Matching Basics

Matching is used to tie a voucher to associated purchase orders and receipts and apply rules that support the internal controls framework and help ensure vendors are not overpaid for the goods and services they provide. Based on UNDP and partner agencies’ policies, all purchase orders are set to go through matching with the exception of recurring PO voucher contracts.

Recurring PO voucher contracts can be set to No Match if desired, allowing vendors to be paid without the matching process. There is less risk involved in recurring PO contracts as the associated vouchers are automatically generated based on the contract amounts. Therefore, the controls added by the matching process are not necessary for recurring PO voucher contracts.

Matching is also used to ensure that a receipt is created before matching successfully. A receipt must be entered on PO’s with the Receipt Required check-box checked. Based on the internal control framework, all PO’s must be set up as Receipt Required except DSA payments and recurring PO voucher contracts.

A PO voucher must be successfully matched before it can be paid through Atlas. Therefore, it’s important to frequently review and resolve match exceptions.

Matching Process

The matching process runs once each day around 11:00PM New York time. Users no longer have access to run this process because of problems that occurred previously when anyone could run in an uncontrolled environment. The scheduled run is monitored so that if any problems occur, they can be resolved as soon as possible.

We would like to increase the frequency of this process to every few hours throughout the day. However, first the number of match exceptions needs to be kept to a minimum. The large number of exceptions outstanding at this time is impacting the process performance and thus does not provide the opportunity to run throughout the day.

In the meantime, Atlas Service Center representatives have been given access to run this process for individual vouchers. If you need to immediately process a voucher for payment, please call or email the ASC for immediate follow-up.

Importance of Clearing Exceptions

As discussed previously, the overwhelmingly large number of match exceptions in Atlas has become a major problem and we need all country offices and HQ units to assist in clearing their exceptions. The following are the impacts of these exceptions so you can better understand the urgency of addressing this matter. Vouchers with these exceptions need to be corrected, either through changes to the PO or changes to the voucher. If these vouchers are no longer needed and have not been paid, they should be deleted.

Payment Processing: A system payment from Atlas cannot be made until a PO-based voucher eligible for matching is matched. The pay cycle will not pick up unmatched vouchers and vouchers with exceptions for payment. It is important to promptly clear match exceptions so that timely payments can be made. Even if a manual payment is made, it cannot be recorded in the system for accounting, reconciliation, and audit until the voucher is matched.
The PO or the voucher can be corrected to ensure the exception is cleared. While senior managers may have the capability to override an exception, this should only be used if it is not possible to clear the exception through other means.

**Matching Process Performance and Frequency:** The Matching batch process, which runs nightly, has been taking a very long time to complete, over an hour and a half. This process scans all vouchers that have either never been matched as well as those vouchers that previously produced exceptions (in order to identify whether a previous exception has cleared). The ATLAS team has tuned the process as much as possible. With 10000+ match exceptions, it is not possible to cut this time further except by clearing outstanding exceptions to a more manageable level. Because of the long run time, we cannot schedule matching more frequently throughout the day. As such, it takes up to a day for the PO voucher to be matched, sometimes delaying payment (although the Atlas Service Center can run matching at any time for specific vouchers upon request.) Once exceptions are reduced to a manageable level (less than 1000), we will likely be able to run the matching process more frequently (similar to contract processes), thus allowing more timely system payments.

**Expense Recognition:** If a voucher is not matched, voucher accounting entries are not created, debiting expense and crediting AP liability. As such, an expense will not be recognized in the ledger. And costs will not be available in Projects. In many cases, payments have been made through manual payments. Accounts payables and expenditures are therefore understated. This will significantly impact and delay year-end closing if the situation doesn’t become more manageable shortly.

**Reporting Irregularities:** Because accounting entries and Projects transactions have not been created for the vouchers with these exceptions, many reports will not appropriately account for the expenditures. Other reports, depending on their purpose, may include these vouchers because they pull from sources such as the voucher table or Commitment Control. By clearing these exceptions and fully processing the vouchers, reports will be in sync and these irregularities will be eliminated.

**Match Manager**

Match Manager is used to review match exceptions. You can navigate to it directly by going to Accounts Payable > Review > Vouchers > Match Manager. Or you can access it directly from a matched voucher or voucher with match exceptions by selecting the Match Manager hyperlink on the Invoice Information page of Voucher Entry.

Various criteria can be entered that may be useful in retrieving exceptions. For example, you can enter the specific business unit or you can filter by Buyer. If you want to retrieve only vouchers with exceptions, choose Exceptions from the Match Status field. This is useful in regularly reviewing what exceptions are present. The search only brings up 3 rows at a time, so make sure you use the arrow buttons or View All to see remaining vouchers with exceptions.
For users with appropriate approval authority, Match Manager can also be used to override many match exceptions. However, an override should only be used if absolutely necessary. The exception should be resolved by making the appropriate changes to the PO and voucher if possible.

By selecting the "i" buttons you can view information on the PO or Receivers that are associated with the voucher, or the specific exceptions. These inquiries also show total amounts for the purpose of calculating tolerances between the PO and the voucher and the receiver and the voucher.

The Purchase Order inquiry shows the information on the PO associated with the voucher line:
The Receiver inquiry shows the information on receipts associated with the voucher line:
The exception log shows the specific exceptions associated with the voucher. Each voucher line can have one or more exceptions.

For users with appropriate approval authority (senior manager and above), Match Manager can also be used to override many match exceptions. However, an override should only be used if absolutely necessary! The exception should be resolved by making the appropriate changes to the PO and voucher if possible. If the override is used, the match status will be updated the next time the matching process runs.

Matching Queries

Several queries have been set up to support searching for match exceptions. The two most useful queries are as follows. These can be used in conjunction with Match Manager to retrieve and resolve match exceptions.

As a reminder, you can access queries by navigating to Reporting Tools > Query > Query Viewer. Type all or part of the name of the query, then select Search, then select Run. These queries will ask for a business unit as a criterion. Wildcards (%) are supported.
### Query Name

<table>
<thead>
<tr>
<th>Query Name</th>
<th>Purpose</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN_AP_MTC_EXCPT_RULE_CNT_BYBU</td>
<td>Shows count of matching exceptions by business unit and match rule id. Does not show detail of specific voucher id.</td>
<td>Business Unit (wildcard supported)</td>
</tr>
<tr>
<td>UN_AP_MTC_EXCPT_BY_VOUCHER</td>
<td>Matching exceptions by voucher line with associated PO and Receipt information. Run by business unit.</td>
<td>Business Unit (wildcard supported)</td>
</tr>
</tbody>
</table>

### Matching Tips

- A PO voucher set up for matching cannot be posted or paid via the system (check or EFT) unless it’s matched. Therefore, it’s important to frequently monitor and resolve match exceptions.
- Matching generally operates at the line level on a voucher and the schedule level of a PO. UN partner agency POs typically only have one schedule per PO line. Thus the schedule level is usually equivalent to the PO line level. All tolerances are based on the schedule/line, not the entire PO.
- Matching is able to find the associated PO(s) or receipt(s) based on the information given on the voucher. If copying from a PO, matching uses the relationship between the PO and receipt(s) to find the associated receipt(s). If copying from a receipt onto a voucher, matching uses the relationship between the receipt and the PO(s) to determine the appropriate POs.
- A PO line (or schedule) can be partially matched if a voucher is entered for a quantity (or amount, for amount-based POs) less than the amount on the line. This allows multiple vouchers to be entered against one line. Matching rules prevent processing more than the appropriate amount, generating exceptions.
- Once a PO line (schedule) is matched to a voucher, it cannot be cancelled. In order to cancel, the voucher has to be unmatched through the Match Manager. The voucher can then be tied to a different PO.
- Changes to a PO often require a change order. This will require a re-approval and a new dispatch before matching is successful. In some cases, it may be easier to create a new PO and close the existing PO instead of processing a change order. The existing voucher can be associated to the new PO using the Associated PO hyperlink.
- A voucher line can only be associated to one PO line/schedule. However, it can be tied to multiple receivers. Thus, if you have not received the entire quantity to be paid, you can enter a receipt for the remaining amount (provided the goods have actually been received).
- Once a PO or voucher is changed in order to correct a match exception, the matching process must be run again to clear the exception and match the voucher. Users should wait until the scheduled process runs next, or create a request with the ASC to run immediately.
- If a payment has been paid manually for a voucher with match exception, but not recorded in the system, please make sure the scheduled payment is checked to hold so that the
system does not automatically generate a duplicate payment. Once the match exception is cleared, the payment can be recorded to replace the scheduled system payment.

- **Use of manual payments should not be considered a substitute for overcoming legitimate match exceptions.** Matching is an important part of the control framework and should not be avoided. Manual payments increase risk of duplicate payments and introduce a lack of control. If immediate execution of the matching process is required for an urgent payment, please contact the ASC for assistance.
## Overview of Match Exceptions/Rules and Resolution

The following summarizes the various match rules and provides possible resolutions to problems. There are two types of exceptions, regular exceptions and system exceptions. System exceptions differ from regular exceptions in that they are the first to be validated and that they generally cannot be overridden.

<table>
<thead>
<tr>
<th>Rule ID</th>
<th>Exception Title</th>
<th>Issue</th>
<th>Example</th>
<th>Resolution</th>
</tr>
</thead>
</table>
| RULE_E100 | Extended Price Tolerance         | The extended amount of the voucher line (unit price times voucher quantity) exceeds the extended amount of the PO (PO schedule unit price times voucher quantity) by more than the 1000 price tolerance. The tolerance level is 1000 regardless of currency of the PO. Note that both extended amounts calculated (PO and voucher) are based on the quantity on the voucher. The quantity on the voucher is converted into the PO schedule unit of measure if different, and the voucher unit price is converted based on the PO currency and PO unit of measure if different. | PO Quantity: 100  
PO Unit Price: 900  
Voucher Quantity: 90  
Voucher Unit Price: 950  
90 * 950 – 90 * 900 = 4500  
4500 exceeds 1000 tolerance | Either adjust the voucher so that the amount paid is within the tolerances or change the PO unit price through a change order, whichever is the most appropriate situation based on what the vendor should be paid. The change order will require re-approval and another dispatch.  
Note that vouchers with this exception also may contain other exception(s) related to unit price. |
| RULE_E200 | Extended Price % Tolerance | The extended amount of the voucher line (unit price times voucher quantity) exceeds the extended amount of the PO (PO schedule unit price times voucher quantity) by more than the 10% PO price tolerance. Note that both extended amounts calculated (PO and voucher) are based on the quantity on the voucher. The quantity on the voucher is converted into the PO unit of measure if different, and the voucher unit price is converted based on the PO currency and PO unit of measure if different. | PO Quantity: 5  
PO Unit Price: 10  
Voucher Quantity: 5  
Voucher Unit Price: 12  
\[ 5 \times 12 - 5 \times 10 = 10 \]  
10 is more than 10% of 50 (5 \times 10) | Either adjust the voucher so that the amount paid is within the tolerances or change the PO unit price through a change order, whichever is the most appropriate situation based on what the vendor should be paid. The change order will require re-approval and another dispatch.  
Note that vouchers with this exception also may contain other exception(s) related to unit price. |
| RULE_H200 | Voucher Vendor/Loc <> PO Vendor/Loc | The vendor ID or vendor location specified in the voucher is different from the PO. | Not applicable. | First check that the business unit on the voucher and the business unit on the PO are the same (both = UNDP1 or both = IND10 etc). If there is a difference between UNDP business units the vendor Id will likely not match, generating this error. Users will need to cancel the voucher and recreate it under the BU of the Purchase Order.  
If both business units are the same, then look at the vendor and vendor location. They need to match on both. The vendor and vendor location on the voucher are stored on the Invoice Information Page. The vendor location on the PO can be found by selecting the Details hyperlink to the right of the ID field.  
The vendor can be changed on the Purchase Order only if has not been approved or dispatched. Once approved or dispatched, the PO must be cancelled and a new one created if the vendor must change. The vendor location can be changed at any time. |
<table>
<thead>
<tr>
<th>RULE_</th>
<th>Voucher Item</th>
<th>Price</th>
<th>Unit Price</th>
</tr>
</thead>
</table>
| H 400 | Vendor/Loc <> Receiver | <> | Vendor/Loc | Vendor/Loc
|        | The vendor ID or vendor location specified in the voucher is different from that of the receipt. | Not applicable. | This issue may be found in conjunction with RULE_H200.
|        | This issue may be found in conjunction with RULE_H200. |
|        | First check that the business unit on the voucher and the business unit on the PO are the same (both = UNDP1 or both = IND10 etc). If there is a difference between UNDP business units the vendor Id will likely not match, generating this error. Users will need to cancel the voucher and recreate it under the BU of the Purchase Order. |
|        | If both business units are the same, then look at the vendor and vendor location on the voucher and on the receiver. They need to match on each. The vendor and vendor location on the voucher are stored on the Invoice Information Page. The vendor location on the receipt can be found be selecting the Details hyperlink to the right of the ID field. |
| L1 00 | Item ID has been entered on the voucher and does not match the value entered on the PO. | Not applicable. | Make sure the item id on the voucher is identical to the item id on the purchase order. If they are different, change the voucher item to match the PO. The item id cannot be changed on the PO unless a change order is created. |
| L2 00 | The item ID used in the voucher and receipt does not match. | Not applicable. | Make sure the item id on the voucher matches the item id on the receiver. |
| P4 00 | The unit price of the voucher line exceeds the PO schedule unit price by more than the 10% tolerance. The unit price of the voucher line will be converted based on the PO unit of measure and currency if different. | PO Unit Price: 5 |
|        | Voucher Unit Price: 6 |
|        | 6 – 5 = 1 |
|        | 1 is more than 10% of 5, thus resulting in an exception. |
|        | Either adjust the voucher so that the amount paid is within the tolerances or change the PO unit price through a change order, whichever is the most appropriate situation based on what the vendor should be paid. The change order will require re-approval and another dispatch. |
|        | Note that vouchers with this exception also may contain other exception(s) related to extended price. |
| RULE_P5 00 | Voucher Unit Price <> PO Price + Unit Tolerance | The unit price of the voucher line exceeds the PO schedule unit price by more than the 1000 tolerance. The tolerance level is regardless of currency. The unit price of the voucher line will be converted based on the PO unit of measure and currency if different. | PO Unit Price: 100000  
Voucher Unit Price: 102000  
102000 - 100000 = 2000  
2000 is exceeds 1000 tolerance | Either adjust the voucher so that the amount paid is within the tolerances or change the PO unit price through a change order, whichever is the most appropriate situation based on what the vendor should be paid. The change order will require re-approval and another dispatch.  
Note that vouchers with this exception also may contain other exception(s) related to extended price. |
| RULE_R 500 | No receipts found | No unmatched receipt can be found for the PO schedule that is associated with the voucher line, and the schedule requires receipt. | Not applicable. | Enter a receipt for the PO using the Maintain Receipts page. The receipt should specify the quantity or amount (amount-based PO lines) for which goods or services were received and are now to be paid to the vendor. |
| RULE_R 650 | Voucher line amt > Sum of associated receiver line amt (this rule only applies to Amount Only transactions) | For an amount-only PO line, the dollar amount specified on the voucher line is greater than the sum of all unmatched receipts. This indicates there is a discrepancy between the amount received and amount invoiced. The voucher line amount is converted to the PO currency if required. | Voucher Line: $1000  
Unmatched Receiver Lines: $500 and $200  
$1000 is greater than $500 + $200. | Users should either make the correction in the voucher line or create a receipt(s) for the remaining amount, depending on the whether the goods or services were actually received. |
| RULE_R 900 | Total voucher received quantity > Accepted quantity | The quantity specified on the voucher line exceeds the accepted quantity specified on the unmatched receipt(s) that the matching process is attempting to match. If required, the voucher line quantity will be converted to the receipt unit of measure. This indicates that the matching process can find an associated receipt(s), but the quantity received is less than the amount being vouchered. | Voucher Quantity: 5 EA  
Unmatched Receipt Quantity: 4 EA  
Since receipt has only been entered for 4 EA, the exception will be generated. | A receipt should be entered for the remaining quantity if the good or service was actually received. If not, the quantity on the voucher should be adjusted. |
| RULE_R 950 | Total Line Invoiced Qty <> Sum of Associated Receipts Accepted Qty | The voucher line has been associated to specific receipts using the Associated Receipts hyperlink on the Voucher Entry page or the PO Receipt Copy function. However, the sum of the accepted quantities specified on the associated receipts is not equal to the total line invoiced quantity. This does not represent the quantity received and entered on the receipt. Instead, it represents the quantity entered on the Associated Receipts for the voucher. | Voucher Quantity: 5 EA Associated Receipts Quantity: 7 EA Since 5 <> 7, this match exception will be generated. | Adjust the quantity on the Associated Receipts sub-page for the voucher or the quantity on the voucher line, whichever is most appropriate for the situation. |
| RULE_V2 00 | Life to Date Voucher Qty > PO Qty + % Tolerance | The total quantity entered on vouchers for the PO schedule to date (including previously matched) exceeds the PO schedule by the 10% tolerance. Amounts are converted to the PO unit of measure if needed. | PO line quantity: 4 Voucher 1 (Already Matched) Quantity: 3 Voucher 2 (Not Matched) Quantity: 2 Total quantity on vouchers (5) exceeds PO quantity (4) by the 10% tolerance. Thus, the second voucher will generate the exception. | Analysis is required to determine whether the invoice duplicates amounts already paid to the vendor. If a duplicate, the voucher should be deleted (or reversed through a reversal voucher if it cannot be deleted). If the PO quantity is wrong, there are two options. Either a change order can be used to increase the quantity. Or a new PO can be created for the additional quantity, and the existing voucher line can be divided into two lines, one tied to the original PO for the remaining quantity and one tied to the new PO. |
| RULE_V4 00 | Life to Date Voucher Amt > PO Schedule Amt + % Tolerance | The total amount entered on vouchers for the PO schedule to date (including previously matched) exceeds the PO schedule by more than the 10% tolerance. The voucher amounts are converted to the PO currency if different. | PO line amount: 100 Voucher 1 (Already Matched) Amount: 100 Voucher 2 (Not Matched) Quantity: 100 Total amount on vouchers (200) exceeds PO amount (100) by the 10% tolerance (10). Thus, the second voucher will generate the exception. | Analysis is required to determine whether the invoice duplicates amounts already paid to the vendor. If a duplicate, the voucher should be deleted (or reversed through a reversal voucher if it cannot be deleted). If the PO amount is wrong, there are two options. Either a change order can be used to increase the amount. Or a new PO can be created for the additional amount, and the |
exception.  

| RULE_V5 00 | Life to Date Voucher Amt > PO Schedule Amt + Tolerance | The total amount vouchered for the PO schedule to date (including previously matched) exceeds the PO schedule by more than the 1000 amount tolerance. The voucher amounts are converted to the PO currency if different. The tolerance level is 1000 regardless of currency. | PO line amount: 100000  
Voucher 1 (Already Matched)  
Amount: 10000  
Voucher 2 (Not Matched)  
Quantity: 95000  
Total amount on vouchers (105000) exceeds PO amount (100000) by the tolerance of 1000 in PO currency. Thus, the second voucher will generate the exception.  

Analysis is required to determine whether the invoice duplicates amounts already paid to the vendor. If a duplicate, the voucher should be deleted (or reversed through a reversal voucher if it cannot be deleted).  

If the PO amount is wrong, there are two options. Either a change order can be used to increase the amount. Or a new PO can be created for the additional amount, and the existing voucher line can be divided into two lines, one tied to the original PO for the remaining amount and one tied to the new PO. |

**System Exceptions**

| RULE_S1 00 | Invalid Match Control ID | The Match Control ID field on the PO is either left blank or is not a valid value. For all UN partner agency PO’s, the value should be STANDARD. This typically defaults when the PO is initially created, but may have been subsequently changed. | Not applicable.  
Navigate to the PO associated with the voucher using Maintain Purchase Orders. Choose 11-Matching from the More menu. Enter STANDARD as the Match Control ID and save the PO. |

| RULE_S2 00 | Invalid PO ID | The matching process cannot find the PO ID specified on the voucher. This may be because the PO ID is not set up for matching (i.e. Match Action is No Match) | Not applicable.  
In most situations, this is caused by the Match Action on the PO set to No Match, while the Voucher Line Match Option is set to Full Match. This can happen if the Match Action on the PO is changed after the PO is copied to the voucher.  
No Match is only allowed for Recurring PO Voucher contract based on UN partner agency procedures. (DSA payments can be set up as no receipt required, but should still be subject to... |
If this voucher is created based on a Recurring PO Voucher contract, then the problem can be resolved by changing the Line Match Option to No Match on the Associated PO/Receivers hyperlink of Voucher Entry. For all other payments, the Match Action on the PO should be changed to Standard, and the Match Control ID entered as STANDARD. This can be changed from the 11-Matching menu option on the Maintain Purchase Order page.

If the problem is not with the Match Action, please contact the Atlas Service Center to report the issue. There are a very small number of vouchers with this exception that are not caused by this situation. These situations require further analysis.

| RULE_S2 10 | Invalid PO Status. | The PO Status is not Dispatched (or Approved for Recurring PO Voucher contracts). This can happen if a Change Order is created after initial dispatch, and the PO is not re-approved and dispatched. | Not applicable. Make sure that the status of the Purchase Order is Dispatched if not a Recurring PO Voucher contract. If it is not dispatched, dispatch the PO so that the match exception can be cleared and voucher further processed. Recurring PO Voucher contracts will generate PO's with an Approved status. This is okay. These PO's cannot be dispatched. |
| RULE_S3 00 | Invalid UOM conversion for PO | The unit of measure on the PO line and the voucher line are different, and a conversion rate does not exist. | The PO line has a unit of measure of EA (each). Voucher line has a unit of measure of D (day). Since no conversion rate exists, this exception is created. Change the unit of measure on either the PO or the voucher so that they match. If the unit of measure is changed on the PO, a change order will be required and the PO will likely need to be re-approved and dispatched. |
| RULE_S4 00 | Invalid currency exchange rate for PO | An exchange rate between the currency of the voucher and the currency of the PO does not exist in the Atlas system. Treasury does not maintain exchange rates between all currencies. | PO line currency: IDR Voucher currency: ARS Verify that the currency on the voucher represents the currency in which the vendor should be paid. If this is the correct payment currency, no exchange rate exists to the PO currency. Therefore, the PO needs to be modified through a change order so that the |
Exchange rates are only maintained between local currencies and USD, local currencies and EUR, EUR and USD, and a few additional scenarios where a country actively uses more than one currency.

two currencies match. The PO will also need to be re-approved and dispatched. The PO and Voucher currencies can generally only differ between local currency and USD, local currency and EUR, and USD and EUR. Treasury can provide more information if needed.