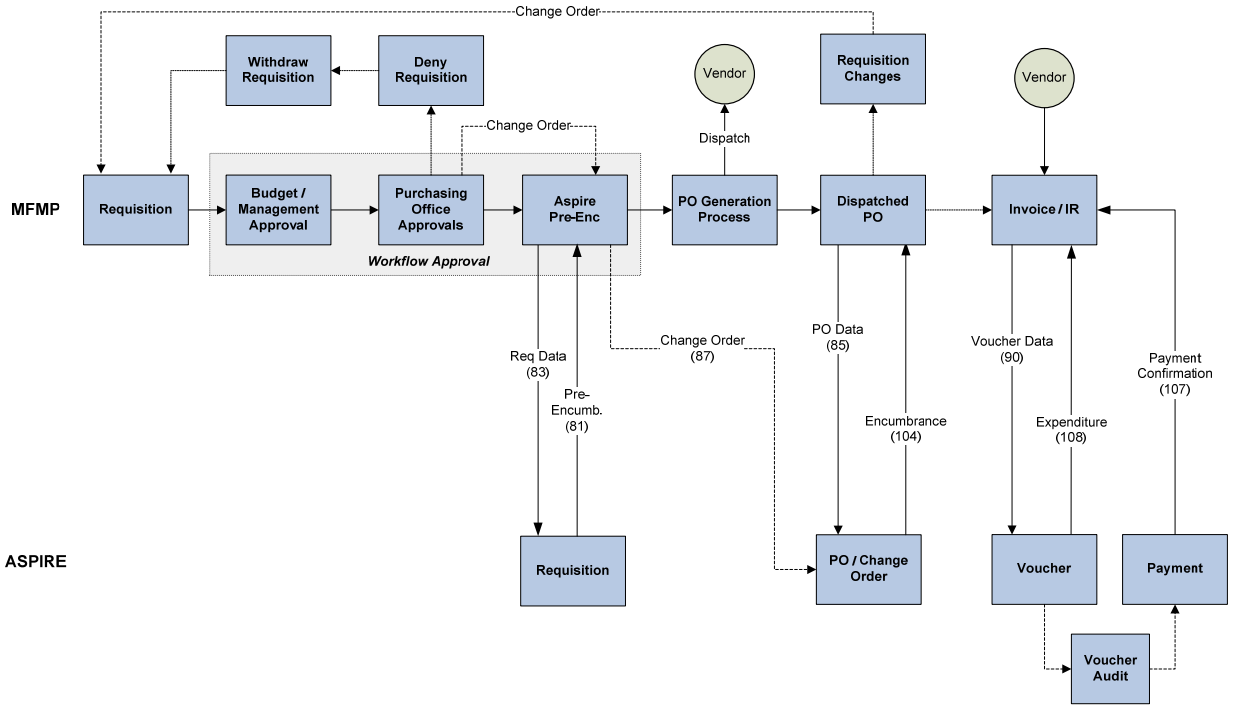
2.0 Appendix A – Project Aspire Conversion/Interface Functional Design

ADML ID	**081**
ADML Description	**MFMP Pre-Encumbrance Status**
ADML Tech #	**079**

2.1 Description Functionality

The purpose of this outbound, real-time interface is to send the pre-encumbrance status of Requisitions to MFMP, which will be used to validate whether or not the encumbrance will be successful. It will run one time right before the MFMP PO Generation process, working in conjunction with the inbound interface (ADML 83) that sends all approved MFMP requisitions to Aspire for budget checking. Once the requisition passes all save validations through ADML 83, the budget checking process will be kicked off immediately. This interface will be triggered to run at the completion of the budget process, sending back a message based on the outcome. The below diagram shows how this interface fits into the overall MFMP Design:



When the budget check passes, the BUDGET_HEADER_STATUS field on the REQ_HEADER table will be set to "V" (Valid) and the pre-encumbrance will be recorded in Aspire's KK tables. This status will trigger the interface to send a successful status message to MFMP and MFMP will then route the requisition to their PO Generation process. It is important to note that in Aspire, when a requisition uses more than the available amount in a "Track" budget, the Budget Header Status will still get set to "V" (Valid), however a Warning message will be generated in the KK tables. Unless otherwise determined, this interface should send all Warning messages back to MFMP even if the Budget Status is Valid.

When the budget check fails, the BUDGET_HEADER_STATUS field on the REQ_HEADER table will be set to "E" (Error) and the pre-encumbrance will not be recorded. This status will trigger the interface to send a failure message to MFMP along with the associated error messages that Aspire's budget checking process generates. MFMP will then set the requisition status to Denied and it will be routed to the Purchase Officer in MFMP.

In certain cases, the Budget Process may update the Requisition status to "Error", but the KK tables will not contain any error messages. This type of failure is usually due to a chartfield data error that is related to a tree structure. For example, in the current chartfield setup, the Org trees are associated to certain Approp (e.g. BE / Category /

Budget Year) ranges. When an unrelated Org and Approp (e.g. BE / Category / Budget Year) are used on the same distribution line, the following error is generated in the Message Log - "Tree Definition Error for Ledger Group 80_MGMT, Chartfield DEPTID, Tree Name 800_ORG_KK, Chartfield value 100001." This interface should send back an error message whenever this situation occurs. Preferably, this message should be as specific as possible in order to help the user resolve the issue. (Note: The new COA design will directly affect the type of errors generated in this situation. Significant testing of the prototype should be performed in order to determine all the possible errors and how to handle them for MFMP.)

In other cases, the Budget Process may fail due to technical reasons. When this occurs, the Budget Header Status will remain "Not Checked" and the Process Monitor Message Log may or may not contain information on what went wrong during the process. In this situation, this interface will not run. Instead, this Requisition will be picked up in a special nightly batch process. At this time, if the Budget Process completes successfully, the interface should be triggered to send back the appropriate message (either Valid or Error). If for some reason the process fails again (Budget Status = "Not Checked") for the same Requisition, this process will select that Requisition again until it is has reached the maximum number of runs as defined by the Run Control. If a Requisition reaches its maximum runs and is still unsuccessful, a message will be sent to MFMP and it will be written to an error log/report.

Authorized users will have the ability to override controlled managerial/project budgets by using the "Available Balance Override Indicator" on the MFMP Requisition. In Aspire, this will allow the dollar amount of the requisition to go above the available budget and drive the total available budget to a negative value. When the budget override is used by an authorized user, this outbound interface will send MFMP the associated Warning message and allow the Requisition to move forward to the PO Generation process. If an unauthorized user tries to use budget override, Aspire will not accept the override and this interface will send back the appropriate error message.

2.2 Scheduling

This interface will occur in real-time based on the outcome of the inbound interface, ADML 83.

2.3 Run Control Parameters

Not Applicable.

2.4 Unit Test Considerations

- Validate that the correct message is sent to MFMP and pre-encumbrance is recorded for a requisition that passes budget checking.
- Validate that the correct message is sent to MFMP and pre-encumbrance is recorded for a requisition that passes budget checking but produces a warning in KK.
- Validate that the correct message is sent to MFMP for a requisition that fails budget checking.
- Validate that if a requisition remains in "Not Checked" status due to a Budget Process failure, it will get picked up in nightly batch.
- Validate that the appropriate error messages are sent to MFMP when a requisition Budget Status = "Error" but there are no related messages in the KK log.

2.5 Miscellaneous

- Refer to ADML 83 for more details on the inbound interface that sends MFMP requisition data to Aspire.

2.6 Assumptions

- The Aspire Requisition ID is directly related to the MFMP Requisiton ID. Aspire Req ID = "R" + Zeroes as fillers + MFMP Req ID (10 total chars).
- All Aspire PO BU's can be determined from the MFMP PUI using the following logic: Aspire PO BU = MFMP PUI + "0". If the Aspire BU setup is revised, this logic will need to be reviewed.
- Budget overrides will only be allowed for users with the appropriate authorization (to be set up in Security module).
- Errors should be fixed in MFMP, the source system, whenever possible.

2.7 Record Layout

Inbound message format from ADML 83 is used as input for this ADML. Outbound message format can be viewed in IOG.