

Fee Management System

Fee Management System (FMS) is Verestro's billing engine for business partners.

It lets you define partner pricing, collect billable data from your services, and automatically calculate fees.

FMS supports both **end-user fee charging (instant settlement)** and **B2B billing (invoice settlement)** with monthly reports that include **revenue, cost, and profit**.

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Article

You can find more knowledge about products on this site.

Interchange Fees and Service Fees - rates and rules

Disclaimer. This article shows in some detail the topic of Interchange Fees. It is presented in the best way to make business decisions, but unfortunately this topic is very complex, so it does not cover 100% of information. If you need 100% of information, please check the **Mastercard and VISA interchange manuals**. Please take into account that this article is written in May 2024, we will try to update information regularly, but make sure you get up-to-date information before making final business decisions.

Introduction

Interchange Fees and Service fees are fees that the issuer of cards gets or pays from/to an acquiring institution to cover cost of payment transaction or payment instrument. Those are fees connected with using Mastercard or VISA cards that are dependent on the decision of payment schemes and they improve or decrease P&L from card issuing activities. In Mastercard manuals they have the following definitions:

- **Interchange Fee** —The fee that passes between the acquirer and the issuer with respect to the interchange of a transaction conducted at a merchant, the “purchase” part of a “purchase with cash back” transaction or a merchandise transaction conducted at an ATM terminal, including a chargeback, second presentment and reversal of such a transaction.
- **Service Fee** —The fee that passes between the acquirer and the issuer with respect to the interchange of any other type of transaction, including a manual cash disbursement transaction, ATM transaction, PIN-based in-branch cash withdrawal, “cash-back” part of a “purchase with cash back” transaction, refund, or payment transaction (such as MoneySend or Gaming Payment Transaction), including a chargeback, second presentment and reversal of such a transaction.

This is quite a complicated topic and we will not be able to cover all details in this chapter but let us try to answer 90% of questions coming from this area. There are several factors impacting the level of interchange. The most important are:

- **geography** - in which the country transaction was performed. Usually Interchange is higher for transaction performed in other countries, especially other continents
- **type of card** - consumer vs business, debit vs credit. Consumer cards usually have lower interchange than business cards. Debit cards usually have lower interchange than credit cards.
- **type of transaction** - there may be different interchange for transactions performed online or offline, face2face POS or eCom merchant, bill payment or government,

contactless vs chip&pin etc.

Let's start with information about types of interchange from geography point of view. There are 3 important groups of transactions:

- **domestic transaction** - transaction performed at Polish merchant, Polish acquirer with card issued in Poland
- **intra-EEA transaction** - transaction performed in one of EEA countries (see below), EEA merchant, EEA acquirer, Polish or EEA card issuer
- **intra-European transaction** - transaction performed in one of Eastern European countries (see below), Eastern European merchant, Eastern-European acquirer, Polish or EEA card issuer
- **inter-Regional transaction** - transaction performed in any other country, usually another continent, with card issued by EEA issuer

The Mastercard EEA subregion where we are located today for purposes of the application of intra-EEA interchange fees includes the following:

- the Member States of the European Union: Austria, Belgium, Bulgaria, Croatia, Czech Republic, Cyprus, Denmark, Estonia, Finland (including Aland Islands), France (including French Guiana, Guadeloupe, Martinique, Réunion, Saint Martin [French Part], and Mayotte), Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal (including Azores and Madeira), Romania, Slovakia, Slovenia, Spain (including Canary Islands, Ceuta, Melilla), and Sweden
- and Iceland, Liechtenstein, and Norway (including Svalbard and Jan Mayen), Andorra (for transactions with above mentioned countries).

The Mastercard Western subregion includes the following: • All EEA subregion countries/territories previously stated • Switzerland, Andorra, Monaco, San Marino, and Holy See (Vatican City State), Antarctica, Greenland, Faroe Islands, Saint Barthelemy, Falkland Islands, Guernsey, Isle of Man, Jersey, Saint Helena, Ascension and Tristan Da Cunha Helena, South Georgia and the South Sandwich Islands

The Mastercard Eastern subregion includes the following: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Israel, Kazakhstan, Kosovo (United Nations Mission in Kosovo), Kyrgyzstan, Macedonia, Moldova, Montenegro, Russian Federation, Serbia, Tajikistan, Turkey, Turkmenistan, Ukraine, and Uzbekistan.

Additional complexity comes from types of cards. There is different interchange for :

- debit consumer cards
- credit consumer cards
- business debit cards
- business credit cards
- Premium cards (usually credit)

- etc.

Let us simplify this topic by creating a few tables with the most important Interchange Fee examples that we recommend to use for your business calculations.

Consumer standard Mastercard debit cards for cards issued in Poland (Polish BIN)

| | |
|-------------------------------------|--|
| Domestic transaction | 0.2% some local interchange levels apply for government, bill payment - usually max fee level is defined in those programs. |
| Intra-EEA transaction | 0.2% |
| Intra-EEA ATM Service Fee | 0.5 EUR + 0.12% |
| Intra-European POS transaction | 0.59% |
| Intra-European full 3DS transaction | 1.19% |
| Intra-European ATM Service Fee | 1.3 EUR + 0.2% |
| Inter-regional transaction POS | 1.6% |
| Inter-regional transaction full 3DS | 1.54% |
| Inter-regional ATM Service Fee | 0.3 USD + 0.6% |

Consumer Premium Mastercard debit cards for cards issued in Poland (Polish BIN)

| | |
|--|--|
| Domestic transaction | 0.2% some local interchange levels apply for government, bill payment - usually max fee level is defined in those programs. |
| Intra-EEA transaction | 0.2% |
| Intra-EEA ATM Service Fee | 0.5 EUR + 0.12% |
| Intra-European Premium POS and 3DS transaction | 1.55% for Platinum |
| Intra-European ATM Service Fee | 1.3 EUR + 0.2% |
| Inter-regional transaction POS and full 3DS | 1.85% |

| | |
|--------------------------------|----------------|
| Inter-regional ATM Service Fee | 0.3 USD + 0.6% |
|--------------------------------|----------------|

Consumer Super Premium Mastercard debit cards for cards issued in Poland (Polish BIN)

| | |
|---|--|
| Domestic transaction | 0.2% some local interchange levels apply for government, bill payment - usually max fee level is defined in those programs. |
| Intra-EEA transaction | 0.2% |
| Intra-EEA ATM Service Fee | 0.5 EUR + 0.12% |
| Intra-European World Elite transaction | 1.8% |
| Intra-European ATM Service Fee | 1.3 EUR + 0.2% |
| Inter-regional transaction POS and full 3DS | 1.98% |
| Inter-regional ATM Service Fee | 0.3 USD + 0.6% |

Consumer Mastercard credit cards for cards issued in Poland (Polish BIN)

| | |
|-------------------------------------|--|
| Domestic transaction | 0.3% some local interchange levels apply for government, bill payment - usually max fee level is defined in those programs. |
| Intra-EEA POS transaction | 0.3% |
| Intra-EEA ATM Service Fee | 0.5 EUR + 0.12% |
| Intra-European POS transaction | 0.59% for Platinum |
| Intra-European full 3DS transaction | 1.19% |
| Intra-European ATM Service Fee | 1.3 EUR + 0.2% |
| Inter-regional transaction POS | 1.1-1.6% |
| Inter-regional full 3DS transaction | 1.54% |
| Inter-regional ATM Service Fee | 0.3 USD + 0.6% |

Business Mastercard debit cards for cards issued in Poland (Polish BIN)

| | |
|---|--|
| Domestic transaction | 0.2% some local interchange levels apply for government, bill payment - usually max fee level is defined in those programs. |
| Intra-EEA POS transaction | 1.5% (minus 0.3% if acquirer meets some criteria) |
| Intra-EEA full 3DS transaction | 1.75% (minus 0.3% if acquirer meets some criteria) |
| Intra-EEA contactless transaction below EUR 25 | 0.8% |
| Intra-EEA ATM Service Fee | 0.5 EUR + 0.12% |
| Intra-European POS chip&pin transaction | 1.7% (minus 0.3% if acquirer meets some criteria) |
| Intra-European contactless transaction below EUR 25 | 1.15% |
| Intra-European full 3DS transaction | 1.95% (minus 0.3% if acquirer meets some criteria) |
| Intra-European ATM Service Fee | 1.3 EUR + 0.2% |
| Inter-regional transaction POS and full 3DS | 2.0% |

Introduction

Fee Management System (FMS) is Verestro's billing engine for fintech companies.

The system collects billable data from external products through **Data Collectors**, calculates fees based on defined **Pricings**, and settles them either by **charging end-user's balance instantly** or by **storing the fee in the database** for later report generation (XLSX).

FMS also provides an **Admin Panel User Interface** for managing pricing configurations without technical support.

Key capabilities

- **Automated B2B billing** — Aggregate fees and generate settlement reports for your business clients. FMS handles the calculation and reporting, simplifying your invoicing process.
- **Instant fee charging** — Charge end-users in real-time when they perform transactions. Every ATM withdrawal, card payment, or IBAN transfer becomes a revenue opportunity for your business.

Instant fee collection is available to Partners integrated with Antaca.

For more information about Antaca service, please open [this link](#).

How to connect with us?

There are two integration methods available:

1. **Plug & play package**
2. **Standalone REST API integration**

Details of both integration options can be found in the following section: [Quick start guide](#) |

[Verestro Developer Zone](#).

Overview

This page provides a high-level overview of **Fee Management System (FMS)** and its core capabilities.

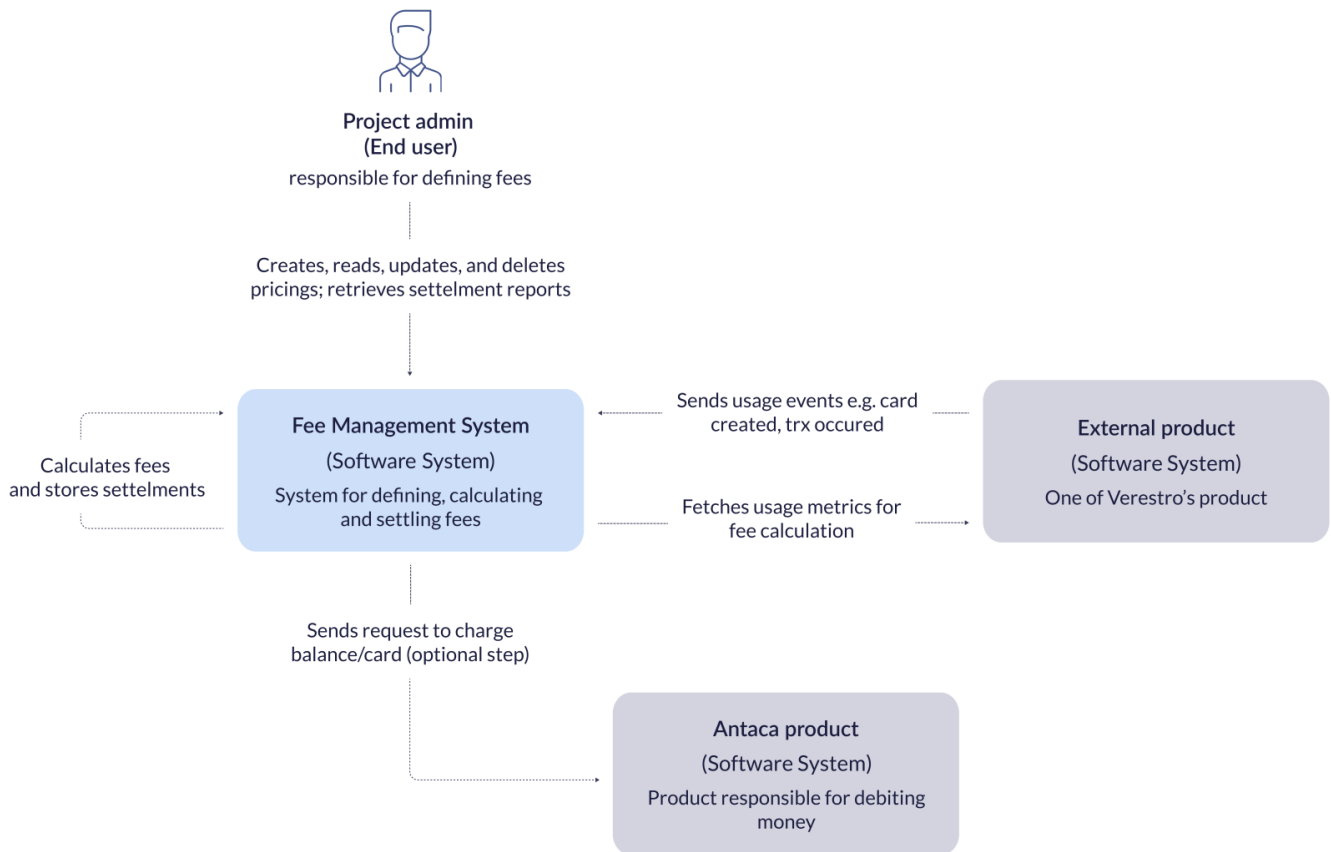
It explains how to configure fee collection for a partner and how FMS **calculates, settles, and reports fees** for both end-users (**instant charging**) and B2B billing (**invoice settlement**).

Key components

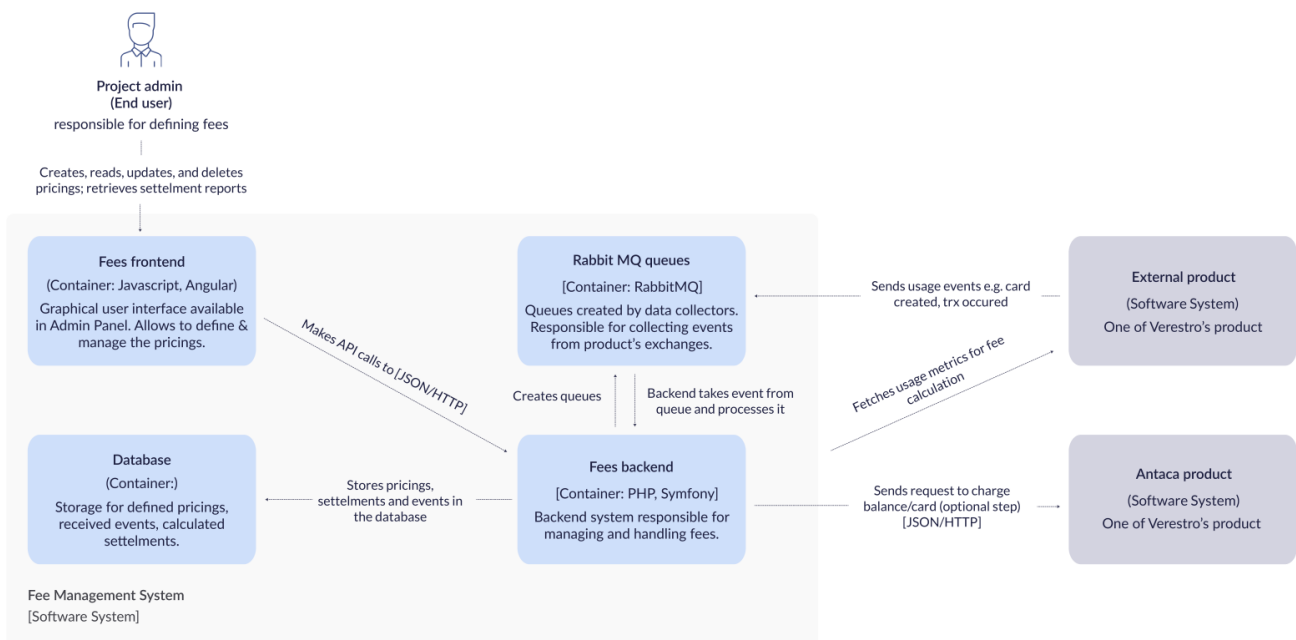
| Component | Description |
|------------------------------|---|
| Fee Management System | Collects data, calculates fees, and stores settlements. Supports optional instant charging. |
| Admin Panel | UI for billing setup, pricing management, and reporting. |
| Antaca API | Executes balance charges for instant fee transactions. |
| External Product | A data source used as an input for fee calculation (events, files, aggregated counts). Currently, FMS is ready to collect billable data from all Verestro services. |

Architecture

C4 Context diagram



C4 Container diagram



Key product features

End-user fee charging (instant settlement)

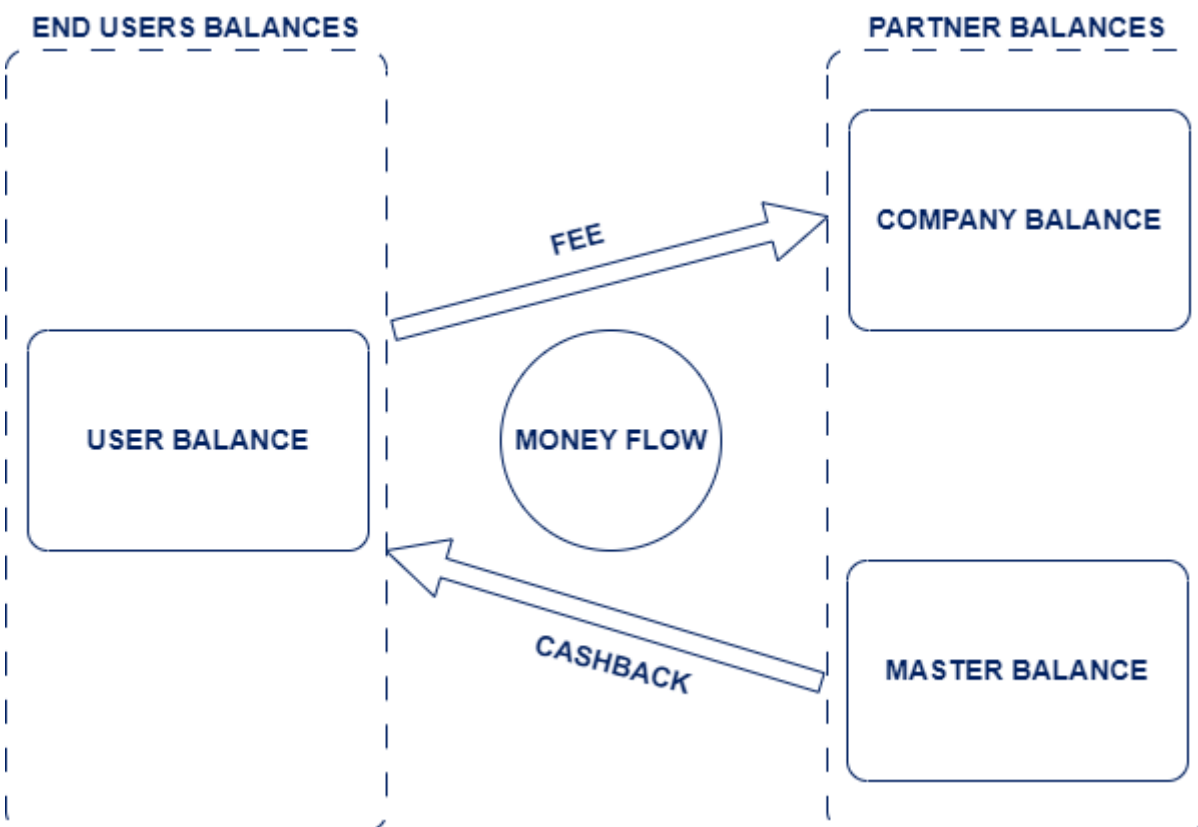
Instant settlement allows to calculate the fee for a defined pricing item and instantly deduct the funds from the balance of the end-user who initiated the transaction.

With instant charging, a partner can **move transaction fees (their operational costs) to the end-user** by charging fees directly on each user transaction (e.g., ATM, card, IBAN).

This feature is available only when end-users' balances are stored on Antaca's side or are external but integrated with Antaca balances.

Fee transaction - money flow

Fee is an internal transaction for a partner who wants to **debit the user's balance** as a fee. Antaca automatically **credits the company balance** with the funds debited from the user's balance.



Automated B2B billing (invoice settlement)

Due to invoice settlement, FMS helps **automate B2B billing** when a client wants to bill their own company or business customers.

Invoice settlement allows charging defined fees for specific services without actually enforcing payment. A report (xlsx file) can be generated from the calculated fees, and then an invoice can be

issued.

Pricing items with invoice settlement can store both **price** (what you charge) and **cost** (what you pay), so you can track costs and calculate profit per billing item.

Supported fee scenarios

| Fee scenario | Instant settlement | Invoice settlement |
|---|--------------------|--------------------|
| Card issuance fee (physical card, virtual card) | ✓ | ✓ |
| Card transaction fee (POS, eCommerce, ATM) | ✓ | ✓ |
| IBAN transfer fee (incoming, outgoing) | ✓ | ✓ |
| Card maintenance fee (daily, weekly, monthly, yearly) | ✓ | ✓ |
| IBAN maintenance fee (daily, weekly, monthly, yearly) | ✗ | ✓ |
| Token maintenance fee (daily, weekly, monthly, yearly) | ✗ | ✓ |
| Project / license / platform recurring fee (daily, weekly, monthly, yearly) | ✗ | ✓ |

Important: Charging an end-user's balance (instant settlement) can be done only by a licensed financial institution. If a partner uses another financial institution to perform charging, the legal responsibility for charging fees is on that financial institution's side.

Fee management

Billing setup

A **Billing Setup** is the main configuration entity that defines how fees are collected and calculated for a specific client.

It contains **Data Collectors** and **Pricings**.

Data collectors

Data Collectors specify where billable data comes from. Three types are available:

| Data Collector Type | Description | Example |
|---------------------|-------------|---------|
|---------------------|-------------|---------|

| | | |
|----------------------------------|---|---|
| Occurrence Data Collector | Captures events in real-time as they occur. | ATM withdrawal, card transaction, IBAN transfer |
| File Data Collector | Processes batch files with lists of entities. Data is retrieved periodically (e.g., daily, monthly). | All active cards for maintenance fees |
| HTTP Query Data Collector | Retrieves aggregated counts via API. Data is retrieved periodically (e.g., daily, monthly). | Number of active accounts per month |

Pricings

A **Pricing** is a set of fee rules (**Pricing Items**) that define what to charge and how.

Each Pricing has a validity period (**Valid from / Valid until**), which ensures full auditability of pricing changes over time.

Each Billing Setup can contain multiple Pricings, but only one can be active at a time.

You can schedule a Pricing change in advance — for example, set a new Pricing to activate on the first day of next month.

Pricing item

Each Pricing item specifies:

- [Pricing item type](#)
- [Data source — data collector](#)
- [Fee calculation type](#)
- [Settlement type](#)
- Pricing item logic (filters, free tier, minimum amount, etc.) is described in detail on the **Use Cases page**.

Pricing item types

| Type | What it means | Typical use cases |
|-------------------|---|--|
| Unit | Fee calculated per single event (one transaction = one fee). | ATM withdrawal fee, card issuance fee, IBAN transfer fee. |
| Recurring | Fee charged once per period (daily/weekly/monthly/yearly). | Monthly platform fee, monthly maintenance fee per project. |
| Cumulative | Fee based on total quantity/volume in a period (calculated using usage metrics from external product). | Card/token maintenance billed using tiered or volume pricing. |
| Aggregated | Collects data via event-based data collector, but the fee is calculated at the end of the billing period based on total accumulated quantity. | Number of active accounts per month, number of active cards per day. |

Fee calculation types

| Calculation type | Description | Example |
|-------------------|--|---|
| Fixed | Static amount per unit/event. | 2 EUR per ATM withdrawal. |
| Percentage | Percentage of transaction value. | 1.5% of transaction amount. |
| Mixed | Fixed amount + percentage. | 0.50 EUR + 0.5% per transaction. |
| Tiered | Different rates for quantity ranges. Each tier is billed at its own rate. | 1-100 transactions: 1.00 EUR each 101-500 transactions: 0.80 EUR each 501+ transactions: 0.50 EUR each <i>150 transactions = (100 × 1.00) + (50 × 0.80) = 140 EUR</i> |
| Volume | Single rate based on total volume. All units billed at the same rate. | 1-100 transactions: 1.00 EUR each 101-500 transactions: 0.80 EUR each 501+ transactions: 0.50 EUR each <i>150 transactions = 150 × 0.80 = 120 EUR</i> |

Fee calculation types per pricing item type

| Pricing item type | Fee calculation types | | | | |
|-------------------|-----------------------|------------|-------|--------|--------|
| | Fixed | Percentage | Mixed | Volume | Tiered |
| Unit | ✓ | ✓ | ✓ | ✗ | ✗ |
| Recurring | ✓ | ✗ | ✗ | ✗ | ✗ |
| Cumulative | ✗ | ✗ | ✗ | ✓ | ✓ |
| Aggregated | ✗ | ✗ | ✗ | ✓ | ✓ |

Settlement types per pricing item type

| Pricing item type | Settlement types | |
|-------------------|--------------------|--------------------|
| | Instant settlement | Invoice settlement |
| Unit | ✓ | ✓ |
| Recurring | ✗ | ✓ |
| Cumulative | ✗ | ✓ |
| Aggregated | ✗ | ✓ |

Data collector types per pricing item type

| Pricing item type | Data collector types | | |
|-------------------|---------------------------|---------------------|---------------------------|
| | Occurrence data collector | File data collector | HTTP query data collector |
| Unit | ✓ | ✓ | ✗ |
| Recurring | ✗ | ✗ | ✗ |
| Cumulative | ✓ (deprecated) | ✗ | ✓ |
| Aggregated | ✓ | ✗ | ✗ |

Detailed behavior and configuration examples for each pricing item type are described in the **Use cases** section.

Fee processing

Once a Billing Setup is configured, FMS processes fees in three steps: **data collection**, **fee calculation**, and **settlement**.

1) Data collection

FMS collects billable data using **Data Collectors**. Depending on the configuration, data can represent end-user transactions (e.g., card, ATM, IBAN) or other measurable actions/usage (e.g., active accounts, active cards).

2) Fee calculation

When data arrives (event, file, or API response), FMS matches it against the **active Pricing** and its **Pricing Items**, calculates the fee amount, and **stores the calculated fee in the database** for auditability and reporting.

3) Settlement

After calculation, the fee is settled in one of two modes:

| Mode | How it works | Best for |
|---------------------------|---|--|
| Instant settlement | FMS charges the end-user's balance for the transaction that triggered the fee. The charge is executed in real time (via Antaca). | Transaction fees, ATM withdrawals, card issuance |

| Mode | How it works | Best for |
|---------------------------|---|---|
| Invoice settlement | FMS stores settlements in the database and aggregates them for reporting. Payment is handled outside of FMS (e.g., by issuing an invoice based on the report). | B2B billing, maintenance fees, volume-based pricing |

Both modes can be used within the same Pricing — charge end-users instantly for transactions while recording invoice settlements for periodic B2B billing.

Reporting

For invoice settlements, FMS generates monthly reports for your finance team (XLSX file). Each report line contains the billing item name and usage details (e.g., quantity and total transaction value), along with the calculated **revenue (price)** and **cost**.

Based on these values, the report automatically calculates **profit (revenue minus cost)** per billing item.

Below is an example of a **monthly B2B settlement report** generated by FMS.

| | A | B | C | D | E | F | G | H |
|----|---------------------------------------|----------|-------------------------|------------|------------|---------------------|------------------|---------------------|
| 1 | Name | Quantity | Total transaction value | Unit price | Unit cost | Total income | Total cost | Net income |
| 2 | Tiered | | | | | | | |
| 3 | Monthly card maintenance (1 - 100000) | 755 | - | 0,135 EUR | 0, EUR | 101,93 EUR | 0,00 EUR | 101,93 EUR |
| 4 | | | | | | | | |
| 5 | Percentage | | | | | | | |
| 6 | Inter POS transaction % | 232 | 0,0000 EUR | 0,0% | 0,179% | 0,00 EUR | 21,52 EUR | -21,52 EUR |
| 7 | Intra ATM % | 3 | 0,0000 EUR | 0,021% | 0,0% | 0,42 EUR | 0,00 EUR | 0,42 EUR |
| 8 | Domestic eCom % | 1 | 0,0000 EUR | 0,0% | 0,013% | 0,00 EUR | 0,01 EUR | -0,01 EUR |
| 9 | Inter eCom transaction % | 440 | 0,0000 EUR | 0,0% | 0,197% | 0,00 EUR | 8,58 EUR | -8,58 EUR |
| 10 | Intra eCom transaction % | 204 | 0,0000 EUR | 0,0% | 0,0305% | 0,00 EUR | 5,37 EUR | -5,37 EUR |
| 11 | Intra POS transaction % | 1100 | 0,0000 EUR | 0,0% | 0,034% | 0,00 EUR | 12,52 EUR | -12,52 EUR |
| 12 | Currency conversion (FX) | 690 | 0,0000 EUR | 45,0% | 0,0% | 109,20 EUR | 0,00 EUR | 109,20 EUR |
| 13 | | | | | | | | |
| 14 | Fixed | | | | | | | |
| 15 | Inter eCom transaction | 440 | - | 0, EUR | 0,0373 EUR | 0,00 EUR | 16,41 EUR | -16,41 EUR |
| 16 | Inter POS transaction | 232 | - | 0, EUR | 0,0373 EUR | 0,00 EUR | 8,65 EUR | -8,65 EUR |
| 17 | Domestic eCom | 1 | - | 0,0177 EUR | 0, EUR | 0,02 EUR | 0,00 EUR | 0,02 EUR |
| 18 | Virtual card issuance | 286 | - | 0,201 EUR | 0, EUR | 57,49 EUR | 0,00 EUR | 57,49 EUR |
| 19 | Intra POS transaction | 1100 | - | 0,022 EUR | 0, EUR | 24,20 EUR | 0,00 EUR | 24,20 EUR |
| 20 | Intra ATM | 3 | - | 0,1289 EUR | 0, EUR | 0,39 EUR | 0,00 EUR | 0,39 EUR |
| 21 | Monthly maintenance | 1 | - | 2 000, EUR | 0, EUR | 2 000,00 EUR | 0,00 EUR | 2 000,00 EUR |
| 22 | Intra eCom transaction | 204 | - | 0,0177 EUR | 0, EUR | 3,61 EUR | 0,00 EUR | 3,61 EUR |
| 23 | | | | | | | | |
| 24 | | | | | | 2 297,25 EUR | 73,07 EUR | 2 224,18 EUR |

Multi-currency: FMS supports fee calculation for transactions and pricing items in multiple currencies.

If a single report contains multiple currencies, the values cannot be summed into one total amount. In such cases, totals should be interpreted **per currency** (or converted externally to a single reporting currency).

Quick start guide

To start using Fee Management System, select one of the following integration methods:

Option 1 – Plug & play package

Get started instantly by choosing the [Antaca + Fee Management System + Administration Panel bundle](#).

No development or integration is needed — just define your pricing rules in the [Verestro Administration Panel](#), and the system will handle all fee collection automatically.

Advantages:

- No integration or development required
- Fastest time-to-market
- All modules work out-of-the-box
- Centralized management via [Administration Panel](#)
- Technical support included

Option 2 – Standalone REST API integration

Integrate Fee Management System as a standalone service via REST API.

This option allows FMS to collect transactional events and usage data from your external systems. We provide sandbox access, documentation, and support for pricing setup and testing.

Important: This option requires development on both sides — your technical team needs to send events to FMS, and Verestro needs to configure Data Collectors for your specific data sources.

Warning: This option may require additional development on Verestro's side to integrate with your transaction processing systems, depending on your setup and business requirements.

Use cases

This page describes practical scenarios for configuring **Fee Management System (FMS)**. Each use case shows the recommended configuration (data collector, pricing item, settlement type), explains the processing flow, and provides a calculation example. For definitions of core concepts, see the **Overview** page.

End-user fee charging (instant settlement)

Instant settlement charges the **end-user's balance** in real time via Antaca every time a billable event occurs or a periodic check runs. This section covers the most common end-user fee scenarios.

Important: Charging an end-user's balance (instant settlement) can be done only by a licensed financial institution. If a partner uses another financial institution to perform charging, the legal responsibility for charging fees is on that financial institution's side.

Card maintenance fee

A periodic fee charged for every active card held by an end-user (e.g., monthly fee for a physical card). FMS retrieves a full list of active cards from Antaca as a CSV file, then charges each card holder individually.

| Data collector | Pricing item type | Settlement type |
|---------------------|-------------------|--------------------|
| File Data Collector | Unit | Instant settlement |

Flow:

1. On the first day of the billing period, FMS sends a request to Antaca for a list of active cards.
2. Antaca returns a CSV file (e.g., 5 000 active physical cards).
3. FMS processes each row and charges the end-user's balance.

“ Example:

Card maintenance fee = **1 EUR / month** per active physical card.
If a user holds 2 active physical cards, the system charges **2 separate fee transactions of 1 EUR each** — one per card.

Transaction fee

A fee charged instantly every time an end-user performs a specific transaction — for example, an ATM withdrawal, a POS purchase, an outgoing IBAN transfer, or a card issuance. FMS receives the transaction event in real time and charges the fee immediately.

| Data collector | Pricing item type | Settlement type |
|---------------------------|-------------------|--------------------|
| Occurrence Data Collector | Unit | Instant settlement |

Flow:

1. End-user performs a transaction (e.g., ATM withdrawal).
2. The external product (e.g., Antaca) publishes a transaction event.
3. FMS receives the event, matches it against the active Pricing, calculates the fee, and charges the end-user's balance instantly.

Examples:

| Scenario | Calculation type | Calculation |
|----------------------------|------------------|------------------------------------|
| ATM withdrawal fee | Fixed | 2.00 EUR per withdrawal |
| Card transaction fee | Percentage | 1.5% of transaction amount |
| Outgoing IBAN transfer fee | Mixed | 0.50 EUR + 0.5% of transfer amount |

FMS can also be integrated with an **external API** to charge end-users via a third-party system instead of Antaca. This requires custom development on the product side.

Recommendation: We recommend charging transaction fees **after the transaction has been cleared (settled)**, not at the authorization stage. While it is technically possible to charge fees on authorization, there is a risk that the transaction may be reversed or declined during clearing — in which case the fee would have already been collected.

Automated B2B billing (invoice settlement)

Invoice settlement **does not execute any payment**. Instead, FMS stores the calculated fees in the database and aggregates them into a settlement report (XLSX). The report serves as a basis for issuing an invoice to the client. This section covers the most common B2B billing scenarios.

Usage-based fees (tiered & volume pricing)

A fee calculated at the end of the billing period based on the **total quantity of usage** — for example, the number of transactions processed, active cards maintained, or cards issued. FMS retrieves the aggregated count from an external product's API and applies tiered or volume pricing.

| Data collector | Pricing item type | Settlement type |
|---------------------------|-------------------|--------------------|
| HTTP Query Data Collector | Cumulative | Invoice settlement |

Note: Historically, Occurrence Data Collector was also used with Cumulative pricing items. This approach is **deprecated** — all new usage-based fee configurations should use HTTP Query Data Collector.

Flow:

1. At the end of the billing period, FMS sends an HTTP request to the external product's API.
2. The API returns an aggregated count (e.g., *numberOfActiveCards: 1 500*).
3. FMS applies the configured tiered or volume pricing to the count.
4. The calculated fee is stored as an invoice settlement item in the report.

Tiered vs volume pricing

Both tiered and volume pricing use quantity ranges (tiers) to determine the fee rate. The key difference is **how the rate is applied across tiers**.

| | Tiered pricing | Volume pricing |
|------------------|---|---|
| Logic | Each tier is billed at its own rate. Units in different tiers have different prices. | A single rate is applied to all units based on which tier the total volume falls into. |
| Tiers | 1-100: 1.00 EUR each 101-500: 0.80 EUR each 501+: 0.50 EUR each | 1-100: 1.00 EUR each 101-500: 0.80 EUR each 501+: 0.50 EUR each |
| 150 units | $(100 \times 1.00) + (50 \times 0.80) = \mathbf{140.00 \text{ EUR}}$ | $150 \times 0.80 = \mathbf{120.00 \text{ EUR}}$ |
| 600 units | $(100 \times 1.00) + (400 \times 0.80) + (100 \times 0.50) = \mathbf{470.00 \text{ EUR}}$ | $600 \times 0.50 = \mathbf{300.00 \text{ EUR}}$ |

When to use which? Tiered pricing provides a gradual cost reduction as volume grows — the client always benefits from the lower rate on the incremental portion. Volume pricing offers a bigger discount at higher volumes, as the lowest tier rate applies to all units once the threshold is crossed.

Fixed recurring fees

A flat fee charged at regular intervals (daily, weekly, monthly, or yearly) regardless of usage. Typical examples include a monthly platform license fee or a yearly project fee. No Data Collector is required — FMS triggers the fee automatically based on the defined schedule.

| Data collector | Pricing item type | Settlement type |
|----------------|-------------------|-----------------|
|----------------|-------------------|-----------------|

| | | |
|---------------------|-----------|--------------------|
| None (not required) | Recurring | Invoice settlement |
|---------------------|-----------|--------------------|

“ **Example:**

Monthly platform license fee = **500.00 EUR / month**.
 Every month, FMS automatically adds a 500.00 EUR line item to the settlement report.

Available recurring periods: **daily, weekly, monthly, yearly**.

Event-based aggregated fees

Similar to usage-based fees, but instead of retrieving an aggregated count from an API, FMS **collects individual events in real time** and aggregates them at the end of the billing period. The fee is then calculated using tiered or volume pricing on the accumulated total. This approach offers greater flexibility because each event carries its full set of properties, enabling **granular filtering per event**.

| Data collector | Pricing item type | Settlement type |
|---------------------------|-------------------|--------------------|
| Occurrence Data Collector | Aggregated | Invoice settlement |

Flow:

1. During the billing period, FMS receives individual transaction events in real time (e.g., each ATM withdrawal).
2. Events are accumulated and counted (with optional filters applied per event).
3. At the end of the period, FMS applies tiered or volume pricing to the total count.
4. The calculated fee is stored as an invoice settlement item.

“ **Example:**

A partner wants to bill a client for ATM withdrawal processing with tiered pricing, but **only for inter-region transactions**. FMS collects each *transaction.cleared* event, filters by *type = "ATM"* and *region = "INTERREGIONAL"*, accumulates 320 matching events over the month, and applies tiered pricing to 320 units.

When to use Cumulative vs Aggregated?

| Aspect | Cumulative (HTTP Query) | Aggregated (Occurrence) |
|-------------|----------------------------------|--|
| Data source | Single aggregated count from API | Individual events collected in real time |

| Aspect | Cumulative (HTTP Query) | Aggregated (Occurrence) |
|-----------------------------------|---|---|
| Filtering flexibility | Limited (depends on what the API exposes) | Full (filters applied per event on all available properties) |
| Best for | Simple quantity metrics (e.g., total active cards, total active accounts) | Scenarios requiring granular filtering (e.g., only inter-region ATM transactions) |
| Recommended for new setups | ✓ (preferred approach) | ✓ (when filtering is required) |

Costs

Each invoice settlement pricing item can define both a **price** (unit price — what you charge) and a **cost** (unit cost — what you pay or deduct). In the settlement report, cost appears as a **negative value** in the *Total cost* column, while price appears as a positive value in the *Total income* column. The report automatically calculates **Net income** as *Total income* minus *Total cost*.

Depending on how you interpret the report columns, cost can serve two different business purposes:

| Interpretation | Invoice amount based on | Cost column represents |
|--------------------------|----------------------------|---|
| Cost tracking | <i>Total income</i> column | Your operational costs per fee type. Use <i>Net income</i> to track profit (revenue minus costs). |
| Discount tracking | <i>Net income</i> column | Discounts or rebates per fee type. The client pays the net amount after deducting discounts. |

Settlement report example:

| | A | B | C | D | E | F | G | H |
|----|---------------------------------------|----------|-------------------------|------------|------------|---------------------|------------------|---------------------|
| | Name | Quantity | Total transaction value | Unit price | Unit cost | Total income | Total cost | Net income |
| 1 | | | | | | | | |
| 2 | Tiered | | | | | | | |
| 3 | Monthly card maintenance (1 - 100000) | 755 | - | 0,135 EUR | 0, EUR | 101,93 EUR | 0,00 EUR | 101,93 EUR |
| 4 | | | | | | | | |
| 5 | Percentage | | | | | | | |
| 6 | Inter POS transaction % | 232 | | EUR 0,0% | 0,179% | 0,00 EUR | 21,52 EUR | -21,52 EUR |
| 7 | Intra ATM % | 3 | | EUR 0,021% | 0,0% | 0,42 EUR | 0,00 EUR | 0,42 EUR |
| 8 | Domestic eCom % | 1 | | EUR 0,0% | 0,013% | 0,00 EUR | 0,01 EUR | -0,01 EUR |
| 9 | Inter eCom transaction % | 440 | | EUR 0,0% | 0,197% | 0,00 EUR | 8,58 EUR | -8,58 EUR |
| 10 | Intra eCom transaction % | 204 | | EUR 0,0% | 0,0305% | 0,00 EUR | 5,37 EUR | -5,37 EUR |
| 11 | Intra POS transaction % | 1100 | | EUR 0,0% | 0,034% | 0,00 EUR | 12,52 EUR | -12,52 EUR |
| 12 | Currency conversion (FX) | 690 | | EUR 45,0% | 0,0% | 109,20 EUR | 0,00 EUR | 109,20 EUR |
| 13 | | | | | | | | |
| 14 | Fixed | | | | | | | |
| 15 | Inter eCom transaction | 440 | - | 0, EUR | 0,0373 EUR | 0,00 EUR | 16,41 EUR | -16,41 EUR |
| 16 | Inter POS transaction | 232 | - | 0, EUR | 0,0373 EUR | 0,00 EUR | 8,65 EUR | -8,65 EUR |
| 17 | Domestic eCom | 1 | - | 0,0177 EUR | 0, EUR | 0,02 EUR | 0,00 EUR | 0,02 EUR |
| 18 | Virtual card issuance | 286 | - | 0,201 EUR | 0, EUR | 57,49 EUR | 0,00 EUR | 57,49 EUR |
| 19 | Intra POS transaction | 1100 | - | 0,022 EUR | 0, EUR | 24,20 EUR | 0,00 EUR | 24,20 EUR |
| 20 | Intra ATM | 3 | - | 0,1289 EUR | 0, EUR | 0,39 EUR | 0,00 EUR | 0,39 EUR |
| 21 | Monthly maintenance | 1 | - | 2 000, EUR | 0, EUR | 2 000,00 EUR | 0,00 EUR | 2 000,00 EUR |
| 22 | Intra eCom transaction | 204 | - | 0,0177 EUR | 0, EUR | 3,61 EUR | 0,00 EUR | 3,61 EUR |
| 23 | | | | | | | | |
| 24 | | | | | | 2 297,25 EUR | 73,07 EUR | 2 224,18 EUR |

In the example report above, the bottom row shows totals: *Total income* is the gross amount, *Total cost* is the sum of all costs/discounts, and *Net income* is the final amount — either the profit or the invoiced amount, depending on interpretation.

Pricing item setup options

Beyond the core fee configuration (data collector, pricing item type, settlement type), each pricing item supports additional setup options that control how fees are filtered, converted, capped, or linked. Availability of each option depends on the settlement type.

Filtering

Each pricing item can include **filters** that narrow down which events trigger the fee. Filters are applied to properties available on the incoming event. This allows defining different fee rules for different transaction types, regions, or other criteria within the same Pricing.

The table below shows the **most commonly used** filter properties. Any property available on the incoming event can be used as a filter.

| Filter property | Description | Example values |
|----------------------------|--|--|
| type | Transaction type | ATM, POS, ECOM |
| region | Region of transaction | INTERREGIONAL, INTRAREGIONAL, DOMESTIC |
| countryCode | Country code of transaction | PL, DE, US |
| currency | Transaction currency | EUR, USD, PLN |
| amount | Transaction amount | amount > 10000 |
| captureMode | Capture mode of the transaction | EMV, MAG, CONTACTLESS, ECOMMERCE |
| digitizedWalletType | Digital wallet type | APPLE_PAY, GOOGLE_PAY, SAMSUNG_PAY |
| terminalId | ID of the terminal where the card was issued | Specific terminal identifier |

“ Example:

A partner wants to charge **1.5% for inter-region ATM withdrawals** but **0% for domestic ATM withdrawals**.

Two pricing items are created with different filters: one with *type* = "ATM" AND *region* = "INTERREGIONAL", and one with *type* = "ATM" AND *region* = "DOMESTIC" with a zero fee.

Automatic currency conversion

FMS supports automatic currency conversion in two scenarios. In both cases, the system uses an **averaged exchange rate from the day preceding the transaction date**.

Case 1: Currency conversion for instant settlement

When the **fee currency** differs from the **end-user's balance currency**, FMS automatically converts the fee amount before charging the balance.

| Parameter | Value |
|---------------------------------------|--------------------------|
| Defined fee | 1.00 EUR (card issuance) |
| User's balance currency | PLN |
| Averaged exchange rate (previous day) | 1 EUR = 4.32 PLN |
| Amount charged | 4.32 PLN |

Case 2: Currency conversion for invoice settlement

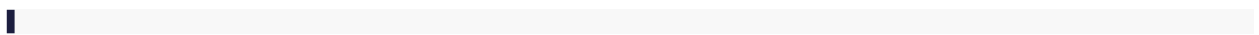
For percentage-based pricing items, a **settlement currency** must be defined. This is the currency in which the fee will appear in the settlement report. If the transaction was executed in a different currency, FMS converts the calculated fee to the settlement currency.

| Parameter | Value |
|---------------------------------------|-------------------|
| Total transaction value | 100 000 EUR |
| Fee rate | 0.1% |
| Settlement currency | USD |
| Averaged exchange rate (previous day) | 1 EUR = 1.08 USD |
| Calculated fee in EUR | 100.00 EUR |
| Fee in settlement report | 108.00 USD |

Exchange rate: In both cases, FMS uses the averaged exchange rate from the day preceding the date of the transaction that triggered the fee.

Minimum amount

A **minimum amount** can be defined per pricing item to ensure that the charged fee never falls below a specified threshold. If the calculated fee (e.g., percentage-based) is lower than the minimum, the minimum amount is charged instead.



Example:Fee = **1.5% of ATM withdrawal**, minimum = **2.00 EUR**.

| Withdrawal amount | Calculated fee (1.5%) | Minimum | Charged amount |
|-------------------|-----------------------|----------|---|
| 50 EUR | 0.75 EUR | 2.00 EUR | 2.00 EUR (minimum applied) |
| 200 EUR | 3.00 EUR | 2.00 EUR | 3.00 EUR (calculated fee higher) |

The minimum amount is also subject to **automatic currency conversion**. If the end-user's balance is in a different currency, both the calculated fee and the minimum are converted before comparison.

Free tier

A **free tier** allows defining a number of fee-exempt events before charging begins. Two modes are available:

| Free tier type | Description | Example |
|---------------------|--|---------------------------------------|
| Period-based | A set number of events are free within each billing period (e.g., monthly). The counter resets at the start of every new period. | 1 ATM withdrawal per month is free. |
| Lifetime | A set number of events are free across the entire lifecycle. The counter never resets. | First card issued for a user is free. |

Actor

When defining a free tier, an **actor** must be specified. The actor determines the object in the context of which the free tier counter is tracked. Any field from the incoming event can be used as the actor — the examples below show the most common choices.

| Actor (example) | Free tier counted per | Example |
|-----------------|--|--|
| End-user | Each end-user has their own free tier counter. | First card issued for a given user is free (regardless of how many balances they have). |
| Balance | Each balance has its own free tier counter. | First card issued for each balance is free (a user with 3 balances gets 3 free cards). |
| Card | Each card has its own free tier counter. | 1 free ATM withdrawal per month per card . |

Example (period-based, actor = end-user):

Free tier = **2 ATM withdrawals per month per end-user**, fee = **2.00 EUR** per withdrawal.

| Withdrawal | Free tier | Charged | Amount |
|------------|-----------|---------|----------|
| 1st | ✓ Free | ✗ | 0.00 EUR |
| 2nd | ✓ Free | ✗ | 0.00 EUR |
| 3rd | ✗ | ✓ | 2.00 EUR |
| 4th | ✗ | ✓ | 2.00 EUR |
| 5th | ✗ | ✓ | 2.00 EUR |

Total charged in month: $3 \times 2.00 \text{ EUR} = \mathbf{6.00 \text{ EUR}}$ (2 withdrawals free, 3 charged).

Reference transaction ID

When enabled, FMS links the **fee transaction** to the **original transaction** that triggered the fee by storing the original transaction's ID as a reference. This allows the partner's system to trace which fee corresponds to which source transaction.

“ Example:

An end-user performs an ATM withdrawal (transaction ID: *txn-abc-123*). FMS charges a 2.00 EUR fee and stores *txn-abc-123* as the reference transaction ID on the fee transaction.

The partner can then use this reference to correlate fees with source transactions in their own systems.

Transaction description

A **static text description** can be defined per pricing item. This description is attached to the fee transaction and visible to the end-user (e.g., in their transaction history). It helps the end-user understand what the fee was charged for.

“ Example:

Transaction description = "ATM withdrawal fee".

Every fee charged by this pricing item will display "ATM withdrawal fee" in the end-user's transaction history.

Currently, transaction description supports **static text only**. Dynamic values (e.g., transaction amount or date) cannot be included in the description.

Funding source

Funding source defines **which balance is debited** when an instant fee is charged. Two options are available:

| Funding source | Description | Example |
|-------------------------|--|--|
| User's balance | The fee is debited from the end-user's balance (balance ID is taken from the event data). | ATM withdrawal fee charged from the user's balance that the card is linked to. |
| Fixed balance ID | The fee is debited from a specific, pre-configured balance ID (hardcoded in the pricing item). | All fees for a particular service are charged from a dedicated settlement balance. |

Pricing item setup options per settlement type

| Setup option | Instant settlement | Invoice settlement |
|-------------------------------|--------------------|--------------------|
| Filtering | ✓ | ✓ |
| Automatic currency conversion | ✓ | ✓ |
| Minimum amount | ✓ | ✗ |
| Free tier | ✓ | ✗ |
| Reference transaction ID | ✓ | ✗ |
| Transaction description | ✓ | ✗ |
| Funding source | ✓ | ✗ |

Cashback

Cashback is technically handled by FMS using a **reversed money flow** — instead of debiting the end-user's balance, FMS **credits** the user's balance with a defined amount or percentage of the transaction value. From a business perspective, cashback is treated as a **separate product**.

For details on cashback configuration, flows, and examples, see the dedicated [Cashback](#) page.