted in draft status.
- 10.11.20 Contracts and POs are converted using testing organizational unit in ITC.
- 10.11.21 Very few converted POs are present in the ITC testing environment.
- 10.11.22 Converted POs and contracts are not adequately tested in ITC. Out of a few hundred converted contracts, only 6 converted contracts were changed and none were tested by a shopping cart or PO.

Impact

- By converting PO and contract in draft status, extra workload is added to buyers to fix each one of them, and then order PO or release the contract. Make this manual step because the cut-over step may tremendously extend cut-over time.
- Using testing organizational unit for contract and PO conversion does not reflect the real-life situation and adds instability to the solution.
- Inadequate test of converted contract and PO may increase unexpected issues in final cut-over and production support.

Recommendation

- 10.11.15 Use an integrated HCM organizational structure for conversions, and test more converted POs and contracts.
- 10.11.16 Add detailed mappings to convert as many POs and contracts as possible directly into ordered or released status to reduce the workload from buyers.
- 10.11.17 Prioritize those POs and contracts in draft status, and put those must being fixed manually during go-live in cut-over steps.

Finding – Sales and Distribution (SD)

- 10.11.23 For SD, only a load sheet for service-materials (ZSER) was found, which looked good.
- 10.11.24 No other conversion documents with SD-relevance found.
- 10.11.25 No other SD-relevant objects are mentioned in the conversion strategy paper.

Impact

- ZSER-material master will be loaded as planned.

Recommendation

- 10.11.18 None.

3. HCM

Finding – Organization Management and Personnel Administration

- 10.11.26 The organizational structure conversion on QE1 – client 100 was done properly and validated. Upon completion of conversion, the Municipality analyst continued to maintain the organization structure to be as current as PeopleSoft. The analyst also set the organizational structure in QE1-100 as the production version and, by default, QE1 client 100 therefore became the golden client for HR – organization management.
- 10.11.27 The employee conversion done on QE1 was done properly and validated. The employee definition shows the same definition as in current Municipality HR system – PeopleSoft.
- 10.11.28 No functional specification documents exist that can be utilized to describe the conversion strategies and mapping fields of PeopleSoft to SAP HCM OM and PA objects.

Impact

- The OM conversion programs to load organizational structure objects will no longer be used.
- The PA conversion programs to load employee master data from PeopleSoft to HCM have to be kept up to date with any net new PA configurations and enhancements.

Recommendation

- 10.11.19 Develop functional specification for every data object and relevant infotype that are in scope for OM and PA conversion list. Each functional specification should be kept as current as the relevant conversion program.
- 10.11.20 Review and update the conversion programs as necessary to ensure the functionalities accommodate the current configurations and enhancements.

4. Project System

Finding

- 10.11.29 Two custom project master data conversions have been developed and tested: PS-SPC-Project Master Data Conversion and PS-SPC- WBS Element Conversion. These are in good shape; however, a third conversion for project and grant historical data (Inception to data) is still being discussed. A decision document for this conversion has been prepared and is going through steering committee review and approvals.

Impact

- Next integration test or mock conversion test cycle is dependent on the inception to date decision because of its significant impact on data conversion approach and effort.
- Historical inception to date data for projects (and grants) will not be available for reporting until a decision is made.

Recommendation

- 10.11.21 The analysis and design of the project history conversion needs to be finalized, documented, developed, and tested. Review the requirement for project (and grant) inception to date historical data. If the data is required only for reporting and not for any operational business process reasons, evaluate other options than bringing the data into SAP ECC. It is not common to convert historical reporting data into SAP ECC. Other options could be to keep the data in the existing databases and leverage the reporting that is used today or make the data available in an existing legacy data warehouse (if not already there) or converting it to SAP BW data warehouse.

5. FERC

Finding

- 10.11.30 Three LSMW objects have been developed to maintain FERC REG indicators, values in direct postings, and traced cost-postings mapping tables. The objects have been tested and verified that they meet the business requirements.

Impact

- The conversion objects have been designed to meet business requirements.

Recommendation

- 10.11.22 Continue the current approach.

Document Guidance Regarding MoA Responses

- The MOA responded to “Findings” with one of the following designations and provided commentary where applicable:
  - Agree
  - Agree with Comment
  - Disagree
  - Disagree with Comment
  - Need More Information

- The MOA responded to “Recommendations” with one of the following designations and provided commentary where applicable:
  - Accept
  - Accept with Comment
  - Reject
  - Reject with Comment
  - Need More Information

Responses are inserted immediately following the relevant paragraph and shaded in light gray for emphasis.

If there is no response after a finding or recommendation, the response from the MoA is Agree or Accept.

11. TESTING

11.1. TESTING – SCORECARD

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
Testing Strategy and Management	HIGH	HIGH	HIGH	HIGH
Testing Requirements	HIGH	HIGH	HIGH	HIGH
Test-Case Design and Execution	HIGH	HIGH	HIGH	HIGH
Defect Management	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Test-Tool Utilization	HIGH	HIGH	HIGH	HIGH
Test Data	HIGH	HIGH	HIGH	HIGH
Environmental Readiness	HIGH	HIGH	HIGH	HIGH
Nonfunctional Testing – Performance	HIGH	HIGH	HIGH	HIGH
Nonfunctional Testing – Value	N/A	N/A	N/A	N/A
Nonfunctional Testing – Stress	HIGH	HIGH	HIGH	HIGH
Nonfunctional Testing – Security	HIGH	HIGH	HIGH	HIGH
Testing from Functional Perspective (Test Cases and Test Plans)	HIGH	HIGH	HIGH	HIGH

11.2. Testing Strategy and Management

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 11.2.1 No overall test strategy document ties all testing together.
- 11.2.2 Microsoft Excel workbooks, or trackers, are used to manage the testing effort. There is no traceability between business requirements (blueprints), test scripts, and defects.
- 11.2.3 Test plans are missing for a number of areas (the SAP Business Warehouse (SAP BW) application, reporting, performance, data, and many other functional areas).
- 11.2.4 Regression testing is not used.
- 11.2.5 No peer reviews of test assets for correctness and completeness exist.
- 11.2.6 Other than start dates of a testing cycle, no clear entry and exit criteria are documented for the various stages of testing in either of the two existing test plans reviewed,. The following quotation does not describe the exit criteria for the test cycle in enough detail:
    - ". . . ensure that an *acceptable* result is obtained to exit parallel cycle 2." (*Found under Test Execution Section 1.7 of the Parallel Test Plan version 3.3.1, dated April 25, 2014 v2.0.)*
- 11.2.7 No dedicated test leadership (test manger or test group) exists, other than two part-time coordinators. One of these coordinators is no longer on the project, and the other has multiple duties including serving as development lead over a functional area.
- 11.2.8 The lack of completeness of the testing has been vocalized by many of the functional areas. No formal lessons learned are performed for test-process improvement.
- 11.2.9 The definition and intent for the stages of testing are not in alignment with SAP's definitions of Integration (ITC1 and ITC2) and mock conversion as defined in section 2.1 Integration Test Preparation, Test Data Preparation of the Integration Test Plan version 3.3.1, dated December 28, 2013 V2.0.
- 11.2.10 No consolidated integration test plan that includes both the SAP ERP Human Capital Management (SAP ERP HCM) and financials and logistics (FILO) and leverages fully converted data testing exists.

Impact

- The test strategy is a necessary and overarching document that sets the standards and guidelines for testing approaches, processes, and activities. Other documents, such as the test plans for each area of interest, draw from the test strategy. It is normally derived from the business requirements specification document or from the blueprint. The test plan is a lower-level document that lists all the testing activities in specific areas. It defines schedules, scope, roles and responsibilities, risks, entry and exit criteria, and test objectives. Without an overall test strategy, it is challenging to obtain an overall view of how all the testing fits together. This can lead to testing that does not fully test the functionality being enabled.

- Using Microsoft Excel to manage the testing effort makes it difficult to validate test coverage. This forces test-script development to be ad hoc, leverage past experience and is not tied to business requirements. Traceability to ensure test coverage of business requirements and alignment of test scripts with the requirements is important to understand what is included in the scope for testing. Without this awareness of what needs to be tested, the testing scope cannot be defined.

- Test plans are essential to define the testing specifics for each area being tested. Without this, it is likely that testing will be incomplete or that testing will be conducted in a way that does not fully test system integration.

- Without using regression testing, the project will not be able to determine if new functionality additions have broken existing functionality previously tested. This leaves the possibility that the functionality will not work in production.

- Peer reviews are an important contribution to test quality and help to validate proper test coverage. Without peer reviews, test scripts run the risk of being developed in a silo and do not test the system in an integrated manner. Peer reviews also reduce the risk by ensuring that the test covers all portions of the implemented functionality.

- Without defining the entry criteria of a test cycle, testing may start with incomplete configuration, poor code quality, incorrect environment settings, or other errors in required preconditions. The lack of exit criteria makes it difficult to determine when the testing is complete. Executing all the desired tests should not determine the completion of a test cycle. Disposition of the defects encountered during the test cycle must be understood and accepted before exiting the cycle. Lack of entry and exit criteria will make it difficult to manage the required testing.

- Without a dedicated test manager or test group to oversee testing activities, it is a challenge to ensure that timely, high-quality testing is performed. A person or group must provide the checks and balances that ensure objectivity and that the defined testing process and procedures are followed. This role must provide the proper coordination among development, test, and management teams.

- A lessons-learned recap is needed after each test cycle to evaluate the testing experience. The findings from the recap should be used for improvements to testing for subsequent test cycles. This will increase the quality of the test efforts and provide a documented testing evaluation for transparency.

- Clear definition and intent is required in the test strategy and in the respective test plans so that there is transparency and understanding among the teams. Differences in definitions for the approach to integration testing (as evidenced in the Integration Test Plan between FILO and SAP ERP HCM) can cause confusion and a misunderstanding of the goals and approach.

- Without a final test plan that is well executed and that documents the testing activities (including both SAP ERP HCM and FILO), the Municipality is unlikely to be able to go-live successfully.

Recommendation

- 11.2.1 Develop an overall test strategy to capture all of the modules in scope along with the standards and guidelines that govern the testing. The test strategy authored by Black & Veatch is a good start because it describes many of the required areas. It must be updated, however, with a current understanding of the testing to be performed.

- 11.2.2 Use a test management tool such as the SAP Solution Manager application management solution. This will facilitate traceability of business requirements to the test requirements and test scripts. A test tool will allow a view into test coverage to determine if tests are covering business functionality adequately.

- 11.2.3 Create test plans for each area of interest that define the specific approach and details of the test effort, as outlined in item A above. All test areas must be documented in a test plan and socialized with the team to ensure that transparency of approach, the resources required, and deliverables produced are understood by the project team.

- 11.2.4 Implement regression testing as part of the testing. This should define testing everything each and every time rather just the new configurations, code, and defect fixes. The purpose of regression testing is to confirm that a new program or code change has not adversely affected existing features. Previously authored test scripts are re-executed to ensure that the new changes do not have any negative side effects on existing functionality.

- 11.2.5 Institute a peer review process to provide an objective critical evaluation of the test scripts for completeness and correctness. This process should also take in to account an iterative feedback loop to review again as the test scripts change.

- 11.2.6 Define clear and concise entry and exit criteria that describe in detail the required conditions to begin the test cycle and the specific conditions to end the test cycle. Entry criteria must include

aspects that allow the testing to start, like review of the previous test stage results, the state of the code, frozen code, and the condition of the test scripts and test data. Exit criteria are conditions to end the test cycle, like the completion of all planned test types, remediation of all defects of a certain priority or severity, and a test evaluation summary that documents the testing experience for that test stage.

- 11.2.7 Create and fill the test manager role. This person or group should oversee testing activities and maintain segregation of testing duties. This role will ensure and enforce the policies, procedures, and guidelines of the test strategy and respective test plans defined for the project. The test manager is responsible for ensuring that testing is complete and accurate. It is one of the key drivers in reducing risk to the project.

- 11.2.8 Conduct lessons learned sessions for the teams. The goal of the sessions is to address and document activities that were both positive and negative in testing. The learning can then be incorporated into the next test cycle.

- 11.2.9 Align Municipality to common standards within a given methodology for implementation like the ASAP methodology. Here are example test definition differences based on testing activities performed:

Testing defined for the Municipality	Maps to:	SAP definition based on how the testing was performed
ITC1 – Integration without Security		Unit testing
ITC2 – Integration with Security (no converted data)		String testing
		SAP Definition: ITC should be performed with fully converted data and security

Figure 27: Definitions

- 11.2.10 Develop and include an overall test plan that encompasses both SAP ERP HCM and FILO. This should use fully converted data in testing the consolidated system that the Municipality will use after going live.

11.3. Testing Requirements

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 11.3.1 No documents define the requirements for authoring test requirements and test scripts. The Municipality is currently using process flows.

- 11.3.2 Many of the test scripts were developed using past experience or current PeopleSoft functionality as requirements.

- 11.3.3 Test requirements are developed by the functional leadership team without calling on extended members of the project team or other system users to validate the requirements.

Impact

- It is difficult to identify all of the tests required to test a system fully when developing test scripts without detailed blueprints. Using process flows does not give the level of required decomposition to determine all testing (alternate, exceptions, and error-handling) activity. Hence, some defects will likely not be detected.

- It may be natural to leverage past experience or existing functionality to represent test requirements in lieu of specifically defined blueprint business requirements. This practice does not scale, however, as staff turnover occurs during the project. When team members are added, knowledge of the system and the previous method of conducting business is not available to the Municipality. This soon results in process gaps.

- It is good that the functional leads are authoring the test scripts. Without representation from other users in the field, however, defects will be undetected because the leads do not have visibility into the all areas using the system.

Recommendation

- 11.3.1 Define business requirements using blueprints to identify details in functionality. The requirements represented by the blueprints can be used to further define functionality and describe the desired features of the system.

- 11.3.2 Use the business requirements as suggested above to derive the test requirements that lead to the test scripts. Using documented business requirements to develop test requirements is the common practice for developing test coverage. These test assets can also be the basis for training and other support documentation.

- 11.3.3 Involve the extended super-user community to author and review test scripts for greater test coverage and capacity. This approach will require an investment of training but will pay dividends in increased test coverage, test execution, and overall quality of the system.

    - **11.3.3 Response: Accept with Comment**

        - MoA will consider adding this to project plan.

11.4. Test-Case Design and Execution

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 11.4.1 Regression testing is not performed. When defect is encountered at a specific step, the testing is suspended until the issue is resolved. Testing then resumes from the step with the defect and on to the subsequent steps rather than starting over from the beginning.

- 11.4.2 Much of the testing has been completed with functional areas in various stages of development. This will require additional test cycles as no code freeze was implemented before entering a test cycle.

- 11.4.3 Not enough emphasis is placed on negative, alternate, or exception test scripts; most of the test scripts are positive scenarios.

- 11.4.4 Mock conversion testing focuses on validating the conversion scripts (load programs) and does not focus on testing the functionality with the converted data.

- 11.4.5 Inadequate time to perform complete testing during integration was observed. Many teams claim that they “felt rushed to get it done.” The teams did not have time to reconcile errors and retest scenarios fully and received limited training on system functionality.

- 11.4.6 In FILO and other areas of SAP ERP HCM, some regulatory configuration cannot be tested because the reports required to validate the work have not been developed yet.

Impact

- Testing only new objects transported into the environment without going back and retesting the existing objects can lead to missing defects that may have been introduced into the environment by the subsequent correction transport(s).

- Code and configuration must be frozen before entering into a test cycle. If it is not frozen, the testing to date will be negated, and the cycle must restart. The lack of a code freeze increases the risk of introducing new defects into the system and decreases the confidence in the quality of the testing performed.

- Testing mostly positive scenarios and not covering the negative, edge, and corner cases is inadequate test coverage. Although positive scenarios provide an understanding of normal business functionality, negative and alternate scenarios provide an understanding of the system’s function in unplanned situations.

- Performing data-validation tests for accuracy, completeness, and duplication tests the conversion and extract programs. They do not cover functional testing of the system with a full complement of data. Testing the functionality of the system end-to-end (integration tests) with the fully converted data ensures functionality in a more production-like environment and will validate data integrity with all of the relationships in place.

- Without adequate time for testing, confidence in the quality of the testing performed is low. Additionally, it does not allow for regression test cycles to retest after defects are remediated.

- In many areas, reports are required to fully validate the system’s functionality. Without end-user reports, the test scenario cannot be completed and may lead to errors in production.

Recommendation

- 11.4.1 Use regression testing during testing. Regression testing is based on the notion of testing everything every time. If additional objects are transported or if the system changes, restart the testing to include all objects previously tested. Changes to the environment during testing should not occur. A code freeze must be part of the entry criteria to begin testing. This will eliminate the need to start testing over.

- 11.4.2 Define and adhere to detailed code-freeze entry criteria and do not introduce new code, configuration, and defect fixes to the test environment during a test cycle. This approach will increase the overall quality and confidence of the test cycle. Additional test cycles are needed, especially for integration, using fully converted data and parallel testing.

- 11.4.3 Expand the test types to include additional scenarios beyond the positive scenarios. This will mimic real-life experiences. Tracing tests to requirements will help identify the additional alternate and exception test scripts. Also consider leveraging unit tests and tests from other stages of testing for additional scenarios, rather than authoring all test scripts from scratch.

- 11.4.4 Integration tests must be performed with a full complement of converted data to ferret out errors caused by the conversion or by the legacy data quality.

- 11.4.5 Plan and perform testing with adequate time to understand the area being tested fully. This will also allow for training of testers so that they understand their area of testing. This approach will provide a greater level of quality and confidence of the test cycle than the current test processes. To increase testing capacity, investigate the possibility of using test automation like the test accelerator and optimizer (TAO) or similar test automation tools designed for nontechnical business users. This will provide repeatable and scalable testing and alleviate the need for repetitive manual testing ultimately resulting in shortened test cycle time with higher quality.

- 11.4.6 Include the development of reports up front for each functional area so that they can be used to complete the testing of an area, where required. The reports must be tested and generated using a full complement of converted data.

11.5. Defect Management

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 11.5.1 The Excel-based issue-tracking log is good and tracks most of the relevant attributes but does not include the priority of the defect. It identifies only criticality and does not reflect the complete view of all the defects in one master list.

- 11.5.2 Periodic defect status reports for the project teams are missing due to the manual administrative overhead involved in maintaining the content and reports.

Impact

- Without understanding the remediation priority of a defect, it is left up to the development team to determine which items to correct in which order. Human nature typically dictates starting with the easy items and not necessarily the highest priority items. This can result in wasted effort and delays in correcting critical defects.

- Detailed defect and issue reports are needed to communicate and understand the quality of the system under test as well as the state of each issue under remediation. Planning for the future is not possible without these reports. This leads to missed timelines and increased costs.

Recommendation

- 11.5.1 Use a defect management tool such as the one contained in SAP Solution Manager so that detailed traceability can be maintained between the defect, test script, test requirement, and blueprint. Note: The defect functionality should not be confused with the SAP IT Service Management (SAP ITSM) application used for production incidents.

- 11.5.2 Create and disseminate defect and issue metrics to measure the quality and state of defect remediation. Key reports typically include defect count by criticality and priority; defect density by area or developer; and defect trending of new, open, and closed. These will help to quantify the quality of the system and forecast potential transitions to the next project stage.

11.6. Test-Tool Utilization

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 11.6.1 Neither SAP Solution Manager nor any other tool specifically designed for test management is formally used for test management.

- 11.6.2 SAP Test Data Migration Server software is not used to scramble or migrate test data into the various environments. Although the Municipality owns SAP Test Data Migration Server, the effort is currently using homegrown scripts for this activity.

Impact

- Currently, test management uses Excel spreadsheets. This makes it difficult to get a complete understanding of the test effort. Using disparate sheets for tracking issues from many areas makes it difficult to track issues from an overall perspective. This can result in insufficient personnel to complete the required testing or testing that does not adequately test all functionality as the integration is not fully understood.

- Using homegrown scripts in the ABAP programming language to migrate data between environments rather than using a tool designed for data movement creates unnecessary development overhead which translates into higher cost. It also presents opportunity costs as the developer cannot be working on other tasks.

Recommendation

- 11.6.1 Use a test management tool, ideally SAP Solution Manager, to track issues and defects. It can also drive traceability between blueprints, test requirements, test scripts, and defects for a holistic understanding of quality of the system. Using a tool designed for test management will provide reports to recognize and forecast the trajectory of quality to make informed decisions for release and other related activities.

- 11.6.2 Acquire staff knowledgeable on SAP Test Data Migration Server and implement the software to take advantage of its benefits, such as smaller data footprints, high-speed data-streaming capabilities, searching of data, data scrambling, and so on.

11.7. Test Data

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 11.7.1 Integration testing does not include a complete set of converted data. Integration is performed using a subset of master data (20%–30%).Additional transactional data is manually added as it is identified in the test scripts.

- 11.7.2 No formal test approach exists to leverage previous data conversion experience. There is no user-friendly approach to producing extracts from SQL scripts for individual comparison.

Impact

- Testing without a full complement of converted data is dangerous as it is not a true representation of the production system. If there is insufficient data, it is quickly exhausted or hijacked by other testers before the completion of the cycle, forcing testers to recreate the data condition and making it difficult to complete end-to-end scenarios. In addition, lack of full loads creates the likelihood that there will be undiagnosed data defects.

- A formal and repeatable documented test plan for data is needed. It must describe how to maintain data in the test environments and how to validate completeness, accuracy, and other quality dimensions like referential integrity. Using the expertise of individual testers with knowledge of writing SQL scripts to extract and compare data conversion results is not scalable few testers possess this skill.

Recommendation

- 11.7.1 Develop and execute a detailed plan for test data to ensure the proper level of breadth and depth of data to accommodate the testing needs of the test cycle. Review the data plan with each of the teams included in the integration test cycle to ensure that enough data is present with the appropriate conditions required for all testing.

- 11.7.2 Develop a data test plan that defines the people, process, and tools that will be used and how the data will be tested and maintained after conversion. Allow for peer review cycles so that all consumers of the data are aware of the plan to ensure correctness and completeness.

11.8. Environmental Readiness

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 11.8.1 Hardware must be upgraded, because the current servers are coming off of or are no longer under warranty or support.

- 11.8.2 Software must be upgraded, specifically the database and operating systems. Also, versions of SAP software must be upgraded so that testing can occur on the appropriate solution platform.

- 11.8.3 The small conference room used for integration testing is inappropriate to house the team members required to complete testing. In general, the room accommodates only the immediately

relevant members for the current test step, while others remain in adjacent rooms until their part of the test is ready.

Impact

- If the hardware and software are not current, the Municipality is not testing on the go-live production system landscape. This means that security risks and other risks can remain undetected.
- A physical integration test environment that cannot comfortably accommodate all testers can make the testing effort challenging, especially when the team is not used to working together. This makes it difficult to concentrate on the testing effort and slows the testing process.

Recommendation

- 11.8.1 Begin upgrade activities to keep hardware and the base software, like Microsoft SQL Server 2008 R2, current. This is doubly important as it is no longer supported by SAP. Other examples of upgrade needs are the Java and operating system versions. The upgrade must begin soon because procurement and deployment lifecycles are typically long.
- 11.8.2 Continue with the practice of conference-room testing, but find and use a room that can accommodate all parties required during integration testing. Ideally it should include areas for breakout discussions.

11.9. Nonfunctional Testing – Performance

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 11.9.1 The areas of interest for performance testing are technically well understood by the Basis team and must be completed prior to go-live. No defined performance test plan exists. Previously, two performance test efforts have been attempted (one with Black & Veatch and one with Peloton), but without usable test assets from either effort.
    - **11.9.1 Response: Agree with Comment**
        - It was not "Peloton;" it was "Coppercone."

Impact

- Although technical areas that need performance testing may be well understood by the Basis team, the understanding must be formally documented and reviewed for completeness and transparency. Modeling transaction profiles for functional areas may be required by the business to simulate special activities like open enrollment; month-end, quarter-end, or year-end processing that may overload the system or impede performance. If this is not done, the system may not be support the user demand.

Recommendation

- 11.9.1 Develop a performance test plan with stakeholders so that all eventualities are included in a comprehensive plan that adequately models the Municipality during key activities throughout the year. Rather than developing in-house expertise, reexamine the use of qualified outside resources to perform this testing, given that performance testing is a cyclical activity and is not executed regularly.

11.10. Nonfunctional Testing – Stress

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 11.10.1 The areas of interest for stress testing are technically understood by the Basis team and must be completed prior to go-live. No defined stress test plan exists.

Impact

- Although the technical areas that need stress testing may be well understood by the Basis team, the understanding must be formally documented and reviewed for completeness and transparency. Modeling transaction profiles for functional areas may be required by the business to simulate special activities like open enrollment; month-end, quarter-end, or year-end processing that may overload the system or impede performance. If this is not done, the system may not be support the user demand.

Recommendation

- 11.10.1 Develop a stress test plan with stakeholders so that all eventualities are included in a comprehensive plan that adequately models the Municipality during key activities throughout the

year. Rather than developing in-house expertise, reexamine the use of qualified outside resources to perform this testing, given that performance testing is a cyclical activity and is not executed regularly.

- **11.10.1 Response: Accept with Comment**

  - At the appropriate time we will evaluate stress test methodologies.

11.11. Nonfunctional Testing – Security

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 11.11.1 Some of the FILO tests in integration test cycle 2 were conducted without using the appropriate test user accounts. Individual or super-user accounts were used during testing.

Impact

- Deviating from the test script steps invalidates the testing for that test. In this case, since the exact test steps are unknown, the testing for the entire cycle is at risk of being invalid.

Recommendation

- 11.11.1 Complete the test scripts as designed to include the security testing. Perform additional test cycles to include security testing for all users and roles.

11.12. Testing from Functional Perspective Test Cases and Test Plans

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

1. Billing and Finance

Finding

- 11.12.1 Conversion data was not used for integration testing.

- 11.12.2 Conversion strategy for grants and projects not present.
- 11.12.3 Retest after error correcting not always complete or not clearly done, lowering confidence. This was specifically true for resource related billing with multifunded projects.
- 11.12.4 It is unclear if test user IDs or project IDs were used for testing.
- 11.12.5 A mix of consultants and project team members performed tests.
- 11.12.6 Test scripts for the main processes have been found and have been executed.
- 11.12.7 The impression remains that that test scripts cover only straightforward processes.
- 11.12.8 Billing of an only partially approved debit-memo request from RRB-billing cannot have been tested, because otherwise it would have been noticed that the development to prevent these documents from billing is still missing.
- 11.12.9 No test-scripts for the difference process with SD billing were found.

Impact

- Without testing with conversion data, there is no clear way to understand that converted data will work with a business process.
- Without a clearly defined conversion strategy it is impossible to convert data for the test.
- Project IDs typically have more authorizations, thereby invalidating the test.
- Municipality staff should perform testing with support of consultants. Consultants performing tests raises questions on the validity of the test.
- No structured result for whether the implemented difference process matches the business requirements.
- Exception processes are untested.

Recommendation

- 11.12.1 Convert data for integration testing.
- 11.12.2 Complete a conversion strategy and implement it to make conversion of data possible.
- 11.12.3 Use only specific test IDs to perform integration test scripts.

- 11.12.4 Only Municipality staff should perform integration tests.
- 11.12.5 Execute at least one more cycle of integration tests.
- 11.12.6 Create a test script for the difference process, including approvals, and document the outcome. These test scripts should at least cover the following situations:
    - 11.12.6.a Difference for a created SD invoice
    - 11.12.6.b Difference for an invoice created in the legacy environment (or will that be always a pure FI-process?)
- 11.12.7 Create test scripts for exception-processes like attempting to bill incomplete approved debit memo requests.

2. Logistics and Inventory

Finding

- 11.12.10 All scenarios are not tested adequately in ITC. For example, only 2 of 5 RFx are tested with total 11 RFx during testing. Options and PPS closeout functions are not tested.
- 11.12.11 Not enough test scripts are available to cover an end-to-end function integration test.
- 11.12.12 Year-end process are not fully tested in ITC, there is no year-end process design document.
- 11.12.13 Integration of SAP ERP HCM and SAP SRM has not been tested at all.
- 11.12.14 All tests are conducted in a testing organization unit; no HCM-replicated structure is used in any testing.
- 11.12.15 Converted contracts and POs are not adequately used in ITC testing.

Impact

- Without enough tests, the solution may be unstable, and production support may become very difficult.
- Without a complete year-end process defined and tested, it may be costly to change certain functions in order to have all year-end steps carried out.
- Lack of testing in the key area of integration of SAP ERP HCM and SAP SRM adds more uncertainty to the solution.

- Without conducting ITC tests in the HCM integrated organizational structure, all testing in ITC becomes more like a unit test.

Recommendation

- 11.12.8 Work with other groups, such as FI, PS, and so on to cover more end-to-end integration testing.

- 11.12.9 Use HCM integrated organizational structure to conduct all tests.

- 11.12.10 Create thorough test scripts to cover integration of SAP ERP HCM and SAP SRM, such as hire to retire of an employee during different procurement stages.

- 11.12.11 Coordinate with FI to design a year-end process and thoroughly test the process.

- 11.12.12 Test converted data, such as POs, contracts, vendors, and so on in ITC.

3. HCM

Finding

- 11.12.16 The Functional team executed the functional unit tests with developer. The system integrator (SI) consultant executed the test scripts for integration testing cycle (ITC) 1; while the Functional team was shadowing and validating the test script execution and workflow approval functionality. However, the integration testing scenarios and test scripts did not incorporate the integration with other SAP software. The ITC1 scenarios and scripts were specific to the OM objects.

- 11.12.17 The ITC1 test scripts were executed without utilizing the security authorization user roles being assigned to the user IDs. The current testing strategy is to have the functional team members executing test scenarios and test scripts during ITC 2.

- 11.12.18 The current staff of the Central Payroll has not had the opportunity to test this functionality. Although previous resources felt comfortable with how this process would work in SAP software, the current staff does not have the knowledge or understanding of how to process an overpayment in SAP software. The business process is not detailed enough to assist in this understanding, and knowledge of the process resides with the consulting payroll lead, who is not on site, to assist in knowledge-transfer on how to process an overpayment in SAP software.

- 11.12.19 Integration test cycle 1 is incomplete (72%).

- 11.12.20 During on-site interviews the Functional team participants stated that Tax Reporter was tested, but no test scenario or script formally documents that it has been tested by end users.

- 11.12.21 Central Payroll staff was quite vocal about how little integration testing had been done and that the quality of the testing was suspect. After reviewing the 55 master integration test scenarios and the 19 actual executed HCM integrated test scripts, it appears that not enough content is covered for all flavors of collective bargaining agreement requirements (9 total bargaining units) to exercise the level of customization included in the payroll driver.

- 11.12.22 Due to the number of issues preventing the team from moving out of Integration Testing cycle 1, Integration Testing cycle 2 was never started. As a result, parallel payroll cycles were deferred. Although the payroll consultants noted that parallel payrolls were executed under a previous integrator, the amount of redesign done after the parallel payrolls means that cycles and their results were unknown to the team and to SAP QA analysts. As a result, we are treating this previous work as though it was invalidated due to the amount of configuration change that has been done since.

- 11.12.23 Consultants were the primary testers for Integration Testing cycle 1, with some limited monitoring by the payroll team. The resources assigned to the payroll team for this oversight are no longer on the project, so that the only knowledgeable resources concerning what was tested are the consultants. The payroll consultant lead is not on site, thereby restricting any ability to educate, train, and teach the employee resources who have been assigned to pick up where the others have left off. The discontinuity has significantly undermined the confidence of the solution, given that Central Payroll staff is insufficiently knowledgeable to assist in learning effectively how payroll works in the current design. This situation is one of the biggest risks to success.

- 11.12.24 Configuration exists in the payroll driver to process retirees, particularly firefighters and police, which is another area of disagreement. It is unknown how much, if any, testing has occurred in this area. The business process is a bit convoluted in that the police, fire, and retirement medical trust gives beneficiaries the opportunity to purchase their insurance using a benefit from an endowment that fronts some money for the insurance. It was the understanding of the payroll team that benefits couldn't handle this and, as a consequence, payroll was asked to configure for this calculation.

- 11.12.25 A cross-walk exists that maps wage types to financial accounts in GL. It is currently maintained as a core maintenance document (based on Microsoft Excel).

- 11.12.26 Some limited unit testing has occurred, but due to the incomplete integration cycle one, more thorough testing has not been done between HR and financials (FI).

- 11.12.27 Not all wage types currently configured have been maintained in SAP software for HR financial postings, especially in the area of Kelly Firefighters and Tour trade donations and receipts.

Impact

- Each team only understood the responsible area which resulting in a lack of end-to-end business understanding and proper design of an integration solution that should flow from the HR department and extend to Finance and SRM.
- Overpayment functionality may not execute as the Central Payroll expects or provide the business process benefit as expected.
- Integrated test scenario may not pass the test, exposing a gap in configuration.
- Not testing Tax Reporter in a formally documented test scenario means that tax reports may not be configured properly, thereby jeopardizing the ability of Central Payroll to execute and generate the required tax documents for its employees and the Municipality.
- Unless the application design is retooled, no guarantee exists that the team will ever move out of Integration Testing cycle 1, and consequently, never finish its portion of the project. Unless risks are mitigated and finance and logistics are removed from dependency on HCM and payroll, the whole project timeline is in jeopardy.
- Calculation of retirees' benefits for this Police and Fire retirement fund may be inadequate or inaccurate unless testing is performed.
- Unless the wage types are configured in the HR financial-posting configuration tables, the actual FI documents from HR will not post to the general ledger (GL) correctly; payroll results may not be in balance to generate the FI documents, and the GL will not reflect the actual financial commitments for labor correctly.

Recommendation

- 11.12.13 Create integration HR life cycle – hire to retire – test scenarios and test scripts that include organizational management as the starting process to ensure that system integration fully meets business requirements and that HR subject matter experts and business owners fully understand the impact and the key integration points of the implemented solution. The integration test scenario should also cover the FI posting and SRM replication to ensure all applications are integrated correctly.
- 11.12.14 Develop the integrated test script for overpayments further. Although the script identifies the step to clear the overpayment claim, the specific steps on how to do so are not documented in the business process flow.
- 11.12.15 Execute the test script once it has been modified to ensure that the process is understood and functions as expected.

- 11.12.16 Complete the current test scenario to ensure that it finishes as expected.

- 11.12.17 Build and execute a test scenario that tests that transaction code PU19 for Tax Reporter functions as it is configured.

- 11.12.18 Further document in detail how to execute transaction PU19 for business process flow PFD-HCM-PY-05 Tax Processing.

- 11.12.19 Reduce the complexity of time evaluation and payroll by retooling the design to eliminate many of the complexities preventing the team from moving forward. The reduction does imply reworking the master test scenarios and test scripts because the design solution would change. But the content and intent of testing the application for satisfaction of the business requirements still remains viable.

- 11.12.20 Conduct a knowledge-transfer session from the payroll consultant to the payroll team to give the team some confidence and comfort that this process is working as expected.

- 11.12.21 Identify a master integrated test scenario to ensure that a test script is written to exercise this configuration.

- 11.12.22 Continue maintaining the core mapping document for new wage types. Update the configuration for the HR financial posting of wage types in the area for Kelly Firefighters and Tour trade donations and receipts. If the Municipality goes forward with a reconciliation of wage types, the HR financial postings configuration would also need to be reconciled with the changes made to wage-type configuration.

- 11.12.23 Design and construct test scripts, including master test scenarios, that incorporates a full end-to-end test sequence of recording time worked and time off in the external time-collection systems, and transfer that data to SAP software as evaluated and processed through payroll. Include all additional postpayroll processing steps to evaluate and generate the HR posting documents to FI. Continue execution of posting the documents to FI and evaluate the journal entries after posting completes. One of the test scripts must include a retroactive master data adjustment that would trigger a reallocation movement of pay results in the GL.

- 11.12.24 See additional documentation provided on best, common practice of generating HR financial-posting documents for distribution to Financial and Controlling.

4. Project System

Finding

- 11.12.28 Testing is advanced, but incomplete. There is good confidence in unit testing in all areas except investment management (where the design is incomplete) and results analysis (where more

design work and configuration changes are required). The initial integration tests were completed with the test scripts provided, but were very limited in terms of volume and scenario variety.

- 11.12.29 Retesting after error correction was not always complete, lowering confidence. This was specifically true for resource related billing for reimbursable projects.

- 11.12.30 Final integration testing is still to be done.

- 11.12.31 A full integration test from appropriation request creation in investment management, followed by project creation in project system (PS) through to substantial completion and project close, and then asset creation and a value update through a full asset lifecycle with a couple of month-ends and retirements, transfers, period-end tasks, and so on is needed to provide confidence that the system is fully tested and ready for cut-over.

- 11.12.32 A full integration test of payroll and labor interfacing from the various time entry systems right through to WBS updates is also needed.

- 11.12.33 A more thorough integration test of project purchasing including creation of shopping carts for many different project scenarios through to goods and service receipts and invoice matching and payment, and including change orders and delivery date changes. Both more volume of testing is needed and more variety to include all possible scenarios.

- 11.12.34 There was a mix of consultants and project team members performing the tests.

Impact

- More integration testing still needs to be done to ensure that the different modules, specifically investment management, the interfaces with PowerPlan and Maximo, and payroll, are working properly with projects and assets before go-live.

Recommendation

- 11.12.25 Complete the conversion strategy, particularly for investment management, and implement the strategy to convert as much master data as possible before the new rounds of integration testing.

- 11.12.26 Prepare for and execute two more rounds of integration testing. These must include a thorough end to end test from investment management through project system to asset accounting, end to end payroll, and end to end project purchasing. A substantial volume of test transactions needs to be tested as well as an extensive variety of test scenarios. In addition at least two month-ends need to be tested, with a good variety of transactions processed before each month-end test.

- 11.12.27 Use only specific test IDs to perform integration test scripts.

- 11.12.28 Only Municipality staff should perform integration testing.

5. FERC

Finding

- 11.12.35 Unit testing is not complete for any of the eight FERC reports, as they have not been developed.
- 11.12.36 The FERC month-end process has not been tested with real data. Integration testing did not fully reflect actual business processes. Accordingly, FERC integration testing has not been completed.
- 11.12.37 The amount of data used for testing was limited and does not cover all business scenarios.

Impact

- Business is unable to validate the FERC module design and processes, which results in an untested solution.

Recommendation

- 11.12.29 Complete development and testing of the eight FERC reports.
- 11.12.30 Execute comprehensive end-to-end integration testing with real business scenarios and reconcile the FERC trial balance that is generated.
- 11.12.31 Consider executing mock close testing for a month in SAP software with data converted from legacy system prior to inter-governmental charges (IGC) allocation. Execute IGC allocations in SAP software; complete month end close and compare the FERC reports generated in SAP software with that in the legacy system.

6. Security

Finding

- 11.12.38 The transactions and applications defined in the FILO roles were security unit tested by the security team but not fully unit tested by the functional team. This is not the recommended method for security unit testing. The recommended method for security unit testing involves the full execution of each transaction or application defined in each role by a team member familiar with business process and the expected results of each transaction.
- 11.12.39 Security unit testing has not been performed on the HCM roles. Complete security unit testing of the HCM and BW roles should be identified as an entrance criterion for ITC2.

- 11.12.40 No security unit testing for SAP BW has been performed.
- 11.12.41 Finance and logistics business roles were tested during ITC2.
- 11.12.42 HCM roles have not been tested as part of integration testing. Business roles are the combination of individual roles that a user would require to perform daily tasks within the system.

Impact

- Security roles contain authorizations that grant users access to execute transactions, reports, and applications within the system. As a standard rule, 75%–80% of the authorizations are identified when security builds each role. The remaining authorizations required within the security roles should identified in security unit testing. If these authorizations are not identified during any of the testing cycles, end users will receive an authorization error and will not be able perform their intended task within the system. Security unit testing performed during integration testing presents multiple issues. One is that not all transactions are defined as part of the testing scenarios. The second issue is the complexity in troubleshooting and properly updating the roles defined in the business roles.

Recommendation

- 11.12.32 Perform security unit testing on the transactions that are defined in the roles but not in the ITC 2 test scripts. The testing should be performed by a team member familiar with the business process and the expected are result of the transactions. The validation and security testing of the transactions will ensure all required authorizations are captured with the security roles and therefore, allow end users to successfully perform their daily tasks within the system.
- 11.12.33 Complete security unit testing before HCM ITC 2 starts. The completion of security unit testing should be identified as an entrance criteria for HCM ITC 2.

7. SAP BW

Finding

- 11.12.43 No strategy for report validation.

Impact

- Without the proper validation of data in the reports, reports may display incorrect data. Users might lose trust in the reports.

Recommendation

- 11.12.34 Data should be validated end-to-end for business process validation with the help of the functional team. Do not rely on the BW consultants to provide functional consulting support. Dedicate functional consultants to provide onsite support to the testing efforts. This side-by side support can expedite the validation of complex data in the reports because the functional team understands the underlying data in SAP ECC and SAP SRM. With their assistance, the users will gain confidence in the reports and thoroughly understand the data flowing into the reports.

Document Guidance Regarding MoA Responses

- The MOA responded to “Findings” with one of the following designations and provided commentary where applicable:
    - Agree
    - Agree with Comment
    - Disagree
    - Disagree with Comment
    - Need More Information

- The MOA responded to “Recommendations” with one of the following designations and provided commentary where applicable:
    - Accept
    - Accept with Comment
    - Reject
    - Reject with Comment
    - Need More Information

Responses are inserted immediately following the relevant paragraph and shaded in light gray for emphasis.

If there is no response after a finding or recommendation, the response from the MoA is Agree or Accept.

12. GRANTS

12.1. GRANTS – SCORECARD

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
Master Data in SAP Grants Management	HIGH	MEDIUM	MEDIUM	MEDIUM
Grant Setup	LOW	MEDIUM	LOW	LOW
Grant Budgeting	HIGH	MEDIUM	LOW	MEDIUM
Grant Indirect Cost	LOW	LOW	LOW	LOW
Grant Billing	MEDIUM	MEDIUM	LOW	MEDIUM
Grant Close-Out	LOW	MEDIUM	LOW	LOW

12.2. Master Data in SAP Grants Management

Overall Risk: HIGH
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 12.2.1 Master data has been configured properly in the SAP Grants Management application. Some issues exist with derivation and the setup of cost-sharing grants:
    - 12.2.1.a External numbering will be used to allow for smart numbering.
    - 12.2.1.b Grant will be derived from fields on internal orders and work breakdown structure (WBS) elements.
    - 12.2.1.c WBS elements allow for multiple grants to fund a WBS by using an enhancement that has a table on the WBS element listing possible funding options. An X is placed next to the active funding source. Derivation takes the active funding source and uses it in the posting.
    - 12.2.1.d No additional fields have been added to the grant master. A user exit is available to add additional fields to the grant master, but it has not been activated.
    - 12.2.1.d Cost-sharing is incomplete for grants. The Municipality attaches cost-sharing funds to the grant in some cases. However, it does not happen in all cases. The Municipality has a concept called in-kind matching. In-kind matching is a flavor of cost-sharing that involves appropriated budget. It occurs when a sponsor agrees to give the Municipality money on the condition it matches it with money from its own budget. When this money comes from the appropriation, it is called in-kind, and the Municipality does not attach the fund to the grant because of a concern around changing the appropriated budget.
    - 12.2.1.e Requests to store additional data on the grant, such as check lists for reporting, are impossible because all fields are used, and the user exit to add fields has not been activated.
- 12.2.2 Sponsored program has been configured properly:
    - 12.2.2.a Sponsored program is derived from fields on internal order and WBS master data.
    - 12.2.2.b Naming conventions for sponsored program is free form.

- 12.2.3 Sponsored class:
    - 12.2.3.a Multiple sets of sponsored classes are possible for grants, which allows the user to choose to roll up postings to all expenses or to individual expense type.
    - 12.2.3.b The sponsored-class level is controlled by authorization group. EXP is entered to signify roll up; blank means detail.
- 12.2.4 Conversion is a challenge:
    - 12.2.4.a No grant objects exist in the legacy system.
    - 12.2.4.b Mapping from legacy is impossible.
    - 12.2.4.c Input files have been created to load grants.
    - 12.2.4.d Once loaded, a golden master data client will be kept and maintained. Grants entered in the legacy system will be entered in the golden client.
    - 12.2.4.e The current golden client was loaded with master data from the end of June 2014.
    - 12.2.4.f No additions have yet been made to the golden client.
- 12.2.5 Knowledge transfer has been inadequate:
    - 12.2.5.a Cost sharing is not fully understood.
    - 12.2.5.b Derivation, particularly the multifunded project derivation, is not fully understood.

Impact

- Not adding additional fields has caused a repurposing of standard fields. For example, the authorization group is used to indicate that a grant is using rollup-sponsored classes instead of detail.
- Repurposing fields restricts future functionality. Authorization group is unavailable for use in security.
- Smart numbering results in external numbering, which requires management of the number range.
- Not having all cost sharing on the grant causes reporting issues. It is impossible to report easily on all the activity with a grant. A grant report needs to be run, then an internal order report. The two reports must be combined to report fully on the grant.
- Lack of understanding of the functionality impacts proper set up of the grant.

- Not keeping the golden master data client up to date adversely affects the ability to go live. However, analysis has been done to compare the level of effort to directly enter changes into the client to building incremental input files with those changes. It has been determined that the level of effort to create the additional input would be higher than to directly enter into the golden client. Also, the people performing this task would be the same under either approach.

Recommendation

- 12.2.1 Handle cost sharing properly:
    - 12.2.1.a Add internal fund to grant for in-kind match.
    - 12.2.1.b Create sponsored program for in-kind match and add it to the grant.
    - 12.2.1.c Create funded program for in-kind match.
    - 12.2.1.d Make a budget change to allocate the proper portion of the internal fund budget to the grant and funded program.
- 12.2.2 Add fields to grant:
    - 12.2.2.a Move sponsored-class level from authorization group to a custom field.
    - 12.2.2.b Review data requests and decide which other items to add to the grant.
- 12.2.3 Continue with master data conversion strategy. Because the level of effort would be greater to create the additional input sheets for the conversion programs.
- 12.2.4 Work with consultants to provide knowledge transfer; develop training material and job aids.

12.3. Grant Setup

Overall Risk: LOW
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 12.3.1 Grant setup process flows have been reviewed and look fine:
    - 12.3.1.a Initially, grant setup will occur centrally.

- 12.3.1.b At some point after going live, a decision might be made to roll grant setup out to departments.

- 12.3.2 The preaward process is performed outside of SAP software:
  - 12.3.2.a Output of the preaward process is a form that collects all information for grant creation in SAP software.
  - 12.3.2.b The form is sent to the central office, and the grant is created.

Impact

- A concern exists that the central creation of grants will be a burden to the grants office.

Recommendation

- 12.3.1 Continue with this approach.
- 12.3.2 Monitor the workload of the grant office to ensure the grant creation does not adversely affect the office's other work.

12.4. Grant Budgeting

Overall Risk: HIGH
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 12.4.1 In general budgeting is configured and setup properly:
  - 12.4.1.a Budget is entered as released (single step).
  - 12.4.1.b All budget types except supplemental are workflow-approved.
  - 12.4.1.c Grant budgets are split by validity period.
  - 12.4.1.d Business Add-Ins (BAdI) for budgeting in SAP Grants Management have been implemented and tested for cost-sharing ceiling.
  - 12.4.1.e Budgeting process flow was reviewed, and it is fine.

- 12.4.2 Availability control is configured properly:
    - 12.4.2.a Tolerance profiles are defined and can be overridden by grant and user ID.
    - 12.4.2.b Control object derivation is correct.
- 12.4.3 *Public Law* field:
    - 12.4.3.a The law authorizing the budget must be cited on the budget transaction.
    - 12.4.3.b In SAP Grants Management, the citation is put in a description field. In FM, it is put in the *Public Law* field.
- 12.4.4 A desire exists to make the budget load program available to departments to facilitate creation of budget. This approach does not put budget transactions in workflow, so it cannot be used.
- 12.4.5 Confusion over availability control (AVC) errors as transactions are processed:
    - 12.4.5.a For grants, two AVC checks occur: One against the FM budget and one against the grant budget.
    - 12.4.5.b The FM budget is a total check and is not performed at the expense item.
    - 12.4.5.c For many grants, the budget in SAP Grants Management is at the expense item, which is driven by the agreement with the sponsor.
    - 12.4.5.d Because of the two checks, users have a difficult time determining what the error is when AVC fails.
- 12.4.6 The source of budget conversion data is a challenge. Because the grant object does not exist, cross-walking the budget in PeopleSoft to SAP software is difficult.
    - 12.4.6.a Two methods of conversion are being considered: Net budget and inception to date:
    - 12.4.6.b Net budget:
        - 12.4.6.b.1 Remaining budget for each grant (original budget minus expenses to date) is loaded.
        - 12.4.6.b.2 This approach currently exists in a *comprehensive annual financial report* (CAFR) schedule.

        - 12.4.6.b.3 Cross-walking this schedule to SAP software would be easier than alternatives.

    - 12.4.6.c Inception to date:

        - 12.4.6.c.1 Load expense totals from beginning of grant to go-live.

        - 12.4.6.c.2 Load original budget.

        - 12.4.6.c.3 Have the software calculate the remaining budget.

Impact

- Inconsistent and incorrect data possible due to the use of description for public budget.
- The standard budget entry screen has higher complexity than the budget load transaction. Accordingly, the probability of bad budget data, or untimely budget data, is higher as long as the standard budget transaction must be used instead of the budget load transaction.
- AVC failures slow down transaction throughput due to unclear training and knowledge transfer.
- The lack of a decision on inception to date or net budget jeopardizes the go-live.

Recommendation

- 12.4.1 Add the *Public Law* field to the grant budget transaction using a BAdI.
- 12.4.2 Approve and implement CM086 to add workflow to the budget load program.
- 12.4.3 Create job aids for dealing with AVC errors.
- 12.4.4 Decide on a conversion approach and implement it.

12.5. Grant Indirect Cost

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 12.5.1 Grant indirect costing is not in use.
    - 12.5.1.a Indirect cost is calculated outside the system and posted to grants.

Impact

- None.

Recommendation

- 12.5.1 None.

12.6. Grant Billing

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: MEDIUM

Finding

- 12.6.1 Grant billing is configured properly:
    - 12.6.1.a Manual billing is configured.
    - 12.6.1.b Resource-related billing is configured.
    - 12.6.1.c Business process flows were reviewed, and they are fine.
- 12.6.2 Resource-related billing (RRB) has been used and set up properly:
    - 12.6.2.a Concerns were expressed regarding the stability of RRB.
    - 12.6.2.b Testing of the multifunded enhancement of RRB is inadequate.

- 12.6.3 Receipt of payment:
    - 12.6.3.a Invoices are cleared automatically where possible.
    - 12.6.3.b Exceptions include clearing of letter of credit (LOC) drawdowns.
        - 12.6.3.b.1 LOC represents multiple invoices for one payment.
        - 12.6.3.b.2 No key to clear these multiple invoices has been provided.

***Note**: The following provides additional clarification for items 12.6.2 and 12.6.3.*

During interviews and prior to arriving on site, concern was raised regarding resource-related billing (RRB) and its setup. The concerns included the turnover among the consulting staff in the grants and projects area, which meant that several consultants have been responsible for setting up RRB. At this point, three different consultants have been responsible. The experience with the functionality has gone from very specific to general knowledge. At one point, the Municipality was told by consulting that the functionality in general was not stable. Items external to RRB have affected perceptions. Projects and grant funded projects use RRB.

An enhancement was developed to support multifunded projects. The enhancement identifies which funding source to use in derivations and the posting. During integration testing, the enhancement did not initially work properly and took several iterations of test and fix to get it working. Because of the problems with the multifunded enhancement, testing of RRB was disrupted. Problems were not fully traced to the enhancement or RRB.

Because of the turnover and the issues with the enhancement, a perception exists that RRB does not work or is unstable.

The review of RRB found that the configuration has been done properly.

- 12.6.4 Knowledge transfer and testing is lacking. This concern was expressed with regard to product stability and a general lack of understanding of the setup.

Impact

- Lack of knowledge transfer and inadequate testing deteriorates confidence in the system.
- Lack of automatic clearing for LOC drawdown slows this process and puts a manual component on it.

Recommendation

- 12.6.1 Provide knowledge transfer in this area.

- 12.6.2 Provide a clearing key for LOC drawdowns:
    - 12.6.2.a Code a user exit in sales and distribution (SD) to populate the reference field on the accounts receivable (AR) invoice with a unique key for each drawdown.
    - 12.2.6.b Refer to this key when payment is received, and all invoices will be pulled into clear.
- 12.6.3 Continue with the process as designed.
- 12.6.4 Perform several integration test scenarios involving RRB.
- 12.6.5 Ensure that the following cases are tested:
    - 12.6.5.a Multifunded projects.
    - 12.6.5.b Multifunded projects with the current funding changed between time expense was posted to time the RRB is executed.
- 12.6.6 Evaluate results
    - 12.6.6.a If there are errors, determine if cause is the enhancement or RRB.
    - 12.6.6.b If the cause is the enhancement, work with developers to correct it.

12.7. Grant Close-Out

Overall Risk: LOW
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 12.7.1 The grant close-out process was reviewed, and it is fine.

Impact

- The grant close-out process will work as designed.

Recommendation

- 12.7.1 Continue with this process.

Document Guidance Regarding MoA Responses

- The MOA responded to “Findings” with one of the following designations and provided commentary where applicable:
  - Agree
  - Agree with Comment
  - Disagree
  - Disagree with Comment
  - Need More Information

- The MOA responded to “Recommendations” with one of the following designations and provided commentary where applicable:
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  - Accept with Comment
  - Reject
  - Reject with Comment
  - Need More Information

Responses are inserted immediately following the relevant paragraph and shaded in light gray for emphasis.

If there is no response after a finding or recommendation, the response from the MoA is Agree or Accept.

13. REPORTING

13.1. REPORTING – SCORECARD

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
Finance and Billing	HIGH	HIGH	HIGH	HIGH
Logistics and Inventory	MEDIUM	HIGH	HIGH	HIGH
HCM	HIGH	HIGH	HIGH	HIGH
FERC	HIGH	HIGH	MEDIUM	HIGH
Project System	MEDIUM	MEDIUM	MEDIUM	MEDIUM
SAP BW	HIGH	MEDIUM	MEDIUM	MEDIUM
Security	LOW	LOW	LOW	LOW

13.2. Finance and Billing

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

1. GL

Finding

- 13.2.1 Standard general ledger reports have been incorporated into the test scripts.
- 13.2.2 Report Painter reports have been developed by consultants to produce trial balances, profit and loss, and department reports.
- 13.2.3 Report selection variants are not defined for all reports.
- 13.2.4 Report layout variants are not defined for all reports.
- 13.2.5 Microsoft integration with SAP software is not understood. Often the end users has a difficult time exporting data into Excel.
- 13.2.6 Reports have not been cross-walked to requirements. The reporting cross-walk from legacy to SAP software is process has not been completed.
- 13.2.7 Navigation of standard reports is difficult for most end users.
- 13.2.8 BI/BW standard content for general ledger has not been activated and has not been reviewed by the Synergy implementation team.

Impact

- Report selection variants and report layout variants needs to be completed to completed training documentation and will assist in the development of the cutover plan. These variants will provide consistent reporting across all system environments
- The completion of the report cross-walk will determine the reporting development scope by application area.
- Reviewing the standard content of BI/BW will reduce the development of custom reports.
- Report Painter knowledge is limited since the report have been developed by consultants. The support of these reports will be difficult.

Recommendation

- 13.2.1 Complete the legacy cross-walk report mapping in order to determine report development.
- 13.2.2 Train the Synergy team members to support the Report Painter tool.
- 13.2.3 Have the Synergy team members review the SAP-provided standard content of BI/BW.

2. CO

Finding

- 13.2.9 Standard controlling reports have been incorporated into the test scripts.
- 13.2.10 Report selection variants are not defined for all reports
- 13.2.11 Report layout variants are not defined for all reports
- 13.2.12 Microsoft integration with SAP software is not understood. Often the end users has a difficult time exporting data into Excel.
- 13.2.13 Report have not been cross-walked to requirements. The reporting cross walk from legacy to SAP software has not been completed
- 13.2.14 Navigation of standard reports is difficult for most end users.
- 13.2.15 BI/BW standard content for general ledger has not been activated and has not been reviewed by the Synergy implementation team.

Impact

- Report selection variants and report layout variants needs to be completed to completed training documentation and assist in the development of the cutover plan. These variants will provide consistent reporting across all system environments
- The completion of the report cross walk will determine the reporting development scope by application area.
- Reviewing the standard content of BI/BW will reduce the development of custom reports.

Recommendation

- 13.2.4 Complete the legacy cross-walk report mapping in order to determine report development.

- 13.2.5 Train the Synergy team members to support the Report Painter tool.

- 13.2.6 Have the Synergy team members review the SAP-provided standard content of BI/BW.

3. Assets

Findings

- 13.2.16 Standard asset reports are in place and working, but custom reports are undefined or not yet fully specified.

- 13.2.17 The following list highlights reports for possible customization in SAP BW:

    - 13.2.17.a One large master asset report in SAP BW to satisfy all general asset accounting needs would have all standard reporting fields plus additional special or custom fields specific to the Municipality and AWWU. It would allow selection of various field combinations and definitions to produce the desired reporting breakdown and summarization.

    - 13.2.17.b Comprehensive annual financial reports (CAFR) reports are required on the FI side by general ledger (GL) account. This requirement is being addressed by a separate CAFR reporting review in section 13.5.

    - 13.2.17.c Summary-level asset report with summary totals similar to the asset history sheet would be useful for financial statement purposes.

    - 13.2.17.d Report showing lack of activity for work in progress (WIP) on active projects would help identify situations where projects have not been closed and assets capitalized in a timely fashion.

    - 13.2.17.e The standard depreciation simulation report forecasts depreciation for assets still being developed in active PS capital projects in combination with existing assets in AA.

Impact

- Missing custom reports make it difficult to get the required asset reporting out of SAP. Management reports will need to be pieced together from multiple standard reports in SAP by exporting their data columns to Excel, merging the exported data columns, and formatting the final Excel reports outside of SAP.

Recommendation

- 13.2.7 Test the standard depreciation simulation report in SAP ECC as a part of the integration testing.

- 13.2.8 Review the reporting requests, identify the ones that are met by standard reports, design the requests required to be customized in SAP BW and develop the custom reports, test them, and implement them at project cut-over.

4. Funds Management

Finding

- 13.2.18 Standard funds management reports have been incorporated into the test scripts.
- 13.2.19 Report Painter reports have been developed by consultants to produce budget vs. actuals reports.
- 13.2.20 Report selection variants are not defined for all reports.
- 13.2.21 Report layout variants are not defined for all reports.
- 13.2.22 Microsoft integration with SAP software is not understood. Often the end users has a difficult time exporting data into Excel.
- 13.2.23 Reports have not been cross-walked to requirements. The reporting cross-walk from legacy to SAP software has not been completed.
- 13.2.24 Navigation of standard reports is difficult for most end users.
- 13.2.25 BI/BW standard content for general ledger has not been activated and has not been reviewed by the Synergy implementation team.

Impact

- Report selection variants and report layout variants needs to be completed to completed training documentation and will assist in the development of the cutover plan. These variants will provide consistent reporting across all system environments
- The completion of the report cross-walk will determine the reporting development scope by application area.
- Reviewing the standard content of BI/BW will reduce the development of custom reports.

Recommendation

- 13.2.9 Complete the legacy cross-walk report mapping in order to determined report development.
- 13.2.10 Train the Synergy team members to support the Report Painter tool.

- 13.2.11 Have the Synergy team members review the SAP-provided standard content of BI/BW.

5. CAFR

Finding

- 13.2.26 There are no functional specifications to support the future development of the CAFR.
- 13.2.27 The expectation from the Municipality is that the CAFR will be published in its entirety through a designated reporting tool. This includes separate statements, supplementary information and so on.
- 13.2.28 The Municipality still needs to further research if the CAFR Xpress tool will fit this reporting requirement and make the decision whether or not to use the CAFR Xpress tool to publish the CAFR report.

Impact

- The development of the CAFR cannot proceed until a decision is finalized regarding the tool that will be used.
- If the Municipality uses the CAFR Xpress tool for the CAFR report, the need for functional specifications will be alleviated.

Recommendation

- 13.2.12 Determine if the CAFR Xpress tool will be utilized for the CAFR. Once the decision has been made, the development of the report can proceed.

6. Grants Management

Finding

- 13.2.29 Standard grants management reports have been incorporated into the test scripts.
- 13.2.30 Report selection variants are not defined for all reports
- 13.2.31 Report layout variants are not defined for all reports
- 13.2.32 Microsoft integration with SAP software is not understood. Often the end users has a difficult time exporting data into Excel.
- 13.2.33 Reports have not been cross-walked to requirements. The reporting cross walk from legacy to SAP is process has not been completed

- 13.2.34 Navigation of standard reports is difficult for most end users.
- 13.2.35 BI/BW standard content for general ledger has not been activated and has not been reviewed by the Synergy implementation team.

Impact

- Report selection variants and report layout variants needs to be completed to completed training documentation and assist in the development of the cutover plan. These variants will provide consistent reporting across all system environments
- The completion of the report cross-walk will determine the reporting development scope by application area.
- Reviewing the standard content of BI/BW will reduce the development of custom reports.

Recommendation

- 13.2.13 Complete the legacy cross-walk report mapping in order to determined report development.
- 13.2.14 Train the Synergy team members to support the Report Painter tool.
- 13.2.15 Have the Synergy team members review the SAP-provided standard content of BI/BW.

13.3. Logistics and Inventory

Overall Risk: MEDIUM
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 13.3.1 No standard SAP Business Warehouse (BW) report has been activated in the Municipality solution.
    - 13.3.1.a For instance, “Procurement Values per Supplier and DUNS” is a standard report which will serve the requirement 5.12 under the Purchasing area in Municipality’s original objectives (RFP).
    - 13.3.1.b Maverick Buying Analysis, Contract Compliance, Procurement Values per Service Agent, Approval Times and Price Trend Analysis are some key SAP BW reports that are

activated during SAP SRM implementations. However, they are not activated in the Municipality solution.

- 13.3.2 The following custom reports have been developed in logistics and inventory area:
    - 13.3.2.a MM-SBQ SRM Sole Source Purchase Orders 10K – 30K
    - 13.3.2.b MM-SBQ SRM Shopping Cart Pre -Encumbrances
    - 13.3.2.c Shopping Cart Overview
    - 13.3.2.d RFx Overview
    - 13.3.2.e MM-SBQ SRM Purchase Order Spend_Open Amount
    - 13.3.2.f Purchase Order Overview
    - 13.3.2.g SRM-SBQ Contracts by Product & Vendor
    - 13.3.2.h SRM-SBQ Contract Spend based on Purchase Order & Invoice
    - 13.3.2.i Contract Overview
    - 13.3.2.j Competitive Purchase Orders 50K – 500K
- 13.3.3 Since the foundation of the standard SRM Business Intelligence (BI) content was not installed in SAP BW, the custom reports have been developed in a piece-meal manner without properly leveraging the standard BI content infrastructure.

Impact

- Not activating key standard SAP BW reports for SAP SRM will result in an inability to measure key performance indicators and metrics necessary to efficiently conduct their purchasing and inventory business processes
- Not using the standard BI content infrastructure will increase the development and maintenance cost of custom reports

Recommendation

- 13.3.1 Review the standard SAP BW reports that come for SAP SRM. Activate key reports which will be useful for the Municipality
- 13.3.2 Redesign and refactor the custom reports to use the standard BI content foundation.

13.4. HCM

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

1. Payroll

Finding

- 13.4.1 The Municipality will need payroll reports to execute the payroll. They must be developed in SAP ECC for payroll processing. Some reports in SAP BW will also be required and should be evaluated for gap–fit analysis.

Impact

- The Municipality may go live without the required reports.

Recommendation

- 13.4.1 Define payroll reports necessary for future operations.
- 13.4.2 Evaluate the reports available in SAP BW.

2. Time

Finding

- 13.4.2 Time reports will come from Kronos.

Impact

- N/A.

Recommendation

- 13.4.3 N/A.

3. Benefits

Finding

- 13.4.3 Standard reports in SAP software are available for cost analysis. Benefits in the public sector does not normally have significant reporting requirements.

Impact

- None.

Recommendation

- 13.4.4 Continue with the current plans.

4. OM and PA

Finding

- 13.4.4 Municipal analysts and consultants explained verbally that HCM OM and PA reports were out of scope at the beginning of the project. They recently started the OM and PA report-requirements gathering. As result, OM and PA report requirements never discussed during the workshop and there is no documentation provided.
    - **13.4.4 Response: Disagree**
- 13.4.5 The standard reports in SAP ECC may not meet the business requirements. Standard content in SAP BW has not been evaluated.

Impact

- The Municipality may go live with known reporting needs.

Recommendation

- 13.4.5 Identify OM and PA reports that are required to support the signed-off business processes.
- 13.4.6 Assess the content in SAP BW and SAP ECC to determine if it meets the business requirements.

13.5. FERC

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: HIGH

Finding

- 13.5.1 Eight period-end FERC reports have been identified for the utility units. The functional specifications of the eight FERC reports do not contain all the latest information.

- 13.5.2 Development is incomplete for all the reports.

Impact

- The business is unable to generate period-end reports and validate the FERC process, which results in an untested solution.

Recommendation

- 13.5.1 Complete development and testing of the eight period-end FERC reports.
- 13.5.2 Update the FERC report functional specifications with the latest information, including the report validation methodology.

13.6. Project System

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 13.6.1 Standard reports for project system are in place and working, but custom reports are undefined or not yet fully specified. Some of the suggestions for custom project system reports that were provided during the Review sessions are:
    - 13.6.1.a Projects with no activity – to identify projects not being updated in a timely fashion
    - 13.6.1.b Capital reporting for CWIP
    - 13.6.1.c Project financial details report showing plans, budgets, commitments, and actuals
    - 13.6.1.d Project overview report
    - 13.6.1.e SAP to PowerPlan custom balancing report – to ensure balance between the two systems.

Impact

- The Municipality may be unable to make decisions based upon information from necessary reports.

Recommendation

- 13.6.1 Complete reporting analysis as soon as possible and ensure that all reporting needs are known.

13.7. SAP BW

Overall Risk: HIGH
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 13.7.1 Technical content for SAP BW is not turned on.

Impact

- Without the technical content, the Municipality cannot record and analyze runtime data for SAP BW processes and events in SAP BEx, the analytic engine, and in the data warehouse.

Recommendation

- 13.7.1 Technical content is delivered along with business content. It includes objects that allow the user to analyze the processes in the BI system and to optimize them for performance (BW statistics, BW data slices, and BW features characteristics).Review http://help.sap.com/saphelp_nw70/helpdata/EN/43/e3807a6df402d3e10000000a1553f7/content.htm?frameset=/EN/43/e37f8a6df402d3e10000000a1553f7/frameset.htm&current_toc=/EN/e3/e60138fede083de10000009b38f8cf/plain.htm&node_id=952 on statistics in SAP BW 7.x. and install the necessary technical content.

- 13.7.2 Review the following specific areas of technical content:

    - 13.7.2.a Wage Type Overview USA – 0PY_ C02_Q004

    - 13.7.2.b Posting Documents (By Calendar Quarter) – 0PY_PP2_Q001

    - 13.7.2.c EE-Specific Payroll and Posting Info (Current Fiscal Year) – 0PY_PP_C3_Q1002

    - 13.7.2.d Auditing Information and Payroll Data (Per In-Period) – 0PY_PP_C1_Q001

13.8. Security

Overall Risk: LOW
Design Build Completeness Risk: LOW
Future Fit or Impact on Scalability Risk: LOW
Remaining Effort: LOW

Finding

- 13.8.1 There are no existing requirements for custom security reports. SAP provides are comprehensive list of security reports within transaction SUIM. This includes reports based on users, role assignments, transactions assigned to users, roles by profile and roles by transaction code. The system also captures change documents for users, roles, profiles, role assignments, and authorizations. The change document reports are all accessible within transaction SUIM.

Impact

- Reporting needs will be met with standard SAP software.

Recommendation

- 13.8.1 Continue with the current approach.

Document Guidance Regarding MoA Responses

- The MOA responded to “Findings” with one of the following designations and provided commentary where applicable:
  - Agree
  - Agree with Comment
  - Disagree
  - Disagree with Comment
  - Need More Information

- The MOA responded to “Recommendations” with one of the following designations and provided commentary where applicable:
  - Accept
  - Accept with Comment
  - Reject
  - Reject with Comment
  - Need More Information

Responses are inserted immediately following the relevant paragraph and shaded in light gray for emphasis.

If there is no response after a finding or recommendation, the response from the MoA is Agree or Accept.

14. INTEGRATION AND MASTER DATA

14.1. INTEGRATION AND MASTER DATA – SCORECARD

Design Review of SAP Solutions – Business Processes	Risk Indicator	Design Build Completeness Risk	Future Fit or Impact on Scalability Risk	Remaining Effort
System Upgrade	HIGH	HIGH	HIGH	HIGH
Split Go-Live	HIGH	HIGH	HIGH	HIGH
Integration Test	HIGH	HIGH	HIGH	HIGH
Design Documents	HIGH	HIGH	HIGH	HIGH
Enterprise Structure and Organizational Management Processes	HIGH	HIGH	HIGH	HIGH
Solution Architecture (Supplier Portal)	MEDIUM	HIGH	HIGH	HIGH
Year-End Process	HIGH	HIGH	HIGH	MEDIUM
Reporting Strategy	HIGH	HIGH	HIGH	HIGH
Workflow	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Project Team Communication	HIGH	N/A	N/A	HIGH
Knowledge Transfer	HIGH	N/A	HIGH	HIGH

14.2. System Upgrade

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 14.2.1 The SAP Business Suite applications at the Municipality are at the level of 2011 innovations level. The SAP Business Suite applications being implemented at the Municipality are four years behind. The recommended practice is to go live with an SAP software release that is no more than two years behind the latest release. For example, the target SAP enhancement package (EHP) for SAP ERP will be EHP6 or EHP7, and the target EHP for SAP SRM will be EHP3
    - **14.2.1 Response: Agree with Comment**
        - However "2011" should be "2010."

Impact

- Being on an older software release will prohibit the Municipality from leveraging new features and functionality. There may be cases where custom enhancements are unnecessary in the new software products.
- After going live, the Municipality will be focused on post go-live activities and will not have the bandwidth to upgrade.
- Whenever the upgrade is executed on SAP SRM, SAP ERP, SAP BW, or any other SAP product even if it is performed as a technical upgrade, it requires rerunning the integration test cycles. EHPs include code corrections, revisions, and, in some areas, new technology.

Recommendation

- 14.2.1 Perform a detailed technical review of the non-SAP and SAP software prerequisites required for the upgrade. Then schedule and execute the upgrade as soon as possible. Execute all the integration tests at least twice to ensure that no regressions result from the upgrade.

14.3. Split Go-Live

Overall Risk: HIGH
Design Build Completeness Risk: HIGH

Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 14.3.1 The Review team was asked for advice regarding a split go-live, in which the finance and logistics (FILO) functionality would go live first. FILO is ahead of the SAP ERP Human Capital Management (SAP ERP HCM) solution in the implementation.

Impact

- The following summarize the negative impacts of a split go-live with FILO first:
    - The solution designed and implemented at the Municipality is a fully integrated solution. For instance, the organizational structure and workflows of SAP SRM rely on the replication of the organizational structure of SAP ERP HCM. Without having the organizational structure or minimaster of SAP ERP HCM set up, the organizational structure in SAP SRM must be set up locally. Once the organizational structure is set up locally, the Municipality can never go back to an integrated replication process for the organizational structure.
    - It will be necessary to design and develop several interfaces from PeopleSoft to get time, payroll, organization management, and benefits data to SAP software. These interfaces are complex to develop and will require data translation tables to map master data values between different systems. Continuous monitoring and ongoing maintenance will also be required of these interfaces. The interfaces will become throw-away once SAP ERP HCM is fully implemented.
    - The Municipality will have to support two live ERP systems with limited staff – PeopleSoft and SAP (SAP ERP, SAP SRM, and the associated software) until SAP ERP HCM goes live and PeopleSoft is retired. In addition the Municipality will need resources to continue the implementation of SAP ERP HCM.
    - Supporting an SAP production environment and a project environment requires additional infrastructure such as hardware, operating system, and database.
    - Currently, the Municipality does not have a test environment for PeopleSoft, and a test and development environment will be required for a split go-live.

Recommendation

- 14.3.1 Note that from the perspective of the design and build of SAP solutions, a split go-live has more disadvantages than advantages.

14.4. Integration Test

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 14.4.1 Integration tests do not represent full end-to-end scenarios.
- 14.4.2 In some cases, integration-test scripts do not represent all conditions. For instance: Retention functionality is not tested with percentage option and subsequent amendments to the purchase orders.
- 14.4.3 Integration tests are not performed with data loaded from mock conversion tests. Mock conversions occur in separate clients in SAP software.
- 14.4.4 Department super users are not involved in integration tests.
- 14.4.5 Some integration tests were executed by the consultants rather than Municipality resources.
- 14.4.6 Some integration test scripts are still being updated.

Impact

- Because the project plan does not call for user-acceptance testing (UAT), integration tests are critical to assess if the solution, as built, works for the Municipality.
- Executing mock conversion tests after executing the integration tests and not using conversion-test data in integration tests are **not** leading practices in software quality assurance or implementation methodologies for SAP software.
- When super users are not involved in the integration tests or UAT, the implementation faces several risks:
    - Department super users will be unable to validate if the system works well for their business processes, which differ from others. For instance, the Port Authority may execute a process differently than the Fire Department does.
    - Once super users return to their roles in the departments, they tend to act as the technical evangelists for the solution and as embedded support persons who can help other users. This benefit is lost if they are not involved in the project early enough.

- These concerns will affect adoption of the solution.

Recommendation

- 14.4.1 Execute mock conversion tests prior to executing integration tests. Integration tests must use the data created by the mock conversions.
- 14.4.2 Review all integration test scripts to ensure that they cover the actual business scenario end to end, starting from the initiation to the end result. This review must include the following aspects:
  - 14.4.2.a All agents and departments involved in the scenario, starting from the initiating user to the user who completes the scenario
  - 14.4.2.b Activities in the integrating systems and the execution of inbound and outbound interfaces involved in the business scenario
  - 14.4.2.c The validations that need to happen in finance and billing area and any report that needs to be executed.
- 14.4.3 If the integration test scripts are missing any of the above, update the integration test scripts and execute the tests again.
- 14.4.4 Train super users on SAP software and include them in the integration tests. Have super users validate if the integration test scripts and the execution will work for the real-life business scenario.
- 14.4.5 Execute two integration test cycles with converted data prior to go live. The results from these two integration test cycles must be successful and repeatable.

14.5. Design Documents

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 14.5.1 Key project documentation to support the software implementation, associated testing, training and sustainability is out of date or missing.
- 14.5.2 The project's business blueprint is incomplete, out of date, and was never approved.

- 14.5.3 Several process flow design diagrams are out of date.
- 14.5.4 The majority of the project's functional specifications are incomplete, out of date, and were never approved.
- 14.5.5 Several integration-test scripts are out of date and incomplete as they do not represent the end-to-end business processes and all testing conditions.

Impact

- The business blueprint document normally serves as the agreement with business process owners on how their business processes will be implemented in the to-be solution. The blueprint may consist of process flow designs. Since these documents are out of date and incomplete, the Municipality will have to rely on integration-test scripts as acceptance criteria for a successful completion of the build. However, because the integration-test scripts are also out of date and incomplete in several areas, validation of completion in these areas becomes an issue. In other words, the Municipality will be unable to assess business readiness of solution prior to go-live with a high degree of accuracy.

Recommendation

- 14.5.1 Update the project blueprint document and align it with the latest solution design.
- 14.5.2 Update functional and technical specifications.
- 14.5.3 Update process flow diagrams and integration-test scripts to reflect the actual business scenarios designed in the system.

14.6. Enterprise Structure and Organizational Management Processes

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 14.6.1 The enterprise structure design in the finance and billing track aligns with leading practices.
- 14.6.2 The enterprise structure in inventory management is very simple and aligns with standard SAP software.

- 14.6.3 The process designs of organizational management and user management process have not been developed to cover the end-to-end process that occurs during an organizational or user change.
    - 14.6.3.a When an employee is hired, transferred, or separated, activities must be performed in security and user management in SAP software, SAP ERP HCM, and SAP SRM. However, the Municipality process designs do not cover these processes end-to-end, with hand-offs between different departments. Therefore, no offline workflow is established across the departments.
    - 14.6.3.b When an organizational unit is reorganized, activities must be performed in security and user management in SAP software, SAP ERP HCM, and SAP SRM. However, the Municipality process designs do not cover these processes end-to-end, with hand-offs between different departments. Therefore, no offline workflow is established across the departments.

Impact

- Failure to establish an offline workflow process will result in incorrect changes or locked documents in production systems. For instance, if the SRM team was not notified of a reorganization that affects the purchasing department, workflow approvers, and so on, deactivated procurement documents will exist in SAP SRM.
- Similarly if an employee is separated in SAP ERP and the replication from SAP ERP HCM to SAP SRM is transferred to another employee before the separated employee's procurement documents (contracts or shopping carts), the documents will be locked.

Recommendation

- 14.6.1 Redesign the user management and organizational management processes with all systems and departments in mind. Ensure that the process flow covers the chain of activities that must occur in different areas.

14.7. Solution Architecture (Supplier Portal)

Overall Risk: MEDIUM
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 14.7.1 The Municipality has decided not to use the registration of suppliers (ROS) functionality of SAP SRM for which the Municipality owns licenses. The supplier portal was part of the original

objectives of the SAP implementation. The Municipality is implementing a third-party supplier registration tool, Supplier Interactive Portal (SIP), instead of SAP software.

- 14.7.2 SIP is not yet fully implemented.
- 14.7.3 A WRICEF or custom development interface is planned to integrate SIP with SAP ERP.
- 14.7.4 The custom interface is not yet designed and developed.

Impact

- Implementing a third-party tool for supplier registration and developing a custom interface for integration with SAP software will increase total maintenance costs.
- The Municipality will not be in a position to leverage future innovations from SAP in the supplier registration and on-boarding functionality.

Recommendation

- 14.7.1 Evaluate the effort required to implement supplier registration and on-boarding functionality in ROS. Compare it with the effort required to implement SIP and develop the custom interface. If the Municipality includes the total cost of ongoing maintenance of SIP and this interface, can validate if it is better to implement ROS instead of SIP.

14.8. Year-End Close Process

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: MEDIUM

Finding

- 14.8.1 The year-end close process in SAP software is not comprehensive and does not cover all the interdepartmental steps required to execute the close and carry-forwards. For instance, coordination must occur among the finance, procurement, and inventory functional areas. Coordination is also required between the procurement department and departments in the field.
- 14.8.2 No business process design document other than a Microsoft Excel checklist exists for this process.

Impact

- Missing key steps in the year-end process will delay the close and cause improper closing and carry-forward of the documents.

Recommendation

- 14.8.1 Develop a business process design that covers all the actors and responsibilities, including the field departments.

14.9. Reporting Strategy

Overall Risk: HIGH
Design Build Completeness Risk: HIGH
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 14.9.1 No cohesive reporting strategy exists. Reports have been developed piecemeal.
- 14.9.2 The fit–gap analysis initially performed did not use standard business intelligence (BI) content delivered by SAP as the baseline.
- 14.9.3 Standard reports are not activated in the SAP BW application.

Impact

- It is common to activate some key standard reports from SAP BW.
- Not installing the standard BI content foundation in the SAP BW application will result in developing reports from scratch and reinventing the wheel. This is a more expensive way to build and maintain reports.
- Once the tactical processes such as executing transactions are completed, the Municipality will be concerned about using SAP ERP to measure metrics and key performance indicators. Without these reports, it will be very difficult to measure metrics and key performance indicators.

Recommendation

- 14.9.1 Install the foundation of standard BI content and perform the fit–gap analysis with the standard queries and Web templates available.

- 14.9.2 Activate some key reports, such as maverick buying, contract compliance, and so on.

14.10. Workflow

Overall Risk: MEDIUM
Design Build Completeness Risk: MEDIUM
Future Fit or Impact on Scalability Risk: MEDIUM
Remaining Effort: MEDIUM

Finding

- 14.10.1 No cohesive workflow-agent determination strategy exists.

- 14.10.2 Workflows leverage organizational structure objects, organizational relationships, and custom Z-tables.

Impact

- When organizational changes or user change requests occur, it will be difficult to update the system because the workflow attributes are stored in many places.

Recommendation

- 14.10.1 Review custom workflows across all functional areas from the standpoint of their workflow agent-determination logic and agent determination attributes. For instance, several agent-determination attributes have been created as custom organizational management relationships in organizational structure and several other agent determination attributes have been implemented through custom Z-tables. In these custom Z-tables, the work agent-determination attributes were sometimes positions, sometimes user IDs, or sometimes both. As mentioned in the Impact, the dissimilar nature of design of the workflow agent-determination attributes will increase the ongoing maintenance of the system when an organizational change or user change request occurs.

- 14.10.2 Consider converting or refactoring some custom Z-table attributes into organizational structure attributes, which can be maintained easily in SAP HCM organizational management (OM) and/or SAP SRM software. For instance, several attributes from these custom Z-tables could be converted to organizational attributes such as custom relationships in addition to the custom relationships that have already been created by the Municipality's implementation team. Furthermore, SAP-standard organizational structure attributes could be leveraged in these workflows or custom organizational structure attributes could be created if standard attributes are not sufficient to maintain the workflow agent-determination logic. Note that even for value limits such as approval limits and spending limits, there are standard organizational attributes available in SAP SRM software. Use custom Z-tables only if the organizational structure attributes and objects

absolutely cannot be leveraged for the workflow agent-determination logic. Centralizing maintenance in the organizational structure will reduce the administrative user having to go to multiple places in the system to maintain these attributes during post go-live support.

14.11. Project Team Communication

Overall Risk: HIGH
Design Build Completeness Risk: N/A
Future Fit or Impact on Scalability Risk: N/A
Remaining Effort: HIGH

Finding

- 14.11.1 The project team members provided inconsistent information. For example, QA Review consultants received differing answers regarding topics such as integration test status, requirements, and/or design.

- 14.11.2 The project team members were unaware why certain requirements were removed from the scope.

- 14.11.3 The owners of integrating systems such as Maximo, Kronos were not included in the change management and project cut-over plan discussions. They are unaware of a project cut-over plan that includes the cut-over activities in these external systems.

- 14.11.4 Communication is compartmentalized within the respective functional areas and cross-functional integration communication is lacking. For example, project system and purchasing teams have developed their respective solutions without leveraging the integration point which will enable Municipality project leads trigger the creation of purchase requisitions directly from the work breakdown structure (WBS) networks.

- 14.11.5 The QA Review team observed a lack of collaboration between some Municipality team members and the consultants.

Impact

- A lack of good communication on the project results in inefficiencies including unnecessary rework, missed requirements, and an elongated schedule.

- SAP software is a fully integrated solution. Lack of cross-functional integration communication will result in a solution that is fragmented with missed integration points.

Recommendation

- 14.11.1 Revisit prior communication plan and ensure that it is followed in project activities.
- 14.11.2 Designate a role for an integration architect who can work with different functional areas and schedule integration meetings that are conducted at a regular cadence.
- 14.11.3 Conduct team-building activities to improve collaboration.

14.12. Knowledge Transfer

Overall Risk: HIGH
Design Build Completeness Risk: N/A
Future Fit or Impact on Scalability Risk: HIGH
Remaining Effort: HIGH

Finding

- 14.12.1 Many Municipality project team members have not acquired the knowledge necessary to support and sustain the solution in a post go-live environment. There are very limited project design documentation, business process procedures, and so on that can be used by Municipality team members to support the system.
- 14.12.2 Currently, there is no knowledge transfer plan to have consultants impart knowledge to Municipality project team members.

Impact

- The Municipality team members will be unable to support and sustain the solution in production environment without assistance.

Recommendation

- 14.12.1 Develop a knowledge transfer plan and measure progress.

15. SOLUTION MATCH TO ORIGINAL OBJECTIVES

15.1. SCORECARD

Design Review of SAP Solutions – Business Processes	Percent Complete
Finance and Billing	
FI/CO/AR/AP/Banking/Cash Management	**MEDIUM**
Budget/Funds Management	**LOW**
Grants Management	**LOW**
Project Systems and Assets	**MEDIUM**
Project Billing (RRB) Billing/Sales and Distribution	**MEDIUM**
FERC	**MEDIUM**
Human Capital Management (HCM)	
Organizational Management/Personnel Administration	**MEDIUM**
Time Management	**MEDIUM**
Benefits	**LOW**

Design Review of SAP Solutions – Business Processes	Percent Complete
Payroll	**MEDIUM**
Logistics and Inventory	
Supplier Relationship Management	**MEDIUM**
Inventory Management & Materials Management	**LOW**

FOLLOW-UP ACTIONS

Action Plan

Please return the response plan to SAP on February 27, 2015.

INTERVIEW PARTICIPANTS

Date	Meeting	Attendee	Role
1/7/2015	Scope and Solution Design Detailed Overview	Anne Reed	MOA SAP Program Manager
1/7/2015	Scope and Solution Design Detailed Overview	Wade Hunter	Peloton
1/7/2015	Scope and Solution Design Detailed Overview	Rick Pannell	Project Manager - FILO
1/7/2015	Scope and Solution Design Detailed Overview	Dean Barnes	Project Manager - Technical
1/7/2015	Scope and Solution Design Detailed Overview	Bill Wilks	Project Manager - Procure to Pay / Finance 1
1/7/2015	Scope and Solution Design Detailed Overview	Nathan Pannkuk	Project Manager - Technical
1/7/2015	Scope and Solution Design Detailed Overview	Daewon Kim	Project Manager - HCM
1/7/2015	Scope and Solution Design Detailed Overview	Tom Fink	Controller / SAP Functional Steering Committee
1/7/2015	Scope and Solution Design Detailed Overview	Vijay Jayapal	Peloton
1/7/2015	Scope and Solution Design Detailed Overview	Ron Hadden	SAP Functional Steering Committee
1/7/2015	Scope and Solution Design Detailed Overview	Marilyn Banzhaf	SAP Functional Steering Committee
1/7/2015	Scope and Solution Design Detailed Overview	Karen Norsworthy	SAP Functional Steering Committee
1/7/2015	Scope and Solution Design Detailed Overview	Lance Ahern	SAP Functional Steering Committee
1/7/2015	Scope and Solution Design Detailed Overview	Rick Miller	SAP Functional Steering Committee
1/7/2015	Scope and Solution Design Detailed Overview	Glenda Gibson	SAP Functional Steering Committee
1/7/2015	Scope and Solution Design Detailed Overview	Diane Thompson	Project Consultant
1/7/2015	Scope and Solution Design Detailed Overview	Kate Giard	CFO
1/7/2015	Scope and Solution Design Detailed Overview	Gail Turner	Project Manager - OCM
1/7/2015	Scope and Solution Design Detailed Overview	Leisa Woods	SAP

Date	Meeting	Attendee	Role
1/7/2015	Scope and Solution Design Detailed Overview	Hiroaki Ajari	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Jason Miskuly	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Fanny Limontje	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Prashant Iyappan	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Ken Medved	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Jackie Willoughby	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Wayne Liu	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Long Vu	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Tim Keohan	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Nitn Joshi	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Tim Gernhardt	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Haritha Biradavolu	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Lynne Ketchie	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Tom Novosal	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Jeff Daniels	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Matt Johnsen	SAP
1/7/2015	Scope and Solution Design Detailed Overview	Joe McDonnell	SAP
1/8/2015	Security - HCM / Finance & Billing	Sandra Huff	OCM Team - Change Champion Coordinator
1/8/2015	Security - HCM / Finance & Billing	Gurpreet Mann	Peloton
1/8/2015	Security - HCM / Finance & Billing	Gary Peters	Technical Team
1/8/2015	Security - HCM / Finance & Billing	Karen Norsworthy	SAP Functional Steering

Date	Meeting	Attendee	Role
			Committee
1/8/2015	Security - HCM / Finance & Billing	Nancy Usera	Executive Steering Committee/ ER Director
1/8/2015	Security - HCM / Finance & Billing	Doina Nica	Security Team
1/8/2015	Design Review	Tom Dulaney	Peloton
1/8/2015	Design Review	Nathan Pannkuk	Project Manager - Basis
1/8/2015	Design Review	Eric Bickers	Database Administrator
1/8/2015	Design Review	Dean Barnes	Project Manager - Technical
1/8/2015	BW Track	Kami Fitch	Technical Team - Reporting Lead
1/8/2015	BW Track	Nathan Pannkuk	Project Manager - Basis
1/8/2015	BW Track	Nelson Leoncio	Technical Team - Reporting Lead
1/8/2015	BW Track	Raj Gutha	Peloton
1/8/2015	BW Track	Tom Dulaney	Peloton
1/8/2015	BW Track	Catherine Gettler-Amyot	Functional Team - GM
1/8/2015	BW Track	Catherine Gettler-Amyot	Functional Team - GM
1/8/2015	BW Track	Kami Fitch	Technical Team - Reporting Lead
1/8/2015	BW Track	Nelson Leoncio	Technical Team - Reporting Lead
1/8/2015	BW Track	Tom Dulaney	SAP
1/8/2015	BW Track	Pamela Ellis	Functional Team - CO/GL
1/8/2015	BW Track	Christine Chesnut	Functional Team - FM
1/8/2015	BW Track	Nathan Pannkuk	Project Manager - Basis
1/8/2015	BW Track	Diane Thompson	Project Consultant
1/8/2015	Finance & Billing - FERC	Bill Wilks	Project Manager - Procure to Pay / Finance 1
1/8/2015	Finance & Billing - FERC	Casie West	Functional Team - FERC/FM
1/8/2015	Finance & Billing - FERC	Linda Culver	Functional Team - CO/GL
1/8/2015	Finance & Billing - FERC	Lindsay Carter	Functional Team - CO/GL
1/8/2015	Finance & Billing - FERC	Erik Johnson	Functional Team - IM/AM/PS

Date	Meeting	Attendee	Role
1/8/2015	Finance & Billing - FERC	Rick Pannell	Project Manager - FILO
1/8/2015	Design Review	Tom Dulaney	Peloton
1/8/2015	Finance & Billing - FERC	Verity Woolley	Functional Team - FERC
1/8/2015	Finance & Billing - FERC	Brian Miller	Functional Team - GL/CO/FERC
1/8/2015	Finance & Billing - FERC	Ken Medved	SAP
1/8/2015	Finance & Billing - FERC	Ram Ramasamy	SAP
1/8/2015	Testing Track	Vijay Jayapal	Peloton
1/8/2015	Testing Track	Dean Barnes	Project Manager - Technical
1/8/2015	Testing Track	Scott Hooper	OCM Team - Trainer
1/8/2015	Testing Track	Lynne Ketchie	SAP
1/8/2015	Testing Track	Glenda Gibson	SAP Functional Steering Committee
1/8/2015	Testing Track	Wade Hunter	Peloton
1/8/2015	Testing Track	Tom Fischer	Peloton
1/8/2015	HCM	Cindy Becker	Payroll Manager
1/8/2015	HCM	Chandra Cheetypalli	Peloton
1/8/2015	HCM	Antti Kesti	Peloton
1/8/2015	HCM	Jody Canet	Functional Team - Time/Payroll
1/8/2015	HCM	Ron Keith	SAP
1/8/2015	HCM	Melanie Wood	Functional Team - Time/Payroll
1/8/2015	HCM	Leisa Wood	SAP
1/8/2015	HCM	Brent McAfee	Peloton
1/8/2015	HCM	Fanny Limontje	SAP
1/8/2015	HCM	Susanne Lawrence	Functional Team - Time/Payroll
1/8/2015	HCM	Tom Fink	Controller / SAP Functional Steering Committee
1/8/2015	HCM	Martha Nelson	Functional Team - OM/PA
1/8/2015	HCM	Tim Gernhardt	SAP
1/8/2015	Finance & Billing - FERC	Verity Woolley	Functional Team - FERC

Date	Meeting	Attendee	Role
1/8/2015	HCM	Nancy Usera	Executive Steering Committee/ ER Director
1/8/2015	HCM	Jay Wheeler	Peloton
1/8/2015	HCM	Daewon Kim	Project Manager - HCM
1/8/2015	HCM	Michael Proksell	Project Manager - Payroll
1/8/2015	HCM	Karen Norsworthy	SAP Functional Steering Committee
1/8/2015	Testing Track	Tom Fischer	Peloton
1/8/2015	Testing Track	Wade Hunter	Peloton
1/8/2015	Testing Track	Dean Barnes	Project Manager - Technical
1/8/2015	Testing Track	Glenda Gibson	SAP Functional Steering Committee
1/8/2015	Testing Track	Lynne Ketchie	SAP
1/8/2015	Testing Track	Scott Hooper	OCM Team - Trainer
1/8/2015	Testing Track	Anne Reed	SAP Program Manager
1/8/2015	Finance & Billing	Robert Lake	SAP
1/8/2015	Finance & Billing	Casie West	Functional Team - FERC/FM
1/8/2015	Finance & Billing	Erik Johnson	Functional Team - IM/AM/PS
1/8/2015	Finance & Billing	Linda Culver	Functional Team - CO/GL
1/8/2015	Finance & Billing	Pamela Ellis	Functional Team - CO/GL
1/8/2015	Finance & Billing	Lindsay Carter	Functional Team - CO/GL
1/8/2015	Finance & Billing	Ken Medved	SAP
1/8/2015	Finance & Billing	Tim Keohan	SAP
1/8/2015	Finance & Billing	Vijay Jayapal	Peloton
1/8/2015	Finance & Billing	Ram Ramasamy	SAP
1/8/2015	Finance & Billing	Jackie Willoughby	SAP
1/8/2015	Finance & Billing	Christine Chesnut	Functional Team - FM
1/8/2015	HCM	Nancy Usera	Executive Steering Committee/ ER Director
1/8/2015	Finance & Billing	Rick Pannell	Project Manager - FILO
1/8/2015	Finance & Billing	Elizabeth Zib	Functional Team -

Date	Meeting	Attendee	Role
			FERC/MM/PS
1/8/2015	Finance & Billing	Verity Woolley	Functional Team - FERC
1/8/2015	Finance & Billing	Brian Miller	Functional Team - GL/CO/FERC
1/8/2015	Finance & Billing	Bill Wilks	Project Manager - Procure to Pay / Finance 1
1/8/2015	Finance & Billing	Chris Richardson	Functional Team - CM
1/8/2015	Finance & Billing	Christo Oliver	Peloton
1/8/2015	Security Track	Doina Nica	Security Team
1/8/2015	Security Track	Sandra Huff	OCM Team - Change Champion Coordinator
1/8/2015	Security Track	Mark Merchant	Chief Information Security
1/8/2015	Security Track	Gary Peters	Technical Support
1/8/2015	Security Track	Gurpreet Mann	Peloton
1/8/2015	Security Track	Gail Turner	OCM Project Manager
1/8/2015	Logistics & Inventory Track	Joel Hayenga	Functional Team - SRM
1/8/2015	Logistics & Inventory Track	Vijay Alisetty	Peloton
1/8/2015	Logistics & Inventory Track	Ron Hadden	SAP Functional Steering Committee
1/8/2015	Logistics & Inventory Track	Wayne Liu	SAP
1/8/2015	Logistics & Inventory Track	Elizabeth Zib	Functional Team - MM/FERC/PS
1/8/2015	Logistics & Inventory Track	Rick Pannell	Project Manager - FILO
1/8/2015	Logistics & Inventory Track	Wayne Liu	SAP
1/8/2015	Logistics & Inventory Track	Prashant Iyappan	SAP
1/8/2015	Logistics & Inventory Track	Joel Hayenga	Functional Team - SRM
1/8/2015	Logistics & Inventory Track	Vijay Alisetty	Peloton
1/8/2015	Logistics & Inventory Track	Ron Hadden	SAP Functional Steering Committee
1/8/2015	Finance & Billing	Rick Pannell	Project Manager - FILO
1/9/2015	BW Track	Glenda Gibson	SAP Functional Steering Committee
1/9/2015	BW Track	Brian Miller	Functional Team - GL/CO/FERC

Date	Meeting	Attendee	Role
1/9/2015	BW Track	Bob Moore	Functional Team - PS
1/9/2015	BW Track	Erik Johnson	Functional Team - IM/AM/PS
1/9/2015	BW Track	Ram Ramasamy	SAP
1/9/2015	BW Track	Melissa Steffen	Functional Team - PS
1/9/2015	BW Track	Nelson Leoncio	Technical Team - Reporting Lead
1/9/2015	BW Track	Kami Fitch	Technical Team - Reporting Lead
1/9/2015	BW Track	Malar Selvan	Peloton
1/9/2015	BW Track	Catherine Gettler-Amyot	Functional Team - GM
1/9/2015	BW Track	Verity Woolley	Functional Team - FERC
1/9/2015	BW Track	Pamela Ellis	Functional Team - CO/GL
1/9/2015	BW Track	Tom Fischer	Peloton
1/9/2015	BW Track	Wade Hunter	Peloton
1/9/2015	BW Track	Nathan Pannkuk	Project Manager - Basis
1/9/2015	BW Track	Tom Dulaney	Peloton
1/9/2015	BW Track	Vijay Jayapal	Peloton
1/9/2015	BW Track	Glenda Gibson	SAP Functional Steering Committee
1/9/2015	BW Track	Brian Miller	Functional Team - GL/CO/FERC
1/9/2015	BW Track	Bob Moore	Functional Team - PS
1/9/2015	BW Track	Erik Johnson	Functional Team - IM/AM/PS
1/9/2015	BW Track	Ram Ramasamy	SAP
1/9/2015	BW Track	Melissa Steffen	Functional Team - PS
1/9/2015	BW Track	Nelson Leoncio	Technical Team - Reporting Lead
1/9/2015	BW Track	Kami Fitch	Technical Team - Reporting Lead
1/9/2015	BW Track	Malar Selvan	Peloton
1/9/2015	BW Track	Catherine Gettler-Amyot	Functional Team - GM
1/9/2015	BW Track	Verity Woolley	Functional Team - FERC

Date	Meeting	Attendee	Role
1/9/2015	BW Track	Pamela Ellis	Functional Team - CO/GL
1/9/2015	BW Track	Tom Fischer	Peloton
1/9/2015	BW Track	Wade Hunter	Peloton
1/9/2015	BW Track	Nathan Pannkuk	Project Manager - Basis
1/9/2015	BW Track	Tom Dulaney	Peloton
1/9/2015	BW Track	Vijay Jayapal	Peloton
1/9/2015	Finance & Billing - FI	Tim Keohan	SAP
1/9/2015	Finance & Billing - FI	Ken Medved	SAP
1/9/2015	Finance & Billing - FI	Ram Ramasamy	SAP
1/9/2015	Finance & Billing - FI	Jackie Willoughby	SAP
1/9/2015	Finance & Billing - FI	Christo Oliver	Peloton
1/9/2015	Finance & Billing - FI	Bob Moore	Functional Team - PS
1/9/2015	Finance & Billing - FI	Verity Woolley	Functional Team - FERC
1/9/2015	Finance & Billing - FI	Bill Wilks	Project Manager - Procure to Pay / Finance 1
1/9/2015	Finance & Billing - FI	Linda Culver	Functional Team - CO/GL
1/9/2015	Finance & Billing - FI	Lindsay Carter	Functional Team - CO/GL
1/9/2015	Finance & Billing - FI	Pamela Ellis	Functional Team - CO/GL
1/9/2015	Finance & Billing - FI	Vijay Jayapal	Peloton
1/9/2015	Finance & Billing - FI	Casie West	Functional Team - FERC/FM
1/9/2015	Finance & Billing - FI	Brian Miller	Functional Team - GL/CO/FERC
1/9/2015	BW Track	Kami Fitch	Technical Team - Reporting Lead
1/9/2015	Finance & Billing - FI	Chrisinte Chesnut	Functional Team - FM
1/9/2015	Finance & Billing - FI	Natalia Meyers	Functional Team - FM
1/9/2015	Finance & Billing - FI	Marilyn Banzhaf	SAP Functional Steering Committee
1/9/2015	Finance & Billing - FI	Robert Lake	SAP
1/9/2015	Finance & Billing - FI	Rick Pannell	Project Manager - FILO
1/9/2015	Finance & Billing - FI	Anne Reed	SAP Program Manager

Date	Meeting	Attendee	Role
1/9/2015	Finance & Billing - FI	Glenda Gibson	SAP Functional Steering Committee
1/9/2015	Finance & Billing - FI	Craig Sehannie	Peloton
1/9/2015	Finance & Billing - FI	Trena Rairdon	Functional Team - GM
1/9/2015	Finance & Billing - FI	Elizabeth Zib	Functional Team - FERC/MM/PS
1/9/2015	Finance & Billing	Tim Keohan	SAP
1/9/2015	Finance & Billing	Ken Medved	SAP
1/9/2015	Finance & Billing	Rick Pannell	Project Manager - FILO
1/9/2015	Finance & Billing	Lindsay Carter	Functional Team - CO/GL
1/9/2015	Finance & Billing	Linda Culver	Functional Team - CO/GL
1/9/2015	Finance & Billing	Elizabeth Zib	Functional Team - FERC/MM/PS
1/9/2015	Finance & Billing	Bill Wilks	Project Manager - Procure to Pay / Finance 1
1/9/2015	Finance & Billing	Christo Oliver	Peloton
1/9/2015	Finance & Billing	Ken Medved	SAP
1/9/2015	Finance & Billing	Trena Rairdon	Functional Team - GM
1/9/2015	Finance & Billing	Anne Reed	SAP Program Manager
1/9/2015	Finance & Billing	Casie West	Functional Team - FERC/FM
1/9/2015	Finance & Billing	Tim Keohan	SAP
1/9/2015	Finance & Billing	Robert Lake	SAP
1/9/2015	Finance & Billing - FI	Chrisinte Chesnut	Functional Team - FM
1/9/2015	Finance & Billing - FERC	Elizabeth Zib	Functional Team - MM/FERC/PS
1/9/2015	HCM - Payroll Process	Michael Proksell	Project Manager - Payroll
1/9/2015	HCM - Payroll Process	Melanie Wood	Functional Team - Time/Payroll
1/9/2015	HCM - Payroll Process	Jeff Lowell	Program Analyst - Kronos
1/9/2015	HCM - Payroll Process	Leisa Wood	SAP
1/9/2015	HCM - Payroll Process	Gail Turner	OCM Project Manager
1/9/2015	HCM - Payroll Process	Cindy Becker	Payroll Manager

Date	Meeting	Attendee	Role
1/9/2015	HCM - Payroll Process	Nancy Usera	Executive Steering Committee/ ER Director
1/9/2015	HCM - Payroll Process	Susanne Lawrence	Functional Team - Time/Payroll
1/9/2015	HCM - Payroll Process	Therese Gochanour	Technical Team - Kronos
1/9/2015	HCM - Payroll Process	Brent McAfee	Peloton
1/9/2015	HCM - Payroll Process	Daewon Kim	Project Manager - HCM
1/9/2015	HCM - Payroll Process	Joe Park	Payroll Technician
1/9/2015	HCM - Payroll Process	Raylene Griffith	Functional Team - OM/PA
1/9/2015	HCM - Payroll Process	Martha Nelson	Functional Team - OM/PA
1/9/2015	HCM - Payroll Process	Tina Posini	Functional Team - OM/PA
1/9/2015	HCM - Payroll Process	Tim Gernhardt	SAP
1/9/2015	HCM - Payroll Process	Raj Gutha	Peloton
1/9/2015	HCM - Payroll Process	Chandra Cheetypalli	Peloton
1/9/2015	HCM - Payroll Process	Fanny Limontje	SAP
1/9/2015	HCM - Payroll Process	Hiroaki Ajari	SAP
1/9/2015	HCM - Payroll Process	Ron Keith	SAP
1/12/2015	Finance Track - CO	Elizabeth Zib	Functional Team - FERC/MM/PS
1/12/2015	Finance Track - CO	Casie West	Functional Team - FERC/FM
1/9/2015	Finance & Billing - FERC	Elizabeth Zib	Functional Team - MM/FERC/PS
1/12/2015	Finance Track - CO	Robert Lake	SAP
1/12/2015	Finance Track - CO	Lindsay Carter	Functional Team - GL/CO
1/12/2015	Finance Track - CO	Linda Culver	Functional Team - GL/CO
1/12/2015	Finance Track - CO	Tim Keohan	SAP
1/12/2015	Finance Track - CO	Ken Medved	SAP
1/12/2015	Finance Track - CO	Ram Ramasamy	SAP
1/12/2015	Finance Track - CO	Natalia Meyers	Functional Team - FM
1/12/2015	Finance Track - CO	Christo Oliver	Peloton
1/12/2015	Finance Track - CO	Craig Sehannie	Peloton

Date	Meeting	Attendee	Role
1/12/2015	Finance Track - CO	Christine Chesnut	Functional Team - FM
1/12/2015	Finance Track - CO	Melissa Steffen	Functional Team - PS
1/12/2015	Finance Track - CO	Marilyn Banzhaf	SAP Functional Steering Committee
1/12/2015	Finance Track - CO	Vijay Jayapal	Peloton
1/12/2015	Finance Track - CO	Brian Miller	Functional Lead - GL/CO/FERC
1/12/2015	Finance Track - CO	Rick Pannell	Project Manager - FILO
1/12/2015	Finance Track - CO	Bill Wilks	Project Manager - Procure to Pay / Finance 1
1/12/2015	Finance Track - CO	Erik Johnson	Functional Team - IM/AM/PS
1/12/2015	Finance Track - CO	Bob Moore	Functional Team - PS
1/12/2015	Finance Track - CO	Verity Woolley	Consultant - FERC
1/12/2015	Finance Track - Budget/FM	Bob Moore	Functional Team - PS
1/12/2015	Finance Track - Budget/FM	Christo Oliver	Peloton
1/12/2015	Finance Track - Budget/FM	Rick Pannell	Project Manager - FILO
1/12/2015	Finance Track - Budget/FM	Joyce Mucha	Functional Team - FM
1/12/2015	Finance Track - Budget/FM	Natalia Meyers	Functional Team - FM
1/12/2015	Finance Track - CO	Robert Lake	SAP
1/12/2015	Finance Track - Budget/FM	Melissa Steffen	Functional Team - PS
1/12/2015	Finance Track - Budget/FM	Casie West	Functional Team - FERC/FM
1/12/2015	Finance Track - Budget/FM	Christine Chesnut	Functional Team - FM
1/12/2015	Finance Track - Budget/FM	Tim Keohan	SAP
1/12/2015	Finance Track - Budget/FM	Craig Sehannie	Peloton
1/12/2015	Finance Track - Budget/FM	Lindsay Carter	Functional Team - GL/CO
1/12/2015	Finance Track - Budget/FM	Linda Culver	Functional Team - GL/CO
1/12/2015	Finance Track - Budget/FM	Elizabeth Zib	Functional Team - MM/FERC/PS
1/12/2015	Finance Track - Budget/FM	Brian Miller	Functional Team - GL/CO/FERC
1/12/2015	Finance Track - Budget/FM	Marilyn Banzhaf	Functional Team - GL/CO
1/12/2015	Finance Track - Budget/FM	Pamela Ellis	Functional Team - GL/CO

Date	Meeting	Attendee	Role
1/12/2015	Finance Track - Budget/FM	Catherine Gettler-Amyot	Functional Team - GM
1/12/2015	Finance Track - AP	David Hertrich	Functional Team - AP
1/12/2015	Finance Track - AP	Casie West	Functional Team - FERC/FM
1/12/2015	Finance Track - AP	Vijay Jayapal	Peloton
1/12/2015	Finance Track - AP	Linda Culver	Functional Team - GL/CO
1/12/2015	Finance Track - AP	Elizabeth Zib	Functional Team - GL/CO
1/12/2015	Finance Track - AP	Tom Fink	Controller / SAP Functional Steering Committee
1/12/2015	Finance Track - AP	Lindsay Carter	Functional Team - GL/CO
1/12/2015	Finance Track - AP	Joel Hayenga	Functional Team - SRM
1/12/2015	Finance Track - Assets	Robert Lake	SAP
1/12/2015	Finance Track - Assets	Pamela Ellis	Functional Team - GL/CO
1/12/2015	Finance Track - Assets	Bob Moore	Functional Team - PS
1/12/2015	Finance Track - Assets	Catherine Gettler-Amyot	Functional Team - GM
1/12/2015	Finance Track - Budget/FM	Melissa Steffen	Functional Team - PS
1/12/2015	Finance Track - Assets	Tim Keohan	SAP
1/12/2015	Finance Track - Assets	Rick Pannell	Project Manager - FILO
1/12/2015	Finance Track - Assets	Trena Rairdon	Functional Team - GM
1/12/2015	Finance Track - Assets	Melissa Steffen	Functional Team - PS
1/12/2015	Finance Track - Assets	Christo Oliver	Peloton
1/12/2015	Finance Track - Assets	Craig Sehannie	Peloton
1/12/2015	Finance Track - Assets	Brent Weber	Functional Team
1/12/2015	Finance Track - Assets	Sandy Simmons	Functional Team - AM
1/12/2015	Finance Track - Assets	Christine Chesnut	Functional Team - FM
1/12/2015	Finance Track - Assets	Natalia Meyers	Functional Team - FM
1/12/2015	Finance Track - Assets	Tom Fischer	Peloton
1/12/2015	Finance Track - Assets	Erik Johnson	Functional Team - IM/AM/PS
1/12/2015	HCM	Fanny Limontje	SAP
1/12/2015	HCM	Karen Norsworthy	SAP Functional Steering

Date	Meeting	Attendee	Role
			Committee
1/12/2015	HCM	Tina Posini	Functional Team - OM/PA
1/12/2015	HCM	Raylene Griffith	Functional Team - OM/PA
1/12/2015	HCM	Brent McAfee	Peloton
1/12/2015	HCM	Daewon Kim	Project Manager - HCM
1/12/2015	HCM	Tim Gernhardt	SAP
1/12/2015	HCM	Prashant Iyappan	SAP
1/12/2015	HCM	Nancy Usera	Executive Steering Committee/ ER Director
1/12/2015	HCM	Chandra Cheetypalli	Peloton
1/12/2015	HCM	Marcus Raath	Peloton
1/12/2015	HCM	Michael Proksell	Project Manager - Payroll
1/12/2015	Finance Track - Assets	Tim Keohan	SAP
1/12/2015	Testing Track	Hiroaki Ajari	SAP
1/12/2015	Testing Track	Nathan Pannkuk	Project Manager - Basis
1/12/2015	Testing Track	Hiroaki Ajari	SAP
1/12/2015	Testing Track	Scott Hooper	OCM Team
1/12/2015	Testing Track	Glenda Gibson	SAP Functional Steering Committee
1/12/2015	Testing Track	Erik Johnson	Functional Team - IM/AM/PS
1/12/2015	Testing Track	Nathan Pannkuk	Project Manager - Basis
1/12/2015	HCM	Fanny Limontje	SAP
1/12/2015	HCM	Michael Proksell	Project Manager - Payroll
1/12/2015	HCM	Chandra Cheetypalli	Peloton
1/12/2015	HCM	Martha Nelson	Functional Team - OM/PA
1/12/2015	HCM	Tina Posini	Functional Team - OM/PA
1/12/2015	HCM	Raylene Griffith	Functional Team - OM/PA
1/12/2015	HCM	Brent McAfee	Peloton
1/12/2015	HCM	Daewon Kim	Project Manager - HCM

Date	Meeting	Attendee	Role
1/12/2015	HCM	Tim Gernhardt	SAP
1/12/2015	HCM	Karen Norsworthy	SAP Functional Steering Committee
1/12/2015	HCM	Marcus Raath	Peloton
1/12/2015	BW Track	Glenda Gibson	SAP Functional Steering Committee
1/12/2015	BW Track	Kami Fitch	Technical Team - Reporting Lead
1/12/2015	BW Track	Marilyn Banzhaf	SAP Functional Steering Committee
1/12/2015	BW Track	Nelson Leoncio	Technical Team - Reporting Lead
1/12/2015	BW Track	Nathan Pannkuk	Project Manager - Basis
1/13/2015	Logistics & Inventory Track	Bill Wilks	Project Manager - Procure to Pay / Finance 1
1/13/2015	Logistics & Inventory Track	Brian Miller	Functional Team - GL/CO/FERC
1/13/2015	Logistics & Inventory Track	Prashant Iyappan	SAP
1/13/2015	Logistics & Inventory Track	Vijay Jayapal	Peloton
1/13/2015	Logistics & Inventory Track	Wayne Liu	SAP
1/13/2015	Logistics & Inventory Track	Elizabeth Zib	Functional Team - FERC/MM/PS
1/13/2015	Logistics & Inventory Track	Joel Hayenga	Functional Team - SRM
1/13/2015	Logistics & Inventory Track	Sandy Simmons	Functional Team - AM
1/13/2015	Logistics & Inventory Track	Casie West	Functional Team - FERC/FM
1/13/2015	Logistics & Inventory Track	Ron Hadden	SAP Functional Steering Committee
1/13/2015	Finance Track - Grants	Tim Keohan	SAP
1/13/2015	Finance Track - Grants	Catherine Gettler-Amyot	Functional Team - GM
1/13/2015	Finance Track - Grants	Jackie Willoughby	SAP
1/13/2015	Finance Track - Grants	Christine Chesnut	Functional Team - FM
1/13/2015	Finance Track - Grants	Rick Pannell	Project Manager - FILO
1/13/2015	Finance Track - Grants	Trena Rairdon	Functional Team - GM
1/13/2015	Finance Track - Grants	Tina Verheyen	Functional Team - GM

Date	Meeting	Attendee	Role
1/13/2015	Finance Track - Grants	Linda Yarbrough	Functional Team - GM
1/13/2015	Finance Track - Grants	Peggy Dieryck	Functional Team - GM
1/13/2015	Finance Track - Grants	Casie West	Functional Team - FERC/CO
1/13/2015	Finance Track - Grants	Melissa Steffen	Functional Team - PS
1/13/2015	Finance Track - Grants	Bob Moore	Functional Team - PS
1/13/2015	Finance Track - Grants	Catherine Gettler-Amyot	Functional Team - GM
1/13/2015	Finance Track - Grants	Christo Oliver	Peloton
1/13/2015	Finance Track - Grants	Craig Sehannie	Peloton
1/13/2015	Logistics & Inventory Track	Brian Miller	Functional Team - GL/CO/FERC
1/13/2015	Finance Track - Grants	Tim Keohan	Peloton
1/13/2015	Finance Track - Grants	Jackie Willoughby	SAP
1/13/2015	Finance Track - Grants	Rick Pannell	Project Manager - FILO
1/13/2015	Finance Track - Grants	Trena Rairdon	Functional Team - GM
1/13/2015	Finance Track - Grants	Christine Chesnut	Functional Team - FM
1/13/2015	Finance Track - Grants	Natalia Meyers	Functional Team - FM
1/13/2015	Finance Track - Grants	Marilyn Banzhaf	SAP Functional Steering Committee
1/13/2015	Data Track	Glenda Gibson	SAP Functional Steering Committee
1/13/2015	Data Track	Dean Barnes	Project Manager - Technical
1/13/2015	Data Track	Anne Reed	MOA SAP Program Manager
1/13/2015	Data Track	Vijay Jayapal	Peloton
1/13/2015	Data Track	Dave Olewiler	Consultant - IT
1/13/2015	Data Track	Nitn Joshi	SAP
1/13/2015	Data Track	Raj Gutha	Peloton
1/13/2015	Data Track	Myron Heil	System Analyst
1/13/2015	Data Track	Hiroaki Ajari	SAP
1/13/2015	Data Track	Linda Culver	Functional Team - GL/CO
1/13/2015	Data Track	Lindsay Carter	Functional Team - GL/CO

Date	Meeting	Attendee	Role
1/13/2015	HCM - PA	Fanny Limontje	SAP
1/13/2015	HCM - PA	Tim Gernhardt	SAP
1/13/2015	HCM - PA	Martha Nelson	Functional Team - OM/PA
1/13/2015	HCM - PA	Aynna Cameron	Functional Team - PA
1/13/2015	HCM - PA	Tina Posini	Functional Team - OM/PA
1/13/2015	HCM - PA	Raylene Griffith	Functional Team - OM/PA
1/13/2015	Finance Track - Grants	Tim Keohan	Peloton
1/13/2015	HCM - PA	Brent McAfee	Peloton
1/13/2015	HCM - PA	Daewon Kim	Project Manager - HCM
1/13/2015	HCM - PA	Therese Gochanour	Technical - Kronos
1/13/2015	HCM - PA	Gail Turner	Project Manager - OCM
1/13/2015	HCM - PA	Marcus Raath	Peloton
1/13/2015	HCM - PA	Nancy Usera	Executive Steering Committee/ ER Director
1/13/2015	HCM - PA	Candace Sherwood	ER
1/13/2015	HCM - PA	Bonnie Scarborough	ER
1/13/2015	HCM - PA	Chandra Cheetypalli	Peloton
1/13/2015	HCM - PA	Karen Norsworthy	SAP Functional Steering Committee
1/13/2015	HCM - PA	Michael Proksell	Project Manager - Payroll
1/13/2015	HCM - PA	Fanny Limontje	SAP
1/13/2015	HCM - PA	Martha Nelson	Functional Team - OM/PA
1/13/2015	HCM - PA	Tim Gernhardt	SAP
1/13/2015	HCM - PA	Brent McAfee	Peloton
1/13/2015	HCM - PA	Raylene Griffith	Functional Team - OM/PA
1/13/2015	HCM - PA	Tina Posini	Functional Team - OM/PA
1/13/2015	HCM - PA	Aynna Cameron	Functional Team - PA
1/13/2015	HCM - PA	Michael Proksell	Project Manager - Payroll
1/13/2015	HCM - PA	Karen Norsworthy	SAP Functional Steering Committee

Date	Meeting	Attendee	Role
1/13/2015	HCM - PA	Chandra Cheetypalli	Peloton
1/13/2015	HCM - PA	Fanny Limontje	SAP
1/13/2015	HCM - PA	Martha Nelson	Functional Team - OM/PA
1/13/2015	HCM - PA	Tim Gernhardt	SAP
1/13/2015	HCM - PA	Brent McAfee	Peloton
1/13/2015	HCM - PA	Brent McAfee	Peloton
1/13/2015	HCM - PA	Raylene Griffith	Functional Team - OM/PA
1/13/2015	HCM - PA	Tina Posini	Functional Team - OM/PA
1/13/2015	HCM - PA	Aynna Cameron	Functional Team - PA
1/13/2015	HCM - PA	Michael Proksell	Project Manager - Payroll
1/13/2015	HCM - PA	Karen Norsworthy	SAP Functional Steering Committee
1/13/2015	HCM - PA	Chandra Cheetypalli	Peloton
1/13/2015	HCM - PA	Daewon Kim	Project Manager - HCM
1/13/2015	HCM - PA	Marcus Raath	Peloton
1/14/2015	HCM - PA	Fanny Limontje	SAP
1/14/2015	HCM - PA	Martha Nelson	Functional Team - OM/PA
1/14/2015	HCM - PA	Karen Norsworthy	SAP Functional Steering Committee
1/14/2015	HCM - PA	Tim Gernhardt	SAP
1/14/2015	HCM - PA	Long Vu	SAP
1/14/2015	HCM - PA	Chandra Cheetypalli	Peloton
1/14/2015	HCM - PA	Gurpreet Mann	Peloton
1/14/2015	HCM - PA	Gary Peters	Tech Support - IT
1/14/2015	HCM - PA	Tina Posini	Functional Team - OM/PA
1/14/2015	HCM - PA	Daewon Kim	Project Manager - HCM
1/14/2015	HCM - PA	Tom Fischer	Peloton
1/14/2015	HCM - PA	Doina Nica	Technical Team - Security
1/14/2015	Project System	Christo Oliver	Peloton

Date	Meeting	Attendee	Role
1/14/2015	Project System	Robert Lake	SAP
1/14/2015	Project System	Tim Keohan	SAP
1/13/2015	HCM - PA	Brent McAfee	Peloton
1/14/2015	Project System	Melissa Steffen	Functional Team - PS/AM
1/14/2015	Project System	Catherine Gettler-Amyot	Functional Team - GM
1/14/2015	Project System	Rick Pannell	Project Manager - FILO
1/14/2015	Project System	Erik Johnson	Functional Team - IM/AM/PS
1/14/2015	Project System	Verity Woolley	Consultant - FERC
1/14/2015	Project System	Brian Miller	Functional Team - GL/CO/FERC
1/14/2015	Project System	Natalia Meyers	Functional Team - FM
1/14/2015	Project System	Elizabeth Zib	Functional Team - MM/FERC/PS
1/14/2015	Project System	Stephen Nuss	Functional Team - PS/IM
1/14/2015	Project System	Sandy Simmons	Functional Team - AM
1/14/2015	Project System	Dean Barnes	Project Manager - Technical
1/14/2015	Project System	Bob Moore	Functional Team - PS
1/14/2015	Project System	Trena Rairdon	Functional Team - GM
1/14/2015	Project System	Anne Reed	MOA SAP Program Manager
1/14/2015	Finance Track - AP	Ken Medved	SAP
1/14/2015	Finance Track - AP	Linda Culver	Functional Team - GL/CO
1/14/2015	Finance Track - AP	Lindsay Carter	Functional Team - GL/CO
1/14/2015	Finance Track - AP	Casie West	Functional Team - FERC/FM
1/14/2015	Finance Track - AP	Vijay Jayapal	Peloton
1/14/2015	Finance Track - AP	David Hertrich	Functional Team - AP
1/14/2015	Finance Track - AP	Tom Fink	Controller / SAP Functional Steering Committee
1/14/2015	Finance Track - AP	Glenda Gibson	SAP Functional Steering Committee
1/14/2015	Finance Track - AP	Bill Wilks	Project Manager - Procure to Pay / Finance 1

Date	Meeting	Attendee	Role
1/14/2015	HCM - Benefits	Tim Gernhardt	SAP
1/14/2015	Project System	Melissa Steffen	Functional Team - PS/AM
1/14/2015	HCM - Benefits	Fanny Limontje	SAP
1/14/2015	HCM - Benefits	Brent McAfee	Peloton
1/14/2015	HCM - Benefits	Raylene Griffith	Functional Team - OM/PA
1/14/2015	HCM - Benefits	Daewon Kim	Project Manager - HCM
1/14/2015	HCM - Benefits	Chandra Cheetypalli	Peloton
1/14/2015	HCM - Benefits	Tom Fischer	Peloton
1/14/2015	HCM - Benefits	Martha Nelson	Functional Team - OM/PA
1/14/2015	HCM - Benefits	Karen Norsworthy	SAP Functional Steering Committee
1/14/2015	HCM - Benefits	Cindy Becker	MOA Payroll Manager
1/14/2015	HCM - Benefits	Tina Posini	Functional Team - OM/PA
1/14/2015	HCM - Benefits	Marie Berry	ER Benefits
1/14/2015	HCM - Benefits	Linda Larsen	Functional Team - BN
1/14/2015	HCM - Benefits	Dean Franklin	Interfaces Lead
1/15/2015	Testing Track	Hiroaki Ajari	SAP
1/15/2015	Testing Track	Catherine Gettler-Amyot	Functional Team - GM
1/15/2015	Testing Track	Vijay Jayapal	Peloton
1/15/2015	Testing Track	Brian Miller	Functional Team - GL/CO/FERC
1/15/2015	Testing Track	Christo Oliver	Peloton
1/15/2015	Testing Track	Leisa Wood	SAP
1/15/2015	Testing Track	Lynne Ketchie	SAP
1/15/2015	Testing Track	Fanny Limontje	SAP
1/15/2015	Testing Track	Glenda Gibson	SAP Functional Steering Committee
1/15/2015	Testing Track	Tom Fink	Controller / SAP Functional Steering Committee
1/15/2015	Testing Track	Robert Lake	SAP
1/14/2015	HCM - Benefits	Fanny Limontje	SAP

Date	Meeting	Attendee	Role
1/15/2015	Testing Track	Dean Barnes	Project Manager - Technical
1/15/2015	Testing Track	Wayne Liu	SAP
1/15/2015	Testing Track	Joel Hayenga	Functional Team - SRM
1/15/2015	Testing Track	Linda Culver	Functional Team - GL/CO
1/15/2015	Testing Track	Lindsay Carter	Functional Team - GL/CO
1/15/2015	Testing Track	Sandy Simmons	Functional Team - AM
1/15/2015	Testing Track	Casie West	Functional Team - FERC/FM
1/15/2015	Testing Track	Erik Johnson	Functional Team - AM/PS/IM
1/15/2015	Testing Track	David Hertrich	Functional Team - AP
1/15/2015	Testing Track	Bob Moore	Functional Team - PS
1/15/2015	Testing Track	Elizabeth Zib	Functional Team - FERC/MM/PS
1/15/2015	Testing Track	Bekki Weaver	Functional Team - AR/CM/RRB/SD
1/15/2015	Testing Track	Natalia Meyers	Functional Team - FM
1/15/2015	Year End Process	Prashant Iyappan	SAP
1/15/2015	Year End Process	Rick Miller	SAP Functional Steering Committee
1/15/2015	Year End Process	Verity Woolley	Consultant - FERC
1/15/2015	Year End Process	Melissa Steffen	Functional Team - PS
1/15/2015	Year End Process	Catherine Gettler-Amyot	Functional Team - GM
1/15/2015	Year End Process	Vijay Jayapal	Peloton
1/15/2015	Year End Process	Joel Hayenga	Functional Team - SRM
1/15/2015	Year End Process	Elizabeth Zib	Functional Team - MM/FERC/PS
1/15/2015	Year End Process	Dean Barnes	Project Manager - Technical
1/15/2015	Year End Process	Trena Rairdon	Functional Team - GM
1/15/2015	Year End Process	Tom Fink	Controller / SAP Functional Steering Committee
1/15/2015	Testing Track	Dean Barnes	Project Manager - Technical
1/15/2015	Year End Process	Marilyn Banzhaf	SAP Functional Steering Committee

Date	Meeting	Attendee	Role
1/15/2015	Year End Process	Natalia Meyers	Functional Team - FM
1/15/2015	Year End Process	Pamela Ellis	Functional Team - GL/CO
1/15/2015	Year End Process	Lindsay Carter	Functional Team - GL/CO
1/15/2015	Year End Process	Linda Culver	Functional Team - GL/CO
1/15/2015	Year End Process	Bill Wilks	Project Manager - Procure to Pay / Finance 1
1/15/2015	Year End Process	Rick Pannell	Project Manager - FILO
1/15/2015	Year End Process	Anne Reed	MOA SAP Program Manager
1/15/2015	Year End Process	Chiquita Cothran	GL SME
1/15/2015	Year End Process	Valerie Dyson	GL SME
1/15/2015	Year End Process	Alla Lelanc	Functional Team - AM
1/15/2015	Data Track - Data Governance	Raj Gutha	Peloton
1/15/2015	Data Track - Data Governance	Vijay Jayapal	Peloton
1/15/2015	Data Track - Data Governance	Dean Barnes	Project Manager - Technical
1/15/2015	Data Track - Data Governance	Myron Heil	System Analyst
1/15/2015	Data Track - Data Governance	Dave Olewiler	Consultant - IT
1/15/2015	Data Track - Data Governance	Nitn Joshi	SAP
1/15/2015	Project System	Robert Lake	SAP
1/15/2015	Project System	Rick Pannell	Project Manager - FILO
1/15/2015	Project System	Melissa Steffen	Functional Team - PS/AM
1/15/2015	Project System	Bob Moore	Functional Team - PS
1/15/2015	Project System	Elizabeth Zib	Functional Team - MM/FERC/PS
1/15/2015	Project System	Christo Oliver	Peloton
1/15/2015	Project System	Verity Woolley	Consultant - FERC
1/15/2015	Year End Process	Marilyn Banzhaf	SAP Functional Steering Committee
1/15/2015	Project System	Erik Johnson	Functional Team - AM/PS/IM
1/15/2015	Project System	Trena Rairdon	Functional Team - GM
1/15/2015	Project System	Natalia Meyers	Functional Team - FM

Date	Meeting	Attendee	Role
1/15/2015	Project System	Catherine Gettler-Amyot	Functional Team - GM
1/15/2015	Project System	Tim Keohan	SAP
1/15/2015	Testing Track	Raj Gutha	Peloton
1/15/2015	Testing Track	Tom Fischer	Peloton
1/15/2015	Testing Track	Dean Barnes	Project Manager - Technical
1/15/2015	Testing Track	Vijay Jayapal	Peloton
1/15/2015	Testing Track	Dave Olewiler	Consultant - IT
1/15/2015	Testing Track	Nitn Joshi	SAP
1/20/2015	Conversion	Tim Keohan	SAP
1/20/2015	Conversion	David Hertrich	Functional Team - AP
1/20/2015	Conversion	Dean Barnes	Project Manager - Technical
1/20/2015	Conversion	Bekki Weaver	Functional Team - AR/CM/RRB/SD
1/20/2015	Conversion	Elizabeth Zib	Functional Team - MM/FERC/PS
1/20/2015	Conversion	Dana Norris	Functional Team - RRB
1/20/2015	Conversion	Casie West	Functional Team - FERC/FM
1/20/2015	Conversion	Nitn Joshi	SAP
1/20/2015	Conversion	Wayne Liu	SAP
	Data Track	Tom Fink	Controller / SAP Functional Steering Committee
	Data Track	Gail Turner	Project Manager - OCM
	Data Track	Dave Olewiler	Consultant - IT
	Data Track	Myron Heil	System Analyst
	Data Track	Raj Gutha	Peloton
	Data Track	Vijay Jayapal	Peloton
	Data Track	Dean Barnes	Project Manager - Technical
	Data Track	Nitn Joshi	SAP
	Data Track	Catherine Gettler-Amyot	Functional Team - GM
	Data Track	Pamela Ellis	Functional Team - GL/CO

Date	Meeting	Attendee	Role
	Data Track	Erik Johnson	Functional Team - IM/AM/PS
	Data Track	Rick Pannell	Project Manager - FILO
	Data Track	Glenda Gibson	SAP Functional Steering Committee
	Data Track	Marilyn Banzhaf	SAP Functional Steering Committee
	Data Track	Anne Reed	MOA SAP Program Manager
	Data Track	Bob Moore	Functional Team - PS
	Data Track	Sandy Simmons	Functional Team - AM
	Data Track	Natalia Meyers	Functional Team - FM
	Security Track	Kami Fitch	Technical Team - Reporting Lead
	Security Track	Nelson Leoncio	Technical Team - Reporting Lead
	Security Track	Malar Selvan	Peloton
	Security Track	Pamela Ellis	Functional Team - GL/CO
	Security Track	Linda Culver	Functional Team - GL/CO
	Security Track	Lindsay Carter	Functional Team - GL/CO
	Security Track	Kami Fitch	Technical Team - Reporting Lead
	Security Track	Lindsay Carter	Functional Team - GL/CO
	Security Track	Pamela Ellis	Functional Team - GL/CO
	Security Track	Linda Culver	Functional Team - GL/CO
	Security Track	Vijay Jayapal	Peloton
	Security Track	Wade Hunter	Peloton
	Security Track	Anne Reed	MOA SAP Program Manager
	Security Track	Tom Dulaney	Technical Team - Basis
	Security Track	Nathan Pannkuk	Technical Team - Basis
	Security Track	Nelson Leoncio	Technical Team - Reporting Lead
	Security Track	Tom Fischer	Peloton
	Security Track	Casie West	Functional Team - GL/CO

Date	Meeting	Attendee	Role
	Security Track	Bill Wilks	Project Manager - Procure to Pay / Finance 1
	Security Track	Glenda Gibson	SAP Functional Steering Committee
	Security Track	Lynne Ketchie	SAP
	Security Track	Elizabeth Zib	Functional Team - MM/FERC/PS
	BW Track	Catherine Gettler-Amyot	Functional Team - GM
	BW Track	Kami Fitch	Technical Team - Reporting Lead
	BW Track	Nelson Leoncio	Technical Team - Reporting Lead
	BW Track	Malar Selvan	Peloton
	BW Track	Nathan Pannkuk	Project Manager - Basis
	BW Track	Tom Fischer	Peloton
	HCM - Payroll Process	Scott Railing	ER
	HCM - Payroll Process	Marie Berry	ER
	HCM - Payroll Process	Susanne Lawrence	Functional Team - Time/Payroll
	HCM - Payroll Process	Linda Larsen	Functional Team - BN
	HCM - Payroll Process	Jacqueline Hoflich	ER - Benefits
	HCM - Payroll Process	Brent McAfee	Peloton
	HCM - Payroll Process	Melanie Wood	Functional Team - Time/Payroll
	HCM - Payroll Process	Leisa Wood	SAP
	HCM - Payroll Process	Chandra Cheetypalli	Peloton
	HCM - Payroll Process	Daewon Kim	Project Manager - HCM
	HCM - Payroll Process	Cindy Becker	Payroll Manager
	HCM - Payroll Process	Martha Nelson	Functional Team - OM/PA
	HCM - Payroll Process	Tina Posini	Functional Team - OM/PA
	HCM - Payroll Process	Raylene Griffith	Functional Team - OM/PA
	HCM - Payroll Process	Michael Proksell	Project Manager - Payroll
	HCM - Payroll Process	Antti Kesti	Peloton

Date	Meeting	Attendee	Role
	HCM - Payroll Process	Jody Canet	Functional Team - Time/Payroll
	HCM - Payroll Process	Ron Keith	SAP
	HCM - Payroll Process	Fanny Limontje	SAP
	HCM - Payroll Process	Leisa Wood	SAP
	HCM - Payroll Process	Daewon Kim	Project Manager - HCM

DOCUMENTATION REVIEWED

Document	Document
Finance and Billing	
B&VProposal.zip	Chart Org Chart
Clients on White Board	Contract.zip
RICEFW_Object_Estimates current master with Priorities & Go-live	MOA Blueprint V3
SAP Q&A Synergy Project Overview.zip	Supporting a Vanilla Implementation
120613MeetingWithSAPonSOW.docx	Consultant form #1.xlsx
Files From Lynn.ZIP	MoA FI Review Report.pptx
MoA SolMan Review Report.pptx	SOW MOA SAP QA Review Final 6.26.12.doc
MoA 2014 Revixew Agenda_draft_ v35.xlsx	DRS_Analytic_Skills.pptx
DRS_Documenting_Findings_Recommendations.pptx	DRS_Facilitation_Skills_Presentation.pptx
DRS_Questioning_Skills_Presentation.pptx	DRS_Writing_Skills.pptx
2014 11 19 Muni of Anchorage QA SOW-FINAL-FULLY Executed.pdf	B&VProposal.zip
MoA Design Review Final_20120922 r_1.pdf	RFP.zip
SAP Audit - Final Hour Estimate per Giard (2)-lk.xlsx	Business Process Flows for SAP.xlsx
PFD-FIN-AP-01 Create Vendor Master Data.pdf	PFD-FIN-AP-02 Maintain Vendor Master Data.pdf
PFD-FIN-AP-04 Process Vendor Invoice.pdf	PFD-FIN-AP-06-Blocked Invoice Analysis (updated by Dave on 10-07-14).pdf
PFD-FIN-AP-07 Process Credit Memo.pdf	PFD-FIN-AP-09 Vendor Invoice Corrections (updated by Dave on 10-07-14).pdf
PFD-FIN-AP-10 Process Payments.pdf	PFD-FIN-AR-01 Create or Update Customer Master Data.pdf
PFD-FIN-AR-03 Process FI Invoice or Credit Memo.pdf	PFD-FIN-AR-07 AR Interfaces.pdf
PFD-FIN-CM-01-01 Process Electronic Bank Statement and Handle Errors.pdf	PFD-FIN-CM-01-03 Maintain Bank Master Data.pdf
PFD-FIN-CM-02 Cash Journal - Incoming Payments Deposits.pdf	PFD-FIN-CM-04 Allocate Pooled Cash Monthly Interest.pdf

Document	Document
PFD-FIN-CM-04 Allocate Pooled Cash Monthly Interest.pdf	PFD-FIN-CO-01 Create or Maintain Cost Center.pdf
PFD-FIN-CO-05-02 Execute Month-End Cost Allocations (Assessments or Distributions).pdf	PFD-FIN-CO-06 Internal Order - Month-End Settlement.pdf
PFD-FIN-FE-02 FERC Month End.pdf	PFD-FIN-GL-02-01 Park and Post Journal Entry - Special Journal Controllers Office.pdf
PFD-FIN-GL-02-03 Park and Post Journal Entry - AWWU to MLP.pdf	PFD-FIN-GL-02-04 Park and Post Journal Entry - Field to MOA.pdf
PFD-FIN-GL-02-05 Park and Post Journal Entry - Field to Utility.pdf	PFD-FIN-GL-02-06 Park and Post Journal Entry - MLP Manual.pdf
PFD-FIN-GL-02-07 Park and Post Journal Entry - Utility to MOA.pdf	PFD-FIN-GL-02 Park and Post Journal Entry - Controller's Office Manual.rev.pdf
PFD-FIN-PS-04 Process Month End.pdf	Revised FILO Business Process Flows.zip
All Documentation Loaded 12-11-2015.zip1.0	Blueprint - Draft.zip1
Project Deliverables - Current.zip1	Project Deliverables - Prior to Peloton.zip
PMO Issue Register.zip	Project Schedule.zip1
Project Team Listing.zip	Project Docs Loaded 12.19.2014.zip
CharterOrgChart.zip	clients on whiteboard.jpg
Consolidated QA Log to SAP_12_05_2014 jam-lk.xlsx	SD-SPF-Contact Confirmation Form
Business Blueprint v3.0 Draft.pdf	SD-SPF-MOA Sales Order Confirmation Form
SD-SPE-Resource Related Billing	SD-SPW-Sales Order Approval Workflow Standard
SD-SPF- Standard MOA Billing Document Form	MoA Billing Resource Related billing in Grants Management
SD-SPW-Sales Order Approval Workflow	ODP1 Dip Profile ZSDRRB01 Material Determination
PFD-FIN-SD-01 Process Contract & Contract Sales Order_20141219.pdf	28010-SD-ITS-Contract To Cash AFD.doc
PFD-FIN-SD-02 Process Sales Order_20141222.pdf	28020-SD-ITS-Contract To Cash Port.doc
PFD-FIN-SD-03 Bill Customer - Sales Order_20141222.pdf	28030-SD-ITS-Contract To Cash RRB (APD).doc
28010_SD_ITS_CntrctToCashAFD.PDF	28040-SD-ITS-Contract To Bill Workflow RRB

Document	Document
	(APD).doc
28020_SD_ITS_ContractToCash_Port.PDF	RICEFW Master List
Business Process Flows (FM) - PFD-FIN_FM-001	**MoA Report List**
Business Process Flows (FM) - PFD-FIN_FM-002	MoA Integration Test Plan
Business Process Flows (FM) - PFD-FIN_FM-004	MoA Synergy – Script Preparation Guidance
Business Process Flows (FM) - PFD-FIN_FM-005	MoA Synergy – Integration Test Kick-off
Business Process Flows (FM) - PFD-FIN_FM-006	Project Issues Log
Financial Requirements Summary	**Configuration Rationale Document - FMDERIVE**
Functional and Technical Specs (FM only) – zip file	**Pre-Closing, Month End, and Year End Closing Schedule**
BW Technical Design Document for FM	Year-to-date Variance Report functional specification
Business Blueprint - Draft	Yearly Trend Report functional specification
Consolidated QA Log	Monthly Trend Report functional specification
Preliminary Reporting GAP Analysis	Budget to Actual Report functional specification
BW Report List	**120613MeetingWithSAPonSOW.docx**
DRS_Analytic_Skills.pptx	**Consultant form #1.xlsx**
DRS_Documenting_Findings_Recommendations.pptx	**Files From Lynn.ZIP**
DRS_Facilitation_Skills_Presentation.pptx	**MoA FI Review Report.pptx**
DRS_Questioning_Skills_Presentation.pptx	**MoA SolMan Review Report.pptx**
DRS_Writing_Skills.pptx	**SOW MOA SAP QA Review Final 6.26.12.doc**
2014 11 19 Muni of Anchorage QA SOW-FINAL-FULLY Executed.pdf	**B&VProposal.zip**
B&VProposal.zip	**Chart Org Chart**
MoA Design Review Final_20120922 r_1.pdf	**Clients on White Board**
RFP.zip	**Contract.zip**
SAP Audit - Final Hour Estimate per Giard (2)-lk.xlsx	**SAP Q&A Synergy Project Overview.zip**

Document	Document
RICEFW_Object_Estimates current master with Priorities & Go-live	**Supporting a Vanilla Implementation**
MOA Blueprint V3	**Municipality_of_anchorage V1.zip**
Business Blueprint v3.0 Draft.pdf	***PFD-FIN-SD-02 Process Sales Order_20141222.pdf**
MoA - Process Mapping Approach V1.pptx	***PFD-FIN-SD-03 Bill Customer - Sales Order_20141222.pdf**
***PFD-FIN-AP-01 Create Vendor Master Data_20150101.pdf**	***PFD-FIN-CM-01-01 Process Electronic Bank Statement_20141208.pdf**
***PFD-FIN-AP-02 Maintain Vendor Master Data_20150101.pdf**	***PFD-FIN-CM-01-03 Maintain Bank Master Data_20141208.pdf**
PFD-FIN-AP-04 Process Vendor Invoice_20141230.pdf	***PFD-FIN-CM-02 Cash Journal - Incoming Payments Deposits_20141229.pdf**
PFD-FIN-AP-06-Blocked Invoice Analysis_20141231.pdf	***PFD-FIN-CM-04 Allocate Pooled Cash Monthly Interest_20141208.pdf**
***PFD-FIN-AP-07 Process Credit Memo_20150102.pdf**	***PFD-FIN-GL-01 Create or Maintain GL Accounts_20141222.pdf**
PFD-FIN-AP-09 Vendor Invoice Corrections_20141231.pdf	***PFD-FIN-GL-02 Park and Post Journal Entry – Controller's Office Manual - 20141222.pdf**
***PFD-FIN-AP-10 Process Payments_20141218.pdf**	***Visio-PFD-FIN-GL-02-03 Park and Post Journal Entry - AWWU to MLP or MLP to AWWU_20141205.pdf**
***PFD-FIN-AR-01 Create or Update Customer Master Data_20141219.pdf**	***MoA - ME Close Test Kick-Off 5-21-14.pptx**
***PFD-FIN-AR-03 Process FI Invoice or Credit Memo_20141219.pdf**	***MoA FILO Integration Test - Status Tracking Log.xlsx**
***PFD-FIN-AR-07 AR Interfaces_20141219.pdf**	***AP-PFD-Year-End Process.vsd**
***PFD-FIN-SD-01 Process Contract & Contract Sales Order_20141219.pdf**	AP-SBQ Payment Drill Down.doc
***AP - Payment Information-Vendor Listing-CME Version.pdf**	AP-SBQ Payment History Report.doc
AP LSD Layout Set Definition Document for Checks.docx	***AP-SPC-Vendor Master Records.doc**
***AP PaymentNet Functional Technical Interface Spec.docx**	***AP-SPE-ACH HEADER RECORD Enhancement.doc**

Document	Document
AP SPW NNN Vendor Invoice workflow diagram.doc	***AP-SPE-ACH Payment Advice by Email.docx**
AP-IDD-004-AP ACH - OUT.doc	AP-SPE-Positive Pay Enhancement.doc
AP-LSD-Payment Advice Form.docx	***AP-SPF-ACH Payment Advice Form.doc**
AP-PDD for Off Cycle Payment.docx	*AP-SPF-AP Checks.doc
***AP-PFD-Create FI Vendor Purchasing Request.vsd**	***AP-SPI-002-Positive Pay OUT.doc**
***AP-PFD-Material Return Credit Memo.vsd**	*AP-SPI-003-ACH Out.docx
***AP-PFD-Month-End Process.vsd.VSD.VSD**	AP-SPR-List of non-PO AP Parked Documents by Fund Center.doc
***AP-PFD-Non PO Based Invoicing.vsd**	AP-SPR-List of non-PO AP Parked Documents by Fund Center.docx
***AP-PFD-Off Cycle Payment.vsd**	***AP-SPR-Payment History Report.docx**
***AP-PFD-Partial Payments.vsd**	AP-SPW-Vendor Non PO Invoicing.doc
***AP-PFD-Payment Processing.vsd**	***AP-SPY-Vendor Master Records.DOCX**
***AP-PFD-PO Based Invoicing for Materials.vsd**	AP-SPE-Positive Pay Enhancement.doc
***AP-PFD-Subsequent Credit and Debit.vsd**	***AR-OID-FI Billing.doc**
***AP-PFD-Vendor Account Management.vsd.VSD**	***AR-OID-FI Credit Memo.doc**
***AR-OID-Incoming Payments (Non-cash register).doc**	***AR*AR cash receipts.vsd**
***AR-OID-Late Fee Waivers.doc**	***AR-PFD-Collections.vsd**
***AR-OID-Write offs.doc**	***AR-PFD-Customer Master Record.vsd**
***AR-PDD- Customer Statements.doc**	***AR-PFD-FI Billing Adjustment.vsd**
***AR-PDD-Centralized Billing.doc**	***AR-PFD-FI Billing others.vsd**
***AR*AR*AR*ARd.doc**	***AR-PFD-Incoming payments.vsd**
***AR-PDD-Decentralized FI Billing.doc**	***AR-PFD-late fee waivers.vsd**
***AR-PDD-Dunning.doc**	***AR-PFD-Sales Order Billing Adjustment.vsd**
***AR-PDD-FI Credit Memo.doc**	***AR-PFD-Sales order billing.vsd**
***AR-PDD-Incoming Payments (Non-cash register).doc**	***AR-PFD-Sales order.vsd**

Document	Document
*AR-PDD-Write offs.doc	*AR-SPC- Main Billing open items(customer open items through JVs).pdf
*AR*AR end Aging report.doc	*AR-SPC-001-Sales Order Processing - APD & AFD (VA01).doc
*AR-PFD-Agreement Billing Port and MF.vsd	*AR-SPC-Agreements Conversion - Merill Field & Port (VA41).doc
*AR-PFD-Agreements MF.vsd	*AR-SPC-Customer Master Data.doc
*AR-PFD-Agreements Port.vsd	*AR-SPC-Main Billing open items (Customer open items through JV's.doc
*AR-SPE-0001-Customer open items BTE.doc	*AR-SPW-Decentralized FI Billing.doc
*AR-SPE-0001-Late fee invoice assignment.doc	*AR Billing - IDD - Aircraft Registration Tax 10-31-11.doc
*AR-SPE-001 Customer open items BTE.pdf	*AR Billing - IDD - SEDC (MLP) 10-19-11.doc
*AR-SPF-001-Cash Receipt for Customer.doc	*AR Billing - IDD - Tax 10-28-11.doc
*AR - PDD - Late Fee Waivers 11-30-11.doc	*AR-DCD-Centralized Billing.doc
*AR - PDD - Customer Master Data 12-15-11.doc	*AR-DCD-Customer Master Data.doc
*AR - PDD - Payment Application Decentralized 11-28-11.doc	*AR-DCD-Customer open item conversion.doc
*AR & Billing - IDD - Special Assessments (AWWU) 11-09-11.doc	*AR-DCD-Decentralized FI Billing.doc
*AR FUNCTIONAL SPEC-Signed.pdf	*AR-DCD-FI Credit Memo.doc
*AR-BOS-Distribution Channel.doc	*AR-DCD-Sales Order Billing - APD.doc
*AR-BOS-Sales Division.doc	*AR-DCD-Sales Order open item conversion.doc
*AR-BOS-Sales Organization.doc	*AR-DCD-Sales Order Processing - APD.doc
*AR-DCD-Agreement Billing - Port.doc	*AR-EDD-Customer open items BTE.doc
*AR-DCD-Centralized Billing.doc	*AR*AR Treasury Document processor.doc
*AR-DCD-Customer Master Data.doc	*AR*AR Treasury Supervisor.doc
*AR-DCD-Customer open item conversion.doc	*AR*AR Billing Adjustments processor.doc
*AR-DCD-Decentralized FI Billing.doc	*AR*AR*AR).doc

Document	Document
*AR-DCD-FI Credit Memo.doc	*AR*AR Billing Specialist (Dept.).doc
*AR-DCD-Sales Order Billing - APD.doc	*AR*AR Billing Supervisor (Dept.).doc
*AR-DCD-Sales Order open item conversion.doc	*AR*AR Cashier Supervisor (dept.).doc
*AR-DCD-Sales Order Processing - APD.doc	*AR*AR Deposit Verifier (Dept.).doc
*AR-EDD-Customer open items BTE.doc	*AR*AR Payment Processor.doc
*AR-EDD-Late fee invoice assignment.doc	*AR*AR Sales Order Processor (Dept.).doc
*AR*AR Subject Matter Expert.doc	*AR-ERD-CMR MDM Processor.doc
*AR*AR Supervisor (Dept.).doc	*AR-ERD-CMR MDM Supervisor.doc
*AR*AR Supervisor(Dept.).doc	*AR-ERD-Decentralized Payment Processing (DPP).doc
*AR*AR Treasury Cash Processor.doc	*AR-ERD-Display and Reporting.doc
*AR-ERD-Billing Specialist (Dept.).doc	*AR-ERD-Invoice Processor (Central and Authorized Utilities).doc
*AR-ERD-Billing Specialist CMR.doc	*AR-ERD-Payment Processor Centralized Payment Processing.doc
*AR-ERD-Billing Supervisor (Dept.).doc	*AR-ERD-Port Director.doc
*AR*AR End Closing.doc	*AR-ERD-Treasury Cash Processor.doc
*AR-ERD-Cashier Supervisor Decentralized Payment Processor (DPP).doc	*AR*AR*ARks & Rec.) - IN.doc
*AR-ERD-City Manager.doc	*AR-IDD-001-Billing Data (SWS) - IN.doc
*AR-IDD-001-Cash Receipts(Tiburon) - OUT.doc	*AR-IDD-003-Cash Receipts(ML&P) - IN.doc
*AR-IDD-001-Cash Receipts-monthly(Transit) - OUT.doc	*AR-IDD-003-Cash Receipts(SWS) - OUT.doc
*AR-IDD-001-CI Billing (AWWU) - IN.doc	*AR-IDD-003-Cash Receipts-Daily(Transit) - IN.doc
*AR-IDD-002-Cash Receipts(ML&P) - OUT.doc	*AR-IDD-004-Cash Receipts (AWWU) - OUT.doc
*AR-IDD-002-Cash Receipts(SWS) - IN.doc	*AR-L*SD--003-Customer Statement.doc
*AR-IDD-002-Cash Receipts(Tax Billing) - IN.doc	*AR-L*SD--Cash Receipt for Customer.doc

Document	Document
*AR*ARm Billing (Tiburon) – IN.DOC	*AR-L*SD--Customer Master Record.doc
*AR-IDD-002-Inter Agency Billing AWWU In.doc	*AR-L*SD--Customer Statements.doc
*AR*AR*AR-monthly(Transit) - IN.doc	*AR-L*SD--Decentralized billing.doc
*AR-IDD-003-Cash Receipts (AWWU) - IN.doc	*AR-L*SD--Dunning.doc
*AR-L*SD--Sales Order Billing - APD.doc	*AR-SPF-003-Customer Statement.doc
*AR-MDD-Customer Master Data.doc	*AR-SPF-006-Non-late fee Dunning - General Government.doc
*AR-OID-Cash Receipts (Cash register).doc	*AR*ARd FI Billing Document (invoice).doc
*AR-OID-Customer Master Record.doc	*AR-SPI-001-Billing Data (Aircraft Tax billing) - IN.doc
*AR-OID-Customer Statements.doc	*AR*ARS) - IN.doc
*AR-OID-Dunning.doc	*AR-SPI-001-Billing Data (SWS) - IN.doc
*AR-SPF-001-Cash Receipt for Customer.pdf	*AR-SPI-001-Billing Data (SWS) – IN.DOC
*AR-SPF-001-Customer Master Record.doc	*AR-SPI-001-Billing Data (Tax billing) - IN.doc
*AR-SPF-001-Decentralized FI Billing.doc	*AR-SPI-001-Billing Data(SWS)- In.pdf
*AR-SPF-002-Late Fee Dunning - General Government.doc	*AR-SPI-001-Billing Data(Tax Billing)- In..pdf
*AR-SPI-001-Cash Receipts(Tiburon) - OUT.doc	*AR*ARm Billing(Tiburon)-In.pdf
*AR-SPI-001-Cash Receipts-monthly(Transit) - OUT.doc	*AR-SPI-002-Inter Agency Billing AWWU In.doc
*AR-SPI-001-CI Billing (AWWU) - IN.doc	*AR-SPI-003-Cash Receipts (AWWU) - IN.doc
*AR-SPI-002-Cash Receipts(ML&P) - OUT.doc	*AR-SPI-003-Cash Receipts(ML&P) - IN.doc
*AR-SPI-002-Cash Receipts(SWS) - IN.doc	*AR-SPI-003-Cash Receipts(SWS) - OUT.doc
*AR-SPI-002-Cash Receipts(Tax Billing) - IN.doc	*AR-SPI-003-Cash Receipts-Daily(Transit) - IN.doc
*AR-SPI-002-CAsh Receipts(Tax Billing) -IN.pdf	*AR-SPI-004-Cash Receipts (AWWU) - OUT.doc
*AR-SPI-002-CI Billing (AWWU)- IN.pdf	*AR*ARd Legacy Billing Inbound Feed â€“ IN.doc

Document	Document
*AR-SPI-002-Equipment Billing Accounting Data (ML&P) - OUT.doc	*AR-SPW-001-FI Billing Decentralized.pdf
*AR*ARm Billing (Tiburon) - IN.doc	*AR-SPW-Cash Receipts (Cash register).doc
*AR-SPW-Cash Receipts(cash Register).pdf	*SD- Form_MOA Billing Document.docx
*AR-SPW-Centralized Billing.doc	*SD- Form_MOA Contract Confirmation.docx
*AR-SPW-Customer Master Record.doc	*SD- Form_MOA Order Confirmation.docx
*AR-SPW-FI Credit Memo.doc	*SD- Sales Order Approval Workflow Specification Document.docx
*AR-SPW-Incoming Payments (Non-cash register).doc	*SD-- SPE-Late Fee Assessment.pdf
*AR-SPW-Late Fee Waivers.doc	*SD-- SPF-Contract Confirmation form.pdf
*AR-SPW-Write offs.doc	*SD-- SPF-MOA Sales Order Confirmation.pdf
*AR-SPX-003-Cash Receipts (ML&P) – IN.DOC	*SD- Workshop Merrill Field 07-19-12.docx
*AR-SPY-Main Billing open items (Customer open items through JV's -.DOC	*ARt 2 07-24-12.docx
*AR-WDD-Cash Receipts (Cash register).doc	*SD- Workshop Port 07-19-12.docx
*AR-WDD-Centralized Billing.doc	*SD- ZSER Material Master Conversion 8-8-14.xlsx
*AR-WDD-Decentralized FI Billing.doc	*SD--DCD-Sales Order Billing - AFD.doc
*AR-WDD-FI Credit Memo.doc	*SD--DCD-Sales Order Processing.doc
*AR-WDD-Incoming Payments (Non-cash register).doc	*SD--ERD â€“ Sales Order Processor (Dept.).doc
*AR-WDD-Sales Order Billing - APD.doc	*SD--ERD- CMR Processor (Central).doc
*SD--ERD- CMR Processor (Dept.).doc	*SD--OID-Billing Processing.doc
*SD--ERD- CMR Supervisor (Central).doc	*SD--OID-Contract Processing Port.doc
*SD--ERD- Sales Order Processor (Dept.).doc	*SD--OID-Port Agreement Billing.doc
*SD--ERDâ€“Billing Processor (Central & AWWU).doc	*SD--OID-Sales Order Billing - AFD.doc
*SD--ERDâ€“Billing Supervisor (Central & Authorized Utilities).doc	*SD--OID-Sales Order Processing - AFD.doc

Document	Document
***AR Agreement Processor (Dept.).doc**	***ARd Order.doc**
***SD--ERD-Billing Supervisor (Central).doc**	***SD--PDD-Billing Processing.doc**
***SD--ERD-Billing Supervisor (Dept.).doc**	***SD--PDD-Contract Processing.doc**
***SD--ERD-Configuration and Administration (Central).doc**	***SD--PDD-Resource Related Billing Processing.doc**
***SD--ERD-Contract & Sales Order Processor.doc**	***SD--PDD-Sales Order Billing (AFD).doc**
***SD--ERD-Display and Reporting.doc**	***SD--PDD-Sales Order Processing - AFD.doc**
***SD--ERD-Master Data Processor.doc**	***SD--PDD-Sales Order Processing.doc**
***SD--ERD-Subject Matter Expert (Central).doc**	***SD--SPE- Resource Related Billing.doc**
***ARd Billing Form.doc**	***SD--SPE-Late Fee Assessment.doc**
***SD--L*SD--Sales Order Billing - AFD.doc**	***SD--SPE-Resource Related Billing.docx**
***SD--SPF-Billing Form Merrill Field.doc**	* CM-SPC-US - ABA Number Load.doc
***ARd.docx**	*CM-SPE-001-Enhancements to Cash Journal.doc
***SD--SPF-Contract Confirmation Form.docx**	*CM-SPI-001 AR Bank Recon - IN.doc
***SD--SPF-Sales Order Confirmation Form.docx**	*CM-SPI-001-Cash Receipts(Courtview) - IN.doc
***SD--SPW-Sales Order Approval Workflow -resource related billing.docx**	*CM-SPI-002 Returns items Processing - IN.doc
***SD--SPW-Sales Order Approval Workflow.docx**	*CM-SPI-003 Customer EDI Payments - IN.doc
***SD--WDD-Sales Order Billing (AFD).doc**	*CM-SPR-Utility Cash Receipts at other locations.doc
CM-PDD-CFR Cash Flow Reporting.doc	***Cash Management - PDD - Bank Corrections 11-28-11.doc**
*** CM-PFD-Bank Master Record.vsd**	***Cash Management - PDD - Bank Statement 11-29-11.doc**
*** CM-PFD-Bank Reconciliation.vsd**	***Cash Management - PDD - Incoming Payments 11-29-11.doc**
*** CM-PFD-Cash Flow Forecasting.vsd**	***Cash Management - PDD - Interest Allocation 11-29-11.doc**

Document	Document
* CM-PFD-Electronic Bank Statement.vsd	*CM-DCD-Bank Master Record.doc
* CM-PFD-Incoming Payments.vsd	*CM-EDD-Enhancements to Cash Journal.doc
* CM-PFD-Interest Allocation.vsd	*CM-ERD - CM Investments Officer.doc
*CM-PFD-NSF.vsd	*CM-ERD-Cashier (Dept.).doc
*CM-ERD-Cashier Supervisor (dept.).doc	*CM-MDD-Bank Master Record.doc
*CM-ERD-Central Bank MDM processor (BANK MASTER).doc	*CM-OID-Bank Master Record.doc
*CM-ERD-CM Central AR and CM Supervisor.doc	*CM-OID-Cash Forecasting.doc
*CM-ERD-CM Debt Manager.doc	*CM-OID-Electronic Bank Statement Reconciliation.doc
*CM-ERD-CM Investment Accountant.doc	*CM-OID-Electronic Bank Statement.doc
*CM-ERD-CM Returned item Processor(Dept.).doc	*CM-OID-Incoming Payments (Cash register).doc
*CM-ERD-CM Treasury Returned Item Processor.doc	*CM-OID-Interest Allocation.doc
*CM-ERD-Deposit Verifier (Dept.).doc	*CM-PDD-Bank Master Record.doc
*CM-ERD-Display and Reporting.doc	*CM-RDD-Utility Cash Receipts at other locations.doc
*CM-ERD-Treasury Cash Processor.doc	CM-SPC-US - ABA Number Load.doc
*CM-IDD-001 AR Bank Recon(Key Bank) - IN.doc	*CM-SPF-001-Summarized Cash Receipts(Internal).doc
*CM-IDD-001-Cash Receipts(Courtview) - IN.doc	*CM-SPI-001 AR Bank Recon - IN.doc
*CM-IDD-002 Returns items processing - IN.doc	*CM-SPI-001-Cash Receipts(Courtview) - IN.doc
*CM-IDD-003 Customer EDI Payments - IN.doc	*CM-SPI-002 Returns items Processing - IN.doc
*CM-LSD-Summarized Cash Receipts(Internal).doc	*CM-SPI-003 Customer EDI Payments - IN.doc
*CM-SPR-Utility Cash Receipts at other locations.doc	CO-SBQ MLP_-_Balance_Sheet_Report_Requirements_meeting_updates.doc

Document	Document
***CM-WDD-Incoming Payments (Cash register).doc**	CO-SBQ MLP_-_Statement_of_Operations_Report_Requirements_meeting.doc
CO - DCD Cost Centers Load.doc	CO-SBQ MLP_-_Trial_Balance_Report_Requirements_meeting__updates.doc
CO - DCD Cost Elements Master Data .doc	CO-SBQ NUREC Report 4.doc
CO-IDD- IGC Allocation Factors Upload.DOC	CO-SBQ NUREC Report 5.doc
CO-MDD- Cost Center Master Data.doc	***CO-SPC-Cost Centers Load.doc**
CO-MDD-FERC Master Data.DOC	***CO-SPC-Cost Elements Master Data.doc**
CO-PDD-Allocations and Distributions.doc	***CO-SPC-FERC Conversion REG Indicators.doc**
***CO-PFD-Create Cost Center.VSD**	***CO-SPC-FERC_Conversion_Direct_Postings.doc**
***CO-PFD-IGC Allocation.VSD**	***CO-SPC-FERC_Conversion_Traced_Cost_Postings.doc**
CO-SBQ AWWU_-_Detailed_balance_Sheet_Requirements_meeting__updat.doc	***CO-SPC-Internal Order.doc**
CO-SBQ AWWU_-_General_ledger_by_Naruc_Requirements_meeting_updat.doc	***CO-SPE- NNN - FERC_Enhancement_Cost_Centers.DOC**
CO-SBQ AWWU_Income_Statement_Requirements_meeting_updates.doc	***CO-SPE- NNN - FERC_Enhancement_Internal_Orders.DOC**
CO-SBQ AWWU_RCA_Report_Statement_of_Income_requirements_meeting_.doc	***CO-SPE- NNN - FERC_Enhancement_WBS_Elements.DOCX**
CO-SBQ AWWU_Trial_Balance_Requirements_meeting_updates.doc	*FI-BOS-Chart of Accounts.doc
FI GL - GL Accounts master data1.DOC	GL-Month-end Closing with Matrix - B.DOC
FI-BOS-Business Area.doc	GL-OID-Change to Processing by Regulatory Accounts.doc

Document	Document
FI-BOS-Chart of Accounts.doc	GL-OID-Period Close.doc
FI-BOS-Chart of Depreciation.doc	GL-OID-Transactions Processing.doc
FI-BOS-Company Code.doc	GL-PDD-FI-CO Master Data Maintenance.doc
FI-BOS-Controlling Area.doc	GL-PDD-GL Transactions Processing.doc
FI-BOS-Functional Area.doc	GL-PDD-Year-end Closing with Matrix.DOC
FI-BOS-Funds Management Area.doc	***GL-PFD-AWWU Manual Journal.VSD**
FI-ERD-Master Data Maintainer.docx	***GL-PFD-AWWU to Mlp Manual Journal.VSD**
GL - DCD General Ledger Accounts balances.doc	***GL-PFD-AWWU to MOA Manual Journal.VSD**
GL - DCD General Ledger Accounts Master Data .doc	***GL-PFD-Controllers Manual Journal.VSD**
GL- ERD-Controllers Fund Accountant.doc	***GL-PFD-Create GL Account.VSD**
GL- ERD-Controllers Supervisor.doc	***GL-PFD-Field Manual Journal.VSD**
GL-IDD-001 - Auto Upload Journal IN.doc	***GL-PFD-MLP Manual Journal.VSD**
***GL-MDD- Cost Elements.doc**	***GL-PFD-MLP to Awwu Manual Journal.VSD**
***GL-SPW-Special Journal.doc**	***27060_ARITSChgCMRActngDocPyRvrFe.PDF**
***GL-WDD-AWWU Manual Journal.DOC**	***27070_AR_ITS_CnvrsnInvIncFrmAdjs.PDF**
***GL-WDD-AWWU to MOA Manual Journal.DOC**	***27080_AR_ITS_CpyInvIncStmntFrm.PDF**
***GL-WDD-Controllers Fund Accountant to AWWU MJ.DOC**	***27090_AR_ITS_CustmrMstrRcrdPortl.PDF**
***GL-WDD-Controllers Fund Accountant to MLP MJ.DOC**	***27100 AR_ITS-CustomerToInvoiceActivity.PDF**
***GL-WDD-Controller's Manual Journal.doc**	***27110 AR_ITS_InvoiceFeesPartialCrMemo.PDF**
***GL-WDD-Field Manual Journal to AWWU.DOC**	***27120_AR_ITS_InvWrkFlwPrtPymtCrd.PDF**
***GL-WDD-Field Manual Journal to MLP.DOC**	***27130_AR_ITS_PymntVaritnsIncRvrs.PDF**
***GL-WDD-Field Manual JournalI.DOC**	***27160_AR_ITSInvWrkflwWFullCrMemo.PDF**
***GL-WDD-MLP Manual Journal.DOC**	***27170 AR_ITS_CopyInvoiceWithReversal.PDF**

Document	Document
***GL-WDD-MLP to MOA Manual Journal.DOC**	***28010_SD_ITS_CntrctToCashAFD.PDF**
*Visio-SAP Interfaces.pdf	***28020_SD_ITS_ContractToCash_Port.PDF**
MOA - Project Issues Log.xlsx	***29010_CM_ITS_CashCkOverage.PDF**
***27020_AR_ITS_APD_InterfaceWPymnt.PDF**	***29020 CM_ITS_CheckTranVoid.PDF**
***27030_AR_ITS_BscInvWrkflMLPwAtch.PDF**	***29030_CM_ITS_MultiCashTrn2DepInc.PDF**
***29040_CM_ITS_MultiCkTrn2DepIncSm.PDF**	***27080-AR-ITS-Copy Inv Inc Statement Form.doc**
***29050_CM_ITS_MultiTrnsVoidRevers.PDF**	***27090-AR-ITS-Customer Master Record Portal.doc**
***29060_CM_ITS_BscWrkflwCshCkCCDep.PDF**	***27100-AR-ITS-Customer To Invoice Activity.doc**
***29070 CM_ITS_RevForecastTool_FundCenterGroup.PDF**	***27110-AR-ITS-Invoice Fees Partial Cr Memo.doc**
***29080 CM_ITS_RevForecastTool_FundsCenter.PDF**	***27120-AR-ITS-Invoice Workflow Part Pymt Cr Memo.doc**
***29090_CM_ITS_SplitTranShortage.PDF**	***27130-AR-ITS-Payment Variations Inc Reversal.doc**
***29100 CM_ITS_Multi-UtilityPymntSinglePoint_AWWU_MLP_SWS_CH.PDF**	***27150-AR-ITS-Reviewer Rejects Invoice Workflow Treasury.doc**
***29110_CM_ITS_CashTrnRefndIncForm.PDF**	***27160-AR-ITS-Invoice Workflow With Full Credit Memo.doc**
***29120_CM_ITS_MxdARPymntIncForm.PDF**	***27170-AR-ITS-Copy Invoice With Reversal.doc**
***21000-AP-ITS-Payment Processing.doc**	***27180-AR-ITS-Open Item Rpt Doubtful Rec Statements.doc**
***21037-AP-ITS-Non-PO Invoicing (split payment).doc**	***28010-SD-ITS-Contract To Cash AFD.doc**
***27020-AR-ITS-APD Interface With Payment.doc**	***28020-SD-ITS-Contract To Cash Port.doc**
***27030-AR-ITS-MLP Basic Inv Workflow Attach.doc**	***28030-SD-ITS-Contract To Cash RRB (APD).doc**
***27060-AR-ITS-Chg CMR Accounting Docs Full Pymt Rev Fee.doc**	***28040-SD-ITS-Contract To Bill Workflow RRB (APD).doc**
***27070-AR-ITS-Conversion Inv Inc Form Adjs.doc**	***29010-CM-ITS-Cash Ck Overage.doc**

Document	Document
*29020-CM-ITS-Check Tran Void.doc	* 20150-GL-ITS-AWWU IT and Finance Operating Activities.doc
*29030-CM-ITS-Multi Cash Tran To Dep Inc Form.doc	*20160-GL-ITS-AWWU CS and Engineering Operating Activities.doc
*29040-CM-ITS-Multi Ck Tran To Dep Inc Sum Rpt.doc	*20170-GL-ITS-MLP Cost Center Distributions.doc
*29050-CM-ITS-Multi Trans Void & Reverse.doc	*20020-GL-ITS-Banking EBS.doc
*29060-CM-ITS-Basic Workflow Cash Check CC To Deposit.doc	*20110-GL-ITS-Misc Operational Grants.doc
*29070-CM-ITS-Revenue Forecast Tool (Funds Center Group).doc	*20150-GL-ITS-AWWU IT and Finance Operating Activities.doc
*29080-CM-ITS-Revenue Forecast Tool (Funds Center).doc	*20160-GL-ITS-AWWU CS and Engineering Operating Activities.doc
*29090-CM-ITS-Split Tran Shortage.doc	*20170-GL-ITS-MLP Cost Center Distributions.doc
*29100-CM-ITS-Multi Utility Payments At Single Point.doc	*GL_COA_at 08_06_14.xls
*29110-CM-ITS-Cash Tran Refund Inc Form.doc	*3.2 Completed FILO Integration Testing.pdf
*29120-CM-ITS-Mixed AR Payments Inc Form.doc	*Directory Prior to Peloton - Supporting Documentation for Sign Offs
* 20180-CO-ITS-MLP Cost Center with Billing.doc	*Directory Prior to Peloton Sign Offs - PDFs
*20180-CO-ITS-MLP Cost Center with Billing.doc	*MOA Synergy Deliverables Review Process.doc
*20190-CO-ITS-MLP Internal Order With Billing.doc	*Directory Staffing Prior to Peloton
* 20110-GL-ITS-Misc Operational Grants.doc	*HCM and FILO Resources Identified in CM093.pdf
*Project Team.xlsx	* ZFI_XREF_GL_AWWU.xlsx
*Volume II ERP Central Component V1.0 -MoA.doc	* ZFI_XREF_GL_MLP.xlsx
*AP - Payment Information BW Specification.docx	*PFD-FIN-CO-01 Create or Maintain Cost Center.pdf
*AP - Payment Information BW Specification_SignedbyDaveH.pdf	*PFD-FIN-CO-03-01 Create Internal Order - AWWU Reg Type AO01.pdf

Document	Document
***Vendor Listing Report Issue Tracking.xlsx**	***PFD-FIN-CO-03-02-01 Create or Close Internal Order and Maximo Work Order.pdf**
***List of Reports.txt**	***PFD-FIN-CO-03-02-02 SAP-Maximo Materials-Goods Receipt-Goods Issue.pdf**
***Response-08-Attachment 1 Financial Requirements Questionaire Final 10-8-13.xlsx**	***PFD-FIN-CO-03-03 Create Internal Order - ML&P.pdf**
***Year to Date Variance Report.pdf**	***PFD-FIN-CO-03-04 Create or Maintain Internal Order - MOA.pdf**
*Risk Management Review.xlsm	***PFD-FIN-CO-04 Internal Order - Overhead Allocation.pdf**
***MoA Synergy - Integration Test FILO Kick-Off 12-30-13.pptx**	***PFD-FIN-CO-05-01 Maintain Allocation Cycles (Assessments or Distributions).pdf**
***Transport Process 2012-08-20.pdf**	***PFD-FIN-CO-05-02 Execute Month-End Cost Allocations (Assessments or Distributions).pdf**
***Bal Sheet Crosswalk MOA 12-17-14.xlsx**	***PFD-FIN-CO-06 Internal Order - Month-End Settlement.pdf**
*** PO Crosswalk MOA 11-25-14.xlsx**	***PFD-FIN-GL-02-02 Park and Post Journal Entry - AWWU Manual.pdf**
*** ZFI_XREF_FULL_AWWU.xlsx**	***PFD-FIN-GL-02-03 Park and Post Journal Entry - AWWU to MLP.pdf**
*** ZFI_XREF_FULL_MLP.xlsx**	***PFD-FIN-GL-02-04 Park and Post Journal Entry - Field to MOA.pdf**
***PFD-FIN-GL-02-05 Park and Post Journal Entry - Field to Utility.pdf**	*** PFD-FIN-SD-03 Bill Customer - Sales Order.pdf**
***PFD-FIN-GL-02-06 Park and Post Journal Entry - MLP Manual.pdf**	***AP - Payment Information-Vendor Listing-CME Version.pdf**
***PFD-FIN-GL-02-07 Park and Post Journal Entry - Utility to MOA.pdf**	AP - Payment Information-Vendor Listing-CME Version.pdf
***PFD-FIN-SD-01 Process Contract Contract Sales Order.pdf**	***MoA-WRICEF Inventory Master.xlsx**
***PFD-FIN-SD-02 Process Sales Order.pdf**	***GL_COA_at 08_06_14.xls**
Business Blueprint v3.0 Draft.pdf	PFD-FIN-SD-03 Bill Customer - Sales Order_20141222.pdf

Document	Document
SD-SPE-Resource Related Billing	28010_SD_ITS_CntrctToCashAFD.PDF
SD-SPF- Standard MOA Billing Document Form	28020_SD_ITS_ContractToCash_Port.PDF
SD-SPF-Contact Confirmation Form	28010-SD-ITS-Contract To Cash AFD.doc
SD-SPF-MOA Sales Order Confirmation Form	28020-SD-ITS-Contract To Cash Port.doc
SD-SPW-Sales Order Approval Workflow Standard	28030-SD-ITS-Contract To Cash RRB (APD).doc
SD-SPW-Sales Order Approval Workflow	28040-SD-ITS-Contract To Bill Workflow RRB (APD).doc
PFD-FIN-SD-01 Process Contract & Contract Sales Order_20141219.pdf	MoA Billing Resource Related billing in Grants Management
PFD-FIN-SD-02 Process Sales Order_20141222.pdf	ODP1 Dip Profile ZSDRRB01 Material Determination
Business Blueprint v3.0 Draft.pdf	AR-SPF-Standard FI Billing Document (invoice)
PFD-FIN-SD-03 Bill Customer - Sales Order_20141222.pdf	SD-SPW-Sales Order Approval Workflow
Business Blueprint v3.0 Draft.pdf	**SD-SPW-Sales Order Approval Workflow Standard**
SD-SPE-Resource Related Billing	**SD-SPW-Sales Order Approval Workflow**
28010_SD_ITS_CntrctToCashAFD.PDF	AM-DCD- Asset Master Data Conversion Definition Document
PFD-FIN-AA-04	Asset Classes Updated 01092015 MOA
PFD-FIN-AA-05	AM-PDD- Asset Capitalization - Adding value to an Existing Asset
PFD-FIN-AA-06	AM-PDD- Asset Capitalization - Capitalize Constructed Asset
PFD-FIN-AA-07	AM-PDD- Asset Capitalization - Direct Purchase Low Value Asset
PFD-FIN-AA-09	AM-PDD- Asset Capitalization - Direct Purchase
PFD-FIN-AA-11	AM-PDD- Asset Capitalization - Donated Assets
PFD-FIN-AA-13	AM-PDD-Asset Retirement - Sale at Auction Surplus

Document	Document
AM-PDD-Asset Retirement- Sales of Land and Real Propoerty	AM-PDD-Periol End Tasks - Depreciation
AM-PDD-Asset Retirement - Scrap	AM-PDD-Period Year End Tasks - Periodic Posting
AM-PDD-Asset Transfer - Across Fund - Business Area	AM-PDD-Year-end Tasks - Managing Asset Fiscal Years
AM-PDD-Asset Transfer - within Fund - Business Area	AM-PDD-Period End Tasks - Physical Inventory
Logistics and Inventory	
2010P033_ERP_&_Implementation_for_the_MOA.pdf	25030-MM-ITS-Shopping Cart For Direct Material.doc
Attachment_1_Financial_Requirements_Questionaire2.xls	25180-MM-ITS-PO_Svc_CC_NoGR_Inv_Retainage.doc
PFD-PUR-01-01 Create or Change Shopping Cart_20141230.pdf	25190-MM-ITS-Limit Cost Center No GR Inv.doc
PFD-PUR-01-02 Complete Shopping Cart - Workflow_20141230.pdf	25200-MM-ITS-AWWU OM and Treatment Operating Activities.doc
PFD-PUR-01-03 Approve Shopping Cart - Workflow_20141215.pdf	25270-MM-ITS-MM-SC to PO to GR to Invoice.doc
PFD-PUR-01-04 Shopping Cart Sourcing_20141215.pdf	MM-DCD-Contracts.doc
PFD-PUR-02-01 Create (Edit) Purchase Order_20141215.pdf	MM-DCD-Purchase Orders.doc
PFD-PUR-02-02 Change Purchase Order_20141218.pdf	MM-EDD-Like Items.doc
PFD-PUR-02-03 Approve Purchase Order - Workflow_20141218.pdf	MM-EDD-No Receipt for Service PO.doc
PFD-PUR-04 RFx Response_20141218.pdf	MM-EDD-Notification to Bidders.doc
Business Blueprint v3.0 Draft.pdf (SRM and MM related sections)	MM-EDD-Order Limit on Contract.doc
PFD-FIN-AP-01 Create Vendor Master Data_20150101.pdf	MM-EDD-PO Cancel Notification to Vendor.doc
PFD-FIN-AP-02 Maintain Vendor Master Data_20150101.pdf	MM-EDD-PO Notifications.doc
PFD-FIN-AP-04 Process Vendor Invoice_20141230.pdf	Publish Bid Invitation.doc

Document	Document
PFD-FIN-AP-06-Blocked Invoice Analysis_20141231.pdf	Publish Contract.doc
PFD-FIN-AP-07 Process Credit Memo_20150102.pdf	SoleSource.doc
PFD-FIN-AP-09 Vendor Invoice Corrections_20141231.pdf	Special Funding.doc
PFD-FIN-AP-10 Process Payments_20141218.pdf	
HCM	
Business Blueprint v3.0 Draft.pdf	OM-Org-Unit-SPC-IT1000-Object ID.xls
Consolidated QA Log to SAP_12_05_2014 jam-lk.xls	OM-Org-Unit-SPC-IT1001-Relationship.xlsx
Copy of Consolidated QA Log to SAP_12_15_2014.xlsx	OM-Org-Unit-SPC-IT1002-General Description.docx
PFD-FIN-CO-01 Create or Maintain Cost Center.pdf	OM-SPC-Org-Unit-IT1008-Account Assignment Features.xlsx
PFD-FIN-GM-03 Create and Maintain Grant Master Data Process.v2.pdf	OM-Org-Unit-SPC-IT1028-Address.xlsx
PFD-HCM-BN-01 Benefits Enrollment.pdf	OM-SPC-Org-Unit-IT1011-Work Schedule.xlsx
PFD-HCM-BN-02 Life Changes.pdf	OM-SPC-Jobs-IT1000-Object ID.xls
PFD-HCM-BN-03 Benefits Termination.pdf	OM-SPC-Jobs-IT1001-Relationship.xlsx
PFD-HCM-BN-05 Benefits Billing Reconciliaton & Remittance v2.pdf	OM-SPC-Jobs-IT1002-General Description.DOCX
PFD-HCM-OM-01 Create or Modify Org Unit.pdf	OM-SPC-Jobs-IT1005-Planned Compensation.xlsx
PFD-HCM-OM-01 Create or Modify Org Unit_20141229_SH.pdf	OM-SPC-Jobs-IT1610-US Job Attributes.doc
PFD-HCM-OM-02 Org Unit or Structure Re-organization.pdf	OM-SPC-Jobs-IT1641-WC code to Job.doc
PFD-HCM-OM-02 Org Unit or Structure Re-organization_20141229_SH.pdf	OM-SPC-Position-IT1000-Object Id.xls
PFD-HCM-OM-03 Create or Modify Job.pdf	OM-SPC-Position-IT1001-Relationship.xlsx
PFD-HCM-OM-03 Create or Modify Job_20141229_SH.pdf	OM-SPC-Position-IT1002-General Description.DOCX
PFD-HCM-OM-04 Create or Modify Position.pdf	OM-SPC-Position-IT1005-Planned Compensation.xlsx

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PFD-HCM-OM-04 Create or Modify Position_20141229_SH.pdf	OM-SPC-Position-IT1007-Vacancy.xlsx
PFD-HCM-OM-06 Delimit Job.pdf	OM-SPC-Position-IT1008-Account Assignment Features.xlsx
PFD-HCM-OM-06 Delimit Job_20141229_SH.pdf	OM-SPC-Position-IT1011-Work Schedule.docx
PFD-HCM-OM-07 Delimit Org Unit.pdf	OM-SPC-Position-IT1013-Employee GroupSubgroup.xlsx
PFD-HCM-OM-07 Delimit Org Unit_20141229_SH.pdf	OM-SPC-Position-IT1014-Obsolete Infotype.xlsx
PFD-HCM-OM-08 Delimit Position.pdf	OM-SPC-Position-IT1016-Create Std Authorization.xlsx
PFD-HCM-OM-08 Delimit Position_20141229_SH.pdf	OM-SPC-Position-IT1017-Structural Authorization.xlsx
PFD-HCM-PA-01-01 Hire Employee. v121614.pdf	OM-SPC-Position-IT1018-Create Cost Distributn.doc
PFD-HCM-PA-01-01 Hire Employee.pdf	OM-SPC-Position-IT1028-Address.docx
PFD-HCM-PA-01-02 Hire Un-Paid.pdf	OM-SPC-Position-IT1613-Workerâ_Ts Compensation.doc
PFD-HCM-PA-01-02 Non-Employee Tracking. V121614.pdf	
PFD-HCM-PA-02-01 Modify Employee Information. V121614.pdf	PA-EDD-New Hire User Exit.doc
PFD-HCM-PA-02-01 Modify Employee Information.pdf	PA-ERD-Compensation_Maintainer.doc
PFD-HCM-PA-02-02 Separate Employee. v121614.pdf	PA-ERD-Dept_ER_Maintainer.doc
PFD-HCM-PA-02-02 Separate Employee.pdf	PA-ERD-Display_Grievances.doc
PFD-HCM-PA-03 Changes due to CBAComp ChangesCPI v121614.pdf	PA-ERD-Display_PA_Master_Data.doc
PFD-HCM-PA-03 Changes due to CBAComp ChangesCPI.pdf	PA-ERD-Display_Salary_Pay_Grade.doc
PFD-HCM-PA-04 Manage Employee - No Show. v121614.pdf	PA-ERD-Employee_Records_Maintainer.doc
PFD-HCM-PA-04 Manage Employee - No Show.pdf	PA-ERD-Grievance_Status_Administration.doc
PA-IDD NEOGOV RehireDOC	PA-ERD-HR Master_Data_Maintainer.doc

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OM-SPC-Position-IT1014-Obsolete Infotype.xlsx	PA-IDD Honeywell EE Info IN.doc
PFD-HCM-OM-07 Delimit Org Unit_20141229_SH.pdf	PA-IDD Honeywell EE Info OUT.doc
PFD-HCM-OM-08 Delimit Position.pdf	OM-SPC-Position-IT1016-Create Std Authorization.xlsx
OM-Org-Unit-SPC-IT1000-Object ID.xls	PA-IDD NEOGOV New HireDOC
OM-Org-Unit-SPC-IT1001-Relationship.xlsx	PA-PDD-Conversion Active.DOC
OM-Org-Unit-SPC-IT1002-General Description.docx	PA-PDD-Conversion inactive.DOC
OM-SPC-Org-Unit-IT1008-Account Assignment Features.xlsx	PA-PDD-Conversion LOA w_o_pay.DOC
OM-Org-Unit-SPC-IT1028-Address.xlsx	PA-PDD-Conversion LOA w_pay.DOC
OM-SPC-Org-Unit-IT1011-Work Schedule.xlsx	PA-PDD-Conversion Separation.doc
OM-SPC-Jobs-IT1000-Object ID.xls	PA-SPC-IT0000-Actions.docx
OM-SPC-Jobs-IT1001-Relationship.xlsx	PA-SPC-IT0001-Org Assignment.docx
OM-SPC-Jobs-IT1002-General Description.DOCX	PA-SPC-IT0002-Personal Data.docx
OM-SPC-Jobs-IT1005-Planned Compensation.xlsx	PA-SPC-IT0006-Addresses.docx
OM-SPC-Jobs-IT1610-US Job Attributes.doc	PA-SPC-IT0007-Planned Working Time.docx
OM-SPC-Jobs-IT1641-WC code to Job.doc	PA-SPC-IT0008-Basic Pay.docx
OM-SPC-Position-IT1000-Object Id.xls	PA-SPC-IT0009-Bank Details.docx
OM-SPC-Position-IT1001-Relationship.xlsx	PA-EDD-New Hire User Exit.doc
OM-SPC-Position-IT1002-General Description.DOCX	PA-ERD-Compensation_Maintainer.doc
OM-SPC-Position-IT1005-Planned Compensation.xlsx	PA-ERD-Dept_ER_Maintainer.doc
OM-SPC-Position-IT1007-Vacancy.xlsx	PA-ERD-Display_Grievances.doc
OM-SPC-Position-IT1008-Account Assignment Features.xlsx	PA-ERD-Display_PA_Master_Data.doc
OM-SPC-Position-IT1011-Work Schedule.docx	PA-ERD-Display_Salary_Pay_Grade.doc
OM-SPC-Position-IT1013-Employee GroupSubgroup.xlsx	PA-ERD-Employee_Records_Maintainer.doc
OM-SPC-Position-IT1014-Obsolete Infotype.xlsx	PA-ERD-Grievance_Status_Administration.doc

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OM-SPC-Position-IT1016-Create Std Authorization.xlsx	PA-ERD-HR Master_Data_Maintainer.doc
OM-SPC-Position-IT1017-Structural Authorization.xlsx	PA-IDD Honeywell EE Info IN.doc
OM-SPC-Position-IT1018-Create Cost Distributn.doc	PA-IDD Honeywell EE Info OUT.doc
OM-SPC-Position-IT1028-Address.docx	PA-IDD NEOGOV RehireDOC
OM-SPC-Position-IT1613-Workerâ_Ts Compensation.doc	PA-IDD NEOGOV New HireDOC
PA-PDD-Conversion LOA w_o_pay.DOC	PA-SPC-IT0000-Actions.docx
PA-PDD-Conversion LOA w_pay.DOC	PA-SPC-IT0001-Org Assignment.docx
PA-PDD-Conversion Separation.doc	PA-SPC-IT0002-Personal Data.docx
PA-SPC-IT0006-Addresses.docx	PA-SPC-IT0008-Basic Pay.docx
PA-SPC-IT0007-Planned Working Time.docx	PA-SPC-IT0009-Bank Details.docx
AWWU Generel Ledger Spec.pdf	PFD-HCM-BN-03 Benefits Termination
3.2 Completed FILO Integration Testing	PFD-HCM-BN-05 Benefits Billing Reconciliation & Remittance v2
3.1 Completed HCM Mock Conversion	Business Blueprint v3.0 Draft
2014 11 19 Muni of Anchorage QA SOW-FINAL-FULLY Executed	MOA - Project Issues Log
MoA Design Review Final_20120922 r_1	MoA Synergy Split Project Plan - 9-19-14
Municipality of Anchorage Project Management Review FINAL	Risk Management Review
PFD-HCM-BN-01 Benefits Enrollment	AWWU Income Statement Spec.pdf
PFD-HCM-BN-02 Life Changes	Volume I - Introduction and Development Process v1.01-MoA
3.3.1 HCM Parallel Test Plan V2	AWWU-SAP-Systems-Diagram
MoA Deliverable 3.2.1 Integration Test Plan - V2.0	PY-SPE-002-Kelly Shift Technical Spec
MoA Synergy - HCM Integration Test Kick-Off 2-6-14	Kelly FLSA Unit Testing Scenarios for SAP Review Team
MoA-WRICEF Inventory Master	Client Landscape 2014-08-22
Kelly Shift Design	MoA - HCM Integration Test Error Tracking Log

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Kelly Shift Hours-Earnings Conversion	MoA HCM Integration Test - Status Tracking Log
Kelly Shift Overtime Periods	MoA Synergy - Script Preparation Guidance
MoA Configuration Naming Convention	MoA-Report Lists
Response-08-Attachment 2 HR-Payroll Requirements Questionnaire Final 9-18-12_v5	Response-08-Attachment 2 HR-Payroll Requirements Questionaire
Transport Approval Process 111314	Synergy Go Live Analysis 091214
Transport_Release Process v1.3	Systems Data Flow 2014-01-12
Volume II ERP Central Component V1.0 -MoA	Risk Management Review.xls
2010P033_ERP_&_Implementation_for_the MOA.pdf	Municipality of Anchorage - Project Organization, Staffing Final.doc
2010P033_SYNOPOSIS.pdf	HCM and FILO Resources Identified in CM093.pdf
Attachment_2_HR-Payroll_Requirements_Questionnaire3.xls	Project Team.xlsx
Attachment_3_MOA_Supported_Hardware_&_Software.doc	MoA Synergy - HCM Integration Test Kick-Off 2-6-14 amr.pps
Attachment_4_MOA_User_Count(s).xls	Client Landscape 2014-08-22.xlsx
Attachment_5_Interfaces_09132010.doc	MoA HCM Integration Test - Status Tracking Log.xlsx
Attachment_6_Pricing_Worksheet_.xls	Transport Process 2012-08-20.pdf
1.1.3.02 - Transport Strategy v1.4.docx	Visio-SAP Interfaces.pdf
1.1.02 - Implementation Strategy v1.2.docx	1.2.01 - Project Oversight Plan v1.5.docx
1.1.04 - Project Team Training Schedule v1.0.xlsx	1.2.02 - Issue Management Plan v1.3.docx
1.1.04 - Project Team Training Strategy v1.1.docx	1.2.03 - Project Scope Change Management Plan v1.3.docx
1.1.05 - End User Training Strategy v2.1.docx	1.2.03 - Project Scope Change Request Template v1.3.docx
1.1.06 - Comprehensive Testing Strategy v2.1.docx	1.2.04 - Risk Management Plan v1.3.docx
1.1.07 - Project Scope v1.2.docx	1.2.04 - Risk Management Tracking v1.1.xlsm
1.1.08 - Project Work Plan.docx	1.3.01 - Client, System Landscape Strategy v1.4.docx

Document	Document
2.1.01 - Training Documentation Standards v1.4.docx	1.3.03 & 1.3.04 Installed SAP SolMan and Sandbox.docx
2.1.02 - End User Training Strategy and Plan v1.4.docx	2.5.02 - Project Communications Plan v2.0.xlsx
2.2.01 - Initial set-up of system landscape completed.docx	3.1.02 - Updated Transport Strategy v1.2.docx
2.3.01 - Business Organizational Structure v1.3.docx	3.10.01.a - Integration Test Plan v2.0.docx
2.4.01 - List of Development Objects (RICEFS).docx	3.10.01.b - Defect Management Plan v2.2.doc
2.4.02 - Conversion Strategy v3.docx	Deliverable 1.1.01-07 & 1.2.01-04 & 1.3.01-04-Project Prep Documents.pdf
2.5.01 - Change Readiness Report & Plan v1.2.docx	Deliverable 2.1.01 & 2.1.02 & 2.2.01 Signoff Sheets.pdf
2.5.01 - Change Readiness Report Findings Baseline v1.0.pptx	Deliverable 2.1.01 Training - fully executed.pdf
Deliverable 2.3.01 - Organizational Structure Signoff Sheet.pdf	2.5.02 - Project Communications Plan v2.0.xlsx
Deliverable 2.4.02 executed sign-off sheet.pdf	3.1 Completed HCM Mock Conversion.pdf
Deliverable 2.5.01 executed sign-off sheet.pdf	PFD-HCM-PY-01 Process Payroll.pdf
Deliverable 2.5.02 executed sign-off sheet.pdf	PFD-HCM-PY-02 Process Offcycle Payroll v2.pdf
Deliverable 3.1.02 executed sign-off sheet.pdf	PFD-HCM-PY-03 Modify Employee Data.pdf
Deliverable 3.1.03 - Sign-Off Sheet Executed.pdf	PFD-HCM-PY-04 Manage Overpayments.pdf
Deliverable 3.10.01.a&b of Integr Test Plan Signoff.pdf	PFD-HCM-PY-05 Tax Processing.dpf
Deliverable 3.11.01 executed sign-off sheet.pdf	PFD-HCM-PY-06 Payroll Reconciliation and Reporting.pdf
Deliverable 3.11.02 executed sign-off sheet.pdf	MoA Design Review Final_20120922 r_1.pdf
MOA Synergy Deliverables Review Process.doc	Business Blueprint v3.0 Draft.pdf
Response-00-Table Of Contents.pdf	Response-10-SampleSAP_KPIs.pdf
Response-01-TransmittalletterSAP.pdf	Response-11-Appendix01 - SAP Sample of All Report Listing.pdf
Response-02-ExecutiveSummary.pdf	Response-11-Appendix02 - SAP Enterprise Support Overivew with Safeguarding.pdf

Document	Document
Response-03-VendorProfileHealthExperience.pdf	Response-11-Appendix03 - NEOGOV.pdf
Response-04-ProjectOrganizationStaffing.pdf	Response-11-Appendix04 - SAP Sample Agreement.pdf
Response-05-VendorTimeframeAvailability.pdf	Response-11-Appendix05 - BV_SAP Comments to MOA Agreement.pdf
Response-05-VendorTimeframeAvailabilityGanttChart.pdf	Response-11-Appendix07 - Project Staffing Plan for MOAs ERP Implementation.pdf
Response-06-ImplementationMethodologyApproach.pdf	Business Blueprint v3.0 Draft.pdf
Response-07-PricingSummary.pdf	Email Guidance on Business Process Flow Strategy.pdf
Response-08-Attachment2 HR-Payroll Requirements Questionnaire.pdf	MoA - Process Mapping Approach V1.pptx
Business Process Flows for SAP.xlsx	MoA Deliverable 3.2.1 Integration Test Plan - V2.0.docx
Email from Joann on Changes She Made After BPs Sent to SAP.pdf	MoA Synergy - Script Preparation Guidance.pptx
PFD-HCM-PA-01-01 Hire Employee .pdf	MoA Synergy - Integration Test Kick-Off 12-30-13.pptx
PFD-HCM-PA-01-02-01 Hire Un-Paid.pdf	3.3.1 HCM Parallel Test Plan V2.0.docx
PFD-HCM-PA-02-01 Modify Employee Information.pdf	MoA HCM Integration Test Kick-off 2-16-14.pptx
PFD-HCM-PA-02-02 Separate Employee.pdf	KellyFLSAUnitTestingScenariosforSAPReviewTeam.xlsx
PFD-HCM-PA-03 Changes due to CBAComp ChangesCPI.pdf	PY-SPE-002-Kelly Shift Technical Spec.DOCX
PFD-HCM-PA-04 Manage Employee - No Show.pdf	MOA - Project Issues Log.xlsx
PFD-HCM-PY-01 Process Payroll.pdf	PFD-HCM-PY-02 Process Offcycle Payroll v2.pdf
PFD-HCM-PY-03 Modify Employee Data.pdf	PFD-HCM-PY-04 Manage Overpayments.pdf
PFD-HCM-PY-05 Tax Processing.pdf	PFD-HCM-PY-06 Payroll Reconciliation and Reporting.pdf
Business Blueprint v3.0 Draft.pdf	OM-Org-Unit-SPC-IT1000-Object ID.xls
Consolidated QA Log to SAP_12_05_2014 jam-lk.xls	OM-Org-Unit-SPC-IT1001-Relationship.xlsx

Document	Document
Copy of Consolidated QA Log to SAP_12_15_2014.xlsx	OM-Org-Unit-SPC-IT1002-General Description.docx
PFD-FIN-CO-01 Create or Maintain Cost Center.pdf	OM-SPC-Org-Unit-IT1008-Account Assignment Features.xlsx
PFD-FIN-GM-03 Create and Maintain Grant Master Data Process.v2.pdf	OM-Org-Unit-SPC-IT1028-Address.xlsx
PFD-HCM-BN-01 Benefits Enrollment.pdf	OM-SPC-Org-Unit-IT1011-Work Schedule.xlsx
PFD-HCM-BN-02 Life Changes.pdf	OM-SPC-Jobs-IT1000-Object ID.xls
PFD-HCM-BN-03 Benefits Termination.pdf	OM-SPC-Jobs-IT1001-Relationship.xlsx
PFD-HCM-BN-05 Benefits Billing Reconciliaton & Remittance v2.pdf	OM-SPC-Jobs-IT1002-General Description.DOCX
PFD-HCM-OM-01 Create or Modify Org Unit.pdf	OM-SPC-Jobs-IT1005-Planned Compensation.xlsx
PFD-HCM-OM-01 Create or Modify Org Unit_20141229_SH.pdf	OM-SPC-Jobs-IT1610-US Job Attributes.doc
PFD-HCM-OM-02 Org Unit or Structure Re-organization.pdf	OM-SPC-Jobs-IT1641-WC code to Job.doc
PFD-HCM-OM-02 Org Unit or Structure Re-organization_20141229_SH.pdf	OM-SPC-Position-IT1000-Object Id.xls
PFD-HCM-OM-03 Create or Modify Job.pdf	OM-SPC-Position-IT1001-Relationship.xlsx
PFD-HCM-OM-03 Create or Modify Job_20141229_SH.pdf	OM-SPC-Position-IT1002-General Description.DOCX
PFD-HCM-OM-04 Create or Modify Position.pdf	OM-SPC-Position-IT1005-Planned Compensation.xlsx
PFD-HCM-OM-04 Create or Modify Position_20141229_SH.pdf	OM-SPC-Position-IT1007-Vacancy.xlsx
PFD-HCM-OM-06 Delimit Job.pdf	OM-SPC-Position-IT1008-Account Assignment Features.xlsx
PFD-HCM-OM-06 Delimit Job_20141229_SH.pdf	OM-SPC-Position-IT1011-Work Schedule.docx
PFD-HCM-OM-07 Delimit Org Unit.pdf	OM-SPC-Position-IT1013-Employee GroupSubgroup.xlsx
PFD-HCM-OM-07 Delimit Org Unit_20141229_SH.pdf	OM-SPC-Position-IT1014-Obsolete Infotype.xlsx
PFD-HCM-OM-08 Delimit Position.pdf	OM-SPC-Position-IT1016-Create Std Authorization.xlsx

Document	Document
PFD-HCM-OM-08 Delimit Position_20141229_SH.pdf	OM-SPC-Position-IT1017-Structural Authorization.xlsx
PFD-HCM-PA-01-01 Hire Employee. v121614.pdf	OM-SPC-Position-IT1018-Create Cost Distributn.doc
PFD-HCM-PA-01-01 Hire Employee.pdf	OM-SPC-Position-IT1028-Address.docx
PFD-HCM-PA-01-02 Hire Un-Paid.pdf	OM-SPC-Position-IT1613-Workerâ_Ts Compensation.doc
PFD-HCM-PA-01-02 Non-Employee Tracking. V121614.pdf	
PFD-HCM-PA-02-01 Modify Employee Information. V121614.pdf	PA-EDD-New Hire User Exit.doc
PFD-HCM-PA-02-01 Modify Employee Information.pdf	PA-ERD-Compensation_Maintainer.doc
PFD-HCM-PA-02-02 Separate Employee. v121614.pdf	PA-ERD-Dept_ER_Maintainer.doc
PFD-HCM-PA-02-02 Separate Employee.pdf	PA-ERD-Display_Grievances.doc
PFD-HCM-PA-03 Changes due to CBAComp ChangesCPI v121614.pdf	PA-ERD-Display_PA_Master_Data.doc
PFD-HCM-PA-03 Changes due to CBAComp ChangesCPI.pdf	PA-ERD-Display_Salary_Pay_Grade.doc
PFD-HCM-PA-04 Manage Employee - No Show. v121614.pdf	PA-ERD-Employee_Records_Maintainer.doc
PFD-HCM-PA-04 Manage Employee - No Show.pdf	PA-ERD-Grievance_Status_Administration.doc
PA-IDD Honeywell EE Info IN.doc	PA-ERD-HR Master_Data_Maintainer.doc
	PA-IDD Honeywell EE Info OUT.doc
OM-Org-Unit-SPC-IT1001-Relationship.xlsx	PA-IDD NEOGOV RehireDOC
OM-Org-Unit-SPC-IT1000-Object ID.xls	PA-IDD NEOGOV New HireDOC
OM-Org-Unit-SPC-IT1002-General Description.docx	PA-PDD-Conversion Active.DOC
OM-SPC-Org-Unit-IT1008-Account Assignment Features.xlsx	PA-PDD-Conversion inactive.DOC
OM-Org-Unit-SPC-IT1028-Address.xlsx	PA-PDD-Conversion LOA w_o_pay.DOC
OM-SPC-Org-Unit-IT1011-Work Schedule.xlsx	PA-PDD-Conversion LOA w_pay.DOC

Document	Document
OM-SPC-Jobs-IT1000-Object ID.xls	PA-PDD-Conversion Separation.doc
OM-SPC-Jobs-IT1001-Relationship.xlsx	
OM-SPC-Jobs-IT1002-General Description.DOCX	PA-SPC-IT0000-Actions.docx
OM-SPC-Jobs-IT1005-Planned Compensation.xlsx	PA-SPC-IT0001-Org Assignment.docx
OM-SPC-Jobs-IT1610-US Job Attributes.doc	PA-SPC-IT0002-Personal Data.docx
OM-SPC-Jobs-IT1641-WC code to Job.doc	PA-SPC-IT0006-Addresses.docx
OM-SPC-Position-IT1000-Object Id.xls	PA-SPC-IT0007-Planned Working Time.docx
OM-SPC-Position-IT1001-Relationship.xlsx	PA-SPC-IT0008-Basic Pay.docx
OM-SPC-Position-IT1002-General Description.DOCX	PA-SPC-IT0009-Bank Details.docx
OM-SPC-Position-IT1005-Planned Compensation.xlsx	105-30510485-Personnel Technician I.rtf
OM-SPC-Position-IT1007-Vacancy.xlsx	acting assignment.pdf
OM-SPC-Position-IT1008-Account Assignment Features.xlsx	Action Reason Codes SAP FINAL 07-01-13.xls
OM-SPC-Position-IT1011-Work Schedule.docx	C_Peoplesoft_and_SAP_Job_Master 05-05-13.xls
OM-SPC-Position-IT1013-Employee GroupSubgroup.xlsx	EmployeeTerminationCheckOffList42-053.pdf
OM-SPC-Position-IT1014-Obsolete Infotype.xlsx	Enterprise Structure FINAL as of December 17 2012.pdf
OM-SPC-Position-IT1016-Create Std Authorization.xlsx	Hirewaiver.pdf
OM-SPC-Position-IT1017-Structural Authorization.xlsx	PFD-HCM-BN-01 Benefits Enrollment_20141231_SH.pdf
OM-SPC-Position-IT1018-Create Cost Distributn.doc	PFD-HCM-BN-02 Life Changes_20141231_SH.pdf
OM-SPC-Position-IT1028-Address.docx	PFD-HCM-BN-03 Benefits Termination_20141231_SH.pdf
OM-SPC-Position-IT1613-Workerâ_Ts Compensation.doc	PFD-HCM-BN-05 Benefits Billing - Recon & Remittance_20141231_SH.pdf
	PFD-HCM-OM-01 Create or Modify Org Unit_20150105_SH.pdf
OM-SPC-Position-IT1008-Account Assignment Features.xlsx	Action Reason Codes SAP FINAL 07-01-13.xls

Document	Document
OM-SPC-Position-IT1011-Work Schedule.docx	C_Peoplesoft_and_SAP_Job_Master 05-05-13.xls
PA-EDD-New Hire User Exit.doc	PFD-HCM-OM-03 Create or Modify Job_20150105_SH.pdf
PA-ERD-Compensation_Maintainer.doc	PFD-HCM-OM-04 Create or Modify Position_20150105_SH.pdf
PA-ERD-Dept_ER_Maintainer.doc	PFD-HCM-OM-06 Delimit Job_20150105_SH.pdf
PA-ERD-Display_Grievances.doc	PFD-HCM-OM-07 Delimit Org Unit_20150105_SH.pdf
PA-ERD-Display_PA_Master_Data.doc	PFD-HCM-OM-08 Delimit Position_20150105_SH.pdf
PA-ERD-Display_Salary_Pay_Grade.doc	PFD-HCM-PA-01-01 Hire Employee_20150105.pdf
PA-ERD-Employee_Records_Maintainer.doc	PFD-HCM-PA-01-02 Non-Employee Tracking_20150105.pdf
PA-ERD-Grievance_Status_Administration.doc	PFD-HCM-PA-02-01 Modify Employee Information_20150105.pdf
PA-ERD-HR Master_Data_Maintainer.doc	PFD-HCM-PA-02-02 Separate Employee_20150105.pdf
PA-IDD Honeywell EE Info IN.doc	PFD-HCM-PA-03 Changes due to CBAComp ChangesCPI_20150105.pdf
PA-IDD Honeywell EE Info OUT.doc	PFD-HCM-PA-04 Manage Employee - No Show_20150105.pdf
PA-IDD NEOGOV RehireDOC	Separation form.pdf
PA-IDD NEOGOV New HireDOC	working out of class (2).pdf
PA-PDD-Conversion Active.DOC	PA-SPC-IT0000-Actions.docx
PA-PDD-Conversion inactive.DOC	PA-SPC-IT0001-Org Assignment.docx
PA-PDD-Conversion LOA w_o_pay.DOC	PA-SPC-IT0002-Personal Data.docx
PA-PDD-Conversion LOA w_pay.DOC	PA-SPC-IT0006-Addresses.docx
PA-PDD-Conversion Separation.doc	PA-SPC-IT0007-Planned Working Time.docx
PA-SPC-IT0009-Bank Details.docx	PA-SPC-IT0008-Basic Pay.docx
Data	

Document	Document
2.4.02 - Conversion Strategy v3.docx	FILO Mock 2 Conversion - Status Tracking Log.xlsx
FM-DCD-Fund.docx	FILO Mock 2 Issues Log.xlsx
GM-DCD-Grant.doc	HCM Mock 2 Catalog 12-16-13.xlsx
MM-DCD-Material Master.doc	HCM Mock Error Log 2-13-14.xlsx
DCD for Vendor Master Records.doc	MoA - FILO Integration Test Error Tracking Log.xlsx
PY-SPC-IT0194 - Garnishments Document.xlsx	MoA - HCM Integration Test Error Tracking Log.xlsx
PY-SPC-IT0195 - Garnishment Order.xls	MOA - Project Issues Log 011115.xlsx
OM-Org-Unit-SPC-IT1000-Object Id.xls	Risk Management Review.xlsm
OM-Org-Unit-SPC-IT1001-Relationship.xlsx	Copy of MoA-WRICEF Inventory Master.xlsx
OM-Org-Unit-SPC-IT1002-General Description.docx	Copy of RICEFW_Object_Estimates current master with priorities & go-live designation.xlsm
BN-SPC-IT0167-Health Plans.docx	DM-DVM GM Grant.docx
DM-DVM AR Customer Master Record (DEBI).docx	DM-DVM MM Material Master ZAMX.docx
DM-DVM AP Vendor Master Record.docx	DM-DVM OM Jobs IT1000 Object Id.docx
DM-DVM FM Fund.docx	DM-DVM PA IT0000 Actions IT0001 Org Assignment IT0002 Personal Data.docx

Testing	
General & Process Flows	**Issues Tracking**
Synergy Project Org Chart November 1.pdf	MoA - FILO Integration Test Error Tracking Log.xlsx
Risk Management Review.xlsm	MoA - HCM Integration Test Error Tracking Log.xlsx
1.1.06 - Comprehensive Testing Strategy v2.1.docx	MoA - ME-YE Close Test Error Tracking Log.xlsx
3.3.1 HCM Parallel Test Plan V2.docx	MOA - Project Issues Log.xlsx
MoA Deliverable 3.2.1 Integration Test Plan - V2.0.docx	MoA HCM Integration Test - Status Tracking Log.xlsx
3.1 Completed HCM Mock Conversion.pdf	PO Crosswalk MOA 11-25-14.xlsx

Document	Document
3.2 Completed FILO Integration Testing.pdf	**Test Scripts**
Business Process Flows for SAP.xlsx	MoA Synergy - Script Preparation Guidance.pptx
Business Blueprint v3.0 Draft.pdf	20150_AWWU_IT_FinanceOpActivites.PDF
25190 ShoppingCart_DirectMaterial_ZRAW.PDF	20160-GL-ITS-AWWU CS and Engineering Operating Activities.doc
MoA - Process Mapping Approach V1.pptx	21000-AP-ITS-Payment Processing.doc
PFD-FIN-AR-01 Create or Update Customer Master Data.pdf	23030-PS-ITS-2014 City Hall Capital Lease Improvement.doc
Response-08-Attachment 2 HR-Payroll Requirements Questionnaire Final 9-18-12_v5.xlsx	24080-GM-ITS-Forfeiture Funds.doc
PFD-HCM-BN-01 Benefits Enrollment_20141224_SH.pdf	24200_BdgtLdUseUpldTool_2014Appr.PDF
PFD-HCM-BN-02 Life Changes_20141224_SH.pdf	27120-AR-ITS-Invoice Workflow Part Pymt Cr Memo.doc
PFD-HCM-BN-03 Benefits Termination_20141224_SH.pdf	28040-SD-ITS-Contract To Bill Workflow RRB (APD).doc
PFD-HCM-OM-01 Create or Modify Org Unit_20141229_SH.pdf	29060-CM-ITS-Basic Workflow Cash Check CC To Deposit.doc
PFD-HCM-OM-02 Org Unit or Structure Re-organization_20141229_SH.pdf	30083-AM-ITS-Transfer Across Funds or BA ABAON Ent to Ent NBV with Cash.doc
PFD-HCM-OM-03 Create or Modify Job_20141229_SH.pdf	30084-AM-ITS-Transfer Across Funds or BA diff Fund type Govt to Ent.doc
PFD-HCM-OM-04 Create or Modify Position_20141229_SH.pdf	FI Billing Testing notes.docx
RICEFW_Object_Estimates current master with priorities & go-live designation.xlsm	20020-GL-ITS-Banking EBS.doc
MoA Design Review Final_20120922 r_1.pdf	20110-GL-ITS-Misc Operational Grants.doc
Municipality of Anchorage Project Management Review	20150-GL-ITS-AWWU IT and Finance Operating Activities.doc
FINAL.pdfclients on whiteboard.jpg	20160-GL-ITS-AWWU CS and Engineering Operating Activities.doc
General & Process Flows	24080-GM-ITS-Forfeiture Funds.doc

Document	Document
20170-GL-ITS-MLP Cost Center Distributions.doc	23070-PS-ITS-Create 2014 Fire Lake Dam Eklutna Bridge.doc
20180-CO-ITS-MLP Cost Center with Billing.doc	23080-PS-ITS-Create 2014 FTA Project to include Bus Purchase.doc
21000-AP-ITS-Payment Processing.doc	23130-PS-AWWU GP-WTR_Vehicle Capital.doc
21037-AP-ITS-Non-PO Invoicing (split payment).doc	23140-PS-ITS-AWWU TD Plant-WTR Capital.doc
23010-PS-ITS-CREATE MULTIPLE OPERATIVE PROJECTS.DOC	23150-PS-ITS-Park Script.doc
23050-PS-ITS-Create 2014 SWS Refuse Collection containers Prj.doc	23200-PS-ITS-License plate scanners_Revenue test.doc
23210-PS-AWWU-Water Treatment Plant.doc	24200-FM-ITS-Budget Loads Using Upload Tool.doc
23220-PS-ITS-MOA OEM.doc	25030-MM-ITS-Shopping Cart For Direct Material.doc
23221-PS-ITS-AWWU Reimbursable Project.doc	25180-MM-ITS-PO_Svc_CC_NoGR_Inv_Retainage.doc
23300-PS-ITS-MLP-Network Order.doc	25190-MM-ITS-Limit Cost Center No GR Inv.doc
23310-PS-ITS-MLP-Network_Order_with Billing_Credit Memo [stopped for issue 241].docx	25200-MM-ITS-AWWU OM and Treatment Operating Activities.doc
23320-PS-ITS-MLP-Network_Order_With Equal Deposit.doc	25270-MM-ITS-MM-SC to PO to GR to Invoice.doc
23330-PS-ITS-MLP-Network_Order_With Refund.doc	26000-IM-AWWU.doc
23340-PS-ITS-Community Development Reimbursable Project Template.doc	27020-AR-ITS-APD Interface With Payment.doc
23350-PS-ITS-AWWU Sewer Deferred Charges & Private Development.doc	27030-AR-ITS-MLP Basic Inv Workflow Attach.doc
23360-PS-ITS-MLP-Network Order Retirement.doc	27060-AR-ITS-Chg CMR Accounting Docs Full Pymt Rev Fee.doc
23370-PS-ITS-MLP-Deferred_Network Order.doc	27070-AR-ITS-Conversion Inv Inc Form Adjs.doc
24020-GM-ITS-Health low value asset purchase, type G4 grant, CHN grant.doc	24080-GM-ITS-Forfeiture Funds.doc
24070-GM-ITS-APD ARRA JAG.doc	24100-FM-ITS-Funds Reservation.doc
24080-GM-ITS-Forfeiture Funds.doc	24200-FM-ITS-Budget Loads Using Upload Tool.doc

Document	Document
24100-FM-ITS-Funds Reservation.doc	25030-MM-ITS-Shopping Cart For Direct Material.doc
25180-MM-ITS-PO_Svc_CC_NoGR_Inv_Retainage.doc	26000-IM-AWWU.doc
25190-MM-ITS-Limit Cost Center No GR Inv.doc	27020-AR-ITS-APD Interface With Payment.doc
25200-MM-ITS-AWWU OM and Treatment Operating Activities.doc	27030-AR-ITS-MLP Basic Inv Workflow Attach.doc
25270-MM-ITS-MM-SC to PO to GR to Invoice.doc	27060-AR-ITS-Chg CMR Accounting Docs Full Pymt Rev Fee.doc
27070-AR-ITS-Conversion Inv Inc Form Adjs.doc	29060-CM-ITS-Basic Workflow Cash Check CC To Deposit.doc
27080-AR-ITS-Copy Inv Inc Statement Form.doc	29070-CM-ITS-Revenue Forecast Tool (Funds Center Group).doc
27090-AR-ITS-Customer Master Record Portal.doc	30180-AM-ITS-Asset Master Multi-Invoice.doc
27100-AR-ITS-Customer To Invoice Activity.doc	30190-AM-ITS-Direct Purchase of multiple like assets.doc
27110-AR-ITS-Invoice Fees Partial Cr Memo.doc	30130-AM-ITS-AWWU Vehicle Retirement with auction proceeds.doc
27120-AR-ITS-Invoice Workflow Part Pymt Cr Memo.doc	30140-AM-ITS-AWWU Transfer Asset between Classes.doc
27130-AR-ITS-Payment Variations Inc Reversal.doc	28030-SD-ITS-Contract To Cash RRB (APD).doc
27150-AR-ITS-Reviewer Rejects Invoice Workflow Treasury.doc	29010-CM-ITS-Cash Ck Overage.doc
27170-AR-ITS-Copy Invoice With Reversal.doc	29020-CM-ITS-Check Tran Void.doc
27180-AR-ITS-Open Item Rpt Doubtful Rec Statements.doc	29030-CM-ITS-Multi Cash Tran To Dep Inc Form.doc
28010-SD-ITS-Contract To Cash AFD.doc	
SAP Business Warehouse (SAP BW) and SAP BusinessObjects Solutions	
CM-PDD-CFR Cash Flow Reporting.doc	AWWU Trial Balance Spec.pdf
BW Account Code Reports vs 2.DOCX	Contract Overview Signature Page.pdf
FM-ERD-FM Reporting.docx	Contract Overview vs 1.0 - Final.pdf
FM-PDD-Reporting.docx	Shopping Cart Overview Signature Page.pdf

Document	Document
Fund Management Budget vs Actual Report - Version 2.pdf	RFx Overview Signature Page.pdf
Funds Management BW Technical Design Document.docx	RCA Income Statement.pdf
GM-ERD-GM Reporting.docx	GM-SBQ-Actual Line Items.xlsx
GM-PDD-Reporting.doc	GM-SPE-GM Budget Validations.docx
GM-SBQ-Budget vs Actuals.xlsx	MM-SBQ-Vendor Listing Drill down.pdf
GM-SBQ-Budget Line Items.xlsx	SBQ BW Query Shopping Cart Overview.xlsx
Grand Management BW Technical Design Document.docx	MoA-Report Lists.xlsx
SBQ BW Query Shopping Cart Encumb.xlsx	RICEFW_Object_Estimates current master with priorities & go-live designation.xlsm
SBQ BW Query Shopping Carts Awaiting Approval.xlsx	AWWU Detailed Balance Sheet Spec.pdf
MoA-WRICEF Inventory Master.xlsx	AP - Payment Information-Vendor Listing-CME Version.pdf
Project System	
PFD-FIN-PS-01	PS-DCD-Project Master Data Conversion Definition Docment
PFD-FIN-PS-02	PS-DCD-WBS Master Data Conversion Definition Docment
PFD-FIN-PS-03	Change Identification Forms
PFD-FIN-PS-04	Synergy Project Org Chart November 1
PFD-FIN-PS-05	Consolidated QA Log to SAP_12_15_2014
MOA ERP Project - Business Blueprint Document v 3.0	Preliminary Reporting Gap List_01_06_2015
	BW Report List
SD-PDD-Resource Related Billing Processing	MOA-Inventory Master
FERC	
AWWU Detailed Balance Sheet Spec	MoA - Process Mapping Approach V1

Document	Document
AWWU Generel Ledger Spec	Business Process Flows for SAP
AWWU Income Statement Spec	2010P033_ERP_&_Implementation_for_the_MOA
AWWU Trial Balance Spec	2010P033_SYNOPSIS
ML&PBalanceSheetSigned	Attachment_1_Financial_Requirements_Questionaire2
ML&PStatementOfOperationsSigned	Copy of RICEFW_Object_Estimates Current master with priorities & go-live designation
ML&PTrialBalanceSigned	MoA Design Review Final_20120922 r_1
RCA Income Statement	Municipality of Anchorage Project Management Review FINAL
Bal Sheet Crosswalk MOA 12-17-14	SAP ECC PM Review Response Plan consol v2
20150_AWWU_IT_FinanceOpActivites	MOA - Project Issues Log
20160_AWWU_CS_EngOpAct	3.2 Completed FILO Integration Testing
20170_StUpDstrbnCclsAndExActlDtr	MOA Synergy Deliverables Review Process
Business Blueprint v3.0 Draft	MoA Synergy Split Project Plan - 9-19-14
MoA Synergy - Integration Test FILO Kick-Off 12-30-13	MLP - Trial Balance Report Requirements_meeting_updates.xlsx
MoA - ME Close Test Kick-Off 5-21-14	MLP - Statement of Operations Report Requirements_meeting_update.xlsx
Client Landscape 2014-08-22	MLP - Balance Sheet Report Requirements_meeting_updates.xlsx
MoA FILO Integration Test - Status Tracking Log	AWWU_Trial_Balance_Requirements FINAL.xlsx
Visio-SAP Interfaces	AWWU_RCA Report_Statement_of_Income_requirements.xlsx
PFD-FIN-FE-01 Maintain FERC Data	AWWU_Income_Statement_Requirements FINAL.xlsx
PFD-FIN-FE-02 FERC Month End	MoA - Process Mapping Approach V1
AWWU - General ledger by Naruc Requirements.xlsx	20170-GL-ITS-MLP Cost Center Distributions.doc
AWWU - Detailed balance Sheet Requirements.xlsx	doc00058620150113121004.pdf
MoA - FILO Integration Test Error Tracking Log.xlsx	Copy of Mock 2 Issues Log.xlsx
MoA Deliverable 3.2.1 Integration Test Plan -	Copy of Mock 2 Conversion - Status Tracking Log.xlsx

Document	Document
V2.0.docx	
Data migration related questions for MoA.docx	GL_COA_at 08_06_14.xls
	Mock Error Log 2-13-14.xlsx
Grants	
Blueprint	GM-EDD-change billing date for GM sales orders
Grant Application process flow	GM-EDD-Revenue GLA Determination
Create and Maintain Grant Master Data process flow	GM-EDD-Sales order release for grants
Develop or Change Grant Budget process flow	GM-EDD-Stat orders for GM Derive
Local Cash Match Posting - process flow	GM-ERD – grant Reporting
Post Indirect Cost - process flow	GM-ERD-Gant Budget Approval director
Reconcilliation and Reimbursement - process flow	GM-ERD-GRANT BUDGET APPROVER
Close Out Grants - process flow	GM-ERD-GRANT INDIRECT COORDINATOR
Collect Grant Receivable - process flow	GM-ERD-GRANT REPORT VIEWER
GM-DCD- Budget	GM-ERD-GRANT SUPERVISOR
GM-DCD-Grant	GM-LSD-FED FORM 425
GM-DCD-Sponsor	GM-LSD-LEG FORM
GM-DCD-Sponsor Class	GM-MDD Grant
GM-DCD-Sponsored Program	GM-OID Grant budgeting
GM-EDD- Ceiling Scenario for Cost Sharing	GM-MDD Sponsor
GM-MDD – Sponsored Class	GM-SBQ-Budget vs Actual
GM-MDD – Sponsored Progam	GM-SPE-GM Budget Validations
GM-OID-Grant Close Out	GM-SPW-Budget Transfers
GM-OID-Grant Master Data Set up	GM-WDD Budget revisions
GM-OID-Manual Grant Billing	Grants Management BW Technical Design Document
GM-OID-Reimbursable Grant billing	Copy of Financial Requirements - Summary

Document	Document
GM-PDD – availability control checks	Muni - Bank Electronic Banking Config
GM-PDD- Indirect cost postings	ODP1 Dip Profile ZSDRRB01 Material Determination
GM-PDD – Grant Budgeting	MoA Billing Resource Related billing in Grants Management
GM-PDD-grant master data set up	Response-08-Attachment 2 HR-Payroll Requirements Questionaire
GM-PDD – Manual Grant Billing	Response-08-Attachment 1 Financial Requirements Questionaire
GM-PDD – Reimbursable Grant Billing	Copy of Preliminary Reporting Gap List_01_06_2015_toSAP
GM-PDD – Reporting	Copy of MoA-Report Lists
GM-SBQ – Actual line items	Copy of MoA-WRICEF Inventory Master
GM-SBQ – Budget line items	Copy of MoA FILO Integration Test - Status Tracking Log
Copy of RICEFW_Object_Estimates current master with priorities & go-live designation	AWWU-SAP-Systems-Diagram (2).pdf
Risk Management Review.xlsm	Systems Data Flow 2014-01-12.jpg
Copy of Consolidated QA Log to SAP_12_15_2014 (5) (2).xlsx	Copy of MOA - Project Issues Log.xlsx
BW Report List	Copy of MoA FILO Integration Test - Status Tracking Log.xlsx
Synergy Go Live Analysis	Copy of MoA - ME-YE Closing Test Script - Master.xlsx
Copy of GL_COA_at 08_06_14.xls	MoA Synergy - Script Preparation Guidance.pptx
MOA SAP security Polcies Master Draft V8.docx	Copy of Client Landscape 2014-08-22.xlsx
MoA Deliverable 3 2 1 Integration Test Plan - V2 0 (2).docx	
Integration and Master Data	
TM-OID-Absence Quota.doc	Work Schedule - Dispatch.xls
TM-OID-TimeCollection-1.doc	Work Schedule - ML&P.xlsx
TM-OID-Workschedule.doc	Work Schedule.docx

Document	Document
TM-PDD-CATSDB Functionalty.doc	XX-PND-Process Name (Narrative Template).docx
TM-PDD-Collect Time Data and Hours Distribution.DOC	20020-GL-ITS-Banking EBS.doc
TM-PDD-Maintain Absence Quota.DOC	20110-GL-ITS-Misc Operational Grants.doc
TM-PDD-Maintain Work Schedule.doc	20150-GL-ITS-AWWU IT and Finance Operating Activities.doc
TM-SPC-IT2012 Leave Plan Balances.DOC	20160-GL-ITS-AWWU CS and Engineering Operating Activities.doc
TM-SPC-IT2013-Quota Corrections.docx	20170-GL-ITS-MLP Cost Center Distributions.doc
TM-SPE-Time Management Enhancements.DOC	20180-CO-ITS-MLP Cost Center with Billing.doc
TM-SPI-001 - Time Data - IN.DOC	20190-CO-ITS-MLP Internal Order With Billing.doc
TM-SPI-002 â€“ Labor Data â€“ Out .docx	21000-AP-ITS-Payment Processing.doc
TM-SPI-004_Personnel_Data_-_OUT_HR 20121017.docx	23010-PS-ITS-CREATE MULTIPLE OPERATIVE PROJECTS.DOC
TM-SPI-004A-KRONOS Personnel Data (MOA) - OUT.DOC	23030-PS-ITS-2014 City Hall Capital Lease Improvement.doc
TM-SPI-005 - Leave Data - OUT.DOC	23050-PS-ITS-Create 2014 SWS Refuse Collection containers Prj.doc
TM-SPI-005A-KRONOS Leave Data (MOA) - OUT.DOC	23070-PS-ITS-Create 2014 Fire Lake Dam Eklutna Bridge.doc
TM-SPI-005A-KRONOS Leave Data (MOA) - OUT.DOCX	23080-PS-ITS-Create 2014 FTA Project to include Bus Purchase.doc
TM-SPI-005B-KRONOS Leave Data (ML&P) - OUT.doc	23130-PS-AWWU GP-WTR_Vehicle Capital.doc
TM-SPI-005B-KRONOS Leave Data (MOA) - OUT.DOCX	23140-PS-ITS-AWWU TD Plant-WTR Capital.doc
TM-SPI-005B-KRONOS_Leave_Data_(ML&P)_-_OUT_vHR.docx	23150-PS-ITS-Park Script.doc
TRoweprice Demographic Interface Functional Spec.docx	23200-PS-ITS-License plate scanners_Revenue test.doc
WDD for PO Based Invoices for Services.docx	23210-PS-AWWU-Water Treatment Plant.doc
23300-PS-ITS-MLP-Network Order.doc	27030-AR-ITS-MLP Basic Inv Workflow Attach.doc
23310-PS-ITS-MLP-Network_Order_with Billing_Credit Memo.docx	27060-AR-ITS-Chg CMR Accounting Docs Full Pymt Rev Fee.doc

Document	Document
23320-PS-ITS-MLP-Network_Order_With Equal Deposit.doc	27070-AR-ITS-Conversion Inv Inc Form Adjs.doc
23330-PS-ITS-MLP-Network_Order_With Refund.doc	27080-AR-ITS-Copy Inv Inc Statement Form.doc
23340-PS-ITS-Community Development Reimbursable Project Template.doc	27090-AR-ITS-Customer Master Record Portal.doc
23350-PS-ITS-AWWU Sewer Deferred Charges & Private Development.doc	27100-AR-ITS-Customer To Invoice Activity.doc
23360-PS-ITS-MLP-Network Order Retirement.doc	27110-AR-ITS-Invoice Fees Partial Cr Memo.doc
23370-PS-ITS-MLP-Deferred_Network Order.doc	27120-AR-ITS-Invoice Workflow Part Pymt Cr Memo.doc
24020-GM-ITS-Health low value asset purchase, type G4 grant, CHN grant.doc	27130-AR-ITS-Payment Variations Inc Reversal.doc
24070-GM-ITS-APD ARRA JAG.doc	27150-AR-ITS-Reviewer Rejects Invoice Workflow Treasury.doc
24080-GM-ITS-Forfeiture Funds.doc	27160-AR-ITS-Invoice Workflow With Full Credit Memo.doc
24100-FM-ITS-Funds Reservation.doc	27170-AR-ITS-Copy Invoice With Reversal.doc
24200-FM-ITS-Budget Loads Using Upload Tool.doc	27180-AR-ITS-Open Item Rpt Doubtful Rec Statements.doc
25030-MM-ITS-Shopping Cart For Direct Material.doc	28010-SD-ITS-Contract To Cash AFD.doc
25180-MM-ITS-PO_Svc_CC_NoGR_Inv_Retainage.doc	28020-SD-ITS-Contract To Cash Port.doc
25190-MM-ITS-Limit Cost Center No GR Inv.doc	28030-SD-ITS-Contract To Cash RRB (APD).doc
25200-MM-ITS-AWWU OM and Treatment Operating Activities.doc	28040-SD-ITS-Contract To Bill Workflow RRB (APD).doc
25270-MM-ITS-MM-SC to PO to GR to Invoice.doc	29010-CM-ITS-Cash Ck Overage.doc
26000-IM-AWWU.doc	29020-CM-ITS-Check Tran Void.doc
27020-AR-ITS-APD Interface With Payment.doc	29030-CM-ITS-Multi Cash Tran To Dep Inc Form.doc
29040-CM-ITS-Multi Ck Tran To Dep Inc Sum Rpt.doc	30064-AM-ITS-Property Foreclosure Retire ABAVN.doc
29050-CM-ITS-Multi Trans Void & Reverse.doc	30070-AM-ITS-Transfer between Cost Centers.doc

Document	Document
29060-CM-ITS-Basic Workflow Cash Check CC To Deposit.doc	30080-AM-ITS-Transfer Across Funds or BA same Fund type.doc
29070-CM-ITS-Revenue Forecast Tool (Funds Center Group).doc	30082-AM-ITS-Transfer Same Fund type but diff BA and Fund Govt.doc
29080-CM-ITS-Revenue Forecast Tool (Funds Center).doc	30083-AM-ITS-Transfer Across Funds or BA ABAON Ent to Ent NBV with Cash.doc
29090-CM-ITS-Split Tran Shortage.doc	30084-AM-ITS-Transfer Across Funds or BA diff Fund type Govt to Ent.doc
29100-CM-ITS-Multi Utility Payments At Single Point.doc	30086-AM-ITS-Transfer Across Funds or BA ABAVN diff Fund type Ent to Govt.doc
29110-CM-ITS-Cash Tran Refund Inc Form.doc	30087-AM-ITS-Transfer BA ABAON diff type Gov to Ent w Cash.doc
29120-CM-ITS-Mixed AR Payments Inc Form.doc	30088-AM-ITS-Transfer Across Funds or BA ABAON diff Fund type Ent to Govt.doc
30020-AM-ITS-Asset Shell.doc	30100-AM-ITS-AWWU Asset Life Cycle.doc
30030-AM-ITS-Donated Asset.doc	30110-AM-ITS-AWWU Asset Retirement_no revenue.doc
30040-AM-ITS-Property Foreclosure Asset.doc	30120-AM-ITS-AWWU Land Sale with Revenue and Gain.doc
30042-AM-ITS-Property Foreclosure Asset Prior Year.doc	30130-AM-ITS-AWWU Vehicle Retirement with auction proceeds.doc
30045-AM-ITS-Post Cap Asset.doc	30140-AM-ITS-AWWU Transfer Asset between Classes.doc
30046-AM-ITS-Land with Bldg breakout.doc	30150-AM-ITS-Purchase of sub assets.doc
30050-AM-ITS-Single Asset Retirement with Rev.doc	30160-AM-ITS-Purchase of Group Capital Asset.doc
30060-AM-ITS-Single Asset Retirement without Rev.doc	30170-AM-ITS-Direct purchase-consolidate to single asset.doc
30062-AM-ITS-Property Foreclosure Retire ABAON.doc	30180-AM-ITS-Asset Master Multi-Invoice.doc
30190-AM-ITS-Direct Purchase of multiple like assets.doc	AM-PDD-Asset Capitalization Direct Purchase.doc
AM-DCD-AssetMaster Data Conversion Definition Document MoA.doc	AM-PDD-Asset Capitalization Donated Assets.doc

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AM-OID-Asset Capitalization - Adding Value to an existing asset.doc	AM-PDD-Asset Retirement - Sale at Auction-Surplus.doc
AM-OID-Asset Capitalization - Constructed Assets.doc	AM-PDD-Asset Retirement - Sale of Land and Real Property.doc
AM-OID-Asset Capitalization - Direct Purchase Low Value Assets.doc	AM-PDD-Asset Retirement - Scrap.doc
AM-OID-Asset Capitalization - Direct Purchase.doc	AM-PDD-Asset Transfer - Across Fund-Business Area.doc
AM-OID-Asset Capitalization - Donated Assets.doc	AM-PDD-Asset Transfer - within Fund-Business Area.doc
AM-OID-Asset Retirement - Land Sales (HLB).doc	AM-PDD-Period End Tasks - Physical Inventory.doc
AM-OID-Asset Retirement - Sale at Auction (Surplus).doc	AM-PDD-Period End Tasks -Depreciation.doc
AM-OID-Asset Retirement - Sales of Foreclosed Property.doc	AM-PDD-Period-Year End Tasks - Periodic Postings.doc
AM-OID-Asset Retirement - Scrap.doc	AM-PDD-Year End Tasks - Managing Asset Fiscal Years.doc
AM-OID-Asset Transfer - Within Fund-Business Area.doc	AP - Payment Information-Vendor Listing-CME Version.pdf
AM-OID-Period End Tasks - Depreciation.doc	AP LSD Layout Set Definition Document for Checks.docx
AM-OID-Period End Tasks -Managing Asset Fiscal Years.doc	AP PaymentNet Functional Technical Interface Spec.docx
AM-PDD-Asset Capitalization - Adding Value to an existing asset.doc	AP SPW NNN Vendor Invoice workflow diagram.doc
AM-PDD-Asset Capitalization -Capitalize Constructed Asset.doc	AP-LSD-Payment Advice Form.docx
AM-PDD-Asset Capitalization Direct Purchase Low Value Assets.doc	AP-PDD for Off Cycle Payment.docx
AP-SPE-ACH Payment Advice by Email.docx	AWWU Trial Balance Spec.pdf
AP-SPF-ACH Payment Advice Form.doc	AWWU WORK SCHEDULES.docx
AP-SPI-003-ACH Out.docx	BN-IDD-014-BHS Cobra - OUT.doc
AP-SPR-List of non-PO AP Parked Documents by Fund Center.docx	BN-PDD Annual Enrollment.docx

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AP-SPR-Payment History Report.docx	BN-PDD New Hire-Rehire Enrollment.docx
AR Billing - IDD - Aircraft Registration Tax 10-31-11.doc	BN-PDD-Status Change Event.DOCX
AR Billing - IDD - SEDC (MLP) 10-19-11.doc	BN-PDD-Vendor Enrollment and Updates.DOCX
AR Billing - IDD - Tax 10-28-11.doc	BN-SPC-IT0167-Health Plans.docx
AR - PDD - Late Fee Waivers 11-30-11.doc	BN-SPC-IT0168-Insurance Plans.DOC
AR - PDD - Customer Master Data 12-15-11.doc	BN-SPC-IT0169-Savings Plans.DOC
AR - PDD - Payment Application Decentralized 11-28-11.doc	BN-SPC-IT0170-Flexible Spending Accounts.DOC
AR & Billing - IDD - Special Assessments (AWWU) 11-09-11.doc	BN-SPC-IT0171-General Benefits Information.docx
AR-SPI-Standard Legacy Billing Inbound Feed â€“ IN.doc	BN-SPC-IT0236-Flex Credit Plans.docx
AWWU Detailed Balance Sheet Spec.pdf	BN-SPC-IT0377-Miscellaneous Plans.docx
AWWU Generel Ledger Spec.pdf	BN-SPI-006-GreatWest New Eligible File - OUT.DOCX
AWWU Income Statement Spec.pdf	BN-SPI-007-GreatWest Loan Feed File - IN.DOC
BN-SPI-008-GreatWest Deferral Feed File - IN.DOC	Contract Overview vs 1.0 - Final.pdf
BN-SPI-012-BHS FSA - OUT.DOC	CO-SPC- IGC Allocation Factors Upload.docx
BN-SPI-014-BHS Cobra - OUT.DOC	CO-SPE- NNN - FERC_Enhancement_Cost_Centers.DOC
BN-SPI-016-Unum - Beneficiary Out.doc	CO-SPE- NNN - FERC_Enhancement_Internal_Orders.DOC
BN-SPI-017-Unum - EOI Out.doc	CO-SPE- NNN - FERC_Enhancement_WBS_Elements.DOCX
BN-SPI-018-Unum - Portability Out.doc	Customer Listing - AR FUNCTIONAL SPEC-Signed.pdf
BW Account Code Reports vs 2.DOCX	DCD for Vendor Master Records.doc
Cash Management - PDD - Bank Corrections 11-28-11.doc	DCD for Vendor Open Items.doc
Cash Management - PDD - Bank Statement 11-29-11.doc	EDD - CO FERC Indicator on CO objects.doc

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Cash Management - PDD - Incoming Payments 11-29-11.doc	EDD - CO FERC Indicator on CO objects[1].doc
Cash Management - PDD - Interest Allocation 11-29-11.doc	EDD Enhancement Definition Document for Positive Pay.docx
CM-PDD-CFR Cash Flow Reporting.doc	ERD for Department AP Approver.docx
CM-SPE-001-Enhancements to Cash Journal.doc	ERD for Department AP Processor.docx
CO - DCD Cost Centers Load.doc	ERD for Finance AP Processor.docx
CO - DCD Cost Elements Master Data .doc	ES-LSD-Employee Separation.docx
CO-DCD-FERC Master Data Conversion.doc	ES-LSD-Leave Cash-In.docx
CO-IDD- IGC Allocation Factors Upload.DOC	ES-OID-Employee Self-Service.docx
CO-MDD-FERC Master Data.DOC	ES-PDD Employee Self Service.docx
Commodity Code Overview.xlsx	ES-SPE-Education and Training.doc
Competitive PO's 50-500K.xlsx	ES-SPE-Effective Date for W-4.doc
Competitive-Sole Overview.xlsx	ES-SPE-Effective Date IT0009.doc
Contract Overview Signature Page.pdf	ES-SPW-Change Working Schedule.doc
ES-SPW-Leave Cash-In.doc	FM-ERD-OMB Director.docx
ES-SPW-Marital Status Change.doc	FM-ERD-Revenue Forecaster.docx
ES-WDD-Employee Separation.docx	FM-ERD-Year End Coordinator.docx
ES-WDD-Leave Cash-In.docx	FM-IDD-003 Power Plant Budget IN.doc
ES-WDD-Marital Status Change.docx	FM-MDD-Budget Period.doc
ES-WDD-Update Nickname.docx	FM-MDD-Commitment Item.doc
FI GL - GL Accounts master data1.DOC	FM-MDD-Fund.doc
FI-ERD-Master Data Maintainer.docx	FM-MDD-Funded Program.doc
FM-DCD-Budget.doc	FM-MDD-Funds Center.doc
FM-DCD-Commitment Item.docx	FM-OID-Departmental Budget Revisions.DOC
FM-DCD-Fund.docx	FM-PDD-Availability Control Checking.docx
FM-DCD-Funded Program.docx	FM-PDD-Departmental Budget Revisions.docx

Document	Document
FM-DCD-Funds Center.docx	FM-PDD-FM Actual and Commitment Update.docx
FM-EDD-Build Funded Program.doc	FM-PDD-FM Month-End Close.docx
FM-ERD-Budget Fund Accountant.docx	FM-PDD-FM Year-End Close.docx
FM-ERD-Departmental Budget Coordinator.docx	FM-PDD-Maintain Budget Period.docx
FM-ERD-Departmental Budget Director.docx	FM-PDD-Maintain Commitment Item.docx
FM-ERD-FM Encumbrance Specialist.docx	FM-PDD-Maintain Fund.docx
FM-ERD-FM Reporting.docx	FM-PDD-Maintain Funded Program.docx
FM-ERD-OMB Analyst.docx	FM-PDD-Maintain Funds Center.docx
FM-PDD-OMB Budget Execution.DOCX	GL- ERD-Controllers Supervisor.doc
FM-PDD-OMB Supplements.docx	GL-IDD-001 - Auto Upload Journal IN.doc
FM-PDD-Project Budget Transfers.docx	GL-Month-end Closing with Matrix - B.DOC
FM-PDD-Reporting.docx	GL-OID-Change to Processing by Regulatory Accounts.doc
FM-SBQ-Actual Line Items.xlsx	GL-OID-Period Close.doc
FM-SBQ-Budget Line Items.xlsx	GL-OID-Transactions Processing.doc
FM-SBQ-Budget vs Actuals.xlsx	GL-PDD-Year-end Closing with Matrix.DOC
FM-SPC-Fund.docx	GL-SPI-001 Auto Journal.doc
FM-SPE-CO Cost Objects in FM Tables.docx	GL-SPW- AWWU to MOA Manual Journal.DOC
FM-SPE-FM Budget Validations.docx	GL-SPW- AWWU Manual Journal.DOC
FM-SPI-XXX-Budget Data IN.docx	GL-SPW- MLP to MOA Manual Journal.DOC
FM-SPI-XXX-FI Master Data Out.docx	GL-SPW- MLP Manual Journal.DOC
FM-SPI-XXX-HR Master Data Out.docx	GL-SPW-Controller to AWWU Manual Journal.DOC
FM-SPI-XXX-IGC Data IN.DOCX	GL-SPW-Controller to MLP Manual Journal.DOC
FM-SPI-XXX-IGC Data OUT.docx	GL-SPW-Controller's Manual Journal.DOC
FM-SPI-XXX-Transactional Data Out.docx	GL-SPW-Field Manual Journal.DOC
FM-SPR Revenue Forecast Tool.docx	GL-SPW-Field to AWWU Manual Journal.DOC

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FM-WDD-Departmental Budget Revisions.docx	GL-SPW-Field to MLP Manual Journal.DOC
Fund Management Budget vs Actual Report - Version 2.pdf	GL-WDD-AWWU Manual Journal.DOC
Funds Management BW Technical Design Document.docx	GL-WDD-AWWU to MOA Manual Journal.DOC
GL - DCD General Ledger Accounts balances.doc	GL-WDD-Controllers Fund Accountant to AWWU MJ.DOC
GL - DCD General Ledger Accounts Master Data .doc	GL-WDD-Controllers Fund Accountant to MLP MJ.DOC
GL- ERD-Controllers Fund Accountant.doc	GL-WDD-Field Manual Journal to AWWU.DOC
GL-WDD-Field Manual Journal to MLP.DOC	GM-LSD-Leg Form.doc
GL-WDD-Field Manual Journall.DOC	GM-MDD-Grant.doc
GL-WDD-MLP Manual Journal.DOC	GM-MDD-Sponsor.doc
GL-WDD-MLP to MOA Manual Journal.DOC	GM-MDD-Sponsored Class.doc
GM-DCD-Budget.doc	GM-MDD-Sponsored Program.doc
GM-DCD-Grant.doc	GM-OID-Grant Budgeting.docx
GM-DCD-Sponsor.docx	GM-OID-Grant Close-Out Process.docx
GM-DCD-Sponsored Class.docx	GM-OID-Grant Master Data Setup.docx
GM-DCD-Sponsored Program.docx	GM-OID-Manual Grant Billing.docx
GM-EDD-Ceiling Scenario for Cost-Sharing budgets.doc	GM-OID-Reimbursable Grant Billing.docx
GM-EDD-Change Billing Date for GM Sales Orders.docx	GM-PDD-Availability Control Checks.docx
GM-EDD-Revenue GLA Determination.docx	GM-PDD-GM Indirect Costing.docx
GM-EDD-Sales Order Release for Grants.docx	GM-PDD-Grant Budgeting.DOCX
GM-EDD-Stat Orders for GMDerive.doc	GM-PDD-Grant Master Data Setup.docx
GM-ERD-GM Reporting.docx	GM-PDD-Manual Grant Billing.docx
GM-ERD-Grant Budget Approval Director.docx	GM-PDD-Reimbursable Grant Billing.docx
GM-ERD-Grant Budget Approver.docx	GM-PDD-Reporting.doc
GM-ERD-Grant Indirect Coordinator.docx	GM-SBQ-Actual Line Items.xlsx

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GM-ERD-Grant Report Viewer.docx	GM-SBQ-Budget Line Items.xlsx
GM-ERD-Grant Supervisor.DOC	GM-LSD-Fed Form 425.doc
GM-SPW-Project Budget Transfers.docx	MM-EDD-Order Limit on Contract.doc
GM-WDD-Departmental Budget Revisions.docx	MM-EDD-PO Cancel Notification to Vendor.doc
Grand Management BW Technical Design Document.docx	MM-EDD-PO Notifications.doc
Holidays 2012 with updated 9.80s.xls	MM-EDD-Publish Bid Invitation.doc
IDD Interface Definition Document for PPay Directory Location.docx	MM-EDD-Publish Contract.doc
Infotype - MDD Master Data Definition Document.docx	MM-EDD-SoleSource.doc
LO-IDD-001 ProcardBank Trns - IN.doc	MM-EDD-Special Funding.doc
LO-IDD-001 ProcardBank Trns - IN-Interface Decision Document.doc	MM-ERD-Administrator.docx
LO-IDD-002A Procard Accting Recon (MOA) - OUT.doc	MM-ERD-Approver.docx
LO-IDD-002A Procard Acctng Recon (AWWU) - OUTT.doc	MM-ERD-Buyer.docx
LO-IDD-002A Procard Acctng Recon (ML&P) - OUTT.doc	MM-ERD-Contract Administrator.docx
MasterLeaveHolidayTable - September 2011.pdf	MM-ERD-Requisioner.docx
MDD Create Vendor Master Record.docx.DOCX.DOCX	MM-IDD-001-SAP to Maximo PO for ML&P-OUT.doc
ML&PBalanceSheetSigned.pdf	MM-IDD-002-SAP to Maximo PO for AWWU-OUT.doc
ML&PStatementOfOperationsSigned.pdf	MM-IDD-003-SAP to Maximo GR for ML&P-OUT.doc
ML&PTrialBalanceSigned.pdf	MM-IDD-004-SAP to Maximo GR for AWWU-OUT.doc
MLPKronosPersonnel.doc	MM-IDD-005-Maximo to SAP GI for ML&P-IN.doc
MM-DCD-Contracts.doc	MM-IDD-006-Maximo to SAP GI for AWWU-IN.doc
MM-DCD-Material Master.doc	MM-IDD-007-Maximo to SAP Material Master ML&P-SYNC.doc

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MM-DCD-Material Quantities.doc	MM-IDD-008-Maximo to SAP Material Master for AWWU-SYNC.doc
MM-DCD-Purchase Orders.doc	MM-IDD-009-AUD to SAP Reservation-IN.doc
MM-EDD-Like Items.doc	MM-IDD-010-AUD to SAP Material Master-SYNC.doc
MM-EDD-No Receipt for Service PO.doc	MM-LSD-Contract Output.doc
MM-EDD-Notification to Bidders.doc	MM-LSD-PO Output.doc
MM-OID-Confirmation Process.docx	MM-SPE-Order Limit on Contract Items.docx
MM-OID-Contract Management Process.docx	MM-SPE-PO Notifications.docx
MM-OID-Inventory Management Process.docx	MM-SPE-Product Category in Bidder Search.docx
MM-OID-Purchase Order Process.docx	MM-SPE-Proxy Bid After Submission Date.docx
MM-OID-Shopping Cart Process.docx	MM-SPE-Publish Bid Invitation.docx
MM-OID-Sourcing Process.docx	MM-SPE-Publish Contract.docx
MM-PDD-Confirmations Process.doc	MM-SPE-RFx Custom Fields.docx
MM-PDD-Contract Approval Process.doc	MM-SPE-Service Item Date Validation with Contract Expire Date.DOC
MM-PDD-Contract Management Process.doc	MM-SPE-SoleSource.docx
MM-PDD-Inventory Management.doc	MM-SPE-Special Funding.docx
MM-PDD-RFx Approval Process.doc	MM-SPE-Staples Catalog Transfer.docx
MM-PDD-Shopping Cart Approval Process.doc	MM-SPE-Zero Dollar Item.docx
MM-PDD-Shopping Cart Process.doc	MM-SPI-011-Staples Outbound PO.doc
MM-PDD-Sourcing (RFx) Process.doc	MM-SPW-Contract Approval.doc
MM-SBQ-Vendor Listing Drill down.pdf	MM-SPW-PO Approval.doc
MM-SPE-Align PO Header Fields.docx	MM-SPW-Shopping Cart Completion Workflow.doc
MM-SPE-Like Items.DOCX	MM-SPW-Workflow for Asset Purchase.docx
MM-SPE-No Receipt for Service PO.docx	MM-WDD-Completion Workflow.doc
MM-SPE-Notification to Bidders.docx	MM-WDD-Contract Approval.doc

Document	Document
MM-WDD-PO Approval.doc	MS-WDD-Maintain Org Unit.docx
MM-WDD-RFx Approval.doc	MS-WDD-Maintain Position.docx
MM-WDD-Shopping Cart Approval Process.doc	MS-WDD-Position Reclassification.docx
MoA - BOS Enterprise Structure Definition.doc	MS-WDD-Salary Adjustment.docx
MoA - ME Close Test Kick-Off 5-21-14.pptx	MS-WDD-Suspension.docx
MOA - Project Issues Log.xlsx	MS-WDD-Termination.docx
MOA Contract Conversion Detailed Mapping Table.xlsx	OID for check management.doc
MoA Synergy - HCM Integration Test Kick-Off 2-6-14 amr.pps	OID for GR-IR clearing account maintenance and reconciliation.do.DOC
MS-LSD-Create Org Unit.docx	OID for Non-PO Invoicing.doc
MS-LSD-Create Position.docx	OID for PO INVOICING FOR MATERIALS.doc
MS-LSD-Maintain Org Unit.docx	OM-Org-Unit-SPC-IT1000-Object Id.xls
MS-LSD-Maintain Position.docx	OM-Org-Unit-SPC-IT1001-Relationship.xlsx
MS-LSD-Position Reclassification.docx	OM-Org-Unit-SPC-IT1002-General Description.docx
MS-LSD-Salary Adjustment.docx	OM-Org-Unit-SPC-IT1028-Address.xlsx
MS-LSD-Suspension.docx	OM-SPC-Jobs-IT1000-Object Id.xls
MS-LSD-Termination.docx	OM-SPC-Jobs-IT1001-Relationship.xlsx
MS-OID-Manager Self-Service.docx	OM-SPC-Jobs-IT1002-General Description.DOCX
MS-PDD Manager Self Service.docx	OM-SPC-Jobs-IT1005-Planned Compensation.xlsx
MS-SPE-IT0554 User Exit.DOC	OM-SPC-Jobs-IT1610-US Job Attributes.doc
MS-SPW-Create Org Unit.doc	OM-SPC-Jobs-IT1641-WC code to Job.doc
MS-SPW-Maintain Position.DOC	OM-SPC-Org-Unit-IT1008-Account Assignment Features.xlsx
MS-WDD-Create Org Unit.docx	OM-SPC-Org-Unit-IT1011-Work Schedule.xlsx
MS-WDD-Create Position.docx	OM-SPC-Position-IT1000-Object Id.xls
PA-IDD Honeywell EE Info IN.doc	PA-PDD-Performance Action.doc
PA-IDD Honeywell EE Info OUT.doc	PA-PDD-Promotion Action.doc

Document	Document
PA-IDD NEOGOV New Hire.doc	PA-PDD-Quick Hire Action.doc
PA-IDD NEOGOV Rehire.doc	PA-PDD-Reclassification_Reallocation Action.doc
PA-OID-Demotion.DOC	PA-PDD-Rehire Action_v2.doc
PA-OID-New Hire.doc	PA-PDD-Return from LOA Action.doc
PA-OID-Promotion.DOC	PA-PDD-Salary Adjustment Action.doc
PA-OID-Quick Hire.DOC	PA-PDD-Separation Action.doc
PA-OID-Rehire.DOC	PA-PDD-Suspension Action.doc
PA-OID-Transfer.DOC	PA-PDD-Transfer Action.doc
PA-PDD-Appointment Change Action.doc	PA-SPC-IT0000-Actions.docx
PA-PDD-Cancel Salary Adjustment Action.doc	PA-SPC-IT0001-Org Assignment.docx
PA-PDD-Conversion Active.DOC	PA-SPC-IT0002-Personal Data.docx
PA-PDD-Conversion Inactive.DOC	PA-SPC-IT0006-Addresses.docx
PA-PDD-Conversion LOA w_o_pay.DOC	PA-SPC-IT0007-Planned Working Time.docx
PA-PDD-Conversion LOA w_pay.DOC	PA-SPC-IT0008-Basic Pay.docx
PA-PDD-Conversion Separation.DOC	PA-SPC-IT0009-Bank Details.docx
PA-PDD-Demotion Action.doc	PA-SPC-IT0014-Recurring PaymentsDeductions.docx
PA-PDD-LOA with Pay Action.doc	PA-SPC-IT0015-Additional Payments.docx
PA-PDD-LOA without Pay Action.doc	PA-SPC-IT0016-Contract Elements.xlsx
PA-PDD-New Hire Action_v2.doc	PA-SPC-IT0017-Travel Privileges.xlsx
PA-IDD Honeywell EE Info IN.doc	PA-PDD-Performance Action.doc
PA-SPC-IT0019-Monitoring of Tasks.xlsx	PA-WDD-Probation Notification.DOC
PA-SPC-IT0021-Family MembersDependents.DOC	PDD - Purchase Order Approval Process.doc
PA-SPC-IT0022-Education.docx	PDD - Purchase Order Process.doc
PA-SPC-IT0023-OtherPrevious Employers.xlsx	PDD for Check Management.docx
PA-SPC-IT0030-Powers of Attorney.xlsx	PDD for Material Returns and Credit Memos.docx

Document	Document
PA-SPC-IT0032-Internal Data.xlsx	PDD for Month end Process.docx.DOCX.DOCX
PA-SPC-IT0040-Objects on Loan.xlsx	PDD for Non-PO Based Invoicing.docx.DOCX
PA-SPC-IT0041-Date Specifications.DOC	PDD for Payments.docx
PA-SPC-IT0048-Residence Status.xlsx	PDD for PO Based Invoices for Materials.docx
PA-SPC-IT0077-Additional Personal Data.DOC	PDD for PO Based Invoices for Services.docx
PA-SPC-IT0094-I9 Residence Status.docx	PDD for Subsequent Debit and Credits.docx
PA-SPC-IT0102-Grievances NA.DOC	PDD for Vendor Account Management.DOCX
PA-SPC-IT0105-Communication.DOC	PDD for Year end Procedure.docx
PA-SPC-IT0128-Notifications.DOCX	PDD to Create FI Vendor Department Request.DOCX
PA-SPC-IT0185-Personal ID's.DOC	PDD to Create FI Vendor Purchasing Request.DOCX
PA-SPC-IT0416-Time Quota Compensation.XLSX	PFD-FIN-AA-04 Transfer Asset With Same Fund & Business Area REV.08.11.14.pdf
PA-SPC-IT0696-Absence Pools.xlsx	PFD-FIN-AA-05 Transfer Asset Across Funds or Business Area REV.pdf
PA-SPE-IT0021 Family Member_Dependents.DOC	PFD-FIN-AA-07 Retire Single Asset REV.pdf
PA-SPE-Promotion-Demotion-Transfer User Exit.DOC	PFD-FIN-AA-09 Assets Month End.pdf
PA-SPI-008-NEOGOV Promotion_On-Boarding - IN.DOC	PFD-FIN-AA-11 Create or Maintain Asset REV2 08.05.14.pdf
PA-SPI-009-NEOGOV Demotion_On-Boarding - IN.DOC	PFD-FIN-AP-01 Create Vendor Master Data.pdf
PA-SPI-010-NEOGOV Transfer_On-Boarding - IN.DOC	PFD-FIN-AP-02 Maintain Vendor Master Data.pdf
PA-SPW-Probation Notification.doc	PFD-FIN-AP-04 Process Vendor Invoice.pdf
PFD-FIN-AP-06-Blocked Invoice Analysis (updated by Dave on 10-07-14).pdf	PFD-FIN-FE-02 FERC Month End.pdf
PFD-FIN-AP-07 Process Credit Memo.pdf	PFD-FIN-FM-01 Create or Maintain FM Master Data.REV.pdf
PFD-FIN-AP-09 Vendor Invoice Corrections (updated by Dave on 10-07-14).pdf	PFD-FIN-FM-02 Annual Approved Budget.pdf
PFD-FIN-AP-10 Process Payments.pdf	PFD-HCM-BN-01 Benefits Enrollment.pdf

Document	Document
PFD-FIN-AR-01 Create or Update Customer Master Data.pdf	PFD-HCM-BN-02 Life Changes.pdf
PFD-FIN-AR-03 Process FI Invoice or Credit Memo.pdf	PFD-HCM-BN-03 Benefits Termination.pdf
PFD-FIN-AR-07 AR Interfaces.pdf	PFD-HCM-BN-05 Benefits Billing Reconciliaton & Remittance v2.pdf
PFD-FIN-CM-01-01 Process Electronic Bank Statement and Handle Errors.pdf	PFD-HCM-OM-01 Create or Modify Org Unit.pdf
PFD-FIN-CM-01-03 Maintain Bank Master Data.pdf	PFD-HCM-OM-02 Org Unit or Structure Re-organization.pdf
PFD-FIN-CM-02 Cash Journal - Incoming Payments Deposits.pdf	PFD-HCM-OM-03 Create or Modify Job.pdf
PFD-FIN-CM-04 Allocate Pooled Cash Monthly Interest.pdf	PFD-HCM-OM-04 Create or Modify Position.pdf
PFD-FIN-CO-01 Create or Maintain Cost Center.pdf	PFD-HCM-OM-06 Delimit Job.pdf
PFD-FIN-CO-03-01 Create Internal Order - AWWU Reg Type AO01.pdf	PFD-HCM-OM-07 Delimit Org Unit.pdf
PFD-FIN-CO-03-02-01 Create or Close Internal Order and Maximo Work Order.pdf	PFD-HCM-OM-08 Delimit Position.pdf
PFD-FIN-CO-03-02-02 SAP-Maximo Materials-Goods Receipt-Goods Issue.pdf	PFD-HCM-PA-01-01 Hire Employee.pdf
PFD-FIN-CO-03-03 Create Internal Order - ML&P.pdf	PFD-HCM-PA-01-02 Hire Un-Paid.pdf
PFD-FIN-CO-03-04 Create or Maintain Internal Order - MOA.pdf	PFD-HCM-PA-02-01 Modify Employee Information.pdf
PFD-FIN-CO-04 Internal Order - Overhead Allocation.pdf	PFD-HCM-PA-02-02 Separate Employee.pdf
PFD-FIN-CO-05-01 Maintain Allocation Cycles (Assessments or Distributions).pdf	PFD-HCM-PA-03 Changes due to CBAComp ChangesCPI.pdf
PFD-FIN-CO-05-02 Execute Month-End Cost Allocations (Assessments or Distributions).pdf	PFD-HCM-PA-04 Manage Employee - No Show.pdf
PFD-FIN-CO-06 Internal Order - Month-End Settlement.pdf	PFD-HCM-PY-01 Process Payroll.pdf
PFD-FIN-FE-01 Maintain FERC Data.pdf	PFD-HCM-PY-02 Process Offcycle Payroll v2.pdf
PFD-HCM-PY-03 Modify Employee Data.pdf	PS-DCD- Project Master Data Conversion Definition Document MoA.doc

Document	Document
PFD-HCM-PY-04 Manage Overpayments.pdf	PS-DCD- WBS Master Data Conversion Definition Document MoA.doc
PFD-HCM-PY-05 Tax Processing.pdf	PS-DCD-Internal Order.docx
PFD-HCM-PY-06 Payroll Reconciliation and Reporting.pdf	PS-OID- Project-Construction Projects - Capitalized.doc
PFD-HCM-TM-01-01 Enter and Correct Time v2.pdf	PS-OID-Project Value Added Asset Capitalization-Through Project.doc
PFD-HCM-TM-01-01 Enter and Correct Time.pdf	PS-PDD-Moa Maintenance.doc
PFD-HCM-TM-01-02 Evaluate Time.pdf	PS-PDD-Project Value Added Asset Capitalization-Through Projects with labor & Components.doc
PFD-HCM-TM-02-01 Manage Quota.pdf	PS-PDD-Project-Considered Project and Expensed & Operation and Maintenance Tasks.doc
PFD-HCM-TM-03 Create or Change Work Schedules.pdf	PS-PDD-Project-Construction and non-construction Projects-Capitalized.doc
Project Overview and Project Financial Details.pdf	PS-PDD-Projects-Period-end Tasks-Settlement.doc
Project Transaction Details.pdf	PS-PDD-Projects-Reimbursable Projects and Billing.doc
PSA Grouping and Time Reporting and Earning Codes.xls	PS-PDD-Projects-Reimbursable Projects and Billing-Retroactive Grants.doc
PSA Grouping for Time Quotas.XLS	PS-PDD-statistical orders.doc
PSA Grouping for Work Schedule.XLS	PS-SPI-006-AWWU-Maximo Chart of Accounts (AWWU) - OUT.doc
PS-WDD-Project Master Workflow.doc	PY-SPC-IT0194 - Garnishments Document.xlsx
Purchase Order Overview Signature Page.pdf	PY-SPC-IT0195 - Garnishment Order.xls
Purchase Order Overview vs 2 - Final.pdf	PY-SPC-IT0207-Residence Tax Area.DOC
PY-IDD-003- P&F Retirement - OUT-Interface Decision Document.doc	PY-SPC-IT0208-Work Tax Area.docx
PY-LSD-Remuneration Statement with Not negotiable check.doc	PY-SPC-IT0209-Unemployment State.docx
PY-LSD-Remuneration Statement with Paycheck at the bottom.doc	PY-SPC-IT0210-Withholding Info W4-W5.docx
PY-PDD-3RD Party Remittance.doc	PY-SPC-IT0235-Other Taxes US.docx

Document	Document
PY-PDD-Garnishment.doc	PY-SPC-T5U8C - Arrears Information.docx
PY-PDD-Maintain Payroll Infotypes.doc	PY-SPC-T5UT1- Tax information.docx
PY-PDD-Off-Cycle Payroll.doc	PY-SPC-T5UT2- Tax information.docx
PY-PDD-Payroll Tax Quarterly, Annual Reporting.doc	PY-SPC-T558B - Pay period information.docx
PY-PDD-Payroll to FICO(GL) Posting.doc	PY-SPC-T558C - Wage Type Information.docx
PY-PDD-Payroll Wage Types.doc	RCA Income Statement.pdf
PY-PDD-Pre-Note.doc	RFx Overview Signature Page.pdf
PY-PDD-Process Payroll.doc	SBQ BW Query Shopping Cart Encumb.xlsx
PY-RDD-Boot User out of System.doc	SBQ BW Query Shopping Cart Overview.xlsx
PY-RDD-Federal Tax Deposit.doc	SBQ BW Query Shopping Carts Awaiting Approval.xlsx
PY-RDD-Turn Off ESS Service.doc	SD Form_MOA Billing Document.docx
PS-WDD-Project Master Workflow.doc	PY-SPC-IT0194 - Garnishments Document.xlsx
SD Form_MOA Contract Confirmation.docx	TEMPLATE - SPC Functional Technical Conversion Spec.DOC
SD Form_MOA Order Confirmation.docx	TEMPLATE - SPC Functional Technical Conversion Spec.DOCX
SD Sales Order Approval Workflow Specification Document.docx	TEMPLATE - SPE Functional Technical Enhancement Spec.DOC
SD-SPE-Resource Related Billing.docx	TEMPLATE - SPF Functional Technical Layout Set Spec.DOC
SD-SPW-Sales Order Approval Workflow.docx	TEMPLATE - SPF Functional Technical Layout Set Spec.DOCX
Shopping Cart (Requisition) Overview vs 2 - Final.pdf	TEMPLATE - SPI Functional Technical Interface Spec.DOC
Shopping Cart Overview Signature Page.pdf	TEMPLATE - SPI Functional Technical Interface Spec.DOCX
Sole Source PO's 10-30K Report.xlsx	TEMPLATE - SPR Functional Technical Report Spec.DOC
Tech Specs - Kelly Shift.docx	TEMPLATE - SPR Functional Technical Report Spec.DOCX

Document	Document
TEMPLATE - BOS Business Organizational Structure Definition.doc	TEMPLATE - SPW Functional Technical Workflow Spec.doc
TEMPLATE - BW Technical Design Document.docx	TEMPLATE - SPW Functional Technical Workflow Spec.DOCX
TEMPLATE - DCD Data Conversion Definition Document.doc	TEMPLATE - WDD Workflow Definition Document.doc
TEMPLATE - DD Decision Document.doc	TEMPLATE - WDD Workflow Definition Document.DOCX
TEMPLATE - EDD Enhancement Definition Document.doc	TEMPLATE -SBQ BW Query Definition Document.xlsx
TEMPLATE - ERD Enterprise Role Definition.doc	TM-MDD-Time Transfer Specifications.DOC
TEMPLATE - IDD Interface Definition Document.doc	TEMPLATE - OID Organizational Impact Definition Form.doc
TEMPLATE - LSD Layout Set Definition Document.doc	TEMPLATE - PDD Process Definition Document.doc
TEMPLATE - MDD Master Data Definition Document.doc	TEMPLATE - PDD Process Definition Document.DOCX
	TEMPLATE - RDD Report Definition Document.doc

COMMON ABBREVIATIONS

Acronym	Definition
AGS	SAP Active Global Support
ALE	Application Linking and Embedding
APO	SAP Advanced Planning and Optimization
BOM	Bill of Material
BAPI	Business Application Programming Interface
BPD	Business Process Design Document
BPF	Business Process Flow
BPP	Business Process Procedure
BPR	Business Process Requirement
BT	Business Transformation
CATS or CATSXT	Cross-Application Time Sheet
CoE	Center of Excellence
CO	Controlling
SAP CRM	SAP Customer Relationship Management
DEV	Development Environment
Dynpro or Web Dynpro	Dynamic Program
EUT	End-User Training
EP	Enterprise Portal
SAP EWM	SAP Extended Warehouse Management
FA	Fixed Asset Accounting
FSCM	Financial Supply Chain Management
FI	Financials
FS	Functional Specification Document
GD	Global Delivery
Global ATP	Global Available to Promise

Acronym	Definition
GRC	Governance, Risk, and Compliance
IDoc	Intermediate Document
HR	Human Resources
KDD	Key Decision Document
KPI	Key Performance Indicator
KT	Knowledge Transfer
LMS	Learning Management System
LE	Logistics Execution
SAP NetWeaver MDM	SAP NetWeaver Master Data Management
MM	Materials Management
SAP MII	SAP Manufacturing Integration and Intelligence
OCM	Organizational Change Management
OM	Organizational Management
PA	Personnel Administration
PD	Personnel Development
SAP PI	SAP Process Integration
SAP PLM	SAP Product Lifecycle Management
PRD	Production Environment
PP	Production Planning
PM	Project Management
PMI	Project Management Institute
PMO	Project Management Office
PS	Project System
QA	Quality Assurance
QAS	Quality Assurance Environment

Acronym	Definition
QC	Quality Control
QM	Quality Management
RFC	Remote Function Call
RICEFW	Reports, Interfaces, Conversions, Enhancements, Forms, and Workflows
SAP SCM	SAP Supply Chain Management
SD	Sales and Distribution
SLA	Service-Level Agreement
SAP SRM	SAP Supplier Relationship Management
SAP TM	SAP Transportation Management
TRN	Training Environment
TS	Technical Specification Document
WBS	Work Breakdown Structure
WM	Warehouse Management

Appendix A - Design Review of SAP Solutions
Synergy Project Responses for Findings and Recommendations - v9

	Item	Risk Category	Response Owner	Response	Comments
3. FINANCE AND Billings					
3.2 General Ledger (GL)					
Findings	3.2.1	Low	Bill Wilks	Agree	
	3.2.2	Low	Bill Wilks	Agree	
	3.2.3	Low	Bill Wilks	Agree	
	3.2.4	Low	Bill Wilks	Agree	
	3.2.4.a	Low	Bill Wilks	Agree	
	3.2.4.b	Low	Bill Wilks	Agree	
	3.2.4.c	Low	Bill Wilks	Agree	
	3.2.4.d	Low	Bill Wilks	Agree	
	3.2.4.e.1	Low	Bill Wilks	Agree	
	3.2.4.e.2	Low	Bill Wilks	Agree	
	3.2.4.e.3	Low	Bill Wilks	Agree	
	3.2.4.e.4	Low	Bill Wilks	Agree	
	3.2.4.e.5	Low	Bill Wilks	Agree	
	3.2.4.e.6	Low	Bill Wilks	Agree	
	3.2.4.f	Low	Bill Wilks	Agree	
	3.2.4.g	Low	Bill Wilks	Agree	
	3.2.4.h	Low	Bill Wilks	Agree	
	3.2.5	Low	Bill Wilks	Agree	
	3.2.6	Low	Bill Wilks	Agree	
	3.2.7	Low	Bill Wilks	Agree with Comment	It should be noted that there will be more substitute rules going forward.
	3.2.8	Low	Bill Wilks	Agree	
Recommendations	3.2.1	Low	Bill Wilks	Accept	
	3.2.1.a	Low	Bill Wilks	Accept	
	3.2.1.b	Low	Bill Wilks	Accept	
	3.2.1.c	Low	Bill Wilks	Accept	
3.3 GL Data					
Findings	3.3.1	Low	Bill Wilks	Agree	
	3.3.2	Low	Bill Wilks	Agree	

Design Review of SAP Solutions
Synergy Project Responses for Findings and Recommendations - v7 (2.19.15)

	Item	Risk Category	Response Owner	Response	Comments
Findings	3.3.3	Low	Bill Wilks	Agree	
	3.3.4	Low	Bill Wilks	Agree	
Findings (cont.)	3.3.5	Low	Bill Wilks	Agree	
	3.3.5.a	Low	Bill Wilks	Agree	
	3.3.5.b	Low	Bill Wilks	Agree	
	3.3.5.c	Low	Bill Wilks	Agree	
	3.3.5.d	Low	Bill Wilks	Agree	
	3.3.5.e	Low	Bill Wilks	Agree	
	3.3.5.f	Low	Bill Wilks	Agree	
	3.3.6	Low	Bill Wilks	Agree	
	3.3.7	Low	Bill Wilks	Agree	
	3.3.8	Low	Bill Wilks	Agree	
	3.3.9	Low	Bill Wilks	Agree	
	3.3.10	Low	Bill Wilks	Agree	
	3.3.11	Low	Bill Wilks	Agree	
	3.3.12	Low	Bill Wilks	Agree	
Recommendations	3.3.1	Low	Bill Wilks	Accept with Comment	Will explore the option of security.
	3.3.1.a	Low	Bill Wilks		
	3.3.1.b	Low	Bill Wilks		
	3.3.1.c	Low	Bill Wilks		
	3.3.1.d	Low	Bill Wilks		
	3.3.1.e	Low	Bill Wilks		
3.4 FI Transaction Processing					
Findings	3.4.1	Low	Bill Wilks	Agree	
	3.4.2	Low	Bill Wilks	Agree	
	3.4.3	Low	Bill Wilks	Agree	
	3.4.4	Low	Bill Wilks	Disagree with Comment	This statement is false
	3.4.5	Low	Bill Wilks	Agree	
	3.4.6	Low	Bill Wilks	Agree	
	3.4.7	Low	Bill Wilks	Agree	
	3.4.8	Low	Bill Wilks	Agree	
	3.4.9	Low	Bill Wilks	Agree	
	3.4.10	Low	Bill Wilks	Agree	

	Item	Risk Category	Response Owner	Response	Comments
	3.4.11	Low	Bill Wilks	Agree	
Recommendations	3.4.1	Low	Bill Wilks	Accept	
	3.4.2	Low	Bill Wilks	Accept	
	3.4.3	Low	Bill Wilks	Accept	
	3.4.3.a	Low	Bill Wilks	Accept	
	3.4.3.b	Low	Bill Wilks	Accept	
	3.4.3.c	Low	Bill Wilks	Accept	
	3.4.3.d	Low	Bill Wilks	Accept	
	3.4.3.e	Low	Bill Wilks	Accept	
	3.4.4	Low	Bill Wilks	Accept	
	3.4.5	Low	Bill Wilks	Accept	
3.5 FI Month- and Year-End					
Findings	3.5.1	Medium	Bill Wilks	Agree	
	3.5.2	Medium	Bill Wilks	Agree	
	3.5.3	Medium	Bill Wilks	Agree	
	3.5.4	Medium	Bill Wilks	Agree	
	3.5.5	Medium	Bill Wilks	Agree	
	3.5.6	Medium	Bill Wilks	Agree with Comment	spreadsheets were utilized in lieu of scripts
	3.5.7	Medium	Bill Wilks	Agree	
	3.5.8	Medium	Bill Wilks	Agree	
	3.5.9	Medium	Bill Wilks	Agree	
	3.5.10	Medium	Bill Wilks	Agree	
	3.5.11	Medium	Bill Wilks	Agree	
	3.5.12	Medium	Bill Wilks	Agree	
Recommendations	3.5.1	Medium	Bill Wilks	Accept	
	3.5.2	Medium	Bill Wilks	Accept	
	3.5.2.a	Medium	Bill Wilks	Accept	
	3.5.2.b	Medium	Bill Wilks	Accept	
	3.5.2.c	Medium	Bill Wilks	Accept	
	3.5.2.d	Medium	Bill Wilks	Accept	
	3.5.2.e	Medium	Bill Wilks	Accept	
3.6 Accounts Receivable (AR)					

Design Review of SAP Solutions
Synergy Project Responses for Findings and Recommendations - v7 (2.19.15)

	Item	Risk Category	Response Owner	Response	Comments
Findings	3.6.1	Low	Paul Cotton	Agree with Comment	Document types asociated with Grants may need to be reviewed
Findings (cont.)	3.6.2	Low	Paul Cotton	Agree	
	3.6.3	Low	Paul Cotton	Agree	
	3.6.4	Low	Paul Cotton	Agree	
	3.6.5	Low	Paul Cotton	Agree	
	3.6.6	Low	Paul Cotton	Agree	
	3.6.7	Low	Paul Cotton	Agree	
	3.6.7.a	Low	Paul Cotton	Agree	
	3.6.7.b	Low	Paul Cotton	Agree	
	3.6.8	Low	Paul Cotton	Agree	
	3.6.9	Low	Paul Cotton	Agree	Per NU
	3.6.10	Low	Paul Cotton	Disagree with Comment	Finding was that our testing client QE1 200 did not include the periodic statement flag and that period statements have not been executed. The periodic statement flag is set to either monthly or no statement (for Risk Management CMR's) and we have tested statements in batch jobs Per NU
	3.6.11	Low	Paul Cotton	Agree	
	3.6.12	Low	Paul Cotton	Agree	
	3.6.13	Low	Paul Cotton	Agree	
	3.6.14	Low	Paul Cotton	Agree	
	3.6.15	Low	Paul Cotton	Agree	
	3.6.15.a	Low	Paul Cotton	Agree	
	3.6.15.b	Low	Paul Cotton	Agree	
	3.6.15.c	Low	Paul Cotton	Agree	
	3.6.15.d	Low	Paul Cotton	Agree	
	3.6.15.e	Low	Paul Cotton	Agree	
	3.6.15.f	Low	Paul Cotton	Agree	
	3.6.16	Low	Paul Cotton	Agree	
Recommendations	3.6.1	Low	Paul Cotton	Accept	
	3.6.2	Low	Paul Cotton	Accept	
	3.6.3	Low	Paul Cotton	Accept	

	Item	Risk Category	Response Owner	Response	Comments
	3.6.4	Low	Paul Cotton	Accept	
3.7 Customer Master					
Findings	3.7.1	Low	Paul Cotton	Agree	
	3.7.2	Low	Paul Cotton	Disagree with Comment	The group disagrees. Finding was that not all customers were extended to all sales organizations and customer account groups. This is intentional because we do not want all Customer Manage Relationships (CMR) in the customer account group for Sponsors (grants). This is also a separate distribution channel (from an SD perspective) and must remain separated.
	3.7.3	Low	Paul Cotton	Agree	
	3.7.4	Low	Paul Cotton	Agree	
	3.7.5	Low	Paul Cotton	Needs More Information	Finding is that not all customers will have a sales and distribution view. This is not correct. I have explained that all customers will be loaded as extended (SAP term) to all sales divisions (not sales areas. we are not impacting grants which are distribution channel 90) during conversion.
	3.7.6	Low	Paul Cotton	Disagree with Comment	Two are configured :1) Customer with no statement and 2) Standard with monthly statement.
	3.7.7	Low	Paul Cotton	Disagree with Comment	Finding was that central notes cannot be maintained for Z-customer account groups and that this was impacting the documentation. The central notes also cannot be maintained for standard customer account groups either, and there is no impact to the documentation. Invoices and statements are generated correctly without central notes.
	3.7.8	Low	Paul Cotton	Disagree with Comment	We do have a process in place to extend customer master records if a new sales organization is added post go-live (unlikely to occur). The process is part of the CMR conversion process and has been tested successfully
	3.7.8.a	Low	Paul Cotton	Disagree with Comment	See comment above
Recommendations	3.7.1	Low	Paul Cotton	Needs more information	Awaiting Clarification from SAP

	Item	Risk Category	Response Owner	Response	Comments
Recommendations	3.7.2	Low	Paul Cotton	Accept	
3.8 Sales Order					
Findings	3.8.1	Low	Paul Cotton	Agree	
	3.8.2	Low	Paul Cotton	Agree	
	3.8.3	Low	Paul Cotton	Agree	
	3.8.4	Low	Paul Cotton	Agree	
	3.8.5	Low	Paul Cotton	Agree	
	3.8.6	Low	Paul Cotton	Agree	
Recommendation	3.8.1	Low	Paul Cotton	Accept	
3.9 Agreement Billing					
Findings	3.9.1	Low	Paul Cotton	Agree	
Findings (cont.)	3.9.2	Low	Paul Cotton	Agree	
	3.9.3	Low	Paul Cotton	Agree with Comment	We did not test for differences to date.
	3.9.4	Low	Paul Cotton	Agree	
Recommendation	3.9.1	Low	Paul Cotton	Accept	
3.10 Sales Order Billing					
Findings	3.10.1	Low	Paul Cotton	Agree	
	3.10.2	Low	Paul Cotton	Agree	
	3.10.3	Low	Paul Cotton	Agree	
	3.10.4	Low	Paul Cotton	Agree	
	3.10.5	Low	Paul Cotton	Agree	
	3.10.6	Low	Paul Cotton	Needs more information	
	3.10.7	Low	Paul Cotton	Agree	
Recommendations	3.10.1	Low	Paul Cotton	Reject with Comment	There are no missing copy requirements.
	3.10.2	Low	Paul Cotton	Reject	
3.11 AR-FI Billing					
Findings	3.11.1	Low	Paul Cotton	Agree	
	3.11.2	Low	Paul Cotton	Agree	
	3.11.3	Low	Paul Cotton	Agree	
	3.11.4	Low	Paul Cotton	Agree	
	3.11.5	Low	Paul Cotton	Agree	
	3.11.6	Low	Paul Cotton	Agree	

	Item	Risk Category	Response Owner	Response	Comments
	3.11.7	Low	Paul Cotton	Agree	
Findings (cont.)	3.11.8	Low	Paul Cotton	Agree	
	3.11.9	Low	Paul Cotton	Agree	
Recommendation	3.11.1	Low	Paul Cotton	Accept	
3.12 AR Adjustments - Billing					
Findings	3.12.1	Low	Paul Cotton	Agree with Comment	The AR module will be used to enter customer invoices and adjustments.
	3.12.2	Low	Paul Cotton	Agree	
	3.12.3	Low	Paul Cotton	Agree	
	3.12.4	Low	Paul Cotton	Agree	
	3.12.5	Low	Paul Cotton	Agree	
	3.12.6	Low	Paul Cotton	Agree	
	3.12.7	Low	Paul Cotton	Disagree with Comment	Not all testing has been completed.
	3.12.8	Low	Paul Cotton	Disagree with Comment	This has been partially tested.
Recommendation	3.12.1	Low	Paul Cotton	Accept	
3.13 AR Cash Processing with Clearing					
Findings	3.13.1	Low	Paul Cotton	Agree	
	3.13.2	Low	Paul Cotton	Agree	
	3.13.3	Low	Paul Cotton	Agree	
	3.13.4	Low	Paul Cotton	Agree	
Recommendations	3.13.1	Low	Paul Cotton	Accept	
	3.13.2	Low	Paul Cotton	Accept	
3.14 AR - Month- and Fiscal Year-End					
Findings	3.14.1	Medium	Bill Wilks	Agree	
	3.14.2	Medium	Bill Wilks	Agree	
	3.14.3	Medium	Bill Wilks	Agree	
	3.14.4	Medium	Bill Wilks	Agree	
	3.14.5	Medium	Bill Wilks	Agree	
	3.14.6	Medium	Bill Wilks	Agree	
	3.14.7	Medium	Bill Wilks	Agree	
	3.14.8	Medium	Bill Wilks	Agree	
	3.14.9	Medium	Bill Wilks	Agree	
	3.14.10	Medium	Bill Wilks	Agree	

	Item	Risk Category	Response Owner	Response	Comments
	3.14.11	Medium	Bill Wilks	Agree	
Findings (cont.)	3.14.12	Medium	Bill Wilks	Agree	
Recommendations	3.14.1	Medium	Bill Wilks	Accept	
	3.14.2	Medium	Bill Wilks	Accept	
	3.14.2.a	Medium	Bill Wilks	Accept	
	3.14.2.b	Medium	Bill Wilks	Accept	
	3.14.2.c	Medium	Bill Wilks	Accept	
	3.14.2.d	Medium	Bill Wilks	Accept	
	3.14.2.e	Medium	Bill Wilks	Accept	
3.15 Accounts Payable - (AP)					
Findings	3.15.1	High	Bill Wilks	Agree	
	3.15.2	High	Bill Wilks	Agree	
	3.15.3	High	Bill Wilks	Agree	
	3.15.4	High	Bill Wilks	Agree	
	3.15.5	High	Bill Wilks	Agree	
	3.15.6	High	Bill Wilks	See sub-bullets	
	3.15.6.a	High	Bill Wilks	Disagree with Comment	We are unable to find any record of this test.
	3.15.6.b	High	Bill Wilks	Agree	
	3.15.6.c	High	Bill Wilks	Agree	
	3.15.7	High	Bill Wilks	Agree	
	3.15.8	High	Bill Wilks	Agree	
	3.15.9	High	Bill Wilks	Agree	
	3.15.10	High	Bill Wilks	Agree	
	3.15.11	High	Bill Wilks	Agree	
	3.15.12	High	Bill Wilks	Agree	
	3.15.13	High	Bill Wilks	Agree	
	3.15.14	High	Bill Wilks	Agree	
	3.15.15	High	Bill Wilks	Agree	
	3.15.16	High	Bill Wilks	Agree	
	3.15.17	High	Bill Wilks	Agree	
	3.15.18	High	Bill Wilks	Agree	
	3.15.19				Reserved for numbering.

	Item	Risk Category	Response Owner	Response	Comments
Findings (cont.)	3.15.20	High	Bill Wilks	Agree with Comment	Manual processes that were tested revolved around invoice posting.
	3.15.21	High	Bill Wilks	Agree with Comment	AP understands validation of security roles.
Recommendations	3.15.1	High	Bill Wilks	Accept	
	3.15.2	High	Bill Wilks	Accept	
	3.15.3	High	Bill Wilks	Accept	
	3.15.4	High	Bill Wilks	Accept with Comments	MoA will reevalutate this in the future.
	3.15.4.a	High	Bill Wilks	Reject with Comment	Business is not prepared to batch the payment
	3.15.4.b	High	Bill Wilks	Accept	
	3.15.4.c	High	Bill Wilks	Accept	
	3.15.5	High	Bill Wilks	Accept	
	3.15.6	High	Bill Wilks	Accept	
	3.15.7	High	Bill Wilks	Accept	
	3.15.8	High	Bill Wilks	Accept with Comment	MoA should consider implementing ECM - Enterprise Content Management
3.16 AP Data					
Findings	3.16.1	Low	Bill Wilks	Agree	
	3.16.1.a	Low	Bill Wilks	Agree	
	3.16.1.b	Low	Bill Wilks	Agree	
	3.16.1.c	Low	Bill Wilks	Agree	
	3.16.1.d	Low	Bill Wilks	Agree	
	3.16.1.e	Low	Bill Wilks	Agree	
	3.16.1.f	Low	Bill Wilks	Agree	
	3.16.2	Low	Bill Wilks	Agree	
	3.16.3	Low	Bill Wilks	Agree	
	3.16.4	Low	Bill Wilks	Agree	
	3.16.5	Low	Bill Wilks	Agree	
	3.16.6	Low	Bill Wilks	Agree	
	3.16.7	Low	Bill Wilks	Agree	
	3.16.8	Low	Bill Wilks	Agree	
Findings (cont.)	3.16.9	Low	Bill Wilks	Agree	
	3.16.9.a	Low	Bill Wilks	Agree	
	3.16.9.b	Low	Bill Wilks	Agree	

	Item	Risk Category	Response Owner	Response	Comments
	3.16.9.c	Low	Bill Wilks	Agree	
	3.16.10	Low	Bill Wilks	Agree	
Recommendations	3.16.1	Low	Bill Wilks	Accept	
	3.16.1.a	Low	Bill Wilks	Accept	
	3.16.1.b	Low	Bill Wilks	Accept	
	3.16.1.c	Low	Bill Wilks	Accept	
	3.16.1.d	Low	Bill Wilks	Accept	
	3.16.1.e	Low	Bill Wilks	Accept	
	3.16.2	Low	Bill Wilks	Accept	
3.17 AP Transaction Processing					
Findings	3.17.1	High	Bill Wilks	Agree	
	3.17.2	High	Bill Wilks	Agree	
	3.17.3	High	Bill Wilks	Agree	
	3.17.4	High	Bill Wilks	Agree	
	3.17.5	High	Bill Wilks	Agree	
	3.17.6	High	Bill Wilks	Agree	
	3.17.7	High	Bill Wilks	Agree	
	3.17.8	High	Bill Wilks	Agree	
	3.17.9	High	Bill Wilks	Agree	
	3.17.10	High	Bill Wilks	Agree	
	3.17.11	High	Bill Wilks	Agree with Comment	Central AP will be removing the block after they update the address.
	3.17.12	High	Bill Wilks	Agree	
	3.17.13	High	Bill Wilks	Agree	
	3.17.14	High	Bill Wilks	Agree	
Recommendations	3.17.1	High	Bill Wilks	Accept	
	3.17.1.a	High	Bill Wilks	Accept	
	3.17.1.b	High	Bill Wilks	Accept	
	3.17.1.c	High	Bill Wilks	Accept	
	3.17.1.d	High	Bill Wilks	Accept	
	3.17.1.e	High	Bill Wilks	Accept	
	3.17.2	High	Bill Wilks	Accept	
	3.17.3	High	Bill Wilks	Accept	

	Item	Risk Category	Response Owner	Response	Comments
	3.17.4	High	Bill Wilks	Accept	
	3.17.5	High	Bill Wilks	Accept	
	3.17.6	High	Bill Wilks	Accept	
3.18 AP Month - and Fiscal Year End					
Findings	3.18.1	Medium	Bill Wilks	Agree	
	3.18.2	Medium	Bill Wilks	Agree	"AR" should be "AP"
	3.18.3	Medium	Bill Wilks	Agree	
	3.18.4	Medium	Bill Wilks	Agree	
	3.18.5	Medium	Bill Wilks	Agree	
	3.18.6	Medium	Bill Wilks	Agree	
	3.18.7	Medium	Bill Wilks	Agree	
	3.18.8	Medium	Bill Wilks	Agree	
	3.18.9	Medium	Bill Wilks	Agree	
	3.18.10	Medium	Bill Wilks	Agree	
	3.18.11	Medium	Bill Wilks	Agree	
	3.18.12	Medium	Bill Wilks	Agree	
Recommendations	3.18.1	Medium	Bill Wilks	Accept	
	3.18.2	Medium	Bill Wilks	Accept with Comment	The team wants to better understand the impact i.e. how much work involved and when to implement this
	3.18.2.a	Medium	Bill Wilks	Accept with Comment	The team wants to better understand the impact of how much work involved and when to implement this component.
	3.18.2.b	Medium	Bill Wilks	Accept	
	3.18.2.c	Medium	Bill Wilks	Accept	
	3.18.2.d	Medium	Bill Wilks	Accept	
ecommendations (cor	3.18.2.e	Medium	Bill Wilks	Accept	
3.19 AP Calendar Year-End					
	3.19.1	Medium	Bill Wilks	Agree with Comment	Testing needs to be completed.
	3.19.2	Medium	Bill Wilks	Agree	
	3.19.2.a	Medium	Bill Wilks	Agree	
	3.19.2.b	Medium	Bill Wilks	Agree	
	3.19.2.c	Medium	Bill Wilks	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Findings	3.19.2.d	Medium	Bill Wilks	Agree	
	3.19.3	Medium	Bill Wilks	Agree	
	3.19.4	Medium	Bill Wilks	Agree	
	3.19.5	Medium	Bill Wilks	Agree	
	3.19.5.a	Medium	Bill Wilks	Agree	
	3.19.5.b	Medium	Bill Wilks	Agree	
	3.19.5.c	Medium	Bill Wilks	Agree	
	3.19.5.d	Medium	Bill Wilks	Agree	
	3.19.6	Medium	Bill Wilks	Agree	
	3.19.7	Medium	Bill Wilks	Agree	
	3.19.7.a	Medium	Bill Wilks	Agree	
	3.19.7.b	Medium	Bill Wilks	Agree	
	3.19.7.c	Medium	Bill Wilks	Agree	
	3.19.7.d	Medium	Bill Wilks	Agree	
	3.19.7.e	Medium	Bill Wilks	Agree	
	3.19.8	Medium	Bill Wilks	Agree	
	3.19.9	Medium	Bill Wilks	Agree	
Recommendations	3.19.1	Medium	Bill Wilks	Accept with Comment	Testing needs to be completed.
	3.19.2	Medium	Bill Wilks	Accept	
	3.19.3	Medium	Bill Wilks	Accept	
	3.19.4	Medium	Bill Wilks	Accept	
3.20 Controlling Master Data					
Findings	3.20.1	Low	Bill Wilks	Agree	
	3.20.2	Low	Bill Wilks	Agree	
	3.20.3	Low	Bill Wilks	Agree	
	3.20.4	Low	Bill Wilks	Agree	
	3.20.5	Low	Bill Wilks	Agree	
	3.20.6	Low	Bill Wilks	Agree	
	3.20.7	Low	Bill Wilks	Agree	
	3.20.8	Low	Bill Wilks	Agree	
	3.20.9	Low	Bill Wilks	Agree	
	3.20.10	Low	Bill Wilks	Agree	
	3.20.11	Low	Bill Wilks	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Findings (cont.)	3.20.12	Low	Bill Wilks	Agree	
	3.20.13	Low	Bill Wilks	Agree	
	3.20.14	Low	Bill Wilks	Agree	
	3.20.15	Low	Bill Wilks	Agree	
	3.20.16	Low	Bill Wilks	Agree	
	3.20.17	Low	Bill Wilks	Agree with Comment	This will be re-evaluated in the future.
	3.20.17.a	Low	Bill Wilks	Agree	
	3.20.17.a.1	Low	Bill Wilks	Agree	
	3.20.17.a.2	Low	Bill Wilks	Agree	
	3.20.17.a.3	Low	Bill Wilks	Agree	
	3.20.17.b	Low	Bill Wilks	Agree	
	3.20.17.c	Low	Bill Wilks	Agree	
	3.20.17.d	Low	Bill Wilks	Agree	
	3.20.17.e	Low	Bill Wilks	Agree	
	3.20.17.e.1	Low	Bill Wilks	Agree	
	3.20.17.e.2	Low	Bill Wilks	Agree	
	3.20.17.e.3	Low	Bill Wilks	Agree	
	3.20.17.e.4	Low	Bill Wilks	Agree	
Findings (cont.)	3.20.17.f	Low	Bill Wilks	Agree	
	3.20.17.g	Low	Bill Wilks	Agree	
	3.20.17.h	Low	Bill Wilks	Agree	
	3.20.18	Low	Bill Wilks	Agree	
	3.20.19	Low	Bill Wilks	Agree	
	3.20.20	Low	Bill Wilks	Agree	
	3.20.21	Low	Bill Wilks	Agree	
Recommendations	3.20.1	Low	Bill Wilks	Accept with Comment	MoA will evaluate this.
	3.20.1.a	Low	Bill Wilks		
	3.20.1.b	Low	Bill Wilks		
	3.20.1.c	Low	Bill Wilks		
	3.20.1.d	Low	Bill Wilks		
	3.20.1.e	Low	Bill Wilks		
	3.20.2	Low	Bill Wilks	Accept with Comment	MoA will evaluate this.
3.21 Controlling Allocations and Distribution					

	Item	Risk Category	Response Owner	Response	Comments
Findings	3.21.1	Medium	Bill Wilks	Agree	
	3.21.2	Medium	Bill Wilks	Agree	
	3.21.3	Medium	Bill Wilks	Agree	
	3.21.4	Medium	Bill Wilks	Agree	
	3.21.5	Medium	Bill Wilks	Agree	
	3.21.6	Medium	Bill Wilks	Agree	
Recommendations	3.21.1	Medium	Bill Wilks	Agree	
	3.21.2	Medium	Bill Wilks	Agree	
3.22 Controlling Month-and Year-End					
Findings	3.22.1	Medium	Bill Wilks	Agree	
	3.22.2	Medium	Bill Wilks	Agree	
	3.22.3	Medium	Bill Wilks	Agree	
	3.22.4	Medium	Bill Wilks	Agree	
	3.22.5	Medium	Bill Wilks	Agree	
	3.22.6	Medium	Bill Wilks	Agree	
	3.22.7	Medium	Bill Wilks	Agree	
	3.22.8	Medium	Bill Wilks	Agree	
Recommendations	3.22.1	Medium	Bill Wilks	Accept	
	3.22.2	Medium	Bill Wilks	Accept with Comment	The team wants to better understand the impact is how much work involved and when to implement this component.
	3.22.2.a	Medium	Bill Wilks		
	3.22.2.b	Medium	Bill Wilks		
	3.22.2.c	Medium	Bill Wilks		
	3.22.2.d	Medium	Bill Wilks		
	3.22.3	Medium	Bill Wilks	Accept	
3.23 Capitalized Projects (including Value-Added Project)					
Findings	3.23.1	Low	Paul Cotton	Agree	
	3.23.2	Low	Paul Cotton	Agree	
	3.23.3	Low	Paul Cotton	Agree	
	3.23.4	Low	Paul Cotton	Agree	
Recommendation	3.23.1	Low	Bill Wilks	Accept	
3.24 Construction and Nonconstruction					

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	Item	Risk Category	Response Owner	Response	Comments
Findings	3.24.1	Low	Paul Cotton	Agree with Comment	This finding needs to be corrected. Validation rules as described are backwards. Level 3 WBS is for revenue and Level 4 WBS is for expenses.
	3.24.2	Low	Paul Cotton	Agree	
	3.24.3	Low	Paul Cotton	Agree	
	3.24.4	Low	Paul Cotton	Disagree with Comment	Municipality is still working on the conversion strategy.
Recommendation	3.24.1	Low	Paul Cotton	Accept	
3.25 Maintenance Project					
Findings	3.25.1	Low	Paul Cotton	Agree	
	3.25.2	Low	Paul Cotton	Agree	
	3.25.3	Low	Paul Cotton	Agree	
Findings (cont.)	3.25.4	Low	Paul Cotton	Agree	
Recommendation	3.35.1	Low	Paul Cotton	Accept	
3.26 Reimbursable Projects and Billing					
Findings	3.26.1	Low	Paul Cotton	Agree	
	3.26.2	Low	Paul Cotton	Agree	
	3.26.3	Low	Paul Cotton	Agree	
	3.26.4	Low	Paul Cotton	Disagree with Comment	Municipality is still working on the conversion strategy.
Recommendation	3.26.1	Low	Paul Cotton	Accept	
3.27 Asset Capitalization					
Findings	3.27.1	Low	Paul Cotton	Agree	
	3.27.2	Low	Paul Cotton	Agree with Comment	Low value assets are maintained in plant maintenance as dequipment and not in material management.
	3.27.3	Low	Paul Cotton	Agree	
	3.27.4	Low	Paul Cotton	Agree	
	3.27.5	Low	Paul Cotton	Agree	
	3.27.6	Low	Paul Cotton	Agree	
Recommendation	3.27.1	Low	Paul Cotton	Accept	
	3.27.2	Low	Paul Cotton	Accept	
3.28 Asset Retirement					
Findings	3.28.1	Low	Paul Cotton	Agree	

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	Item	Risk Category	Response Owner	Response	Comments
Findings	3.38.2	Low	Paul Cotton	Agree	
Recommendation	3.38.1	Low	Paul Cotton	Accept	
3.29 Asset Transfers					
Finding	3.29.1	Low	Paul Cotton	Agree	
	3.29.2	Low	Paul Cotton	Agree	
Recommendation	3.29.1	Low	Paul Cotton	Accept	
3.30 Asset Period - and Year-End Tasks					
Finding	3.30.1	Medium	Paul Cotton	Agree	
	3.30.2	Medium	Paul Cotton	Agree	
	3.30.3	Medium	Paul Cotton	Agree	
Recommendation	3.30.1	Medium	Paul Cotton	Accept	
Recommendation (cont.)	3.30.2	Medium	Paul Cotton	Accept	
3.31 Asset Reporting					
Findings	3.31.1	Medium	Paul Cotton	Agree	
	3.31.2	Medium	Paul Cotton	Agree with Comment	Entire section should be moved to recommendations - the MoA will consider these items as part of the reporting gap analysis
	3.31.2.a	Medium	Paul Cotton	Disagree with Comment	This report will be produced out of ECC and not BW.
	3.31.2.b	Medium	Paul Cotton	Agree with Comment	Report gap analysis is not complete. Reports will not be finalized until the reporting gap analysis is complete.
	3.31.2.c	Medium	Paul Cotton	Agree with Comment	Report gap analysis is not complete. Reports will not be finalized until the reporting gap analysis is complete.
	3.31.2.d	Medium	Paul Cotton	Agree	
	3.31.2.e	Medium	Paul Cotton	Agree	
Recommendations	3.31.1	Medium	Paul Cotton	Accept	
	3.31.2	Medium	Paul Cotton	Accept	
	3.31.3	Medium	Paul Cotton	Accept	
3.32 Period End (No Finding, Impact, or Recommendation - topics were addressed in other areas)					
	3.32.1	Medium	Paul Cotton	Agree	
	3.32.2	Medium	Paul Cotton	Agree	
	3.32.3	Medium	Paul Cotton	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Findings	3.32.4	Medium	Paul Cotton	Agree	
	3.32.5	Medium	Paul Cotton	Agree	
	3.32.6	Medium	Paul Cotton	Agree	
	3.32.7	Medium	Paul Cotton	Agree	
	3.32.8	Medium	Paul Cotton	Agree	
	3.32.9	Medium	Paul Cotton	Agree	
	3.32.10	Medium	Paul Cotton	Agree	
	3.32.11	Medium	Paul Cotton	Agree	
	3.32.12	Medium	Paul Cotton	Agree	
Recommendation	3.32.1	Medium	Paul Cotton	Accept	
	3.32.2	Medium	Paul Cotton	Accept	
Recommendation (cont.)	3.32.2.a	Medium	Paul Cotton	Accept	
	3.32.2.b	Medium	Paul Cotton	Accept	
	3.32.2.c	Medium	Paul Cotton	Accept	
	3.32.2.d	Medium	Paul Cotton	Accept	
	3.32.2.e	Medium	Paul Cotton	Accept	
3.33 Funds Management (FM) - Maintain FM Master Data					
Findings	3.33.1	Low	Paul Cotton	Agree	
	3.33.2	Low	Paul Cotton	Agree with Comment	Grants should be included in the list of elements.
	3.33.3	Low	Paul Cotton	Agree	
	3.33.3.a	Low	Paul Cotton	Agree	
	3.33.3.b	Low	Paul Cotton	Agree	
	3.33.3.c	Low	Paul Cotton	Agree	
	3.33.3.d	Low	Paul Cotton	Agree	
	3.33.3.e	Low	Paul Cotton	Agree	
	3.33.3.f	Low	Paul Cotton	Agree	
	3.33.3.g	Low	Paul Cotton	Agree	
	3.33.3.h	Low	Paul Cotton	Agree	
	3.33.4	Low	Paul Cotton	Agree	
	3.33.5	Low	Paul Cotton	Agree	
	3.33.6	Low	Paul Cotton	Agree	
	3.33.7	Low	Paul Cotton	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Recommendations	3.33.1	Low	Paul Cotton	Accept	
	3.33.2	Low	Paul Cotton	Accept	
	3.33.3	Low	Paul Cotton	Accept	
3.34 Budget Execution - Annual Approved Budget, Budget Transfers, and Supplements					
Findings	3.34.1	Medium	Paul Cotton	Agree with Comment	Only applies to operating budget; the capital budget has not been addressed.
	3.34.2	Medium	Paul Cotton	Agree with Comment	Only applies to operating budget; the capital budget has not been addressed.
	3.34.3	Medium	Paul Cotton	Agree with Comment	Only applies to operating budget; the capital budget has not been addressed.
	3.34.4	Medium	Paul Cotton	Agree	
	3.34.5	Medium	Paul Cotton	Agree	
	3.34.5.a	Medium	Paul Cotton	Agree	
Findings (cont.)	3.34.5.b	Medium	Paul Cotton	Agree	
	3.34.6	Medium	Paul Cotton	Agree with Comment	Additional testing is needed.
	3.34.7	Medium	Paul Cotton	Agree	
	3.34.7.a	Medium	Paul Cotton	Agree	
	3.34.7.b	Medium	Paul Cotton	Agree	
	3.34.7.c	Medium	Paul Cotton	Agree	
	3.34.7.d	Medium	Paul Cotton	Agree	
	3.34.8	Medium	Paul Cotton	Agree	
	3.34.9	Medium	Paul Cotton	Agree with Comment	The capital budget was tested during Mock 1 and Mock 2 for the utilities.
	3.34.10	Medium	Paul Cotton	Agree	
	3.34.11	Medium	Paul Cotton	Agree	
	3.34.11.a	Medium	Paul Cotton	Agree	
	3.34.11.b	Medium	Paul Cotton	Agree	
	3.34.11.c	Medium	Paul Cotton	Agree	
	3.34.12	Medium	Paul Cotton	Agree	
	3.34.13	Medium	Paul Cotton	Agree	
	3.34.14	Medium	Paul Cotton	Agree	
	3.34.15	Medium	Paul Cotton	Agree	
	3.34.16	Medium	Paul Cotton	Agree	
	3.34.17	Medium	Paul Cotton	Agree	
	3.34.1	Medium	Paul Cotton	Accept	

	Item	Risk Category	Response Owner	Response	Comments
Recommendations	3.34.2	Medium	Paul Cotton	Accept	
	3.34.3	Medium	Paul Cotton	Accept	
	3.34.3.a	Medium	Paul Cotton	Accept	
	3.34.3.b	Medium	Paul Cotton	Accept	
	3.34.4	Medium	Paul Cotton	Accept	
	3.34.5	Medium	Paul Cotton	Accept	
	3.34.6	Medium	Paul Cotton	Accept	
3.35 FM Derivation Rules					
Findings	3.35.1	Medium	Paul Cotton	Agree	
	3.35.2	Medium	Paul Cotton	Agree	
	3.35.3	Medium	Paul Cotton	Agree	
Findings (cont.)	3.35.4	Medium	Paul Cotton	Agree	
	3.35.5	Medium	Paul Cotton	Agree	
	3.35.6	Medium	Paul Cotton	Agree with comment	It performs as designed; however, the business requires further refinement of the rules.
Recommendations	3.35.1	Medium	Paul Cotton	Accept	
	3.35.2	Medium	Paul Cotton	Accept	
	3.35.2.a	Medium	Paul Cotton	Accept	
	3.35.2.b	Medium	Paul Cotton	Accept	
	3.35.3.c	Medium	Paul Cotton	Accept	
	3.35.3	Medium	Paul Cotton	Accept	
	3.35.4	Medium	Paul Cotton	Accept with Comment	We will review to identify the scenarios and document where it is applicable to derive and override. We will edit derivation rules as appropriate.
	3.35.5	Medium	Paul Cotton	Accept	
3.36 Earmarked Funds					
Findings	3.36.1	Medium	Paul Cotton	Agree	
	3.36.2	Medium	Paul Cotton	Agree	
	3.36.3	Medium	Paul Cotton	Agree	
	3.36.4	Medium	Paul Cotton	Agree with Comment	Further business decisions will need to be made.
Recommendations	3.36.1	Medium	Paul Cotton	Accept	
	3.36.2	Medium	Paul Cotton	Accept	

	Item	Risk Category	Response Owner	Response	Comments
	3.36.3	Medium	Paul Cotton	Accept	
3.37 Carry-Forward Process					
Findings	3.37.1	Medium	Paul Cotton	Agree	
	3.37.1.a	Medium	Paul Cotton	Agree	
	3.37.1.b	Medium	Paul Cotton	Agree	
	3.37.1.c	Medium	Paul Cotton	Agree	
	3.37.2	Medium	Paul Cotton	Agree	
	3.37.3	Medium	Paul Cotton	Agree	
	3.37.4	Medium	Paul Cotton	Agree	
	3.37.5	Medium	Paul Cotton	Agree	
	3.37.6	Medium	Paul Cotton	Agree	
	3.37.7	Medium	Paul Cotton	Agree	
Findings (cont.)	3.37.8	Medium	Paul Cotton	Agree	
	3.37.9	Medium	Paul Cotton	Agree with Comment	Further business decisions need to be made.
	3.37.10	Medium	Paul Cotton	Agree	
	3.37.11	Medium	Paul Cotton	Agree	
	3.37.12	Medium	Paul Cotton	Agree	
	3.37.13	Medium	Paul Cotton	Agree	
Recommendations	3.37.1	Medium	Paul Cotton	Accept	
	3.37.2	Medium	Paul Cotton	Accept	
	3.37.3	Medium	Paul Cotton	Accept	
	3.37.4	Medium	Paul Cotton	Accept	
	3.37.5	Medium	Paul Cotton	Accept	
3.38 P-Card Process					
Findings	3.38.1	Medium	Bill Wilks	Agree	
	3.38.2	Medium	Bill Wilks	Agree	
	3.38.3	Medium	Bill Wilks	Disagree with Comment	The discounts are not directly allocated to support a full time position.
	3.38.4	Medium	Bill Wilks	Agree	
	3.38.5	Medium	Bill Wilks	Agree	
	3.38.6	Medium	Bill Wilks	Agree	
	3.38.7	Medium	Bill Wilks	Agree	
	3.38.8	Medium	Bill Wilks	Agree	
	3.38.9	Medium	Bill Wilks	Agree	

	Item	Risk Category	Response Owner	Response	Comments
	3.38.10	Medium	Bill Wilks	Disagree with Comment	If the input file fails due to cost objects, the file is rejected and corrected" This statement is incorrect since the file is not rejected. According to our design, invalid cost objects are substituted to a dummy cost object through a substitution rule, allowing them to process
	3.38.11	Medium	Bill Wilks	Agree	
	3.38.12	Medium	Bill Wilks	Agree	
Recommendations	3.38.1	Medium	Bill Wilks	Accept	We have a design, but we need to complete testing.
	3.38.1.a	Medium	Bill Wilks		
	3.38.1.b	Medium	Bill Wilks		
Recommendations (cont.)	3.38.1.c	Medium	Bill Wilks		
	3.38.2	Medium	Bill Wilks	Accept	
	3.38.3	Medium	Bill Wilks	Accept	
	3.38.4	Medium	Bill Wilks	Accept	
3.39 Electronic Bank Statement					
Findings	3.39.1	Medium	Paul Cotton	Agree	
	3.39.2	Medium	Paul Cotton	Agree with Comment	MOA is not using a custom program to import bank master data. This is not correct, MOA is importing bank master data from the federal website via the standard ransaction tcode: BAUP.
	3.39.3	Medium	Paul Cotton	Agree	
	3.39.4	Medium	Paul Cotton	Agree	
	3.39.5	Medium	Paul Cotton	Agree with Comment	However, statement seems to be copied from another report. The word "state's" needs to be changed to "MoA"
	3.39.6	Medium	Paul Cotton	Agree	
Recommendation	3.39.1	Medium	Paul Cotton	Accept	
3.40 Cash Management					
Findings	3.40.1	High	Paul Cotton	Agree	
	3.40.2	High	Paul Cotton	Agree	
	3.40.3	High	Paul Cotton	Agree	
	3.40.4	High	Paul Cotton	Agree	
	3.40.5	High	Paul Cotton	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Recommendations	3.40.1	High	Paul Cotton	Accept	
	3.40.1.a	High	Paul Cotton	Accept	
	3.40.1.b	High	Paul Cotton	Accept	
	3.40.1.c	High	Paul Cotton	Accept	
	3.40.1.d	High	Paul Cotton	Accept	
	3.40.2	High	Paul Cotton	Accept	
4. LOGISTICS AND INVENTORY					
4.2 SAP Supplier Relationship Management (SAP SRM) - Landscape and Architecture					
Findings	4.2.1	Medium	Bill Wilks	Agree	
	4.2.2	Medium	Bill Wilks	Agree	
	4.2.3	Medium	Bill Wilks	Agree	
Recommendations	4.2.1	Medium	Bill Wilks	Accept	
	4.2.2	Medium	Bill Wilks	Accept with Comment	MoA will evaluate.
4.3 Organizational Structure					
Findings	4.3.1	Medium	Bill Wilks	Agree	
	4.3.2	Medium	Bill Wilks	Agree	
	4.3.3	Medium	Bill Wilks	Agree	
	4.3.4	Medium	Bill Wilks	Agree	
	4.3.5	Medium	Bill Wilks	Agree	
	4.3.6	Medium	Bill Wilks	Agree	
	4.3.7	Medium	Bill Wilks	Agree	
Recommendations	4.3.1	Medium	Bill Wilks	Reject with Comment	MoA is currently replicating org structure. MoA will continue to use its current design.
	4.3.2	Medium	Bill Wilks	Reject with Comment	MoA is currently replicating org structure. MoA will continue to use its current design.
	4.3.3	Medium	Bill Wilks	Reject with Comment	MoA is currently replicating org structure. MoA will continue to use its current design.
	4.3.4	Medium	Bill Wilks	Accept	
	4.3.5	Medium	Bill Wilks	Accept	
4.4 Master Data					
Findings	4.4.1	High	Bill Wilks	Agree	
	4.4.2	High	Bill Wilks	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Recommendation	4.4.1	High	Bill Wilks	Accept with Comment	MoA will evaluate.
	4.4.2	High	Bill Wilks	Accept	
4.5 SAP SRM - Shopping Cart and Workflow					
Findings	4.5.1	Medium	Bill Wilks	Agree	
	4.5.2	Medium	Bill Wilks	Agree	
	4.5.3	Medium	Bill Wilks	Disagree with Comment	MoA believes that completed documents were provided to SAP.
	4.5.4	Medium	Bill Wilks	Agree	
Recommendation	4.5.1	Medium	Bill Wilks	Accept with Comment	Completed documents provided to SAP
	4.5.2	Medium	Bill Wilks	Accept	
4.6 SAP SRM - Purchase Order and Workflow					
Findings	4.6.1	High	Bill Wilks	Agree	
	4.6.2	High	Bill Wilks	Agree	
	4.6.3	High	Bill Wilks	Agree	
	4.6.4	High	Bill Wilks	Agree	
	4.6.5	High	Bill Wilks	Agree	
	4.6.6	High	Bill Wilks	Agree	
	4.6.7	High	Bill Wilks	Agree	
	4.6.8	High	Bill Wilks	Agree	
	4.6.9	High	Bill Wilks	Agree	
	4.6.10	High	Bill Wilks	Agree	
Recommendations	4.6.1	High	Bill Wilks	Accept	
	4.6.2	High	Bill Wilks	Accept	
	4.6.3	High	Bill Wilks	Accept	
	4.6.4	High	Bill Wilks	Accept	
	4.6.5	High	Bill Wilks	Accept	
	4.6.6	High	Bill Wilks	Accept	
	4.6.7	High	Bill Wilks	Accept	
	4.6.8	High	Bill Wilks	Accept	
	4.6.9	High	Bill Wilks	Accept	
4.7 SAP SRM - RFx Workflow					
Findings	4.7.1	High	Bill Wilks	Agree	
	4.7.2	High	Bill Wilks	Agree	

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	Item	Risk Category	Response Owner	Response	Comments
	4.7.3	High	Bill Wilks	Agree	
Findings (cont.)	4.7.4	High	Bill Wilks	Agree	
Recommendations	4.7.1	High	Bill Wilks	Accept with Comment	Completed documents have been provided to SAP.
	4.7.2	High	Bill Wilks	Accept	
	4.7.3	High	Bill Wilks	Accept with Comment	We will evaluate and document the process
4.8 SAP SRM - Contract and Workflow					
Findings	4.8.1	Medium	Bill Wilks	Disagree with Comment	MoA believes that completed documents were provided to SAP.
	4.8.2	Medium	Bill Wilks	Agree	
	4.8.3	Medium	Bill Wilks	Agree	
	4.8.4	Medium	Bill Wilks	Agree	
	4.8.5	Medium	Bill Wilks	Agree	
Recommendations	4.8.1	Medium	Bill Wilks	Accept	
	4.8.2	Medium	Bill Wilks	Accept	
	4.8.3	Medium	Bill Wilks	Accept	
4.9 Materials Management (MM) - Process Goods Receipt					
Findings	4.9.1	Low	Bill Wilks	Agree with Comment	MoA has solved the problem differently than planned. MoA will document the reason it was removed from scope.
	4.9.2	Low	Bill Wilks	Agree	
	4.9.3	Low	Bill Wilks	Agree	
	4.9.4	Low	Bill Wilks	Agree	
	4.9.5	Low	Bill Wilks	Agree	
Recommendations	4.9.1	Low	Bill Wilks	Reject with Comment	MoA has solved the problem differently than planned. MoA will document the reason it was removed from scope.
	4.9.2	Low	Bill Wilks	Accept	
	4.9.3	Low	Bill Wilks	Accept	
	4.9.4	Low	Bill Wilks	Accept	
4.10 MM - Process Goods Issue					
Findings	4.10.1	Low	Bill Wilks	Agree	
	4.10.2	Low	Bill Wilks	Agree	
Recommendation	4.10.1	Low	Bill Wilks	Accept with Comment	MoA will document the reason why we did not implement a pick list

	Item	Risk Category	Response Owner	Response	Comments
Recommendation (cont.)	4.10.2	Low	Bill Wilks	Accept with Comment	MoA will document the reason why we did not implement a pick list
4.11 MM - Cycle-Count Process					
Findings	4.11.1	Medium	Bill Wilks	Agree	
	4.11.2	Medium	Bill Wilks	Agree	
	4.11.3	Medium	Bill Wilks	Agree	
Recommendation	4.11.1	Medium	Bill Wilks	Accept	
4.12 MM - Maintain Material Master					
Findings	4.12.1	Low	Bill Wilks	Agree	
	4.12.2	Low	Bill Wilks	Agree	
	4.12.3	Low	Bill Wilks	Agree	
	4.12.4	Low	Bill Wilks	Agree	
	4.12.5	Low	Bill Wilks	Agree with Comment	MoA does not directly use standard material types. MoA created custom material types by copying the standard material type and customizing the views. MoA does not use the above material types.
	4.12.5.a	Low	Bill Wilks		
	4.12.5.b	Low	Bill Wilks		
	4.12.5.c	Low	Bill Wilks		
	4.12.5.d	Low	Bill Wilks		
	4.12.5.e	Low	Bill Wilks		
Findings (cont.)	4.12.5.f	Low	Bill Wilks		
	4.12.5.g	Low	Bill Wilks		
	4.12.5.h	Low	Bill Wilks		
	4.12.5.i	Low	Bill Wilks		
	4.12.6	Low	Bill Wilks	Agree	
	4.12.7	Low	Bill Wilks	Agree	
	4.12.8	Low	Bill Wilks	Agree with Comment	Duplicate checks will be created in Maximo (AWWU)
Recommendations	4.12.1	Low	Bill Wilks	Accept	
	4.12.2	Low	Bill Wilks	Accept with Comment	MoA will evaluate.
4.13 SAP SRM - Account Assignment					
Findings	4.13.1	Medium	Bill Wilks	Agree	
	4.13.2	Medium	Bill Wilks	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Findings	4.13.3	Medium	Bill Wilks	Agree	
	4.13.4	Medium	Bill Wilks	Agree	
Recommendations	4.13.1	Medium	Bill Wilks	Accept	
	4.13.2	Medium	Bill Wilks	Accept	
4.14 SAP SRM - Supplier Registration					
Findings	4.14.1	High	Bill Wilks	Agree	
	4.14.2	High	Bill Wilks	Agree	
Recommendation	4.14.1	High	Bill Wilks	Accept with Comment	MoA will evaluate.
5. HUMAN CAPITAL MANAGEMENT (HCM)					
5.2 Payroll - Manage Overpayments					
Findings	5.2.1	High	Michael Proksell	Agree	
	5.2.2	High	Michael Proksell	Agree	
	5.2.3	High	Michael Proksell	Agree	
	5.2.4	High	Michael Proksell	Agree	
	5.2.5	High	Michael Proksell	Agree	
	5.2.6	High	Michael Proksell	Agree	
	5.2.7	High	Michael Proksell	Agree	
Recommendations	5.2.1	High	Michael Proksell	Accept	
	5.2.2	High	Michael Proksell	Accept	
	5.2.3	High	Michael Proksell	Accept	
	5.2.4	High	Michael Proksell	Accept	
	5.2.5	High	Michael Proksell	Accept	
	5.2.6	High	Michael Proksell	Accept	
	5.2.7	High	Michael Proksell	Accept	
	5.2.8	High	Michael Proksell	Accept	
	5.2.9	High	Michael Proksell	Accept	
	5.2.10	High	Michael Proksell	Accept	
	5.2.11	High	Michael Proksell	Accept	
	5.2.12	High	Michael Proksell	Accept	
5.3 Payroll - Tax Processing					
	5.3.1	Medium	Michael Proksell	Agree	
	5.3.2	Medium	Michael Proksell	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Findings	5.3.3	Medium	Michael Proksell	Agree	
	5.3.4	Medium	Michael Proksell	Agree	
	5.3.5	Medium	Michael Proksell	Agree	
	5.3.6	Medium	Michael Proksell	Agree	
	5.3.7	Medium	Michael Proksell	Agree	
	5.3.8	Medium	Michael Proksell	Agree	
Recommendations	5.3.1	Medium	Michael Proksell	Accept	
	5.3.2	Medium	Michael Proksell	Accept	
	5.3.3	Medium	Michael Proksell	Accept	
Recommendations (cont.)	5.3.4	Medium	Michael Proksell	Accept	
	5.3.5	Medium	Michael Proksell	Accept	
	5.3.6	Medium	Michael Proksell	Accept	
	5.3.7	Medium	Michael Proksell	Accept	
	5.3.8	Medium	Michael Proksell	Accept	
	5.3.9	Medium	Michael Proksell	Accept	
	5.3.10	Medium	Michael Proksell	Accept	
	5.3.10.a	Medium	Michael Proksell	Accept	
	5.3.10.b	Medium	Michael Proksell	Accept	
	5.3.10.c	Medium	Michael Proksell	Accept	
	5.3.10.d	Medium	Michael Proksell	Accept	
5.4 Payroll - Reconciliation					
Findings	5.4.1	Medium	Michael Proksell	Agree	
	5.4.2	Medium	Michael Proksell	Agree	
	5.4.3	Medium	Michael Proksell	Agree	
	5.4.3.a	Medium	Michael Proksell	Agree	
	5.4.3.b	Medium	Michael Proksell	Agree	
	5.4.3.c	Medium	Michael Proksell	Agree	
	5.4.4	Medium	Michael Proksell	Agree	
	5.4.4.a	Medium	Michael Proksell	Agree	
	5.4.4.b	Medium	Michael Proksell	Agree	
	5.4.4.c	Medium	Michael Proksell	Agree	
	5.4.4.d	Medium	Michael Proksell	Agree	
	5.4.4.e	Medium	Michael Proksell	Agree	

	Item	Risk Category	Response Owner	Response	Comments
	5.4.4.f	Medium	Michael Proksell	Agree	
	5.4.4.g	Medium	Michael Proksell	Agree	
	5.4.5	Medium	Michael Proksell	Agree	
	5.4.6	Medium	Michael Proksell	Agree	
Recommendations	5.4.1	Medium	Michael Proksell	Accept	
	5.4.2	Medium	Michael Proksell	Accept	
	5.4.3	Medium	Michael Proksell	Accept	
	5.4.4	Medium	Michael Proksell	Accept	
Recommendation (cont.)	5.4.5	Medium	Michael Proksell	Accept	
5.5 Process Payroll					
Findings	5.5.1	High	Michael Proksell	Agree with Comment	MoA plans to revisit this design during documentation and configuration.
	5.5.2	High	Michael Proksell	Agree	
	5.5.3	High	Michael Proksell	Agree	
	5.5.4	High	Michael Proksell	Agree	
	5.5.5	High	Michael Proksell	Agree	
	5.5.6	High	Michael Proksell	Agree	
	5.5.7	High	Michael Proksell	Agree	
	5.5.8	High	Michael Proksell	Agree	
	5.5.9	High	Michael Proksell	Agree	
	5.5.10	High	Michael Proksell	Agree	
	5.5.11	High	Michael Proksell	Agree	
	5.5.12	High	Michael Proksell	Agree	
	5.5.13	High	Michael Proksell	Agree	
	5.5.14	High	Michael Proksell	Agree	
	5.5.15	High	Michael Proksell	Need More Information	
	5.5.16	High	Michael Proksell	Agree	
	5.5.17	High	Michael Proksell	Agree	
	5.5.18	High	Michael Proksell	Agree	
	5.5.19	High	Michael Proksell	Agree	
	5.5.20	High	Michael Proksell	Agree	

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	Item	Risk Category	Response Owner	Response	Comments
	5.5.21	High	Michael Proksell	Disagree with Comment	Based on documentation received we are currently configured to do both full and modified accrual methods (See attached PDF document)
Recommendations	5.5.1	High	Michael Proksell	Accept with Comment	We will revisit to see if there is a possible change that needs to be made.
	5.5.2	High	Michael Proksell	Accept with Comment	We will review business process in this area to see what changes need to be made.
	5.5.3	High	Michael Proksell	Accept	
	5.5.4	High	Michael Proksell	Accept	
	5.5.5	High	Michael Proksell	Accept	
Recommendations (cont.)	5.5.6	High	Michael Proksell	N/A	
	5.5.7	High	Michael Proksell	Accept	
	5.5.8	High	Michael Proksell	Accept	
	5.5.9	High	Michael Proksell	Accept	
	5.5.10	High	Michael Proksell	N/A	
	5.5.11	High	Michael Proksell	Accept	
	5.5.12	High	Michael Proksell	Accept	
	5.5.13	High	Michael Proksell	Accept	
	5.5.14	High	Michael Proksell	Accept	
	5.5.15	High	Michael Proksell	Accept	
	5.5.16	High	Michael Proksell	Accept	
	5.5.17	High	Michael Proksell	Accept	
	5.5.18	High	Michael Proksell	Accept	
	5.5.19	High	Michael Proksell	Accept	
	5.5.20	High	Michael Proksell	Accept	
	5.5.21	High	Michael Proksell	Reject with Comment	MoA is not aware of any decision to move to just a modified accrual approach. We are currently using and configured to use both a modified and full accrual approach.
5.6 Process Off-Cycle Payroll					
Findings	5.6.1	Medium	Michael Proksell	Agree	
	5.6.2	Medium	Michael Proksell	Agree	
	5.6.3	Medium	Michael Proksell	Agree	
	5.6.4	Medium	Michael Proksell	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Recommendations	5.6.1	Medium	Michael Proksell	Accept	
	5.6.2	Medium	Michael Proksell	Accept	
5.7 Time Management					
Findings	5.7.1	High	Michael Proksell	Agree	
	5.7.2	High	Michael Proksell	Agree	
	5.7.3	High	Michael Proksell	Agree	
	5.7.4	High	Michael Proksell	Agree	
	5.7.5	High	Michael Proksell	Agree	
Findings (cont.)	5.7.6	High	Michael Proksell	Agree	
	5.7.7	High	Michael Proksell	Agree	
	5.7.8	High	Michael Proksell	Agree	
	5.7.9	High	Michael Proksell	Agree	
	5.7.10	High	Michael Proksell	Agree	
	5.7.11	High	Michael Proksell	Agree	
	5.7.12	High	Michael Proksell	Agree	
	5.7.13	High	Michael Proksell	Agree	
Recommendations	5.7.1	High	Michael Proksell	Accept	
	5.7.2	High	Michael Proksell	Accept	
	5.7.3	High	Michael Proksell	Accept	
	5.7.4	High	Michael Proksell	Accept	
	5.7.5	High	Michael Proksell	Accept	
	5.7.6	High	Michael Proksell	Accept	
	5.7.7	High	Michael Proksell	Accept	
	5.7.8	High	Michael Proksell	Accept	
	5.7.9	High	Michael Proksell	Accept	
	5.7.10	High	Michael Proksell	Accept	
	5.7.11	High	Michael Proksell	Accept	
	5.7.12	High	Michael Proksell	Accept	
	5.7.12.a	High	Michael Proksell	Accept	
	5.7.12.b	High	Michael Proksell	Accept	
	5.7.13	High	Michael Proksell	Accept	
	5.7.14	High	Michael Proksell	Accept	
5.8 Enter or Correct Time					

	Item	Risk Category	Response Owner	Response	Comments
Findings	5.8.1	High	Michael Proksell	Agree	
	5.8.2	High	Michael Proksell	Agree	
	5.8.3	High	Michael Proksell	Agree	
	5.8.4	High	Michael Proksell	Agree	
	5.8.5	High	Michael Proksell	Agree	
	5.8.6	High	Michael Proksell	Agree	
Findings (cont.)	5.8.7	High	Michael Proksell	Agree with Comment	MoA is evaluating the best solution.
	5.8.8	High	Michael Proksell	Agree	
	5.8.9	High	Michael Proksell	Agree	
	5.8.9.a	High	Michael Proksell	Agree	
	5.8.9.b	High	Michael Proksell	Agree	
Recommendations	5.8.1	High	Michael Proksell	Accept	
	5.8.2	High	Michael Proksell	Accept	
	5.8.3	High	Michael Proksell	Accept	
	5.8.4	High	Michael Proksell	Accept	
	5.8.5	High	Michael Proksell	Accept	
	5.8.5.a	High	Michael Proksell	Accept	
	5.8.5.b	High	Michael Proksell	Accept	
5.9 Evaluate Time					
Findings	5.9.1	High	Michael Proksell	Agree	
	5.9.2	High	Michael Proksell	Agree	
	5.9.3	High	Michael Proksell	Agree	
	5.9.4	High	Michael Proksell	Agree	
	5.9.5	High	Michael Proksell	Agree	
	5.9.5.a	High	Michael Proksell	Agree	
	5.9.6	High	Michael Proksell	Agree	
	5.9.7	High	Michael Proksell	Agree	
	5.9.7.a	High	Michael Proksell	Agree	
	5.9.8	High	Michael Proksell	Agree	
	5.9.9	High	Michael Proksell	Agree	
	5.9.10	High	Michael Proksell	Agree	
	5.9.1	High	Michael Proksell	Accept with Comment	MoA is evaluating how to best implement this recommendation.

	Item	Risk Category	Response Owner	Response	Comments
Recommendations	5.9.1.a	High	Michael Proksell		
	5.9.1.b	High	Michael Proksell		
	5.9.1.c	High	Michael Proksell		
	5.9.1.d	High	Michael Proksell		
	5.9.1.e	High	Michael Proksell		
Recommendation (cont.)	5.9.2	High	Michael Proksell	Accept	
	5.9.3	High	Michael Proksell	Accept	
	5.9.4	High	Michael Proksell	Accept	
	5.9.5	High	Michael Proksell	Accept	
5.10 Payroll - Modify Employee Data					
Findings	5.10.1	Medium	Michael Proksell	Disagree with Comment	There are discrepancies between PeopleSoft and SAP, but the data are internally consistent within SAP.
	5.10.2	Medium	Michael Proksell	Agree	
	5.10.3	Medium	Michael Proksell	Agree	
	5.10.4	Medium	Michael Proksell	Agree	
Recommendations	5.10.1	Medium	Michael Proksell	Accept	
	5.10.2	Medium	Michael Proksell	Accept	
	5.10.3	Medium	Michael Proksell	Accept	
	5.10.4	Medium	Michael Proksell	Accept	
5.11 Time - Manage Quota					
Findings	5.11.1	Medium	Michael Proksell	Agree	
	5.11.2	Medium	Michael Proksell	Agree	
	5.11.3	Medium	Michael Proksell	Agree	
	5.11.4	Medium	Michael Proksell	Agree	
	5.11.5	Medium	Michael Proksell	Agree	
	5.11.6	Medium	Michael Proksell	Agree	
	5.11.7	Medium	Michael Proksell	Agree	
	5.11.8	Medium	Michael Proksell	Agree	
	5.11.9	Medium	Michael Proksell	Agree	
	5.11.10	Medium	Michael Proksell	Agree	
Recommendations	5.11.1	Medium	Michael Proksell	Accept	
	5.11.2	Medium	Michael Proksell	Accept	

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	Item	Risk Category	Response Owner	Response	Comments
Recommendations	5.11.3	Medium	Michael Proksell	Accept	
	5.11.4	Medium	Michael Proksell	Accept	
5.12 Time - Create or Change Work Schedules					
Findings	5.12.1	Medium	Michael Proksell	Agree	
	5.12.2	Medium	Michael Proksell	Agree	
	5.12.3	Medium	Michael Proksell	Agree	
Findings (cont.)	5.12.4	Medium	Michael Proksell	Agree	
	5.12.5	Medium	Michael Proksell	Agree	
	5.12.6	Medium	Michael Proksell	Agree	
Recommendation	5.12.1	Medium	Michael Proksell	Accept	
5.13 OM - Enterprise Structure Definition					
Findings	5.13.1	High	Michael Proksell	Agree	
	5.13.2	High	Michael Proksell	Agree	
	5.13.2.a	High	Michael Proksell	Agree	
	5.13.2.b	High	Michael Proksell	Agree	
	5.13.3	High	Michael Proksell	Agree	
	5.13.4	High	Michael Proksell	Agree	
	5.13.5	High	Michael Proksell	Agree	
Recommendations	5.13.1	High	Michael Proksell	Accept	
	5.13.2	High	Michael Proksell	Accept	
5.14 General Process Design for Organizational Management and Personnel Administration					
Finding	5.14.1	Medium	Michael Proksell	Agree	
Recommendation	5.14.1	Medium	Michael Proksell	Accept	
5.15 OM - Create and Maintain Organizational					
Findings	5.15.1	Medium	Michael Proksell	Agree	
	5.15.2	Medium	Michael Proksell	Agree	
	5.15.3	Medium	Michael Proksell	Agree	
	5.15.4	Medium	Michael Proksell	Agree	
	5.15.5	Medium	Michael Proksell	Disagree with Comment	Some of the documentation does exist but it is incomplete and/or inadequate (page 382 of QA Assessment shows business blueprint V 3.0 Draft).
	5.15.6	Medium	Michael Proksell	Agree	

	Item	Risk Category	Response Owner	Response	Comments
	5.15.7	Medium	Michael Proksell	Agree	
	5.15.8	Medium	Michael Proksell	Agree	
	5.15.9	Medium	Michael Proksell	Agree	
	5.15.10	Medium	Michael Proksell	Agree with Comment	For ESS and MSS testing, role based user ID's were used. For ECC testing security roles were not available.
	5.15.11	Medium	Michael Proksell	Agree	
Recommendations	5.15.1	Medium	Michael Proksell	Accept	
	5.15.2	Medium	Michael Proksell	Accept	
	5.15.3	Medium	Michael Proksell	Accept	
	5.15.4	Medium	Michael Proksell	Accept	
	5.15.5	Medium	Michael Proksell	Accept	
	5.15.6	Medium	Michael Proksell	Accept	
	5.15.7	Medium	Michael Proksell	Accept	
5.16 OM - Create and Maintain Job					
Findings	5.16.1	Medium	Michael Proksell	Agree	
	5.16.2	Medium	Michael Proksell	Agree	
	5.16.3	Medium	Michael Proksell	Agree	
	5.16.4	Medium	Michael Proksell	Agree	
	5.16.5	Medium	Michael Proksell	Agree	
	5.16.6	Medium	Michael Proksell	Agree	
Recommendations	5.16.1	Medium	Michael Proksell	Agree	
	5.16.2	Medium	Michael Proksell	Accept	
	5.16.3	Medium	Michael Proksell	Accept	
	5.16.3.a	Medium	Michael Proksell	Accept	
	5.16.3.b	Medium	Michael Proksell	Accept	
	5.16.4	Medium	Michael Proksell	Accept	
5.17 OM - Create and Maintain Position					
Findings	5.17.1	High	Michael Proksell	Agree	
	5.17.2	High	Michael Proksell	Agree	
	5.17.3	High	Michael Proksell	Agree	
	5.17.4	High	Michael Proksell	Agree	
	5.17.5	High	Michael Proksell	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Findings	5.17.6	High	Michael Proksell	Agree	
	5.17.7	High	Michael Proksell	Agree	
	5.17.8	High	Michael Proksell	Agree	
	5.17.9	High	Michael Proksell	Agree	
	5.17.10	High	Michael Proksell	Agree	
Recommendation	5.17.1	High	Michael Proksell	Accept	
	5.17.2	High	Michael Proksell	Accept with Comment	MoA will evaluate.
	5.17.3	High	Michael Proksell	Accept	
	5.17.4	High	Michael Proksell	Accept	
	5.17.5	High	Michael Proksell	Accept	
	5.17.6	High	Michael Proksell	Accept	
	5.17.7	High	Michael Proksell	Accept	
	5.17.8	High	Michael Proksell	Accept with Comment	MoA will evaluate.
	5.17.9	High	Michael Proksell	Accept	
5.18 OM - Create and Maintain Relationships					
Findings	5.18.1	Medium	Michael Proksell	Agree	
	5.18.2	Medium	Michael Proksell	Agree	
	5.18.3	Medium	Michael Proksell	Agree with Comment	Relationships were not part of the Integration test scripts.
	5.18.4	Medium	Michael Proksell	Agree with Comment	For ESS and MSS testing, role based user ID's were used. For ECC testing, security role were not available.
Recommendations	5.18.1	Medium	Michael Proksell	Accept	
	5.18.2	Medium	Michael Proksell	Accept	
5.19 OM - Delimit Organizational Unit					
Findings	5.19.1	Medium	Michael Proksell	Agree	
	5.19.2	Medium	Michael Proksell	Agree	
	5.19.3	Medium	Michael Proksell	Agree with Comment	Delimit org unit was not part of integration test scripts.
	5.19.4	Medium	Michael Proksell	Agree with Comment	For ESS and MSS testing, role based user ID's were used. For ECC testing, security role were not available.
Recommendations	5.19.1	Medium	Michael Proksell	Accept	
	5.19.2	Medium	Michael Proksell	Accept	
	5.19.3	Medium	Michael Proksell	Accept	

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	Item	Risk Category	Response Owner	Response	Comments
5.20 Organizational Management (OM) - Delimit Job					
Findings	5.20.1	Medium	Michael Proksell	Agree	
	5.20.2	Medium	Michael Proksell	Agree	
	5.20.3	Medium	Michael Proksell	Agree with Comment	Delimit job was not part of integration test scripts.
Findings (cont.)	5.20.4	Medium	Michael Proksell	Agree with Comment	For ESS and MSS testing, role based user ID's were used. For ECC testing, security role were not available.
Recommendations	5.20.1	Medium	Michael Proksell	Accept	
	5.20.2	Medium	Michael Proksell	Accept	
	5.20.3	Medium	Michael Proksell	Accept	
5.21 OM - Delimit Position					
Findings	5.21.1	Medium	Michael Proksell	Agree	
	5.21.2	Medium	Michael Proksell	Agree	
	5.21.3	Medium	Michael Proksell	Agree with Comment	Delimit position was not part of integration test scripts.
	5.21.4	Medium	Michael Proksell	Agree with Comment	For ESS and MSS testing, role based user ID's were used. For ECC testing, security role were not available.
Recommendations	5.21.1	Medium	Michael Proksell	Accept	
	5.21.2	Medium	Michael Proksell	Accept	
	5.21.3	Medium	Michael Proksell	Accept	
5.22 PA - Hire Employee					
Findings	5.22.1	Medium	Michael Proksell	Agree	
	5.22.2	Medium	Michael Proksell	Agree	
	5.22.3	Medium	Michael Proksell	Agree	
	5.22.4	Medium	Michael Proksell	Agree	
	5.22.5	Medium	Michael Proksell	Agree	
	5.22.6	Medium	Michael Proksell	Agree	
	5.22.7	Medium	Michael Proksell	Agree with Comment	Integration testing was done with BN, TM and PY. SRM was not part of testing at the time.
	5.22.8	Medium	Michael Proksell	Agree with Comment	For ESS and MSS testing, role based user ID's were used. For ECC testing, security role were not available.
	5.22.9	Medium	Michael Proksell	Agree	
	5.22.1	Medium	Michael Proksell	Accept	

	Item	Risk Category	Response Owner	Response	Comments
Recommendations	5.22.2	Medium	Michael Proksell	Accept	
	5.22.3	Medium	Michael Proksell	Accept	
	5.22.4	Medium	Michael Proksell	Accept	
	5.22.5	Medium	Michael Proksell	Accept	
Recommendations (cont.)	5.22.6	Medium	Michael Proksell	Accept	
	5.22.7	Medium	Michael Proksell	Accept	
5.23 PA - Hire Unpaid					
Findings	5.23.1	Medium	Michael Proksell	Agree	
	5.23.2	Medium	Michael Proksell	Agree	
	5.23.3	Medium	Michael Proksell	Agree	
Recommendations	5.23.1	Medium	Michael Proksell	Accept	
	5.23.2	Medium	Michael Proksell	Accept	
	5.23.3	Medium	Michael Proksell	Accept	
5.24 Maintain Employee Information					
Findings	5.24.1	Medium	Michael Proksell	Agree	
	5.24.2	Medium	Michael Proksell	Agree	
	5.24.3	Medium	Michael Proksell	Agree	
Recommendations	5.24.1	Medium	Michael Proksell	Accept	
	5.24.2	Medium	Michael Proksell	Accept	
	5.24.3	Medium	Michael Proksell	Accept	
	5.24.4	Medium	Michael Proksell	Accept	
5.25 Personnel Administration (PA) - Manage Employee - No Show					
Findings	5.25.1	Medium	Michael Proksell	Agree	
	5.25.2	Medium	Michael Proksell	Agree	
	5.25.3	Medium	Michael Proksell	Agree	
	5.25.4	Medium	Michael Proksell	Agree	
	5.25.5	Medium	Michael Proksell	Agree	
Recommendations	5.25.1	Medium	Michael Proksell	Accept	
	5.25.2	Medium	Michael Proksell	Accept with Comment	MoA will evaluate.
	5.25.3	Medium	Michael Proksell	Accept	
	5.25.4	Medium	Michael Proksell	Accept	
5.26 PA - Manage Employee Transfer or Leave of Absence					
	5.26.1	Low	Michael Proksell	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Findings	5.26.2	Low	Michael Proksell	Agree	
	5.26.3	Low	Michael Proksell	Agree	
	5.26.4	Low	Michael Proksell	Agree	
	5.26.5	Low	Michael Proksell	Agree	
Recommendations	5.26.1	Low	Michael Proksell	Accept	
	5.26.2	Low	Michael Proksell	Accept	
5.27 PA - Separate Employee					
Findings	5.27.1	Medium	Michael Proksell	Agree	
	5.27.2	Medium	Michael Proksell	Agree	
	5.27.3	Medium	Michael Proksell	Agree	
Recommendations	5.27.1	Medium	Michael Proksell	Accept	
	5.27.2	Medium	Michael Proksell	Accept	
	5.27.3	Medium	Michael Proksell	Accept	
5.28 PA - Changes Due to CBA, Compensation Changes, or CPI					
Findings	5.28.1	Medium	Michael Proksell	Disagree with Comment	Salary Adjustments for non-rep employees will be processed within SAP using the standard transaction PA-40.
	5.28.2	Medium	Michael Proksell	Agree	
	5.28.3	Medium	Michael Proksell	Agree	
	5.28.4	Medium	Michael Proksell	Agree	
Recommendations	5.28.1	Medium	Michael Proksell	Accept	
	5.28.1.a	Medium	Michael Proksell	Accept	
	5.28.1.b	Medium	Michael Proksell	Accept	
	5.28.2	Medium	Michael Proksell	Accept	
	5.28.3	Medium	Michael Proksell	Accept with Comment	MoA accept but need to investigate further to see if Neogov can accommodate changes via an interface
5.29 Modify Benefits Plan					
Findings	5.29.1	Medium	Michael Proksell	Agree	
	5.29.2	Medium	Michael Proksell	Agree	
	5.29.3	Medium	Michael Proksell	Agree	
Recommendations	5.29.1	Medium	Michael Proksell	Accept	
	5.29.2	Medium	Michael Proksell	Accept	
5.30 Benefits Billing - Reconciliation and Remittance					

	Item	Risk Category	Response Owner	Response	Comments
Findings	5.30.1	Medium	Michael Proksell	Agree	
	5.30.2	Medium	Michael Proksell	Agree	
	5.30.2.a	Medium	Michael Proksell	Agree	
	5.30.3	Medium	Michael Proksell	Agree	
	5.30.4	Medium	Michael Proksell	Agree	
Recommendations	5.30.1	Medium	Michael Proksell	Accept	
	5.30.2	Medium	Michael Proksell	Accept	
5.31 Benefits Enrollment					
Findings	5.31.1	Medium	Michael Proksell	Agree	
	5.31.2	Medium	Michael Proksell	Agree	
Recommendation	5.31.1	Medium	Michael Proksell	N/A	
5.32 Benefits - Life Changes					
Findings	5.32.1	Medium	Michael Proksell	Agree	
	5.32.2	Medium	Michael Proksell	Agree	
Recommendation	5.32.1	Medium	Michael Proksell	Accept	
	5.32.2	Medium	Michael Proksell	Accept	
5.33 Benefits Termination					
Findings	5.33.1	Medium	Michael Proksell	Agree	
	5.33.2	Medium	Michael Proksell	Agree	
Recommendation	5.33.1	Medium	Michael Proksell	Accept	
	5.33.2	Medium	Michael Proksell	Accept	
6. SAP BUSINESS WAREHOUSE (SAP BW) AND SAP BUSINESS OBJECTS SOLUTIONS					
6.2 General Design Concept for SAP BW					
Findings	6.2.1	High	Julie Collins	Agree	
	6.2.2	High	Julie Collins	Agree	
	6.2.3	High	Julie Collins	Agree	
	6.2.4	High	Julie Collins	Agree	
	6.2.5	High	Julie Collins	Agree	
	6.2.6	High	Julie Collins	Agree	
	6.2.7	High	Julie Collins	Agree	
Recommendations	6.2.1	High	Julie Collins	Accept	
	6.2.2	High	Julie Collins	Accept	

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	Item	Risk Category	Response Owner	Response	Comments
	6.2.3	High	Julie Collins	Accept	
6.3 Use of Standard Content for SAP BW					
Finding	6.3.1	High	Julie Collins	Agree	
Recommendations	6.3.1	High	Julie Collins	Accept	
	6.3.1.a	High	Julie Collins	Accept	
Recommendation (cont.)	6.3.1.b	High	Julie Collins	Accept	
6.4 SAP BW - System Landscape					
Finding	6.4.1	Medium	Julie Collins	Agree	
Recommendations	6.4.1	Medium	Julie Collins	Accept	
	6.4.2	Medium	Julie Collins	Accept	
6.5 Overall Solution Landscape - Transition from SAP Bex to SAP Business Objects Solutions					
Findings	6.5.1	Medium	Julie Collins	Agree	
	6.5.2	Medium	Julie Collins	Agree	
	6.5.3	Medium	Julie Collins	Agree	
Recommendations	6.5.1	Medium	Julie Collins	Accept	
	6.5.2	Medium	Julie Collins	Accept	
6.6 SAP BW - Transport Concept					
Finding	6.6.1	High	Julie Collins	Agree	
Recommendation	6.6.1	High	Julie Collins	Accept	
6.7 SAP BW - Authorizations					
Findings	6.7.1	Low	Julie Collins	Agree	
	6.7.2	Low	Julie Collins	Agree	
Recommendation	6.7.1	Low	Julie Collins	Accept	
6.8 Logical Interfaces					
Finding	6.8.1	Low	Julie Collins	Agree	
Recommendation	6.8.1	Low	Julie Collins	Accept	
6.9 Functional Specifications					
Findings	6.9.1	High	Julie Collins	Agree	
	6.9.2	High	Julie Collins	Agree	
Recommendations	6.9.1	High	Julie Collins	Accept	
	6.9.2	High	Julie Collins	Accept	

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	Item	Risk Category	Response Owner	Response	Comments
6.10 Data Modeling - LSA					
Findings	6.10.1	High	Julie Collins	Agree	
	6.10.2	High	Julie Collins	Agree	
	6.10.3	High	Julie Collins	Agree	
Recommendations	6.10.1	High	Julie Collins	Accept	
Recommendations (cont.)	6.10.2	High	Julie Collins	Accept	
	6.10.3	High	Julie Collins	Accept	
6.11 Data Sourcing					
Finding	6.11.1	High	Julie Collins	Agree	
Recommendation	6.11.1	High	Julie Collins	Accept	
6.12 Data Storage					
Findings	6.12.1	High	Julie Collins	Agree	
	6.12.2	High	Julie Collins	Agree	
Recommendation	6.12.1	High	Julie Collins	Accept	
	6.12.2	High	Julie Collins	Accept	
6.13 Data Transformation					
Finding	6.13.1	High	Julie Collins	Agree	
Recommendation	6.13.1	High	Julie Collins	Accept	
6.14 SAP BW - Business Content Extractors					
Finding	6.14.1	High	Julie Collins	Agree	
Recommendation	6.14.1	High	Julie Collins	Accept	
6.15 Content Enhancements					
Finding	6.15.1	High	Julie Collins	Agree	
Recommendation	6.15.1	High	Julie Collins	Accept	
6.16 Non-SAP Data Sources					
Finding	6.16.1	Low	Julie Collins	Agree	
Recommendation	6.16.1	Low	Julie Collins	Accept	
6.17 Master Data Process Chain					
Finding	6.17.1	Medium	Julie Collins	Agree	
Recommendation	6.17.1	Medium	Julie Collins	Accept	
6.18 Text and Hierarchy Process Chain					
Finding	6.18.1	Medium	Julie Collins	Agree	

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	Item	Risk Category	Response Owner	Response	Comments
Recommendation	6.18.1	Medium	Julie Collins	Accept	
6.19 Transaction Data Process Chain					
Finding	6.19.1	Medium	Julie Collins	Agree	
Recommendation	6.19.1	Medium	Julie Collins	Accept	
6.20 Query Definition					
Findings	6.20.1	Medium	Julie Collins	Agree with Changes	Should be "exclusion" rather than "inclusion."
	6.20.2	Medium	Julie Collins	Agree	
Recommendations	6.20.1	Medium	Julie Collins	Accept with Comment	Exclusion filters will only be used when reasonably necessary.
	6.20.2	Medium	Julie Collins	Accept	
7. PROJECT SYSTEM					
7.2 Investment Management					
Findings	7.2.1	Medium	Paul Cotton	Agree	
	7.2.2	Medium	Paul Cotton	Agree	
	7.2.3	Medium	Paul Cotton	Agree	
Recommendations	7.2.1	Medium	Paul Cotton	Accept	
	7.2.2	Medium	Paul Cotton	Accept	
	7.2.3	Medium	Paul Cotton	Accept	
7.3 Project Initiation - Capitalized Projects					
Findings	7.3.1	Low	Paul Cotton	Agree	
	7.3.2	Low	Paul Cotton	Agree	
	7.3.3	Low	Paul Cotton	Agree	
	7.3.4	Low	Paul Cotton	Agree	
	7.3.5	Low	Paul Cotton	Agree	
Recommendation	7.3.1	Low	Paul Cotton	Accept	
7.4 Project Initiation - Expense Projects - Construction (This topic was covered in 7.3)					
7.5 Project Initiation - Expense Projects - Nonconstruction (This topic was covered in 7.3)					
7.6 Maintenance and Operations Projects					
Findings	7.6.1	Low	Paul Cotton	Agree	
	7.6.2	Low	Paul Cotton	Agree	
	7.6.3	Low	Paul Cotton	Agree	
Recommendation	7.6.1	Low	Paul Cotton	Accept	

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	Item	Risk Category	Response Owner	Response	Comments
	7.6.2	Low	Paul Cotton	Accept	
7.7 Project Creation - Project Structures					
Finding	7.7.1	Low	Paul Cotton	Agree	
Recommendation	7.7.1	Low	Paul Cotton	N/A	
7.8 Project Creation - Project Numbers					
Finding	7.8.1	Low	Paul Cotton	Agree	
Recommendation	7.8.1	Low	Paul Cotton	N/A	
7.9 Project Definition and WBS Element Data Fields					
Finding	7.9.1	Low	Paul Cotton	Agree	
Recommendation	7.9.1	Low	Paul Cotton	N/A	
7.10 Custom Data Fields					
Finding	7.10.1	Medium	Paul Cotton	Agree	
Recommendation	7.10.1	Medium	Paul Cotton	Accept	
7.11 Project Planning and Budgeting - Cost Estimating and Planning					
Findings	7.11.1	Low	Paul Cotton	Agree	
	7.11.2	Low	Paul Cotton	Agree	
	7.11.3	Low	Paul Cotton	Agree	
Recommendations	7.11.1	Low	Paul Cotton	Accept	
	7.11.2	Low	Paul Cotton	Accept	
7.12 Project Planning and Budgeting - Scheduling					
Finding	7.12.1	Low	Paul Cotton	Agree	
Recommendation	7.12.1	Low	Paul Cotton	N/A	
7.13 Project Planning and Budgeting - Billing and Reimbursement Planning					
Findings	7.13.1	Low	Paul Cotton	Agree	
	7.13.2	Low	Paul Cotton	Agree	
	7.13.3	Low	Paul Cotton	Agree	
	7.13.4	Low	Paul Cotton	Disagree with Comment	MoA has not completed the conversion strategy.
Recommendations	7.13.1	Low	Paul Cotton	Accept	
	7.13.2	Low	Paul Cotton	Accept	
7.14 Project Execution - Project Statuses					

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	Item	Risk Category	Response Owner	Response	Comments
Findings	7.14.1	Low	Paul Cotton	Agree	
	7.14.2	Low	Paul Cotton	Agree	
	7.14.3	Low	Paul Cotton	Agree	
	7.14.4	Low	Paul Cotton	Disagree with Comment	MoA has not completed the conversion strategy.
Recommendations	7.14.1	Low	Paul Cotton	Accept	
	7.14.2	Low	Paul Cotton	Accept	
7.15 Project Execution - Billing (Reimbursements), Down Payments, Procurement (Purchase Requisitions and Purchase Orders), Invoicing, and P-Card Processes					
Findings	7.15.1	Medium	Paul Cotton	Agree	
	7.15.2	Medium	Paul Cotton	Agree	
	7.15.3	Medium	Paul Cotton	Agree	
	7.15.4	Medium	Paul Cotton	Agree with Comment	MoA does not use Maximo. Future interfaces are not considered complex.
	7.15.5	Medium	Paul Cotton	Agree	
	7.15.6	Medium	Paul Cotton	Disagree with Comment	MoA has not extensively tested the interface.
	7.15.7	Medium	Paul Cotton	Agree	
	7.15.8	Medium	Paul Cotton	Agree	
	7.15.8.a	Medium	Paul Cotton	Agree	
	7.15.8.b	Medium	Paul Cotton	Agree	
	7.15.8.c	Medium	Paul Cotton	Agree	
	7.15.8.d	Medium	Paul Cotton	Agree	
	7.15.8.e	Medium	Paul Cotton	Agree	
	7.15.9	Medium	Paul Cotton	Agree	
Recommendations	7.15.1	Medium	Paul Cotton	Accept with Comment	MoA will evaluate
	7.15.2	Medium	Paul Cotton	Accept	
	7.15.3	Medium	Paul Cotton	Accept	
	7.15.4	Medium	Paul Cotton	Accept	
7.16 Project Execution - Payroll and Labor Process					
Findings	7.16.1	Medium	Paul Cotton	Agree	
	7.16.2	Medium	Paul Cotton	Agree	
Recommendation	7.16.1	Medium	Paul Cotton	Accept	
7.17 Project Execution - Cost Collection and Overhead Allocations					
	7.17.1	Medium	Paul Cotton	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Findings	7.17.2	Medium	Paul Cotton	Agree	
	7.17.3	Medium	Paul Cotton	Agree	
	7.17.4	Medium	Paul Cotton	Agree	
Findings (cont.)	7.17.5	Medium	Paul Cotton	Agree	
	7.17.6	Medium	Paul Cotton	Disagree with Comment	MoA has not tested this.
Recommendation	7.17.1	Medium	Paul Cotton	Accept	
	7.17.2	Medium	Paul Cotton	Accept	
	7.17.3	Medium	Paul Cotton	Accept	
7.18 Project Execution - Change Orders					
Findings	7.18.1	Low	Paul Cotton	Agree	
	7.18.2	Low	Paul Cotton	Agree	
	7.18.3	Low	Paul Cotton	Agree	
Recommendation	7.18.1	Low	Paul Cotton	Accept	
7.19 Project Execution - Period-End Tasks					
Findings	7.19.1	Low	Paul Cotton	Agree	
	7.19.2	Low	Paul Cotton	Agree	
	7.19.3	Low	Paul Cotton	Agree	
Recommendations	7.19.1	Low	Paul Cotton	Accept	
	7.19.2	Low	Paul Cotton	Accept	
	7.19.3	Low	Paul Cotton	Accept	
7.20 Project-Close Checklist					
Findings	7.20.1	Low	Paul Cotton	Agree	
	7.20.2	Low	Paul Cotton	Agree	
Recommendations	7.20.1	Low	Paul Cotton	Accept	
	7.20.2	Low	Paul Cotton	Accept	
	7.20.3	Low	Paul Cotton	Accept	
7.21 Status Updates - TECO, CLSD, and Lessons Learned					
Findings	7.21.1	Low	Paul Cotton	Agree	
	7.21.2	Low	Paul Cotton	Agree	
Recommendation	7.12.2	Low	Paul Cotton	Accept	
8. FERC					
8.2 FERC - Master Data					

	Item	Risk Category	Response Owner	Response	Comments
Findings	8.2.1	Low	Bill Wilks	Agree	
	8.2.2	Low	Bill Wilks	Agree	
	8.2.3	Low	Bill Wilks	Agree	
Findings (cont.)	8.2.4	Low	Bill Wilks	Agree with Comment	The configuration document exists and has been provided to SAP.
Recommendations	8.2.1	Low	Bill Wilks	Accept	
	8.2.2	Low	Bill Wilks	Accept	
8.3 FERC Parameters					
Findings	8.3.1	Low	Bill Wilks	Agree	
	8.3.2	Low	Bill Wilks	Agree	
	8.3.3	Low	Bill Wilks	Agree	
	8.3.4	Low	Bill Wilks	Agree	
	8.3.5	Low	Bill Wilks	Agree	
Recommendation	8.3.1	Low	Bill Wilks	Accept	
8.4 CO Variance Allocation (This topic was not part of the business requirements)					
8.5 Trace Posting Accounts					
Findings	8.5.1	Medium	Bill Wilks	Disagree with Comment	This mapping has been documented.
	8.5.2	Medium	Bill Wilks	Agree	
Recommendations	8.5.1	Medium	Bill Wilks	Accept	
	8.5.2	Medium	Bill Wilks	Accept	
8.6 Direct Posintg Accounts					
Findings	8.6.1	Medium	Bill Wilks	Agree	
	8.6.2	Medium	Bill Wilks	Agree	
Recommendations	8.6.1	Medium	Bill Wilks	Accept	
	8.6.2	Medium	Bill Wilks	Accept	
	8.6.3	Medium	Bill Wilks	Accept	
8.7 Trace Accuracy					
Findings	8.7.1	High	Bill Wilks	Agree	
	8.7.2	High	Bill Wilks	Agree	
	8.7.3	High	Bill Wilks	Agree	
Recommendations	8.7.1	High	Bill Wilks	Accept	
	8.7.2	High	Bill Wilks	Accept	
8.8 FERC - Drill-Down					

	Item	Risk Category	Response Owner	Response	Comments
Finding	8.8.1	Medium	Bill Wilks	Agree	
Recommendation	8.8.1	Medium	Bill Wilks	Accept	
8.9 Secondary Costs to be Excluded					
Finding	8.9.1		Bill Wilks	Agree	
Recommendation	8.9.1		Bill Wilks	N/A	
8.10 Embedding FERC into Numbering Scheme					
Findings	8.10.1	Low	Bill Wilks	Agree	
	8.10.2	Low	Bill Wilks	Agree	
Recommendation	8.10.1	Low	Bill Wilks	Accept	
8.11 Maintain FERC Data (This topic was addressed in Item 8.3)					
8.12 FERC Month-End					
Findings	8.12.1	High	Bill Wilks	Agree	
	8.12.2	High	Bill Wilks	Agree	
	8.12.3	High	Bill Wilks	Agree	
	8.12.4	High	Bill Wilks	Agree	
Recommedations	8.12.1	High	Bill Wilks	Accept	
	8.12.2	High	Bill Wilks	Accept	
	8.12.3	High	Bill Wilks	Accept	
9. SECURITY					
9.2 Security Plan					
Findings	9.2.1	High	Dean Barnes	Agree	
	9.2.2	High	Dean Barnes	Agree	
	9.2.2.a	High	Dean Barnes	Agree	
	9.2.2.b	High	Dean Barnes	Agree	
	9.2.2.c	High	Dean Barnes	Agree	
	9.2.2.d	High	Dean Barnes	Agree	
Recommendations	9.2.1	High	Dean Barnes	Accept	
	9.2.2	High	Dean Barnes	Accept	
	9.2.3	High	Dean Barnes	Accept	
	9.2.4	High	Dean Barnes	Accept	
	9.2.5	High	Dean Barnes	Accept	
9.3 HCM Roles and Authorizations - Design Review					

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	Item	Risk Category	Response Owner	Response	Comments
Findings	9.3.1	Low	Dean Barnes	Agree	
Findings (cont.)	9.3.2	Low	Dean Barnes	Agree	
	9.3.3	Low	Dean Barnes	Agree	
Recommendation	9.3.1	Low	Dean Barnes	Accept	
9.4 Finance and Billing Roles and Authorization - Design Review					
Findings	9.4.1	Low	Dean Barnes	Agree	
	9.4.2	Low	Dean Barnes	Agree	
	9.4.3	Low	Dean Barnes	Agree	
	9.4.4	Low	Dean Barnes	Agree	
Recommendation	9.4.1	Low	Dean Barnes	Accept	
9.5 Logistics and Inventory Roles and Authorization - Design Review					
Findings	9.5.1	Low	Dean Barnes	Agree	
	9.5.2	Low	Dean Barnes	Agree	
	9.5.3	Low	Dean Barnes	Agree	
Recommendation	9.5.1	Low	Dean Barnes	Accept	
9.6 SAP BW - Roles and Authorization - Design Review					
Finding	9.6.1	Low	Dean Barnes	Agree	
Recommendation	9.6.1	Low	Dean Barnes	Accept	
9.7 Production Support Roles					
Finding	9.7.1	Medium	Dean Barnes	Agree	
Recommendation	9.7.1	Medium	Dean Barnes	Accept	
9.8 Quality Assurance of Roles and Authorizations					
Findings	9.8.1	High	Dean Barnes	Agree	
	9.8.2	High	Dean Barnes	Agree	
	9.8.3	High	Dean Barnes	Agree	
	9.8.4	High	Dean Barnes	Agree	
	9.8.5	High	Dean Barnes	Agree	
Recommendations	9.8.1	High	Dean Barnes	Accept	
	9.8.2	High	Dean Barnes	Accept	
9.9 Maintenance of Check Indicators and Proposal Values					
Findings	9.9.1	Medium	Dean Barnes	Agree	
	9.9.2	Medium	Dean Barnes	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Recommendation	9.9.1	Medium	Dean Barnes	Accept with Comment	We agree that maintenance of proposal values with SU24 is a “best practice” and will implement this recommendation going forward, except for firefighter roles and selected “restrictive” roles that contain no transactions. We may choose not to remediate all roles prior to go live if it introduces the need for substantial regression testing. We will not introduce any new manual proposal values into any of these roles.
9.10 Portal Security					
Findings	9.10.1	High	Julie Collins	Agree	
	9.10.2	High	Julie Collins	Agree	
	9.10.3	High	Julie Collins	Agree	
Recommendation	9.10.1	High	Julie Collins	Accept	
9.11 User Access Management					
Findings	9.11.1	Medium	Dean Barnes	Agree	
	9.11.2	Medium	Dean Barnes	Agree	
	9.11.3	Medium	Dean Barnes	Agree	
	9.11.4	Medium	Dean Barnes	Agree	
	9.11.5	Medium	Dean Barnes	Agree	
	9.11.6	Medium	Dean Barnes	Agree	
	9.11.7	Medium	Dean Barnes	Agree	
Recommendations	9.11.1	Medium	Dean Barnes	Accept	
	9.11.1.a	Medium	Dean Barnes	Accept	
	9.11.1.b	Medium	Dean Barnes	Accept	
	9.11.1.c	Medium	Dean Barnes	Accept	
	9.11.1.d	Medium	Dean Barnes	Accept	
	9.11.1.e	Medium	Dean Barnes	Accept	
	9.11.1.f	Medium	Dean Barnes	Accept	
9.12 Authentication and Single-Sign					
Finding	9.12.1	Low	Dean Barnes	Agree	
Recommendation	9.12.1	Low	Dean Barnes	Accept	
9.13 Monitoring and Auditing					

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	Item	Risk Category	Response Owner	Response	Comments
Findings	9.13.1	High	Dean Barnes	Agree	
	9.13.2	High	Dean Barnes	Agree	
Recommendations	9.13.1	High	Dean Barnes	Accept	
	9.13.1.a	High	Dean Barnes	Accept	
	9.13.1.b	High	Dean Barnes	Accept	
	9.13.1.c	High	Dean Barnes	Accept	
	9.13.1.d	High	Dean Barnes	Accept	
9.14 Security Patches					
Findings	9.14.1	High	Dean Barnes	Agree	
	9.14.2	High	Dean Barnes	Agree	
Recommendation	9.14.1	High	Dean Barnes	Accept	
9.15 Role Mapping					
Findings	9.15.1	High	Dean Barnes	Agree	
	9.15.2	High	Dean Barnes	Agree	
	9.15.3	High	Dean Barnes	Agree	
Recommendations	9.15.1	High	Dean Barnes	Accept	
	9.15.2	High	Dean Barnes	Accept	
	9.15.3	High	Dean Barnes	Accept	
	9.15.4	High	Dean Barnes	Accept	
9.16 Securing Standard Users					
Findings	9.16.1	High	Dean Barnes	Agree	
	9.16.2	High	Dean Barnes	Disagree with Comment	The SAP* user role is properly maintained in all clients.
	9.16.3	High	Dean Barnes	Agree	
Recommendations	9.16.1	High	Dean Barnes	Accept	
	9.16.2	High	Dean Barnes	Accept	
	9.16.3	High	Dean Barnes	Accept	
Recommendations (cont.)	9.16.4	High	Dean Barnes	Accept	
	9.16.5	High	Dean Barnes	Accept	
	9.16.6	High	Dean Barnes	Accept	
9.17 Access Risk Analysis					
	9.17.1	High	Dean Barnes	Agree	

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	Item	Risk Category	Response Owner	Response	Comments
Finding	9.17.2	High	Dean Barnes	Agree	
	9.17.3	High	Dean Barnes	Agree	
Recommendation	9.17.1	High	Dean Barnes	Accept	
9.18 Emergency Access Management					
Finding	9.18.1	High	Dean Barnes	Agree	
Recommendation	9.18.1	High	Dean Barnes	Accept	
10. DATA					
10.2 Process of Data Migration					
Findings	10.2.1	High	Dean Barnes	Agree	
	10.2.2	High	Dean Barnes	Agree	
	10.2.3	High	Dean Barnes	Agree	
	10.2.4	High	Dean Barnes	Agree	
	10.2.5	High	Dean Barnes	Agree	
	10.2.6	High	Dean Barnes	Agree	
	10.2.7	High	Dean Barnes	Agree	
	10.2.8	High	Dean Barnes	Agree	
Recommendations	10.2.1	High	Dean Barnes	Accept	
	10.2.1.a	High	Dean Barnes	Accept	
	10.2.1.b	High	Dean Barnes	Accept	
	10.2.1.c	High	Dean Barnes	Accept	
	10.2.1.d	High	Dean Barnes	Accept	
	10.2.1.e	High	Dean Barnes	Accept	
	10.2.1.f	High	Dean Barnes	Accept	
	10.2.1.g	High	Dean Barnes	Accept	
	10.2.1.h	High	Dean Barnes	Accept	
	10.2.1.i	High	Dean Barnes	Accept	
	10.2.2	High	Dean Barnes	Accept	
Recommendations (cont.)	10.2.3	High	Dean Barnes	Accept with Comment	The custom ABAP programs use BAPI to properly report business logic errors. We will continue to evaluate each load and determine the best approach.
	10.2.4	High	Dean Barnes	Accept	
10.3 Data Organization - Roles and Responsibilities					

	Item	Risk Category	Response Owner	Response	Comments
Findings	10.3.1	High	Dean Barnes	Agree	
	10.3.2	High	Dean Barnes	Agree	
	10.3.3	High	Dean Barnes	Agree	
	10.3.4	High	Dean Barnes	Agree	
	10.3.5	High	Dean Barnes	Agree	
	10.3.6	High	Dean Barnes	Agree	
	10.3.7	High	Dean Barnes	Agree	
Recommendations	10.3.1	High	Dean Barnes	Accept	
	10.3.2	High	Dean Barnes	Accept	
	10.3.3	High	Dean Barnes	Accept	
	10.3.4	High	Dean Barnes	Accept	
	10.3.5	High	Dean Barnes	Accept	
	10.3.6	High	Dean Barnes	Accept	
	10.3.7	High	Dean Barnes	Accept	
	10.3.8	High	Dean Barnes	Accept	
	10.3.9	High	Dean Barnes	Accept	
10.4 Data Collection, Construction, and Extraction					
Findings	10.4.1	High	Dean Barnes	Agree	
	10.4.2	High	Dean Barnes	Agree	
	10.4.3	High	Dean Barnes	Agree	
Recommendations	10.4.1	High	Dean Barnes	Accept	
	10.4.2	High	Dean Barnes	Accept	
	10.4.3	High	Dean Barnes	Accept	
	10.4.4	High	Dean Barnes	Accept	
10.5 Data Transformation, Cleansing, and Validation					
Findings	10.5.1	High	Dean Barnes	Agree	
	10.5.2	High	Dean Barnes	Agree	
Findings (cont.)	10.5.3	High	Dean Barnes	Agree	
	10.5.4	High	Dean Barnes	Agree	
	10.5.1	High	Dean Barnes	Accept	
	10.5.2	High	Dean Barnes	Accept	
	10.5.2.a	High	Dean Barnes	Accept	
	10.5.2.b	High	Dean Barnes	Accept	

	Item	Risk Category	Response Owner	Response	Comments
Recommendations	10.5.2.c	High	Dean Barnes	Accept	
	10.5.2.d	High	Dean Barnes	Accept	
	10.5.2.e	High	Dean Barnes	Accept	
	10.5.2.f	High	Dean Barnes	Accept	
	10.5.3	High	Dean Barnes	Accept	
	10.5.4	High	Dean Barnes	Accept	
	10.5.5	High	Dean Barnes	Accept	
	10.5.6	High	Dean Barnes	Accept	
	10.5.7	High	Dean Barnes	Accept	
	10.5.7.a	High	Dean Barnes	Accept	
	10.5.7.b	High	Dean Barnes	Accept	
	10.5.7.c	High	Dean Barnes	Accept	
	10.5.7.d	High	Dean Barnes	Accept	
	10.5.7.e	High	Dean Barnes	Accept	
	10.5.7.f	High	Dean Barnes	Accept	
	10.5.7.g	High	Dean Barnes	Accept	
	10.5.8	High	Dean Barnes	Accept	
	10.5.9	High	Dean Barnes	Accept	
	10.5.10	High	Dean Barnes	Accept	
10.6 Data Requirements - Development and Change Management					
Findings	10.6.1	High	Dean Barnes	Agree	
	10.6.2	High	Dean Barnes	Agree	
	10.6.3	High	Dean Barnes	Agree	
	10.6.4	High	Dean Barnes	Agree	
Recommendations	10.6.1	High	Dean Barnes	Accept	
	10.6.2	High	Dean Barnes	Accept	
	10.6.3	High	Dean Barnes	Accept	
10.7 Review of Project Data Mapping Documentation for Material Master, Vendor Master, and Others and their Functional Specifications					
Findings	10.7.1	Medium	Dean Barnes	Agree	
	10.7.2	Medium	Dean Barnes	Agree	
	10.7.3	Medium	Dean Barnes	Agree	
	10.7.4	Medium	Dean Barnes	Accept	
Recommendations	10.7.1	Medium	Dean Barnes	Accept	

	Item	Risk Category	Response Owner	Response	Comments
Recommendations	10.7.2	Medium	Dean Barnes	Accept	
10.8 Test Data Preparation					
Findings	10.8.1	Medium	Dean Barnes	Agree	
	10.8.2	Medium	Dean Barnes	Agree	
	10.8.3	Medium	Dean Barnes	Agree	
	10.8.4	Medium	Dean Barnes	Agree	
	10.8.5	Medium	Dean Barnes	Agree	
	10.8.6	Medium	Dean Barnes	Agree	
	10.8.7	Medium	Dean Barnes	Agree	
	10.8.8	Medium	Dean Barnes	Agree	
	10.8.9	Medium	Dean Barnes	Agree	
	10.8.10	Medium	Dean Barnes	Agree	
Recommendations	10.8.1	Medium	Dean Barnes	Accept	
	10.8.2	Medium	Dean Barnes	Accept	
	10.8.3	Medium	Dean Barnes	Accept	
	10.8.4	Medium	Dean Barnes	Accept	
	10.8.5	Medium	Dean Barnes	N/A	
	10.8.6	Medium	Dean Barnes	Accept	
10.9 Preparation for and Transition to Data Governance					
Findings	10.9.1	High	Dean Barnes	Agree	
	10.9.2	High	Dean Barnes	Agree	
Recommendations	10.9.1	High	Dean Barnes	Accept	
	10.9.2	High	Dean Barnes	Accept	
	10.9.3	High	Dean Barnes	Accept	
	10.9.4	High	Dean Barnes	Accept	
Recommendations (cont.)	10.9.5	High	Dean Barnes	Accept	
	10.9.6	High	Dean Barnes	Accept	
	10.9.7	High	Dean Barnes	Accept	
10.10 Data - Data Migration Planning, Status, Timelines, Problem Identification and Reportin					
	10.10.1	High	Dean Barnes	Agree	
	10.10.2	High	Dean Barnes	Agree	
	10.10.3	High	Dean Barnes	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Findings	10.10.4	High	Dean Barnes	Agree	
	10.10.5	High	Dean Barnes	Agree	
	10.10.6	High	Dean Barnes	Agree	
	10.10.7	High	Dean Barnes	Agree	
Recommendations	10.10.1	High	Dean Barnes	Accept	
	10.10.2	High	Dean Barnes	Accept	
	10.10.3	High	Dean Barnes	Accept	
	10.10.4	High	Dean Barnes	Accept	
	10.10.5	High	Dean Barnes	Accept	
	10.10.6	High	Dean Barnes	Accept	
	10.10.7	High	Dean Barnes	Accept	
	10.10.8	High	Dean Barnes	Accept	
	10.10.9	High	Dean Barnes	Accept	
	10.10.10	High	Dean Barnes	Accept	
	10.10.11	High	Dean Barnes	Accept	
10.11 Data-Conversion Objects					
Findings	10.11.1	High	Dean Barnes	Agree	
	10.11.2	High	Dean Barnes	Agree	
	10.11.3	High	Dean Barnes	Agree	
	10.11.4	High	Dean Barnes	Agree	
	10.11.5	High	Dean Barnes	Agree	
	10.11.6	High	Dean Barnes	Agree	
	10.11.6.a	High	Dean Barnes	Agree	
	10.11.6.b	High	Dean Barnes	Agree	
	10.11.7	High	Dean Barnes	Agree	
	10.11.7.a	High	Dean Barnes	Agree	
	10.11.7.b	High	Dean Barnes	Agree	
	10.11.7.c	High	Dean Barnes	Agree	
	10.11.7.c.1	High	Dean Barnes	Agree	
	10.11.7.c.2	High	Dean Barnes	Agree	
	10.11.7.c.3	High	Dean Barnes	Agree	
	10.11.7.c.4	High	Dean Barnes	Agree	
	10.11.7.c.5	High	Dean Barnes	Agree	

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	Item	Risk Category	Response Owner	Response	Comments
Findings (cont.)	10.11.8	High	Dean Barnes	Agree	
	10.11.9	High	Dean Barnes	Agree	
	10.11.10	High	Dean Barnes	Agree	
	10.11.11	High	Dean Barnes	Agree	
	10.11.12	High	Dean Barnes	Agree	
	10.11.13	High	Dean Barnes	Agree	
	10.11.14	High	Dean Barnes	Agree with Comment	MoA is evaluating all options.
	10.11.14.a	High	Dean Barnes	Agree	
	10.11.14.a.1	High	Dean Barnes	Agree	
	10.11.14.a.2	High	Dean Barnes	Agree	
	10.11.14.a.3	High	Dean Barnes	Disagree with Comment	Net budget requires significant effort
	10.11.14.b	High	Dean Barnes	Agree	
	10.11.14.b.1	High	Dean Barnes	Agree	
	10.11.14.b.2	High	Dean Barnes	Agree	
	10.11.14.b.3	High	Dean Barnes	Agree	
	10.11.14.b.4	High	Dean Barnes	Agree	
	10.11.14.b.5	High	Dean Barnes	Agree	
	10.11.15	High	Dean Barnes	Agree	
	10.11.16	High	Dean Barnes	Agree	
	10.11.16.a	High	Dean Barnes	Agree	
	10.11.16.b	High	Dean Barnes	Agree	
	10.11.16.c	High	Dean Barnes	Agree	
	10.11.16.d	High	Dean Barnes	Agree	
	10.11.16.e	High	Dean Barnes	Agree	
	10.11.17	High	Dean Barnes	Agree	
Findings (cont.)	10.11.18	High	Dean Barnes	Agree with Comment	MoA is using a derivation strategy when loading multi-funded projects.
	10.11.19	High	Dean Barnes	Agree	
	10.11.20	High	Dean Barnes	Agree	
	10.11.21	High	Dean Barnes	Agree	
	10.11.22	High	Dean Barnes	Agree	
	10.11.23	High	Dean Barnes	Agree	
	10.11.24	High	Dean Barnes	Agree	
	10.11.25	High	Dean Barnes	Agree	

	Item	Risk Category	Response Owner	Response	Comments
	10.11.26	High	Dean Barnes	Agree	
	10.11.27	High	Dean Barnes	Agree	
	10.11.28	High	Dean Barnes	Agree	
	10.11.29	High	Dean Barnes	Agree	
	10.11.30	High	Dean Barnes	Agree	
Recommendations	10.11.1	High	Dean Barnes	Accept	
	10.11.2	High	Dean Barnes	Accept	
	10.11.3	High	Dean Barnes	Accept	
	10.11.4	High	Dean Barnes	Accept	
	10.11.5	High	Dean Barnes	Accept	
	10.11.6	High	Dean Barnes	Reject with Comment	MoA is evaluating all options.
	10.11.6.a	High	Dean Barnes		
	10.11.6.b	High	Dean Barnes		
	10.11.6.b.1	High	Dean Barnes		
	10.11.6.b.2	High	Dean Barnes		
	10.11.7	High	Dean Barnes	Accept	
	10.11.8	High	Dean Barnes	Accept	
	10.11.9	High	Dean Barnes	Accept	
	10.11.10	High	Dean Barnes	Accept	
	10.11.11	High	Dean Barnes	Accept	
	10.11.12	High	Dean Barnes	Reject with Comment	MoA will evaluate how to proceed on conversion
	10.11.13	High	Dean Barnes	Accept	
Recommendations (cont.)	10.11.14	High	Dean Barnes	Accept	
	10.11.15	High	Dean Barnes	Accept	
	10.11.16	High	Dean Barnes	Accept	
	10.11.17	High	Dean Barnes	Accept	
	10.11.18	High	Dean Barnes	Accept	
	10.11.19	High	Dean Barnes	Accept	
	10.11.20	High	Dean Barnes	Accept	
	10.11.21	High	Dean Barnes	Accept	
	10.11.22	High	Dean Barnes	Accept	
11. TESTING					

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	Item	Risk Category	Response Owner	Response	Comments
11.2 Testing Strategy and Management					
Findings	11.2.1	High	Functional Steering Committee	Agree	
	11.2.2	High	Functional Steering Committee	Agree	
	11.2.3	High	Functional Steering Committee	Agree	
	11.2.4	High	Functional Steering Committee	Agree	
	11.2.5	High	Functional Steering Committee	Agree	
	11.2.6	High	Functional Steering Committee	Agree	
	11.2.7	High	Functional Steering Committee	Agree	
	11.2.8	High	Functional Steering Committee	Agree	
	11.2.9	High	Functional Steering Committee	Agree	
	11.2.10	High	Functional Steering Committee	Agree	
Recommendations	11.2.1	High	Functional Steering Committee	Accept	
	11.2.2	High	Functional Steering Committee	Accept	
	11.2.3	High	Functional Steering Committee	Accept	
	11.2.4	High	Functional Steering Committee	Accept	
	11.2.5	High	Functional Steering Committee	Accept	
	11.2.6	High	Functional Steering Committee	Accept	
	11.2.7	High	Functional Steering Committee	Accept	
	11.2.8	High	Functional Steering Committee	Accept	
	11.2.9	High	Functional Steering Committee	Accept	
	11.2.10	High	Functional Steering Committee	Accept	
11.3 Testing Requirements					
Findings	11.3.1	High	Functional Steering Committee	Agree	
Findings (cont.)	11.3.2	High	Functional Steering Committee	Agree	
	11.3.3	High	Functional Steering Committee	Agree	
Recommendations	11.3.1	High	Functional Steering Committee	Accept	
	11.3.2	High	Functional Steering Committee	Accept	
	11.3.3	High	Functional Steering Committee	Accept with Comment	MoA will consider adding this to project plan
11.4 Test-Case Design and Execution					
Findings	11.4.1	High	Functional Steering Committee	Agree	
	11.4.2	High	Functional Steering Committee	Agree	
	11.4.3	High	Functional Steering Committee	Agree	

	Item	Risk Category	Response Owner	Response	Comments
	11.4.5	High	Functional Steering Committee	Agree	
	11.4.6	High	Functional Steering Committee	Agree	
Recommendations	11.4.1	High	Functional Steering Committee	Accept	
	11.4.2	High	Functional Steering Committee	Accept	
	11.4.3	High	Functional Steering Committee	Accept	
	11.4.4	High	Functional Steering Committee	Term	
	11.4.5	High	Functional Steering Committee	Accept	
	11.4.6	High	Functional Steering Committee	Accept	
11.5 Defect Management					
Findings	11.5.1	High	Dean Barnes	Agree	
	11.5.2	High	Dean Barnes	Agree	
Recommendations	11.5.1	High	Dean Barnes	Accept	
	11.5.2	High	Dean Barnes	Accept	
11.6 Test Tool Utilization					
Findings	11.6.1	High	Dean Barnes	Agree	
	11.6.2	High	Dean Barnes	Agree	
Recommendations	11.6.1	High	Dean Barnes	Accept	
	11.6.2	High	Dean Barnes	Accept	
11.7 Test Data					
Findings	11.7.1	High	Dean Barnes	Agree	
	11.7.2	High	Dean Barnes	Agree	
Recommendations	11.7.1	High	Dean Barnes	Accept	
Recommendations (cont.)	11.7.2	High	Dean Barnes	Accept	
11.8 Environmental Readiness					
Findings	11.8.1	High	Dean Barnes	Agree	
	11.8.2	High	Dean Barnes	Agree	
	11.8.3	High	Dean Barnes	Agree	
Recommendations	11.8.1	High	Dean Barnes	Accept	
	11.8.2	High	Dean Barnes	Accept	
11.9 Nonfunctional Testing - Performance					

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	Item	Risk Category	Response Owner	Response	Comments
Finding	11.9.1	High	Dean Barnes	Agree with Comment	It was not "Peloton;" it was "Coppercone."
Recommendation	11.9.1	High	Dean Barnes	Accept	
11.10 Nonfunctional Testing - Stress					
Finding	11.10.1	High	Dean Barnes	Agree	
Recommendation	11.10.1	High	Dean Barnes	Accept with Comment	At the appropriate time we will evaluate stress test methodologies.
11.11 Nonfunctional Testing - Security					
Finding	11.11.1	High	Dean Barnes	Agree	
Recommendation	11.11.2	High	Dean Barnes	Accept	
11.12 Testing from Functional Perspective Test Cases and Test Plans					
Findings	11.12.1	High	Functional Steering Committee	Agree	
	11.12.2	High	Functional Steering Committee	Agree	
	11.12.3	High	Functional Steering Committee	Agree	
	11.12.4	High	Functional Steering Committee	Agree	
	11.12.5	High	Functional Steering Committee	Agree	
	11.12.6	High	Functional Steering Committee	Agree	
	11.12.7	High	Functional Steering Committee	Agree	
	11.12.8	High	Functional Steering Committee	Agree	
	11.12.9	High	Functional Steering Committee	Agree	
	11.12.10	High	Functional Steering Committee	Agree	
	11.12.11	High	Functional Steering Committee	Agree	
	11.12.12	High	Functional Steering Committee	Agree	
	11.12.13	High	Functional Steering Committee	Agree	
	11.12.14	High	Functional Steering Committee	Agree	
	11.12.15	High	Functional Steering Committee	Agree	
	11.12.16	High	Functional Steering Committee	Agree	
	11.12.17	High	Functional Steering Committee	Agree	
	11.12.18	High	Functional Steering Committee	Agree	
	11.12.19	High	Functional Steering Committee	Agree	
	11.12.20	High	Functional Steering Committee	Agree	
	11.12.21	High	Functional Steering Committee	Agree	
	11.12.22	High	Functional Steering Committee	Agree	
	11.12.23	High	Functional Steering Committee	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Findings (cont.)	11.12.24	High	Functional Steering Committee	Agree	
	11.12.25	High	Functional Steering Committee	Agree	
	11.12.26	High	Functional Steering Committee	Agree	
	11.12.27	High	Functional Steering Committee	Agree	
	11.12.28	High	Functional Steering Committee	Agree	
	11.12.29	High	Functional Steering Committee	Agree	
	11.12.30	High	Functional Steering Committee	Agree	
	11.12.31	High	Functional Steering Committee	Agree	
	11.12.32	High	Functional Steering Committee	Agree	
	11.12.33	High	Functional Steering Committee	Agree	
	11.12.34	High	Functional Steering Committee	Agree	
	11.12.35	High	Functional Steering Committee	Agree	
	11.12.36	High	Functional Steering Committee	Agree	
	11.12.37	High	Functional Steering Committee	Agree	
	11.12.38	High	Functional Steering Committee	Agree	
	11.12.39	High	Functional Steering Committee	Agree	
	11.12.40	High	Functional Steering Committee	Agree	
	11.12.41	High	Functional Steering Committee	Agree	
	11.12.42	High	Functional Steering Committee	Agree	
	11.12.43	High	Functional Steering Committee	Agree	
Recommendations	11.12.1	High	Functional Steering Committee	Accept	
	11.12.2	High	Functional Steering Committee	Accept	
	11.12.3	High	Functional Steering Committee	Accept	
	11.12.4	High	Functional Steering Committee	Accept	
	11.12.5	High	Functional Steering Committee	Accept	
	11.12.6	High	Functional Steering Committee	Accept	
	11.12.6.a	High	Functional Steering Committee	Accept	
	11.12.6.b	High	Functional Steering Committee	Accept	
	11.12.7	High	Functional Steering Committee	Accept	
	11.12.8	High	Functional Steering Committee	Accept	
	11.12.9	High	Functional Steering Committee	Accept	
	11.12.10	High	Functional Steering Committee	Accept	
	11.12.11	High	Functional Steering Committee	Accept	

	Item	Risk Category	Response Owner	Response	Comments
Recommendations (cont.)	11.12.12	High	Functional Steering Committee	Accept	
	11.12.13	High	Functional Steering Committee	Accept	
	11.12.14	High	Functional Steering Committee	Accept	
	11.12.15	High	Functional Steering Committee	Accept	
	11.12.16	High	Functional Steering Committee	Accept	
	11.12.17	High	Functional Steering Committee	Accept	
	11.12.18	High	Functional Steering Committee	Accept	
	11.12.19	High	Functional Steering Committee	Accept	
	11.12.20	High	Functional Steering Committee	Accept	
	11.12.21	High	Functional Steering Committee	Accept	
	11.12.22	High	Functional Steering Committee	Accept	
	11.12.23	High	Functional Steering Committee	Accept	
	11.12.24	High	Functional Steering Committee	Accept	
	11.12.25	High	Functional Steering Committee	Accept	
	11.12.26	High	Functional Steering Committee	Accept	
	11.12.27	High	Functional Steering Committee	Accept	
	11.12.28	High	Functional Steering Committee	Accept	
	11.12.29	High	Functional Steering Committee	Accept	
	11.12.30	High	Functional Steering Committee	Accept	
	11.12.31	High	Functional Steering Committee	Accept	
	11.12.32	High	Functional Steering Committee	Accept	
	11.12.33	High	Functional Steering Committee	Accept	
Recommendations (cont.)	11.12.34	High	Functional Steering Committee	Accept	
12. GRANTS					
12.2 Master Data in SAP Grants Management					
	12.2.1	High	Paul Cotton	Agree	
	12.2.1.a	High	Paul Cotton	Agree	
	12.2.1.b	High	Paul Cotton	Agree	
	12.2.1.c	High	Paul Cotton	Agree	
	12.2.1.d	High	Paul Cotton	Agree	
	12.2.1.e	High	Paul Cotton	Agree	
	12.2.1.f	High	Paul Cotton	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Findings	12.2.2	High	Paul Cotton	Agree	
	12.2.2.a	High	Paul Cotton	Agree	
	12.2.2.b	High	Paul Cotton	Agree	
	12.2.3	High	Paul Cotton	Agree	
	12.2.3.a	High	Paul Cotton	Agree	
	12.2.3.b	High	Paul Cotton	Agree	
	12.2.4	High	Paul Cotton	Agree	
	12.2.4.a	High	Paul Cotton	Agree	
	12.2.4.b	High	Paul Cotton	Agree	
	12.2.4.c	High	Paul Cotton	Agree	
	12.2.4.d	High	Paul Cotton	Agree	
	12.2.4.e	High	Paul Cotton	Agree	
	12.2.4.f	High	Paul Cotton	Agree	
	12.2.5	High	Paul Cotton	Agree	
	12.2.5.a	High	Paul Cotton	Agree	
	12.2.5.b	High	Paul Cotton	Agree	
Recommendations	12.2.1	High	Paul Cotton	Accept	
	12.2.1.a	High	Paul Cotton	Accept	
	12.2.1.b	High	Paul Cotton	Accept	
	12.2.1.c	High	Paul Cotton	Accept	
Recommendations (cont.)	12.2.1.d	High	Paul Cotton	Accept	
	12.2.2	High	Paul Cotton	Accept	
	12.2.2.a	High	Paul Cotton	Accept	
	12.2.2.b	High	Paul Cotton	Accept	
	12.2.3	High	Paul Cotton	Accept	
	12.2.4	High	Paul Cotton	Accept	
12.3 Grant Setup					
Findings	12.3.1	Low	Paul Cotton	Agree	
	12.3.1.a	Low	Paul Cotton	Agree	
	12.3.1.b	Low	Paul Cotton	Agree	
	12.3.2	Low	Paul Cotton	Agree	
	12.3.2.a	Low	Paul Cotton	Agree	
	12.3.2.b	Low	Paul Cotton	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Recommendations	12.3.1	Low	Paul Cotton	Accept	
	12.3.2	Low	Paul Cotton	Accept	
12.4 Grant Budgeting					
Findings	12.4.1	High	Paul Cotton	Agree	
	12.4.1.a	High	Paul Cotton	Agree	
	12.4.1.b	High	Paul Cotton	Agree	
	12.4.1.c	High	Paul Cotton	Agree	
	12.4.1.d	High	Paul Cotton	Agree	
	12.4.1.e	High	Paul Cotton	Agree	
	12.4.2	High	Paul Cotton	Agree	
	12.4.2.a	High	Paul Cotton	Agree	
	12.4.2.b	High	Paul Cotton	Agree	
	12.4.3	High	Paul Cotton	Agree	
	12.4.3.a	High	Paul Cotton	Agree	
	12.4.3.b	High	Paul Cotton	Agree	
	12.4.4	High	Paul Cotton	Agree	
	12.4.5	High	Paul Cotton	Agree	
	12.4.5.a	High	Paul Cotton	Agree	
	12.4.5.b	High	Paul Cotton	Agree	
Findings (cont.)	12.4.5.c	High	Paul Cotton	Agree	
	12.4.5.d	High	Paul Cotton	Agree	
	12.4.6	High	Paul Cotton	Agree	
	12.4.6.a	High	Paul Cotton	Agree	
	12.4.6.b	High	Paul Cotton	Agree	
	12.4.6.b.1	High	Paul Cotton	Agree	
	12.4.6.b.2	High	Paul Cotton	Agree	
	12.4.6.b.3	High	Paul Cotton	Agree	
	12.4.6.c	High	Paul Cotton	Agree	
	12.4.6.c.1	High	Paul Cotton	Agree	
	12.4.6.c.2	High	Paul Cotton	Agree	
	12.4.6.c.3	High	Paul Cotton	Agree	
Recommendations	12.4.1	High	Paul Cotton	Accept	
	12.4.2	High	Paul Cotton	Accept	

	Item	Risk Category	Response Owner	Response	Comments
~~Recommendations~~	12.4.3	High	Paul Cotton	Accept	
	12.4.4	High	Paul Cotton	Accept	
12.5 Grant Indirect Cost					
Finding	12.5.1	Low	Paul Cotton	Agree	
	12.5.1.a	Low	Paul Cotton	Agree	
Recommendation	12.5.1	Low	Paul Cotton	N/A	
12.6 Grant Billing					
Findings	12.6.1	Medium	Paul Cotton	Agree	
	12.6.1.a	Medium	Paul Cotton	Agree	
	12.6.1.b	Medium	Paul Cotton	Agree	
	12.6.1.c	Medium	Paul Cotton	Agree	
	12.6.2	Medium	Paul Cotton	Agree	
	12.6.2.a	Medium	Paul Cotton	Agree	
	12.6.2.b	Medium	Paul Cotton	Agree	
	12.6.3	Medium	Paul Cotton	Agree	
	12.6.3.a	Medium	Paul Cotton	Agree	
	12.6.3.b	Medium	Paul Cotton	Agree	
	12.6.3.b.1	Medium	Paul Cotton	Agree	
Findings (cont.)	12.6.3.b.2	Medium	Paul Cotton	Agree	
	12.6.4	Medium	Paul Cotton	Agree	
Recommendations	12.6.1	Medium	Paul Cotton	Accept	
	12.6.2	Medium	Paul Cotton	Accept	
	12.6.2.a	Medium	Paul Cotton	Accept	
	12.6.2.b	Medium	Paul Cotton	Accept	
	12.6.3	Medium	Paul Cotton	Accept	
	12.6.4	Medium	Paul Cotton	Accept	
	12.6.5	Medium	Paul Cotton	Accept	
	12.6.5.a	Medium	Paul Cotton	Accept	
	12.6.5.b	Medium	Paul Cotton	Accept	
	12.6.6	Medium	Paul Cotton	Accept	
	12.6.6.a	Medium	Paul Cotton	Accept	
	12.6.6.b	Medium	Paul Cotton	Accept	

	Item	Risk Category	Response Owner	Response	Comments
12.7 Grant Close-Out					
Finding	12.7.1	Low	Paul Cotton	Agree	
Recommendation	12.7.1	Low	Paul Cotton	Accept	
13.1 REPORTING					
13.2 Finance and Billing					
Findings	13.2.1	High	Julie Collins	Agree	
	13.2.2	High	Julie Collins	Agree	
	13.2.3	High	Julie Collins	Agree	
	13.2.4	High	Julie Collins	Agree	
	13.2.5	High	Julie Collins	Agree	
	13.2.6	High	Julie Collins	Agree	
	13.2.7	High	Julie Collins	Agree	
	13.2.8	High	Julie Collins	Agree	
	13.2.9	High	Julie Collins	Agree	
	13.2.10	High	Julie Collins	Agree	
	13.2.11	High	Julie Collins	Agree	
	13.2.12	High	Julie Collins	Agree	
	13.2.13	High	Julie Collins	Agree	
	13.2.14	High	Julie Collins	Agree	
Findings (cont.)	13.2.15	High	Julie Collins	Agree	
	13.2.16	High	Julie Collins	Agree	
	13.2.17	High	Julie Collins	Agree	
	13.2.17.a	High	Julie Collins	Agree	
	13.2.17.b	High	Julie Collins	Agree	
	13.2.17.c	High	Julie Collins	Agree	
	13.2.17.d	High	Julie Collins	Agree	
	13.2.17.e	High	Julie Collins	Agree	
	13.2.18	High	Julie Collins	Agree	
	13.2.19	High	Julie Collins	Agree	
	13.2.20	High	Julie Collins	Agree	
	13.2.21	High	Julie Collins	Agree	
	13.2.22	High	Julie Collins	Agree	
	13.2.23	High	Julie Collins	Agree	

	Item	Risk Category	Response Owner	Response	Comments
	13.2.24	High	Julie Collins	Agree	
	13.2.25	High	Julie Collins	Agree	
	13.2.26	High	Julie Collins	Agree	
	13.2.27	High	Julie Collins	Agree	
	13.2.28	High	Julie Collins	Agree	
	13.2.29	High	Julie Collins	Agree	
	13.2.30	High	Julie Collins	Agree	
	13.2.31	High	Julie Collins	Agree	
	13.2.32	High	Julie Collins	Agree	
	13.2.33	High	Julie Collins	Agree	
	13.2.34	High	Julie Collins	Agree	
	13.2.35	High	Julie Collins	Agree	
Recommendations	13.2.1	High	Julie Collins	Accept	
	13.2.2	High	Julie Collins	Accept	
	13.2.3	High	Julie Collins	Accept	
	13.2.4	High	Julie Collins	Accept	
	13.2.5	High	Julie Collins	Accept	
	13.2.6	High	Julie Collins	Accept	
Recommendations (cont.)	13.2.7	High	Julie Collins	Accept	
	13.2.8	High	Julie Collins	Accept	
	13.2.9	High	Julie Collins	Accept	
	13.2.10	High	Julie Collins	Accept	
	13.2.11	High	Julie Collins	Accept	
	13.2.12	High	Julie Collins	Accept	
	13.2.13	High	Julie Collins	Accept	
	13.2.14	High	Julie Collins	Accept	
	13.2.15	High	Julie Collins	Accept	
13.3 Logistics and Inventory					
	13.3.1	Medium	Julie Collins	Agree	
	13.3.1.a	Medium	Julie Collins	Agree	
	13.3.1.b	Medium	Julie Collins	Agree	
	13.3.2	Medium	Julie Collins	Agree	
	13.3.2.a	Medium	Julie Collins	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Findings	13.3.2.b	Medium	Julie Collins	Agree	
	13.3.2.c	Medium	Julie Collins	Agree	
	13.3.2.d	Medium	Julie Collins	Agree	
	13.3.2.e	Medium	Julie Collins	Agree	
	13.3.2.f	Medium	Julie Collins	Agree	
	13.3.2.g	Medium	Julie Collins	Agree	
	13.3.2.h	Medium	Julie Collins	Agree	
	13.3.2.i	Medium	Julie Collins	Agree	
	13.3.2.j	Medium	Julie Collins	Agree	
	13.3.3	Medium	Julie Collins	Agree	MoA will evaluate standard reports
Recommendations	13.3.1	Medium	Julie Collins	Accept	
	13.3.2	Medium	Julie Collins	Accept	
13.4 HCM					
Findings	13.4.1	High	Julie Collins	Agree	
	13.4.2	High	Julie Collins	Agree	
	13.4.3	High	Julie Collins	Agree	
	13.4.4	High	Julie Collins	Disagree	
	13.4.5	High	Julie Collins	Agree	
Recommendations	13.4.1	High	Julie Collins	Accept	
	13.4.2	High	Julie Collins	Accept	
	13.4.3	High	Julie Collins	N/A	
	13.4.4	High	Julie Collins	Accept	
	13.4.5	High	Julie Collins	Accept	
	13.4.6	High	Julie Collins	Accept	
13.5 FERC					
Findings	13.5.1	High	Julie Collins	Agree	
	13.5.2	High	Julie Collins	Agree	
Recommendations	13.5.1	High	Julie Collins	Accept	
	13.5.2	High	Julie Collins	Accept	
13.6 Project System					
	13.6.1	Medium	Julie Collins	Agree	
	13.6.1.a	Medium	Julie Collins	Agree	

	Item	Risk Category	Response Owner	Response	Comments
Findings	13.6.1.b	Medium	Julie Collins	Agree	
	13.6.1.c	Medium	Julie Collins	Agree	
	13.6.1.d	Medium	Julie Collins	Agree	
	13.6.1.e	Medium	Julie Collins	Agree	
Recommendation	13.6.1	Medium	Julie Collins	Accept	
13.7 SAP BW					
Finding	13.7.1	High	Julie Collins	Agree	
Recommendations	13.7.1	High	Julie Collins	Accept	
	13.7.2	High	Julie Collins	Accept	
	13.7.2.a	High	Julie Collins	Accept	
	13.7.2.b	High	Julie Collins	Accept	
	13.7.2.c	High	Julie Collins	Accept	
	13.7.2.d	High	Julie Collins	Accept	
13.8 Security					
Finding	13.8.1	Low	Julie Collins	Agree	
Recommendation	13.8.1	Low	Julie Collins	Accept	
14. Integration and Master Data					
14.2 System Upgrade					
Finding	14.2.1	High	Dean Barnes	Agree with Comment	However "2011" should be "2010"
Recommendation	14.2.1	High	Dean Barnes	Accept	
14.3 Split Go-Live					
Finding	14.3.1	High	Dean Barnes	Agree	
Recommendation	14.3.1	High	Dean Barnes	Accept	
14.4 Integration Test					
Findings	14.4.1	High	Dean Barnes	Agree	
	14.4.2	High	Dean Barnes	Agree	
	14.4.3	High	Dean Barnes	Agree	
	14.4.4	High	Dean Barnes	Agree	
	14.4.5	High	Dean Barnes	Agree	
	14.4.6	High	Dean Barnes	Agree	
	14.4.1	High	Dean Barnes	Accept	
	14.4.2	High	Dean Barnes	Accept	

	Item	Risk Category	Response Owner	Response	Comments
Recommendations	14.4.2.a	High	Dean Barnes	Accept	
	14.4.2.b	High	Dean Barnes	Accept	
	14.4.3	High	Dean Barnes	Accept	
	14.4.5	High	Dean Barnes	Accept	
14.5 Design Documents					
Findings	14.5.1	High	Dean Barnes	Agree	
	14.5.2	High	Dean Barnes	Agree	
	14.5.3	High	Dean Barnes	Agree	
	14.5.4	High	Dean Barnes	Agree	
	14.5.5	High	Dean Barnes	Agree	
Recommendations	14.5.1	High	Dean Barnes	Accept	
	14.5.2	High	Dean Barnes	Accept	
	14.5.3	High	Dean Barnes	Accept	
14.6 Enterprise Structure and Organizational Management Process					
Findings	14.6.1	High	Dean Barnes	Agree	
Findings (cont.)	14.6.2	High	Dean Barnes	Agree	
	14.6.3	High	Dean Barnes	Agree	
	14.6.3.a	High	Dean Barnes	Agree	
	14.6.3.b	High	Dean Barnes	Agree	
Recommendation	14.6.1	High	Dean Barnes	Accept	
14.7 Solution Architecture (Supplier Portal)					
Findings	14.7.1	Medium	Dean Barnes	Agree	
	14.7.2	Medium	Dean Barnes	Agree	
	14.7.3	Medium	Dean Barnes	Agree	
	14.7.4	Medium	Dean Barnes	Agree	
Recommendation	14.7.1	Medium	Dean Barnes	Accept	
14.8 Year-End Close Process					
Findings	14.8.1	High	Dean Barnes	Agree	
	14.8.2	High	Dean Barnes	Agree	
Recommendation	14.8.2	High	Dean Barnes	Accept	
14.9 Reporting Strategy					
Findings	14.9.1	High	Dean Barnes	Agree	
	14.9.2	High	Dean Barnes	Agree	

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	Item	Risk Category	Response Owner	Response	Comments
	14.9.3	High	Dean Barnes	Agree	
Recommendations	14.9.1	High	Dean Barnes	Accept	
	14.9.2	High	Dean Barnes	Accept	
14.10 Workflow					
Findings	14.10.1	Medium	Dean Barnes	Agree	
	14.10.2	Medium	Dean Barnes	Agree	
Recommendations	14.10.1	Medium	Dean Barnes	Accept	
	14.10.2	Medium	Dean Barnes	Accept	
14.11 Project Team Communication					
Findings	14.11.1	High	Functional Steering Committee	Agree	
	14.11.2	High	Functional Steering Committee	Agree	
	14.11.3	High	Functional Steering Committee	Agree	
	14.11.4	High	Functional Steering Committee	Agree	
	14.11.5	High	Functional Steering Committee	Agree	
Recommendations	14.11.1	High	Functional Steering Committee	Accept	
	14.11.2	High	Functional Steering Committee	Accept	
	14.11.3	High	Functional Steering Committee	Accept	
14.12 Knowledge Transfer					
Findings	14.12.1	High	Functional Steering Committee	Agree	
	14.12.2	High	Functional Steering Committee	Agree	
Recommendation	14.12.1	High	Functional Steering Committee	Accept	