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Global PAYplus

Fees - Core Processing

Business Guide

Version Control

Version	Summary of Changes
1.0	Document Created
2.0	Updated **Error! Reference source not found.**, **Error! Reference source not found.**, **Error! Reference source not found.**, **Error! Reference source not found.**, Fee Formula Selection Rules, and Attaching the Rules to Clients and Office. Created Taxes and Rebate.
3.0	Removed the NOCHGCODE system parameter.
4.0	Updated for Rebranding

Table of Contents

1   Overview

1.1   Introduction

The Fees Service in Global PAYplus (GPP) is a mechanism used for deriving the correct charges for a payment. Charges may be taken from either the debit party (from the sender or initiator of the payment) and/or credit party (from a fee account or from the payment amount.

This business guide describes how to create the correct flow for processing the Fees Service in GPP.

1.2   Services Involved

FeesCalculationService

1.3   Target Audience

This document describes the Fees Core Processing workflow. It is designed for business analysts and system administrators who need to set up and configure this feature. It is also of value to anyone who wants to know more about how this feature is implemented.

2   Processing

2.1   High Level Schema

Bypass fee ▶ Fee type ▶ Fee formula ▶ Fee account lookup ▶ Fee evaluation & validation

2.2   Processing Description

This section describes the GPP service flow that includes business rules assessment and payment attributes enrichment. This service is designed for Straight-Through Processing (STP). However, in some cases, manual adjustments may be required. In these cases, unique icons indicate the manual procedures along with the message errors that are generated for the operator.

The Fees process involves the following steps:

• Find scenarios where fees are waived/skipped (evaluate Bypass Fees business rules)

• Find relevant fee types (evaluate Fee Type Selection business rules)

• Find Fee Formula Selection rules for each fee type (evaluate Fee Formula business rules)

• Find special fee account usage (evaluate Fee Account Determination business rules)

• Implement fees, including Fee Calculation and Validation
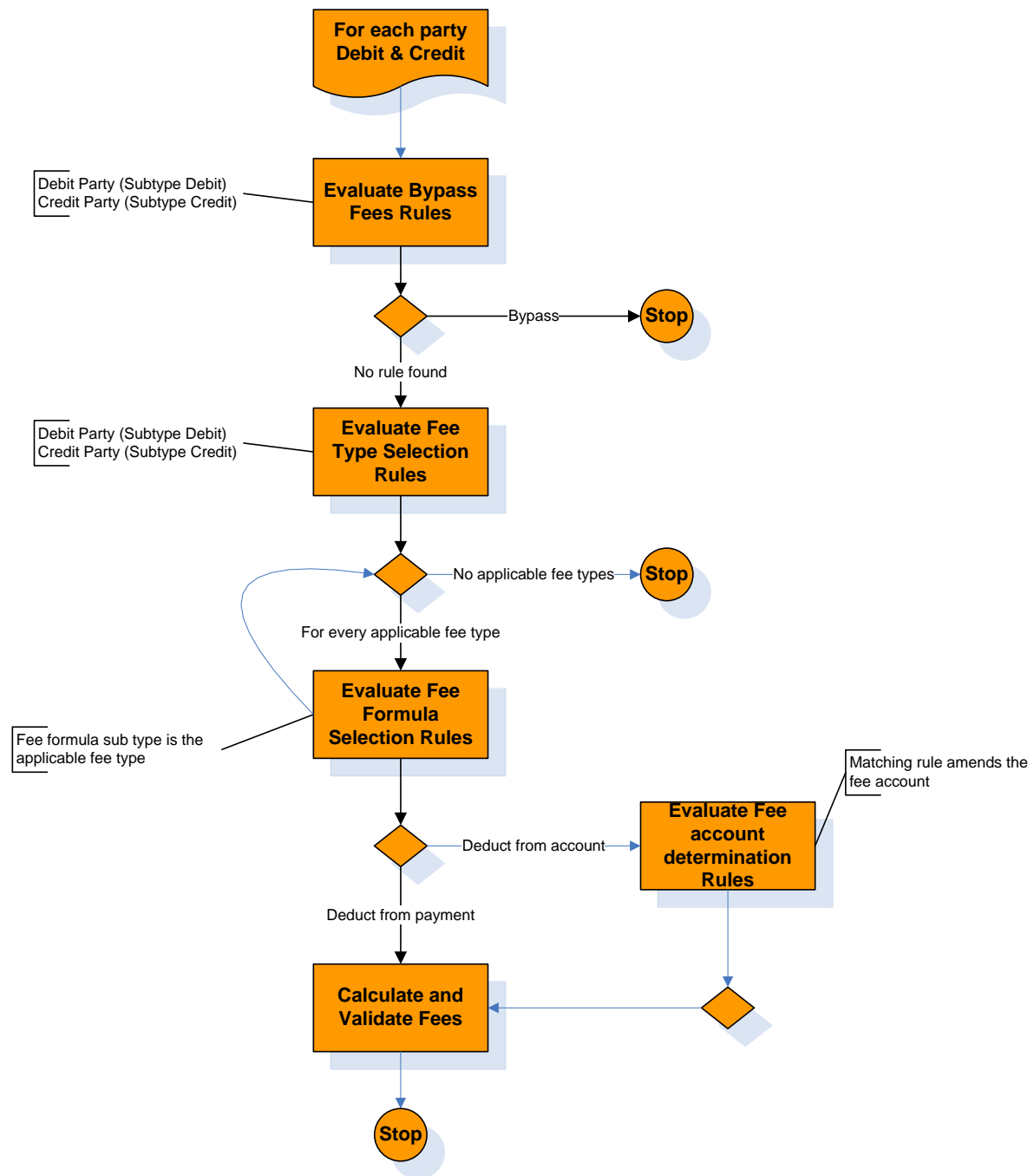
2.2.1 Bypass Fees Rules

The Bypass Fees rule determines whether to skip the fee calculation step for specific transactions.

- The rule subtype indicates which fees (debit/credit/agent fees) should be skipped
- The rule can be attached to a Party and/or Office

The system evaluates the bypass rules attached to the Party or the Office.

When looking at the debit party, the system evaluates Bypass Fees rules with subtype debit that are attached to that party. If a matching rule is found, the system skips the debit side fee calculation. If no matching rule is found, the system looks at the rules attached to the Office.

The same process is done for the credit party & agent fees. If no bypass rule is found, the system continues processing, by evaluating the Fee Type Selection Rules.

2.2.2 Fee Type Selection Rules

Fee types describe the fees that are determined in this process, for example, Cable fee, Commission etc. The Bank specifies all applicable fee types in the system, and the purpose of this rule is to find the applicable fee types for the payment.

- Rule subtype specifies the party side & nature (DR/CR/Agent)
- Available actions consists of the names of all active Fee Type profiles in the system for the assessing office
- The rule is attached to both Party and Office

In this step, the system evaluates all rules by party. The outcome of the evaluation process is a list of Fee Types (per party & possible agent fees) for which the system looks for relevant fee formulas (described in the next step).

The order of the attachment of the rules in each subtype defines the priority of the Fee Type. This concept is used in the Unwind process.

2.2.3 Fee Formula Selection Rules

Fee Formula rules are used to generate a fee value for every fee type that is found to be applicable. It is invoked immediately after fee type selection is performed. Fee formulas sub type is Fee Type. For example, if 'Commission' fee type is defined applicable for a payment, the assessment of fee formulas is performed for that fee type (i.e. only fee formulas with sub type 'Commission' are assessed and the first matching rule is the fee type value.

- If a matching rule is not found, GPP-SP evaluates the rules attached to the Bank in order of attachment.
- If no matching rule is found at the Party or Office level, no fees are charged for the fee type and fee type is no longer valid for payment.
- If a matching rule is found, fees are applied to the transaction according to the Fee Formula that is the action of the rule.

2.2.4 Taxes

The tax calculation is part of the fee logic. According to the information provided in the new tax frame in the Fee and Rebate Types profile the taxes can be calculated differently; they can be applied on different amounts, they may be credited to different P&L accounts etc.

The following is the description of the tax calculation STP processing done as part of the fee logic according to the setup of the new tax frame.

The current functionality of the fee logic includes fee type selection done by the rule mechanism; for each selected fee type the system selects a fee formula (also rule driven).

The fee logic considers the tax information at the stage of the fee type selection and to apply it at the proper stage of the fee calculation.

The basic attribute that affects the tax calculation is the field **Apply on**. This field can be set to one of the following values: Principle amount, Fee/Rebate amount.

If the **Apply On** field is set to **Principle amount** the system applies the percentage specified in the field **Tax Rate** on the principle amount to calculate the tax amount. In this case, this fee type will point

to a fee formula that calculates zero fees. The system supports fee formula that is set to fixed amount zero.

If the field **Apply On** is set to **Fee/Rebate Amount** the system applies the percentage specified in the **Tax Rate** on the calculated rebate/fee amount of the specific type

The system calculates the tax on the rebate/fee for each type.

The tax rate may be changed by the government from time to time; the new tax frame holds the new tax rate and the date until which the current tax rate should be applied.

During the tax calculation the system compares the payments value date to the date specified in the field **Valid until**. If the payments value date is before or equal to this date, the rate specified in the field **Tax Rate** is used. If the payments value date is later than the date specified there the rate specified in the field **New Tax Rate** is used.

The tax amount calculated for each fee type can be credited to different P&L accounts; the system uses the account specified in the new field **Tax P&L account** to credit the taxes.

The taxes can be charged as a separate posting entry or can be included within the fee entry. This is determined by the new checkbox **Separate tax entry**; if this checkbox is checked it means that the tax amount are added to the debit or credit fee amount, and this amount is logged as a consolidated posting entry. If this checkbox is unchecked it means that the taxes should be charged as a separate posting entry. In this case the taxes are charged as a separate posting entry.

<u>Example 1:</u>

- The Separate tax entry is checked:
    - o The principle amount is USD100
    - o The fee amount is USD10
    - o The tax amount is USD1
- The posting entries will be as follows:
    - o Dr Debit customer account - USD100
    - o Cr Credit account (customer account/clearing account) - USD100
    - o Dr Debit fee account (the fee account can be defined in the account profile (the debit account of the payment) or the party profile (of the payment debit party). There is also fee account selection rule that can determine the fee account) - USD10
    - o Cr fee P&L account - USD10
    - o Dr Debit fee account (can be the debit customer account or a special fee account related to the debit customer) - USD1
    - o Cr Tax P&L account - USD1

<u>Example 2:</u>

- The **Separate tax entry** is not checked:
    - o The principle amount is 100USD
    - o The fee amount is 10USD
    - o The tax amount is 1USD
- The posting entries will be as follows:
    - o Dr Debit customer account- 100USD
    - o Cr Credit account (customer account/clearing account)-100USD

- o Dr Debit fee account (can be a the debit customer account or a special fee account related to the debit customer)-11USD
- o Cr fee P&L account-11USD

During the fee calculation the system logs an entry in the msg_fees table for each fee type; the taxes related information is added to each entry.

The tax will be charged at the same time as the related fee or rebate type. It means that if the fee& rebate formula related to the selected fee & rebate type indicates that the fees or rebate should be applied Later, the tax calculated for the same type is also be applied later types. (The MSGFEES.APPLY refers to both fee/rebate and tax).

2.2.4.1   Tax support in Manual Fees

In order to support taxes in case of manual fees, i.e. the fee information is provided manually or from external source (e.g. Teller system) and not calculated by the system ,the Fee type name, Fee amount and Fee currency must be provided.

According to the fee type provided, the system applies the tax rate on the amount provided manually.

Note: Additional information may be needed to support the manual fees processing; this will be detailed in the manual fees section; the above fields are mentioned in the context of taxes only.

2.2.4.2   Taxes in case of Fees Deducted from Payment Amount

 If fees are deducted from the payment amount, the tax amount calculated is deducted from the payment amount as well irrespective of the Separate tax entry checkbox setup.

2.2.4.3   Tax Support in Request for Charges

When request for charges is generated automatically in the system, the taxes should be added to the requested amount of the request for charges message, the system should add the amount from msg_fees. TAX_AMOUNT to msg_fees.FEE_AMOUNT and to map it to the amount field.

2.2.4.4   Tax Support in case of Fee Discount

In case that the fee discount should be performed (applicable for internet banking) the tax should be calculated from the fee amount after the discount was already deducted from it.

2.2.4.5   Tax Posting Entries

The posting entries of the tax (also in case of rebate) are as follows:
- Debit account-the debit account will be taken from MINF. P_DBT_FEE_ACCT_NB

- Credit account-the credit account will be taken from MSG_FEES. TAX_ PNL_ACCOUNT_NO

2.2.5   Rebate

2.2.5.1   Rebate Amount Calculation

The rebate amount is calculated similarly to the fee amount calculation, using the same fields available for fees in the fee & Rebate formula profile;

The rebate evaluation and calculation is done last, after the total fee amount is already calculated and known. The rebate will be applied on the customer based on the setup in 'Fee & Rebate types' profile; i.e. if the field 'Party' is set to 'Debit', the rebate will be calculated from the total debit fee amount.

The difference is the amount that the rebate is applied on, if expressed as a percentage.

The field on the fee and rebate formula profile **Rebate reference amount** indicates on which amount the rebate should be applied if expressed as a percentage.

If the field **Rebate reference amount** is set to **Principle amount** the percentage specified in the fee and rebate formula is applied on the principle amount.

If the field **Rebate reference amount** is set to **fee amount** the percentage specified in the fee and rebate formula is applied on the total fee amount.

If there is a fixed amount, that amount will be set in the fee formula profile as per the current functionality of fee formula.

For each rebate type the system logs an entry into msg_fees table as all other fee types.

For rebate types the system lights a field in the msg_fees table,msg_fees. REBATE,to indicate that this types is a rebate and not regular fees.

The P&L account specified in the rebate type is mapped to the rebate record in msg_fees to msg_fees.FEE_PNL_ACC_NO.

- Deduct from method: The fee formula associated with the rebate type can be set to deduct the fees either from the account or from the payment.

- If the fee formula is deduct from payment: The fee amount is the net amount and the rebate amount is deducted from the payment amount.

  Example: Payment amount - 1000CNY

Debit amount and account	Credit amount and account
1000CNY, debit customer account	
	800CNY, settlement account/credit customer account
	150, fee P&L account
	50, customer rebate account/debit customer account

- If the fee formula is deduct from account: The fee amount is a gross amount from which the rebate amount is credited.

  Example: Payment amount - 800CNY

Debit amount and account	Credit amount and account
800CNY, debit customer account	800CNY, settlement account/credit customer account
200, debit customer fee account	200, fee P&L account
50, P&L account	50, customer rebate account/debit customer account

2.2.5.2   Rebate Account Derivation

The rebate account is the account to which the rebate amount is credited.

- The field **Rebate account** is added to the following profiles:
  o   Parties
  o   Accounts
- The derivation of the rebate account is as follows:

a. The system checks whether a rebate account is specified within the account profile of the payment debit account. (MINF.p_dbt_acct_nb) if such account exists, the system uses it as the rebate account and will map it to the new field in MINF.P_REBATE_ACCT_NB.

b. If no rebate account is specified within the debit account profile, the system checks whether a rebate account is specified within the party profile of the debit party. If such account exists, the system uses it as the rebate account and maps it to the field in MINF.P_DBT_REBATE_ACCT_NB.

c. If no rebate account is specified within the debit account or debit party profile, the system uses the debit fee account (MINF.P_DBT_FEE_ACCT_NB) and maps it to the new field in MINF.P_REBATE_ACCT_NB.

- Rebate-Posting entries: At the stage of generating the posting entries for rebate, the following logic is applied:

  o Deduct from payment: If the rebate type (msg_fees.rebate is true) and the method is deduct from payment (msg_fees.DEDUCT_FROM=P) and the paying party is debit (msg_fees.PAYING_ PARTY=DR) then:

    ❖ Credit account: The rebate account is used as the credit account (MINF.P_DBT_REBATE_ACCT_NB)

    ❖ The P&L account derived from the specific rebate type/formula should be ignored (msg_fees.FEE_PNL_ACC_NO).

    Note: There is no need to derive debit account since this amount was already debited from the customer debit account

  o Deduct from account: If the rebate type (msg_fees.rebate is true) and the method is deduct from account (msg_fees.DEDUCT_FROM=A) and the paying party is debit (msg_fees.PAYING_ PARTY=DR) then:

    ❖ Debit account: The P&L account specified in the **Fee & Rebate Types** profile is used as the debit account (msg_fees.FEE_PNL_ACC_NO is the debit account). Refer to Periodical Rebate.

    ❖ Credit account: The rebate account is used as the credit account (MINF.P_DBT_REBATE_ACCT_NB).

2.2.5.3   Rebate Support in Manual Fees

In order to support rebate in case of manual fees, i.e. the fee information is provided manually or from external source (e.g. Teller system) and not calculated by the system, the Fee & Rebate type name, Rebate amount and Rebate currency must be provided:

Note: Additional information may be needed to support the manual fees processing; this is detailed in the manual fees section; the above fields are mentioned in the context of rebate only.

2.2.5.4   Periodical Rebate

If the rebate is granted periodically and not in real time, the fee formula selected for the rebate type should indicate that this rebate should be applied **LATER**.

2.2.5.5   Taxable Rebate

The Rebate amount can be taxable. In this case, the information in the new tax frame should be set to apply the tax on the rebate amount; the system uses the tax related information in the tax frame to calculate the tax on the rebate amount as describe in the tax processing section.
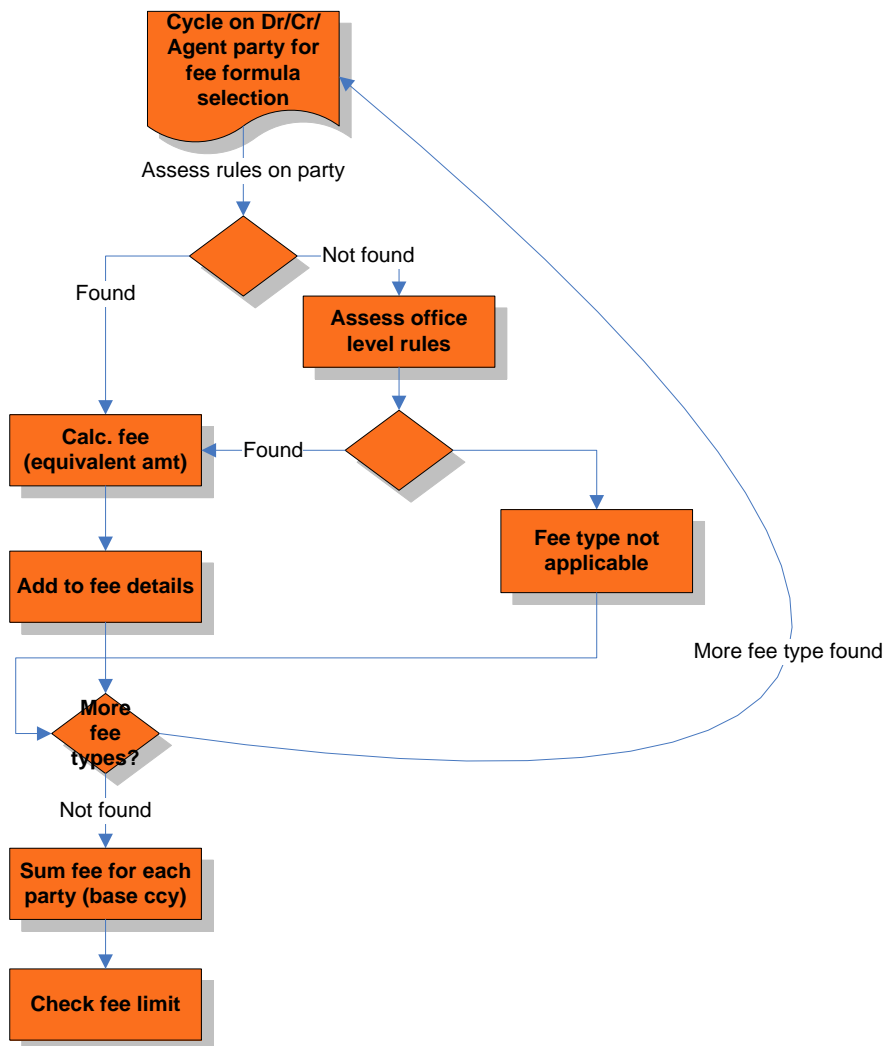
2.2.6   Fee Account Derivation Rules

If Fee Formula profile is set to **Deduct from Account**, the following process is performed:

- The Fee Account Selection rules are checked.

- If a matching rule is found, the fees are deducted from the specified account.

- If no matching rule is found, the system checks whether the fees should be deducted from the Debit Account or the Credit Account.

    d.   Deduct from Debit Account

- Debit Account = Vostro (Non-asset)

- If Main Dr account is a Vostro/Loro (i.e. bank account and asset flag is not checked).

- If yes, looks for a fee account in Dr party account profile

- If no account is defined, looks for a fee account in Dr party profile

- If no account is defined, system parameter REPNOFEEACVOS is checked.

    o   Set to **Yes**, the payment is sent to the **Repair** status.

    o   Set to **No**, the system uses the Main Dr Account.

- Debit Account – Nostro (Asset)

    o   Debit Account = Nostro (Asset)

- o   If Main Dr account is a Nostro (i.e. bank account and asset flag is checked).

- o   If yes, looks for a fee account in Dr party account profile

- o   If no account is defined, looks for a fee account in Dr party profile

- o   If no account is defined, system parameter REPNOFEEACNOS is checked. If system parameter is:

  - ❖   Set to REPAIR, set payment to Repair status for manual handling.

  - ❖   Set to FEEACCONLY, the system only tries to find a proper non-asset fee account.

  - ❖   Set to FEEACCFIRST, the system first tries to find a proper non-asset fee account. If such an account is not found, generate a request for charges (SWIFT n91) message

Note: This check is performed only if the original sender of the message is the owner of the Dr Account. If not, all fee account lookup checks are performed on the original sender party profile and not on the owner of the Nostro account that was found.

This procedure covers cases where funds are settled via a clearing house (the **Fin Copy** code indicates the clearing house) or via agent banks (i.e., F54 or F53).

- •   Deduct from Credit Account

If fees should be deducted from the credit side and no fee account selection rules are found, the system checks whether the Main Cr account is an asset (Nostro) account or not.

- •   Cr Account – Vostro (Non-asset)

Same behavior as defined above for Dr party

- •   Cr Account - Nostro (Asset)

If the Main CR account is a Nostro account, no derivation is performed. The system treats these cases as if Fee Formula is set to deduct from payment.

2.2.7   Validation

For fees deducted from a payment, GPP compares the total fees amount (both credit and debit, if each exists) against the payment amount. If the total fees amount is equal or greater than payment amount, the payment is routed to Repair for manual handling with the error "Fees amount is greater than payment amount".

For fees deducted from an account, GPP compares the total credit fees amount against the credit amount. If total fees amount is equal or greater than credit amount, payment is routed to Repair for manual handling with the error "Fees amount is greater than credit amount". GPP also compares the total debit fees amount against the debit amount. If total fees amount is equal or greater than the debit amount, the payment is routed to Repair for manual handling with the below error "Fees amount is greater than debit amount".

2.2.8   Unwind Process

The system parameter FEEUNWINDMETHOD determines the unwind method to use if the total fee amount is more than the Max Fee Limit or the net payment is less than the Min Floor Amount.

Possible values:

- •   FIRST_AMT – Unwind entire fee amount.
  The first fee that caused the Max Fee Limit or Min Floor Amount to trigger an action is removed. The fee calculation process is not stopped.

- FIRST_REL_AMT – Unwind relative fee amount.
  The first fee that exceeded the Max Fee Limit or caused the net payment to be less than the Min Floor Amount is reduced by the excess amount. The fee calculation process is not stopped.

- ALL_REL_PCT – Unwind relative percentage.
  All fee formulas are calculated. Each calculated fee amount is reduced by the percentage required (a) to reduce the total fees to the Max Fee Limit or (b) to increase the net payment to the Min Floor Amount.

The sequence of unwinding operations to be performed is determined by the Fee Type Selection rule attachment order.

The following fields are updated in the MSG_FEE table when the unwind process is invoked:

- All Fee Formulas that were deducted for the specific MID are updated in the table.

- The UNWIND_FEE field indicates whether an unwind fee is applicable.

- Fee Amount – The calculated fee amount is held in the fee currency after the unwind process ends

If the unwind method = FIRST_AMT

The Fee Amount for the first Fee formula that needs unwinding is reset to 0 (zero), along with all the relevant fee formulas with lower priority, which follow this fee formula.

If the unwind method = FIRST_REL_AMT

The Fee Amount for the first Fee formula that needs unwinding is set to the relative amount that should have been deducted from the fee formula. The Fee Amount for the additional Fee formulas with a lower priority that follow this fee formula is reset to 0 (zero).

If the unwind method = ALL_REL_PCT

In this case, the Fee Amount for all relevant Fee Formulas is updated with the calculated fee amount (relative percentage calculation).

Original Fee Amount - Hold the original calculated fee amount in the fee currency.

This field holds the original Fee amount for each fee formula that should have been deducted, unless the unwind process is performed.
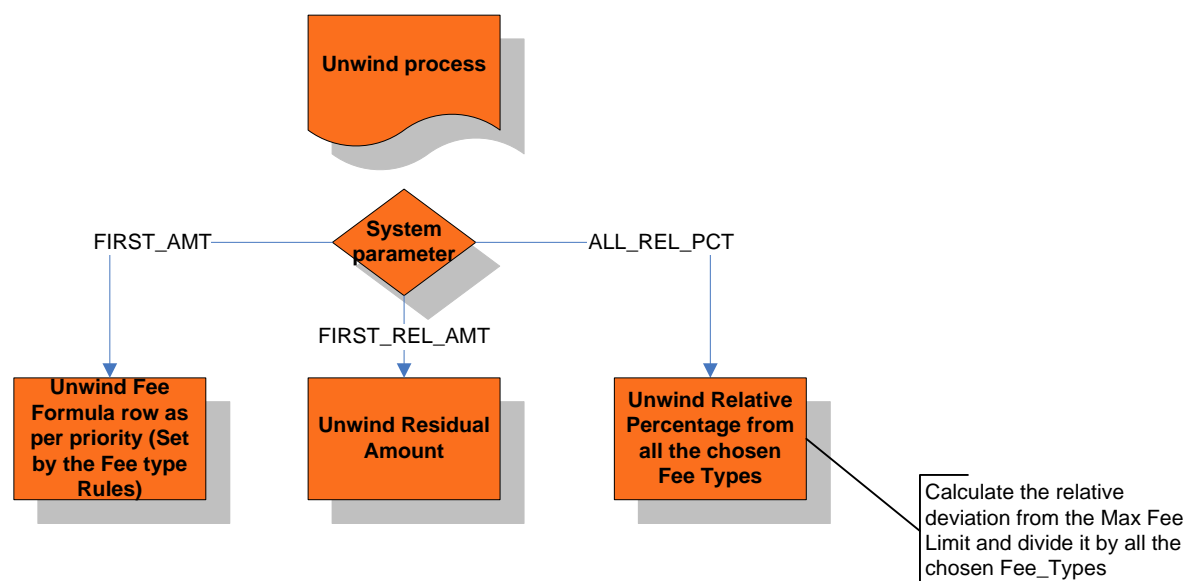
3   Manual Handling

Manual intervention is often required in GPP. Operator selections are taken into consideration and will not be overridden by the system.

GPP allows operators to change the fee formula(s) applied to the transaction.

The Message Fee Details window summarizes all the eligible selected fees. In this window, each of the Fee Types is shown, along with those formulas that were selected by the system. The operator can remove, add or change any fee formula that is to be applied. When GPP-SP eventually calculates the fee amounts, it will use the selected fee formulas (zero or one per fee type).

Fee type is displayed for both the debit and credit side. The operator can select a fee formula for each fee type. Where a fee formula is manually selected, or the existing value is overridden, the system does not need to evaluate fee rules. The system calculates the fee based upon the formula that the operator has selected.

If the operator creates a payment, or alternatively, the message drops to repair and no Fees were charged yet, the following steps should be performed:

1. An empty row should appear per fee type. The operator only has the ability to waive a certain fee type by selecting a designated waive fee-formula per line. In order to waive fees per payment, the operator should WAIVE the fees on the main screen.

2. The operator can only delete a manually entered Fee Formula (indicated in the Fee Details screen as check box).

    Note: If the operator tries to delete an "automated" fee (no manual fee), the following message is generated: In order to delete the fee formula, the Apply Fee should be set to Waive.

3. The operator should have the ability to select a fee formula per type, for types that are not selected the rules should be evaluated.

4. User Account Selection – the operator can define the Dr/Cr Fee Account (From the Accounting tab). If an account is defined, there is no need to perform account derivation. GPP-SP does not validate if the entered fee account belongs to the paying customer.

4   System Configuration and Business Setup

4.1   Static Data

This section defines the business guide building blocks that are used in setting up the Fees Service. These building blocks include:

- System Parameters
- Profiles
- Business Rules
- Statuses
- Tasks
- Access Class Entitlement
- Message Attributes

4.1.1   System Parameters

4.1.1.1   Basic Fees

The following describes the System Parameters - Basic Fees.

Name	Description
REPNOFEEACVOS	Determines whether a payment should be placed in a Repair queue if fees are to be deducted from an account but a customer fee account has not been set up or the user has not specified a fee account.
	When fees are to be deducted from an account but there is no customer fee account set-up or specified by the user, and the main Dr or Cr account from which the system would otherwise deduct the fees is a liability (non-asset) account:
	If Yes, then the payment is sent to the Repair queue.
	If No, then the system continues processing the payment and debits the non-asset account. (Default)
REPNOFEEACNOS	Defines a mechanism to follow for an incoming payment with charge option DEBT (SWIFT term OUR) where agent fees are not provided and where the debit account is a Nostro account.
	Where set to Repair, these messages are sent to a Repair queue for user intervention.
	Where set to MT191AUTOGEN, then regardless of whether the system can find a proper fee account, it generates a request for charges (MT191) for the missing funds and allows the incoming payment to continue processing.
	Where set to FEEACCFIRST, then the system tries to find a proper fee account (i.e., a non-asset account that belongs to the original sender). If such an account is not found, the system generates a request for charges (MT191). (Default)
	Where set to FEEACCONLY, then the system tries to find a proper fee account (i.e., a non-asset account that belongs to the original sender) and if such account is not found, the payment is placed in a Repair queue for manual handling.
MAXFEEAMT	Specifies the maximum fee amount if no maximum fee amount is stated in the relevant Party profile. This amount is expressed in base currency (not as a percentage). If the fee amount is above the amount specified in MAXFEEAMT, fees are unwound until they do not exceed the MAXFEEAMT limit.

Name	Description
FEEUNWINDMETHOD	Determines the unwind method to use if the total fee amount exceeds the Max Fee Limit or causes the net payment to be less than the Min Floor Amount. Possible values:
	FIRST_AMT – Unwind the entire fee amount. The first fee that caused the Max Fee Limit to be exceeded or caused the net payment to be less than the Min Floor Amount is removed. (Default)
	FIRST_REL_AMT – Unwind the relative fee amount. The first fee that triggered the Max Fee Limit or the Min Floor Amount is reduced by the amount required to avoid reaching these thresholds.
	ALL_REL_PCT – Unwind a relative percentage. All fee formulas are recalculated to reduce the fee amount by the amount required to avoid exceeding the Max Fee Limit or to prevent the net payment from falling below the Min Floor Amount.
FLOORAMT	Specifies the minimum floor amount (in base currency) after fees, for example, 200. If the net payment drops below this floor, fees are unwound until the net payment is not less than the floor amount.

4.1.2   Profiles

These are the details of the required setup in GPP profiles for the Fees - Core Processing.

Note: For a detailed description of all the fields in the profiles, see GPP Online Help.

4.1.2.1   Fee and Rebate Type

Fee and Rebate Types are the names for the calculated fees (example: Commission of $5 where commission is a fee type name) used to group accounting entries for bookkeeping purposes. The groups are pre-configured for each individual institution.

A Fee type is associated with the debit party, the credit party, or agent fees, and with a P&L Account.

The following describes the Fee Type profile fields.

Field Name	Description
Fee Type	
Fee Type	A code for the fee that is taken (example: STDCHG). This information is stored in the database
Description	A fee type name (example: Standard charges) for the fee that is taken. This information is shown to the operator.
Party	Party that pays the fee; either the credit or debit side or agent fees for an outgoing SWIFT tag71G.
Group	The type of fee, charges or commission.
P&L (Profit and Loss)	
Account	The Profit and Loss (fee income) Account; selected from the Accounts profile Data Search window.
Currency	The currency of the transaction. If one account is found, automatically populated (derived from the selected fee account without validation) when a P&L account is selected. If no account is found, an error message directs the user to enter a valid account number. If multiple accounts are found, the Currency field remains empty.

Field Name	Description
Tax Information	
Apply on	Determines the amount on which the tax rate will be applied. This field includes a drop down list with the following values: Principle amount, Fee/rebate amount
Separate Tax Entry	Check box field that indicates whether the tax is included in the fee amount or calculated and charged separately. If this check box is unchecked, the tax amount will be included in the fee amount record in the posting entry. If this check box is checked, the tax amount will be logged separately as an additional posting entry; in this case all taxes should be consolidated in a single entry. No multiple tax entries are allowed.
Tax Rate	Indicates the tax rate in percentage. This rate is used during tax calculation and is applied on the principle, fee or rebate amount
Tax rate valid until	Holds the date until which the rate indicated in the Tax rate field is valid. This date is used during the tax calculation. If the payment's value date is earlier or equal to the date indicated in this field, the rate indicated in the Tax rate field is used. If the payment's value date is later than this date then the rate indicated in the New rate field is used. The date must be later than the current business date. Available only if Tax Rate is populated.
New tax rate	Holds the new rate that will be applied one day after the date indicated in the Valid until field. This rate is be used during the tax calculation. If the payment's value date is before or equal to the date indicated in the Valid until field, the rate indicated in the 'Tax rate' field is used. If the payment's value date is greater than the date indicated there then the rate indicated in this field is used. Becomes a mandatory field if the Valid until field is populated. Available only if Tax Rate is populated.
Tax on tax rate	After the fee amount is calculated and the tax applied, the system takes the percentage indicated in the Tax on tax field and validates that it is still valid (if the payment's value date is earlier or equal to the date indicated in the Valid until field, the rate indicated in the Tax on tax field is used).
	If the tax is not valid, the system use the rate indicated in the New tax rate field (in the Tax on tax row). If no new rate is available, the system continue the flow without calculating the Tax on tax amount.
	The tax on tax amount is credited to the existing P&L account field.
Tax P&L Account The P&L Account belongs to the bank (office) and is always in Office base currency.	
Account	Specifies the P&L account to which the tax calculated within the specific fee type is credited. This field is a drill down field that imports records from the Accounts profile table. If no account is specified, the fee P&L account is credited with the specific tax.
Currency	Specifies the tax P&L account currency. This field is auto populated with the currency of the selected tax P&L account.
Office	Specifies the P&L account office. This field is auto populated with the office of the selected tax P&L Office.

4.1.2.2   Fee and Rebate Formula

Fee and Rebate Formula profiles enable the user to customize the fees that the bank applies to processed messages. These profiles are invoked by user-defined rules. Fees can be calculated based on a simple and/or tiered formula. A tiered amount can be built from:

- A fixed amount

- A percentage of each payment

- Progressive / Ad valorem (i.e., a fixed amount or percentage for each tier)

- A combination of fixed and percentage value fee types

The tiered option allows you to set minimum fees for message processing in the event the amount calculated on a percentage basis is low. GPP also allows you to specify a maximum fee that will be levied against messages. GPP-SP uses Fee Formula Selection Rules to determine the Fee Formula to be applied to a payment.

There may be a number of applicable fee formulas for every fee type. Only the first matching fee formula rule applies for the message.

The following describes the Fee Formulas profile fields.

Field Name	Description
Fee name	Name of the fee formula. That information is stored in the database
Fee type	Each fee formula must be associated with & applicable for a fee type. Selected from a drop-down list taken from **Error! Reference source not found.** Profiles.
Fee currency	Specifies the currency of the fee formula.
Description	Provides a description of the fee formula.
Deduct from	Indicates whether fees are to be deducted from payment proceeds (payment amount) or debited to an account. Set to 'Account' and disabled if Fee Type is Agent Fees. If payment, Apply fee field set to Now and disabled.
Apply fee	Specifies when the fee is to be charged. Values in the drop-down list: Now: Both the fee calculation, and the actual posting, should take place with the message completion. Later: The fee calculation should take place and be displayed immediately, but the posting should take place later (i.e. skip posting). This is usually set for a billing option. Waive: No posting takes place. Disables Fixed Amount, Percentage, Min fees, and Max fees fields. Set to Now and disabled if Fee Type is Agent Fees.
Fee per	Indicates whether the fee is per message or per advice generated. If 'Advice' is selected, then the Fee Method is set to 'Regular' and Fixed Amount field is enabled.
Fee P&L Account	
Account	Specifies the Profit & Loss account to which fees will be credited. Selected from the Accounts profile Data Search window. Disabled if Fee Type is Agent Fees. If an account is not selected, the system credits the fees to the account stated in the relevant fee type. When the profile is saved, the ACCOUNTS table is searched for the relevant account. If one account is found, automatically populated (derived from the selected fee account without validation). If no account is found, an error message directs the user to enter a valid account number. If multiple accounts are found, the Currency field remains empty.
Currency	Populated automatically based on Account selection.
Office	Populated automatically based on Account selection.
Rebate Reference Amount	Drop down field with the options: - Principle amount

Field Name	Description
	• Fee amount
Formula Details	
Method	Affects the way the fees are calculated. Options are Regular or Tiered. UI changes accordingly on selection.
Tier type	Indicates whether the tier type is fixed or progressive. Enabled if Fee Formula is Tiered.
Fixed Amount	Enabled if Apply Fee option is Now or Later
Percentage	Enabled if Apply Fee option is Now or Later
Min fees	Enabled if Apply Fee option is Now or Later
Max fees	Enabled if Apply Fee option is Now or Later
Tier	
From/To amount	From and To amounts for the first step of the Progressive Fee Formula. Fields are enabled if Progressive Tier type is selected. When a new row is added, the To amount from the previous row is selected as the new From amount in the new row
Fixed Fee	Fixed fee for the amounts entered.
Percentage	Percentage fee for amounts entered

4.1.2.3   Parties

The Parties profile maintains the customer data. Customers can be financial institutions with which the office has a relationship or a private (non-financial) customer of the bank. The Parties profile defines bank information within the SWIFT or similar payment network. In this context, a Party includes any financial institution in the payment network, including your own financial institution.

The following describes the Parties profile fields.

Field Name	Description
Processing Tab	
Amount Min. floor	Minimum floor amount after fees in base currency. If the message amount drops below this floor, fee components are removed according to system parameter FEEUNWINDMETHOD logic until the message amount reaches the floor amount.
Max fee amount	Maximum charge that can be taken from a party. If this amount is not defined at the party level, the system checks the MAXFEEAMT system parameter.
Max. fee percentage	Maximum percentage of the instruction amount that can be charged as a fee.
Fee account Office	Office that holds the Fee Account
Account	Fee account number. Click the ⋯ button to display the list defined in Profiles → Accounts.
Account	Select a Rebate account number. The list is derived from Accounts.
Currency	Currency of the selected Rebate account. This field is displayed automatically.
Rebate Account Office	Office that holds the Rebate Account. This field is populated automatically based on the account selected.
Rebate Account Number	Rebate account to which the rebate amount should be credited to.

Field Name	Description
Rebate Account Currency	Rebate account currency

4.1.2.4   Accounts

In addition to the principal debit account, an alternate fee account can be specified. If the alternate fee account is designated for the payment of debit fees, it will be debited for fees instead of the principal debit account.

The following describes the Accounts profile fields in the tab.

Field Name	Description
Asset checkbox	If selected, indicates the account is a Nostro settlement account. Fees are not deducted from a Nostro account unless Agent fees (SWIFT 71G) are provided. See system option REPNOFEEACNOS functionality.
	If agent fees are not provided and the account is a debit account, the system generates a Request for Charges if the system options permit it to do so.
Account	Account number.
Currency	Currency code
Processing	
Fee account Office	Office that holds the Fee Account
Account	Fee account number. Click the ⋯ button to display the list defined in Profiles → Accounts.
Rebate Account Office	Office that holds the Rebate Account. This field is populated automatically based on the account selected.
Rebate Account Number	Rebate account to which the rebate amount should be credited to.
Rebate account currency	Rebate account currency

4.1.3   Business Rules

A rule consists of a set of conditions and an action. The conditions refer to attributes of the transaction or other data in the system. The action determines what should be done if the conditions are met.

Rules must be attached to an object (such as a processing office or customer) before they can become effective. For example, Fee Formula Selection rules are attached to an Office profile. If more than one rule is attached to an object, the rules are evaluated in the order they are listed.

4.1.3.1   Fee Bypass

Description: Debit and Credit fees can be skipped by the creation of this business rule. The rule normally addresses situations where there is no need to calculate fees. The Fee Bypass rule subtype is Dr, Cr or Agent fees. This enables Dr and/or Cr (as well as outgoing agent fees) fees to be waived separately.

Rule Attachment: Bypass Fees rules are attached to a party or to the local office. Multiple rules may be attached. Default rules are attached to the Local Bank. First matching rule applies (per rule sub type).

Usage: Fee bypass rules are attached to the debit/credit parties or to the local office. GPP-SP scans the rules attached by order of priority. If found, GPP-SP bypasses fees on both the debit side, credit side or outgoing agent fees, depending on the party to which the rule is attached.

Rule Action: Bypass.

4.1.3.2   Fee Account Determination

Description: Under normal processing, a fee account can be associated with the debit/credit account or with the debit/credit party. It is also possible to use the principal account for payment of fees. This business rule provides the ability to define a unique fee account that is used for the deduction of fees.

Rule Attachment: Fee Account Determination rules may be attached to a Party & Office.

Usage: The rules are evaluated in their attachment order. First matching rule found is selected for every paying party.

Rule Action: Fee account (from accounts profile).

4.1.3.3   Fee Type

Description: Fee types define names for the different fee amounts that are determined (for example: commission, cable charge etc.). For every fee type, GPP-SP finds an appropriate fee formula. Fee type selection defines a list of applicable fee types for each message. After the fee type is defined, a fee formula is selected for the fee type.

Rule Attachment: Fee Type rules may be attached to a Party or Office.

Usage: The rules are evaluated in their attachment order. All applicable fee types are selected.

Rule Action: Fee type (from fee type profile).

4.1.3.4   Fee Formula

Description: Fee Formula rules automatically determine the amount of fees to charge per transaction. Fee Formula rules attach specific fee calculation formulas to messages meeting defined criteria. If a fee type is applicable to a message, a fee formula determines the fee amount that is applicable to that fee type. For example, if the system finds a cable fee applicable to a message, the fee formula selection rules determine the amount to be charged.

The Fee Formula rule has a subtype option indicating the specific Fee Type option. The available actions for Fee Formula rules consist of the names of all active Fee Formula profiles in the system.

Rule Attachment: Fee Formula rules may be attached to a Party or Office.

Note: Multiple rules can be attached to a Party or Office.

Usage: GPP-SP first scans the fee rules attached to the Party (Debit or Credit depending on message details) by order of priority. If no rule is found, GPP-SP then scans the fee rules attached to the Office. The first applicable rule found is used.

Rule Action: Fee formula (from fee formula profile)

4.1.4   Access Class Entitlements

The following Access Class Entitlements listed in **Error! Reference source not found.** should be added:

The following describes Access Class Entitlements Required for Fees Processing.

Name of Profile	Selections
Access	Profiles: Fees – Fee Type, Fee Formula
	Rules: Business Rules, Rule Attachments

4.1.5   Message Attributes

The table describes the Fees message attributes. For a description of the layout of the Message (Message Location in the table) refer to the Creating a Payment section in the Online Help.

Attribute Name	Description	Message Location	Sub Location	Type
Account	Debit account no.	Header	Debit/Credit details Debit	Amount
Amount	Debit amount	Header	Debit/Credit details Debit	Amount
Value Date	Debit value date	Header	Debit/Credit details Debit	String
Total fees from account	Total debit fees that were deducted from debit party and that were applied now (rather than Later or Waived)	Header	Debit/Credit details Debit Additional info	Amount
Out agent fees	Total agent fees (SWIFT tag 71G receiver charges) in debit currency	Header	Debit/Credit details Debit Additional info	Amount
Main posting amount	Total debit amount. If separate fee account does not exist, then total fees deducted from account (NOW) and out agent fees are added	Header	Debit/Credit details Debit Additional info	Amount
Account	Credit account no.	Header	Debit/Credit details Credit	Amount
Amount	Credit amount	Header	Debit/Credit details Credit	Amount
Value Date	Credit value date	Header	Debit/Credit details Credit	String

Attribute Name	Description	Message Location	Sub Location	Type
Fee Type Name	Fee type name used	Body/ Fees tab	Fees information	String
Paying Party	Party paying the fees	Body/ Fees tab	Fees information	String
Fee Formula nm	Fee Formula name used	Body/ Fees tab	Fees information	String
Fee Currency	Fee currency used	Body/ Fees tab	Fees information	String
Fee Amount	Fee amount	Body/ Fees tab	Fees information	Amount
Orgnl Fee amt	Original fee amount	Body/ Fees tab	Fees information	Amount
Apply	When to apply the Fees	Body/ Fees tab	Fees information	String

4.2   Recommended Setup

This section provides examples of how to set up the Fees service in GPP. Fees setup involves the following steps:

- Create a fee type selection business rule to select the Fee Type profile
  - o   Create a Fee Type profile
- Create Fee Formula selection rules for all relevant fee types
  - o   Create a Fee Formula profile
- Attach the rules to Clients and Office
- Handle Parties and Accounts
  - o   Set up Fee accounts
  - o   Define parties special fee handling
- Verify default values of the relevant system options
- Apply changes

4.2.1   Creating Fee Type Selection Rules to Select the Fee Type Profile

This section provides examples of typical Business Rules for selecting Fee Type profiles:

- FEE_CABLE_DR_O - Charge cable fees from debit party for outgoing payments with charge bearer DEBT/SHAR
- FEE_CABLE_DR_SHAR - Charge cable fees from debit party for outgoing payments with charge bearer SHAR
- FEE_CABLE_CR_SHAR - Charge cable fees from credit party for incoming payments with charge bearer SHAR
- FEE_AGENT - Agent fees for DEBT/OUR cases

See Fee Type for more information on creating Business Rules for Fee Type profile.

4.2.1.1   FEE_CABLE_DR_O

This rule stipulates that cable fees on outgoing payments should be taken from debit party when charge bearer is DEBT/SHAR.

Rule condition states: Where Chrg Br is equal to DEBT, then take action defined in FEE_CABLE_DR Fee Type profile.

4.2.1.2   FEE_CABLE_DR_SHAR

This rule stipulates that cable fees on outgoing payments should be taken from debit party when charge bearer is SHAR.

Rule conditions state: Where Chrg Br is equal to SHAR **and** Cdt MOP <> BOOK, then take action defined in FEE_CABLE_DR Fee Type profile.

4.2.1.3   FEE_CABLE_CR_SHAR

Rule conditions state: Where Chrg Br is <> to CRED

4.2.1.4   FEE_AGENT

This rule stipulates that agent fees be deducted for DEBT/OUR cases.

Rule condition states: Where Chrg Br is equal to DEBT, then take action defined in FEE_AGENT Fee Type profile.

4.2.2   Creating a Fee Type Profile

This section provides examples of three typical Fee Type profiles:

- FEE_CABLE_DR - Cable fees for Dr party
- FEE_CABLE_CR - Cable fees for Cr party
- FEE_AGENT - Agent fees

See Fee Type for an explanation of the parameters that should be defined when creating a Fee Type profile.

Please refer to the User Manual for a more detailed explanation on how to create a Fee Type profile.

4.2.2.1   FEE_CABLE_DR

- Fee Type name: FEE_CABLE_DR
- Description: Cable fees charged to debit party
- Party that is to be charged the fees: Debit
- P&L Account in which to deposit the cable fee

4.2.2.2   FEE_CABLE_CR

- Fee Type name: FEE_CABLE_CR
- Description: Cable fees charged to credit party
- Party that is to be charged the fees: Credit
- P&L Account in which to deposit the fee

4.2.2.3 FEE_AGENT

- Fee Type name: FEE_AGENT

- Description: Agent Fees

- Party that is to be charged the fees: Agent Fees

- Profit & Loss account to which to credit the fees

4.2.3 Creating Fee Formula Selection Rules to Select the Fee Formula Profile

This section provides examples of typical Business Rules for selecting Fee Formula profiles:

- FEE_1EUR - Platinum customers pay 1 EUR

- FEE_TIERED - Non Corporate customers pay tiered model pricing

- FEE_2USD – All incoming payments pay 2 USD

- FEE_3AUD – Agent Fess pay 3 AUD

See Fee Formula for more information on creating Business Rules for Fee Formula profile.

Refer to the Online Help for a more detailed explanation on how to create a rule for Fee Formula profile.

4.2.3.1 FEE_CABLE_1EUR

This rule stipulates that corporate customers pay 1 EUR on cable fees.

Rule condition states: Where Customer Category is equal to AC, then take action defined in FEE_1EUR Fee Formula profile.

4.2.3.2 FEE_CABLE_TIERED

This rule stipulates that non-corporate customers pay a tiered model pricing on cable fees.

Rule condition states: Where Customer Category is not equal to AC, then take action defined in FEE_TIERED Fee Formula profile.

4.2.3.3 FEE_CABLE_2USD

This rule stipulates that all incoming payments pay 2 USD on cable fees.

Rule condition is not required. Rule uses FEE_2USD Fee Formula.

4.2.3.4 FEE_AGENT_3AUD

This rule stipulates that all Agents Fees are 3 AUD.

Rule condition is not required. Rule uses FEE_3AUD Fee Formula.

4.2.4 Creating a Fee Formula Profile

This section provides examples of four typical Fee Formula profiles:

- FEE_1EUR - FEE_CABLE_DR - Cable fee charge for cable fees taken from Dr party. Fix 1 EUR

- FEE_2USD - FEE_CABLE_CR - Cable fee charge for cable fees taken from Cr party. Fix 2 USD

- FEE_3AUD - FEE_AGENT - Agents fee for outgoing message where agent fees are known. Fix 3 AUD

- FEE_TIERED - FEE_CABLE_DR - Tiered pricing for cable (debit) fees

See Fee Formula for an explanation of the parameters that should be defined when creating a Fee Formula profile.

Refer to the User Manual for a more detailed explanation on how to create a Fee Formula profile.

4.2.4.1   FEE_1EUR - FEE_CABLE_DR

- Fee name: FEE_1EUR

- Fee Type (to link to the Fee Formula): FEE_CABLE_DR

- Fee Currency: USD

- Description: Cable fee charge for cable fees taken from Dr party. Fix 1 EUR

- Deduct From: Account

- Apply Fee: Now

- Fee Per: New Message

- Formula Details: Regular

4.2.4.2   FEE_2USD - FEE_CABLE_CR

- Fee name: FEE_2USD

- Fee Type (to link to the Fee Formula): FEE_CABLE_CR

- Fee Currency: USD

- Description: Cable fee charge for cable fees taken from Cr party. Fix 2 USD

- Deduct From: Account

- Apply Fee: Now

- Fee Per: New Message

- Formula Details: Regular

4.2.4.3   FEE_3AUD - FEE_AGENT

- Fee name: FEE_3AUD

- Fee Type (to link to the Fee Formula): FEE_AGENT

- Fee Currency: AUD

- Description: Agents fee for outgoing message where agent fees are known. Fix 3 AUD

- Deduct From: Account

- Apply Fee: Now

- Fee Per: New Message

- Formula Details: Regular

4.2.4.4   FEE_TIERED - FEE_CABLE_DR

- Fee name: FEE_TIERED

- Fee Type (to link to the Fee Formula): FEE_CABLE_DR

- Fee Currency: EUR

- Description: Tiered pricing for cable (debit) fees

- Deduct From: Account

- Apply Fee: Now

- Fee Per: New Message

- Formula Details: Tiered

- Fee Type: Progressive

4.2.5   Attaching the Rules to Clients and Office

The rule types now need to be attached to an object in order to become effective. Fee Type & Fee Formula rules may be attached to an office or a party.

Please refer to the User Manual for a more detailed explanation on how to attach rules.

4.2.5.1   Attach Fee Type Rule to Office

Rule type name: Fee type

Sub-type: DR – for debit side Fee rules/CR– for credit side Fee rules /AF – for Agent Fee rules

Name Object: fee type rule can be attached to an office or a party (customer)

4.2.5.2   Attach Fee Formula Rule to Office

Rule type name: Fee formula

Sub-type: Fee type rule name

Name Object: fee type rule can be attached to an office or a party (customer)

4.2.6   Handling Parties and Accounts

4.2.6.1   Setting up Fee Accounts

Fee accounts should be set up per party, through the Party profile or Account profile.

Please refer to the User Manual for a more detailed explanation on how to set up Fee Accounts.

4.2.6.2   Defining Special Fees for a Party

For special fee handling, attach the relevant rule type to a specific party.

Please refer to the User Manual for a more detailed explanation on how to handle special fees.

4.2.7   Verifying Default Values of the Relevant System Options

Default values of the relevant system options should be verified to ensure that they are relevant (see Static Data). If these default values are not relevant, they should be changed to fit the requirements of the office.

Please refer to the User Manual for a more detailed explanation on how to change the default values of System Options.

4.2.8   Applying Changes

For changes to these static data items to become applicable, GPP cache needs to be refreshed.

Note: The system cache is refreshed automatically every time GPP is restarted.

Refer to the Online Help for a more detailed explanation on how to apply changes.

Appendix A: Glossary

Term	Description
Cr	Credit
Dr	Debit
DEBT	Debtor
CRED	Creditor
GPP	Global PAYplus
Nostro	A bank's own foreign bank account, usually in the currency of the foreign country. http://en.wikipedia.org/wiki/Nostro_and_vostro_accounts
P&L	Profit and Loss Account
SWIFT	Society for Worldwide Interbank Financial Telecommunication, an organization owned by banks that operates a network to facilitate the exchange of messages between financial institutions (including broker-dealers and securities companies). A SWIFT payment message is an instruction to transfer funds. Settlement takes place via a payment system or through correspondent banking relationships. http://www.swift.com/
Vostro	An account that a correspondent bank maintains on behalf of a foreign bank, also called a loro account. http://en.wikipedia.org/wiki/Nostro_and_vostro_accounts