Global PAYplus

Special Processing

Business Guide

Version Control

Version	Date	Summary of Changes
1.0		Document Created
2.0	November 2015	Updated for Rebranding
3.0	Sept 2018	Document rebranded to Finastra template

Table of Contents

1 Overview

Global PAYplus (GPP), which is also called Override Straight-Through Processing (STP), enables a Financial Institution to implement specific and non-customary instructions during the payment processing workflow. These instructions, which use business rules and profiles, enable a Financial Institution to prevent STP processing and route payment messages to a specific queue designated for manual handling.

The Special Processing rules and profiles can include the following:

- Customer specific instructions for system users to perform manually
- Additional bank validations for the system to perform during payment processing

GPP routes payment messages that meet defined rule conditions to a specific queue for alerting purposes and manual handling. Authorized GPP users can access messages in the queue to manually repair message attributes, as required.

1.1 Target Audience

This document describes the Special Processing feature, and provides information about special and validation processes, and working with message data. 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.

1.2 High Level Schema

This is a high level schema that shows the placement of the Special Processing (Override STP) process in payment message workflow.
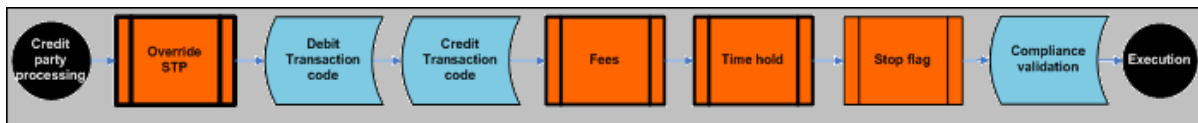
The process begins with credit party processing, and completes upon compliance validation.

1.3 Detailed Schema

This is a detailed schema of payment message handling and validation during the Special Processing stage.
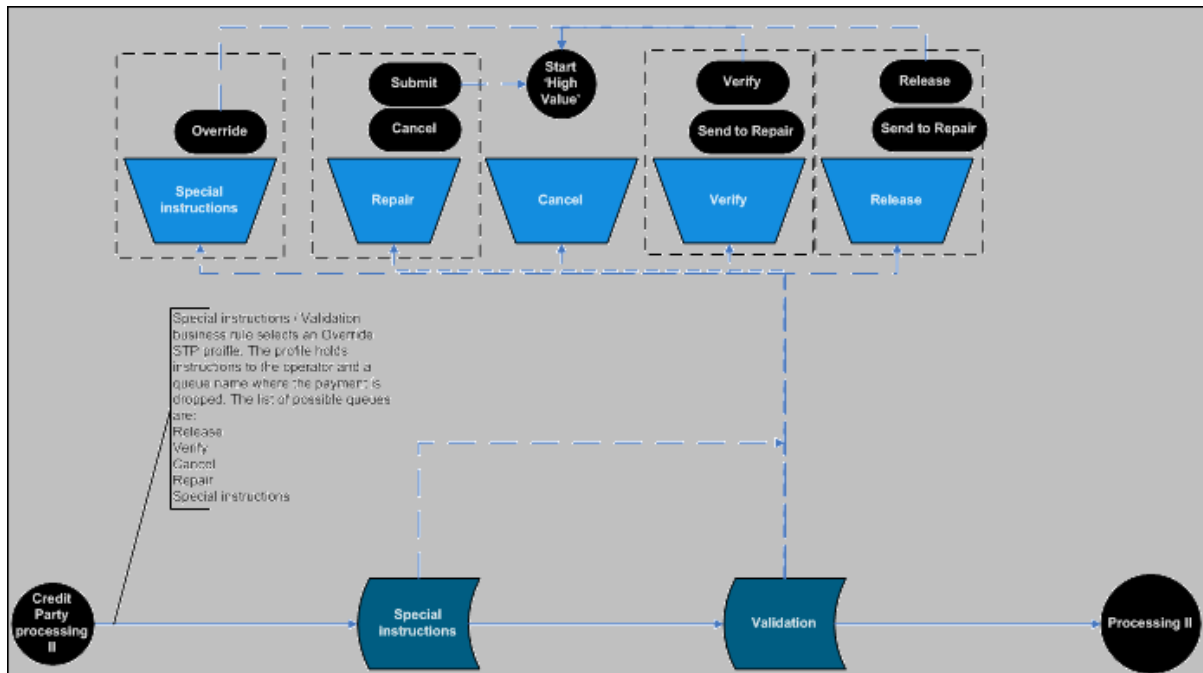
The Special instructions / Validation business rule selects an Override STP profile, which provides instructions and a queue name where the payment is dropped.

The list of possible queues are:

- Release
- Verify
- Cancel
- Repair
- Special instructions

2 Processing

GPP implements the Special Processing workflow with the Special Instruction Process and the Validation Process.

2.1 Special Instruction Process

2.1.1 Special Instruction Workflow

The workflow begins with four rules and profiles:
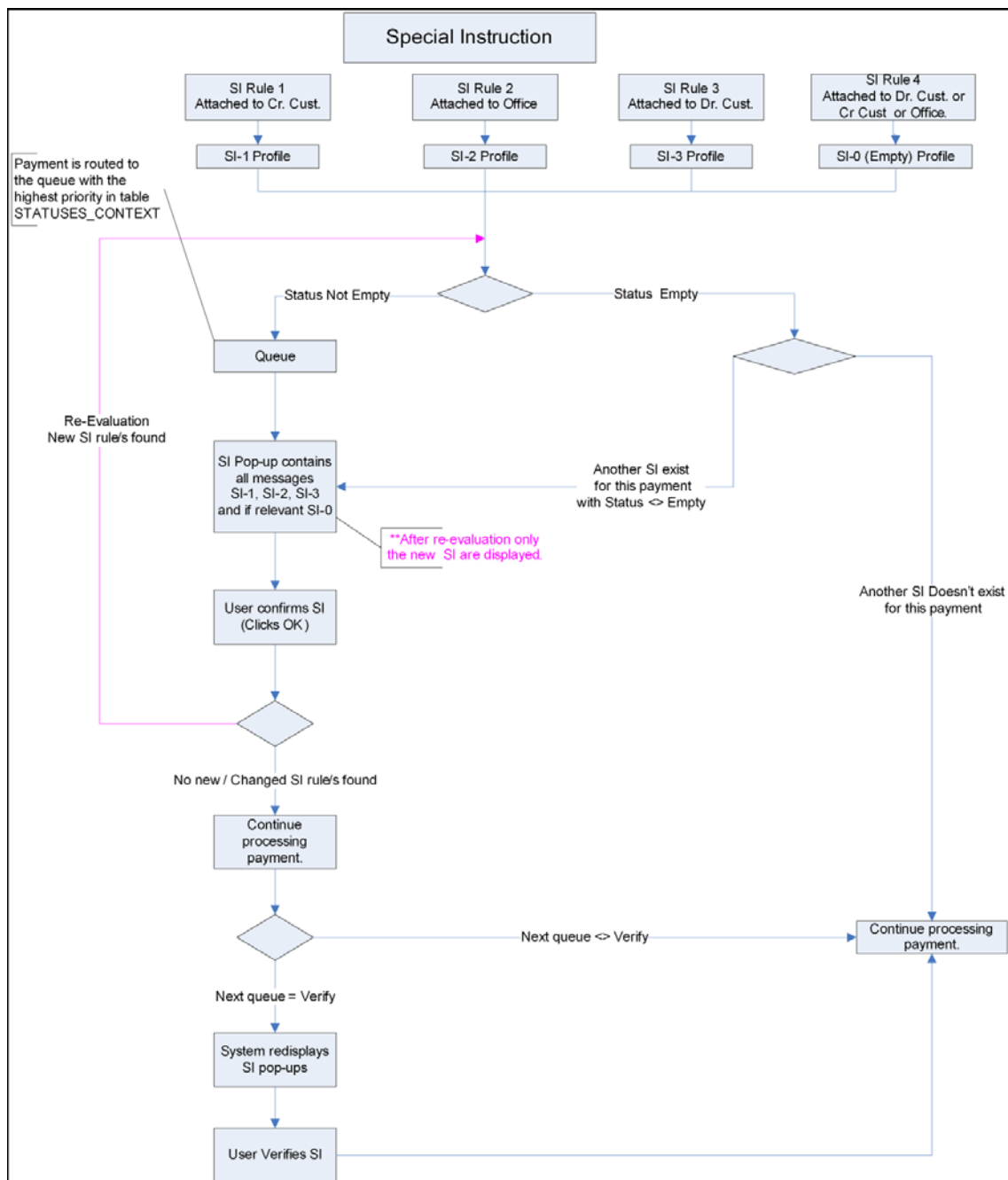
2.1.2 Special Instruction Details

GPP implements Special Instruction rules (see Special Instruction Rule) towards the end of the payment processing, after both debit and credit side identifications.

GPP first evaluates rules that are attached to any of the relevant parties, such as first in credit chain and first in debit chain, and then continues to evaluate rules that are attached to the party that belongs to the local office.

Note: A bank can define rules attached to a party representing the local office as default rules, which are evaluated regardless of the first in chain parties.

The system continues to evaluate and apply rules for a specific payment message until all attached rules are evaluated or an applied rule has a STOP action.

If an applied rule has an Override STP profile as its action, the system routes the payment message to the specific queue, as defined in the profile. If the system applies multiple rules with multiple queues (as defined in each Override STP profile) to a single payment message, the system routes the message to the queue with the highest priority.

Note: Queue priority is defined in STATUSES_CONTEX.PRIORITY.

The system maintains all instructions from the selected Override STP profiles that are applied to a payment message in the MSG_SPECIAL_INSTRUCTIONS table (see MSG_SPECIAL_INSTRUCTIONS Table). The system adds an additional Special Instruction entry to a specific payment message, only if one does not already exist for the same message, Override STP profile, party, and party type.

Note: A 2 in the SI_STATUS indicates a historical record, and the system does not re-evaluate the rule, nor does it display the Special Instruction in the Special Instructions tab.

If a payment message does not meet the defined conditions of any Special Instruction rules, the system continues the payment processing workflow.

2.2 Validation Process

2.2.1 Validation Workflow
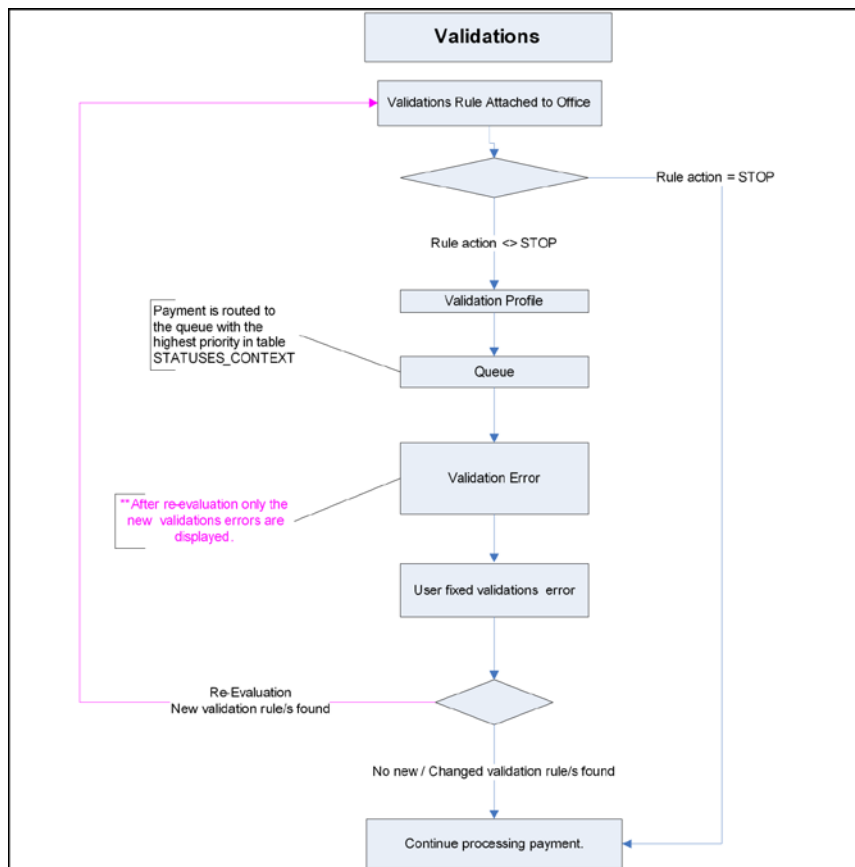
2.2.2 Validation Details

GPP implements Validation rules (see Validation Rule) toward the end of the payment processing, after debit- and credit-side identifications and Special Instruction evaluation. The system imposes validations as per these the rules in addition to the standard validations that the system automatically performs.

The system evaluates Validation rules attached to the local office for a specific payment message until one of the following conditions is true:

- The system has evaluated all Validation rules.

- The message meets the conditions for a specific rule with a STOP action, and the system does not evaluate remaining attached rules.

- The message meets the conditions for a specific rule with an Override STP action.

If the action is an Override STP profile name, the system does the following:

- Routes the payment message to a specific queue, as defined in the Override STP profile.

- Adds an error record with the Validation text to the message error log (MSGERR), which authorized GPP user can view in the Errors tab.

An authorized GPP user can access the payment message in the queue and fix the relevant message attribute. The user can then release the message back into the message processing workflow.

The system then re-evaluates all Validation rules and applies a rule if the payment message meets the defined conditions.

Note: There is no override for Validation rules. The system applies the same rule again when processing continues, which causes the system to stop processing the payment message an additional time.

If the system does not match any Validation rules with an Override STP action during evaluation, the system continues the payment processing workflow.

3 Manual Handling (N/A)

4 System Configuration and Business Setup

GPP uses reference data, such as business rules and profiles, to implement the Special Processing functionality. The Override STP profile is used to implement both Special Instruction and Validation business rules.

- For more information about business rules, see Rules.

- For more information about the Override STP profile, see Override STP Profile.

Special Instruction data for payment messages is stored in the MSG_SPECIAL_INSTRUCTIONS table. For more information, see MSG_SPECIAL_INSTRUCTIONS Table.

GPP accesses the message error log (MSGERR table), and adds to it the Validation data for each relevant payment message.

GPP implements Special Instruction and Validation business rules differently during payment message processing. For more information, see Rules.

4.1 Business Setup

To implement the GPP Special Processing functionality, authorized users should configure GPP to meet the specific Financial Institution's requirements.

4.1.1 System Parameters (N/A)

4.1.2 Profiles

These are the details of the required setup in GPP profiles for the Special Processing.

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

4.1.2.1 Override STP Profile

The Override STP profile is used to prevent STP processing of specific payment messages that meet defined business rule conditions. GPP routes these messages to specific queues for manual handling.

Multiple Override STP profiles can be applied to a single payment message, as per relevant Special Instruction and Validation rules. An authorized GPP user can define Override STP profiles with the following types:

- **Special Instruction**: Used to prevent STP processing of a payment message with specific characteristics, such as a settlement amount greater than a defined value. For more information, see Special Instruction Rule.

- **Validation**: Used to prevent STP processing of a payment message that is invalid as defined by the specific conditions, such as a missing product code. For more information, see Validation Rule.

The Override STP profile is accessible from the GPP menu bar: Business Setup > Processing > Override STP.

These are the specific attributes that need to be defined in the Override STP profile for Special Processing.

Field Name	Description
Name	Profile name (15 characters maximum).
Type	Indicate which type of process the profile is for: • Special Instruction • Validation
Description	Profile description (1000 characters maximum).
Status	The status or queue that the system assigns to a payment message that meets the defined conditions of a business rule/s, which selects a profile. One of the following: • Verify • Special Instruction • Repair • Release

4.1.3 Rules

GPP uses the following business rules to implement the Special Processing functionality:

• Special Instruction Rule

• Validation Rule

Note: GPP evaluates Special Instruction rules before evaluating Validation rules.

4.1.3.1   Special Instruction Rule

GPP uses Special Instruction (SI) rules, and their accompanying Override STP profile (see Override STP Profile), to impose additional customized validations that are not part of core system validations. These rules are related to agreements with customers or bank regulations, and are also used to customize alerts for advisory purposes.

If GPP determines that a payment message meets the defined conditions of a Special Instruction rule, it does not process the payment message via STP, but instead routes the message to a specific queue for manual handling.

Rule Action

A Special Instruction rule has one of the following actions:

• The name of an Override STP profile of Special Instruction type.

• A STOP action, which causes GPP to stop evaluating additional Special Instruction rules from the point a rule with this action is evaluated and matched. If GPP did not previously match any Special Instruction rules to the payment message at the time of the STOP action, the payment is considered to have no Special Instructions and message processing continues.

Special Instruction rules are attached to one of the following:

• The credit party of a payment message

• The debit party of a payment message

- The party that represents the local office (for default rules)

A user can attach multiple rules to the same party, and GPP applies all rules to each payment message that matches the defined conditions.

Usage

Special Instruction rules are invoked for all payment messages at the following stages in the workflow:

- After MOP selection, and credit and debit parties and accounts are identified, but before balance inquiry
- Upon submission of a manually created message
- Upon submission of a message from repair

If GPP determines that a payment message matches the conditions defined in the rule, the system does one of the following:

- Routes the payment message to the specific queue as defined in the selected Override STP profile
- Stops rule evaluation

Authorized GPP users can view the Special Instruction text, as defined in the respective Override STP profile, in the Special Instructions tab of the individual message in GPP. For more information, see Special Instruction Rule.

After applying a Special Instruction rule and routing a payment message to a queue for manual handling, GPP continues processing the message only after an authorized system user reviews and accepts the relevant Special Instruction. GPP then evaluates Special Instruction rules again to check for additional rules that might apply.

As opposed to the Validation rules, GPP does not review and apply Special Instruction rules that a user already reviewed and accepted for a payment message. It only evaluates new Special Instruction rules or rules that it did not previously apply to the payment message. For example, GPP might not have evaluated a rule because:

- A STOP action rule was applied
- A change occurred to the payment message
- A change occurred to a system attribute (such as the time of day)

GPP continues processing a payment message only if no additional Special Instruction rules are applied.

Example

A customer instructs the bank to call for confirmation each time the bank receives instructions to debit a specific customer account for more than $100,000.

A user creates an Override STP profile with the following definitions:

- **Name**: CALL_HIGH_PMT
- **Type**: Special instruction
- **Description**: Call customer for high amount payment confirmation.

A Special Instruction rule is attached to the party representing the specific customer, which the system evaluates only if the party is the debit customer, and has the following field definitions and conditions:

- If there is a match then: SET

- Special instruction is: CALL_HIGH_PMT

AND/OR	Field/Function	Operator	Value/Field/Function
	[Dbt acct nb]	=	<Customer Account Number>
AND	[Sttlm amt]	>	100000
AND	[Sttlm Ccy]	=	USD

4.1.3.2   Validation Rule

GPP uses Validation rules to define customized validations for messages in addition to the standard validations that GPP performs automatically. GPP considers invalid message payments that meet the defined conditions and routes them to a specific queue for manual handling.

Note: The GPP GUI does not display Validation rule information in a specific tab. Instead, validation errors are displayed with other errors in the Errors tab of the Message page.

Rule Action

A Validation rule has one of the following actions:

- The name of an Override STP profile of type Validation

- A STOP action, which causes GPP to stop evaluating additional Validation rules from the point a rule with this action is evaluated and matched. GPP evaluates Validation rules only until the first matching rule. If the first matching rule is a STOP action, the payment message is considered valid and processing continues.

Validation rules are attached to an office. A user can attach multiple rules to the same office. Only the first matching Validation rule is applied to a payment message. After applying a rule, GPP stops evaluating additional Validation rules for that message.

Usage

Validation rules are invoked for all payment messages at the following stages in the workflow:

- After MOP selection, and credit and debit parties and accounts are identified, but before balance inquiry

- Upon submission of a manually created message

- Upon submission of a message from repair

If the system determines that a payment message matches the conditions defined in the rule, the system does one of the following:

- Routes the payment message to a specific queue, as defined in the selected Override STP profile

- Stops rule evaluation

Authorized GPP users can view the Validation text, as defined in the respective Override STP profile, in the error log for the individual message in the Errors tab of the Message page.

After applying a Validation rule and routing a payment message to a queue for manual handling the system continues processing the payment message only after an authorized system user reviews and fixes the message.

GPP then evaluates all Validation rules (including the previously matched rule) again to check the validity of the payment message.

Note: There is no override for Validation rules, which means that if a user did not fix the problematic attribute that caused the system to apply a Validation rule, GPP applies the same rule again when processing continues, which may cause GPP to stop processing the payment message an additional time.

GPP continues processing the payment message if no additional Validation rules are applied.

Example

A bank in Country A requires that all international payments sent to Country B are sent in USD only.

A user creates an Override STP profile with the following definitions:

- **Name**: CCY2CN_NOT_USD
- **Type**: Validation
- **Description**: Outward payments to Country B must be sent in USD.

A Validation rule is attached to the local office, and has the following field definitions and conditions:

- If there is a match then: SET
- Override STP Profile: CCY2CN_NOT_USD

AND/OR	Field/Function	Operator	Value/Field/Function
	[Cdtr ctry]	=	<Country B>
AND	[Sttlm Ccy]	<>	USD

4.2 System Configuration (N/A)

5 Message Data

5.1 Message Attributes

5.1.1 MSG_SPECIAL_INSTRUCTIONS Table

These are the fields in the MSG_SPECIAL_INSTRUCTIONS table, which GPP uses to implement the Special Instructions functionality.
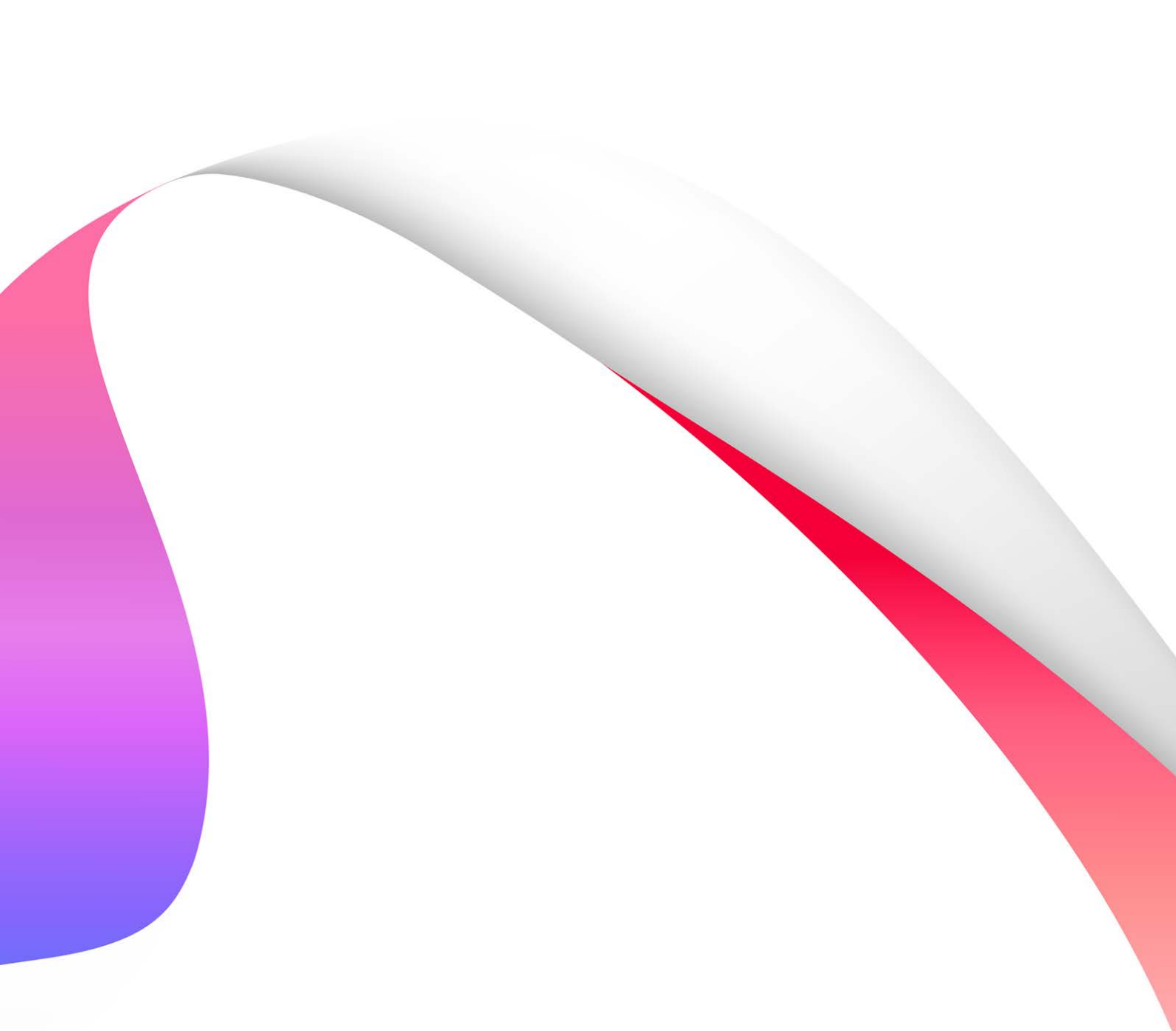
Field ID	Name	Description	Attribute
MID	Message ID	Internal GPP unique ID of the payment message.	Char(16)
ERROR_CODE	Error code	Hard-coded error code used by the system for Special Instructions.	Number(5)
ERROR_PARAMS	Error parameters	Value of the updated parameters fields, mainly the Special Instruction description. Constructed during the preparations for the binding process (as all message errors are constructed), based on a hard-coded template for the error text.	Varchar(1500)
SI_STATUS	Special Instruction status	Special Instruction status. One of the following: • 0: Special Instruction found but not yet accepted by a GPP user. The system holds the payment. This is the default value.	Number(2)

Field ID	Name	Description	Attribute
		• 1: Special Instruction accepted and the system will not hold the payment after re-evaluation. The GPP user interface displays a record in the Special Instructions tab with an APPROVED status. • 2: Historical Special Instruction that the system does not display.	
PREVENT_STP_UID	Prevent STP user ID	Unique ID (UID) of the Override STP profile received as an action from the selected rule.	Varchar(100)
PARTY_TYPE	Party type	Indicator of current Special Instruction. One of the following: • CR: Credit • DR: Debit • LOCAL: Local office	Varchar(5)
OBJECT_ID	Object ID	Object Id (party code) that caused the system to apply the Special Instruction.	Varchar(20)
CREATE_DATE	Creation date	Date and time (in local office time) when the Special Instruction was applied.	Date
ZONE_CODE	Zone code	Time zone of the time stamp (server).	Varchar(4)
TIME_STAMP	Timestamp	Creation or acceptance time stamp (in server time) of the entry.	Char(23)

5.2 Errors & Audit Trail (N/A)

Appendix A: Glossary

Term	Description
CR	Credit
DR	Debit
GPP	Global PAYplus
Override STP	Special processing that enables the system to hold messages for manual handling.
	GPP uses Special Instructions, Validation rules, and Override STP profiles to prevent the STP processing for specific payment messages, based on customized conditions.
SI	Special Instruction
STP	Straight-Through Processing
	Automated processing. After a payment message enters the system, GPP completes end-to-end processing without manual intervention.
UID	Unique ID

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