# Recurring card payments (Subscription) - MOTO (Mail Order / Telephone Order)

> ✅ **Subscription compliant with PSD2 regulation**
>
> - First transaction (subscription initiation transaction) done via IVR, phone, mail
> - All subsequent transactions are linked to the first transaction

## Description

This section covers the implementation MOTO recurring card payments, on Axepta Online for **CB, VISA, Mastercard.**

Axepta Online offers 2 kind of subscription :

- **Subscription for a fixed amount and frequency over a defined period**: The amount, frequency and duration are known when the customer suscribes
- **Variable subscription - CIT / MIT** : in any other case, the amount, frequency or duration are not known at the time of subscription (tacit renewal).

> ⚠️ The kind of subscription must be defined during the first transaction and cannot be modified during subscription.
>
> If you want to switch from a fixed-term subscription to a variable subscription, you will have to enroll your customer again.

## Prerequisites

- Subscription / recurring payment by card (CB, Visa, Mastercard):

  - Choose which kind of subscription you will use (see below)
  - Get your client's consent for the subscription of a new subscription (on merchant side)
  - Store the following data

    - The JSON object Card containing: the tokenized card number (PCNr), the card brand and the expiration date
    - The schemeReferenceID received in response of the first transaction (subscription initiation transaction)

# Subscription flows

The subscription flows are :

1. **Client enrolement : subscription initiation transaction**
   a. A chaining value will be sent in the response of this transaction. It will be stored by the merchant and used in all subsequent transactions (see diagram below).
2. **Subsequent transactions**
   a. The subsequent transactions will be initiated by the merchant. It's an MIT or Merchant Initiated transaction.
   b. The requests will use the chaining value received in response of the subscription initiation transaction.
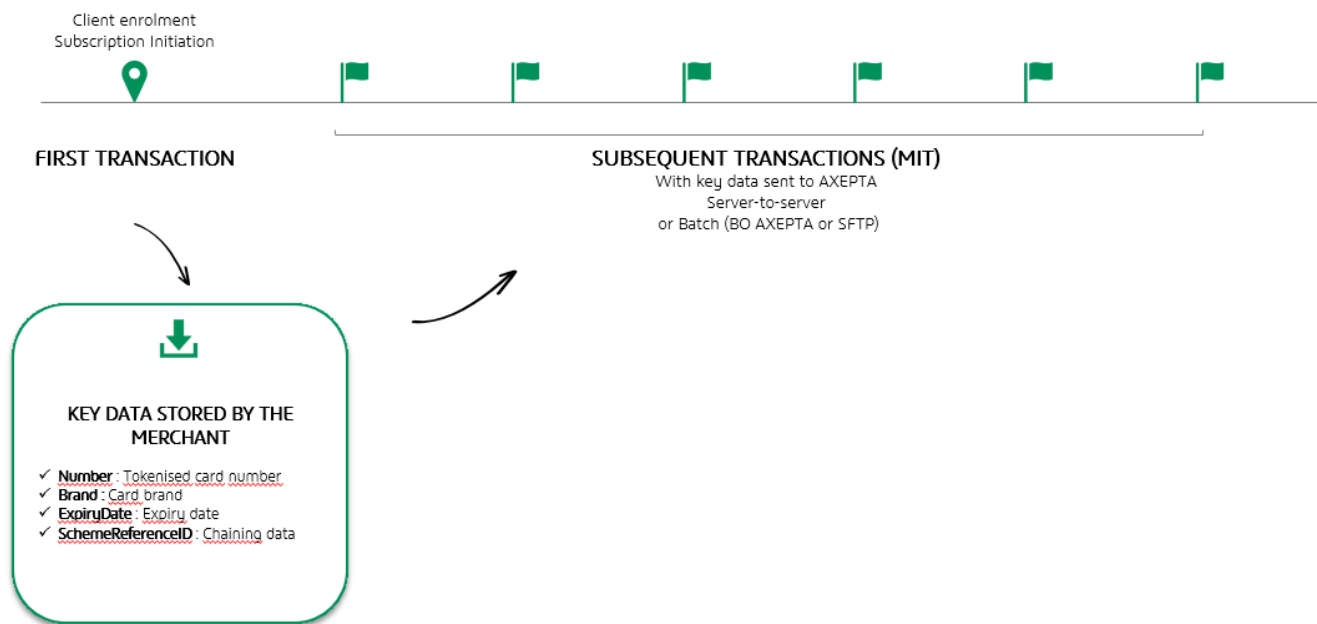


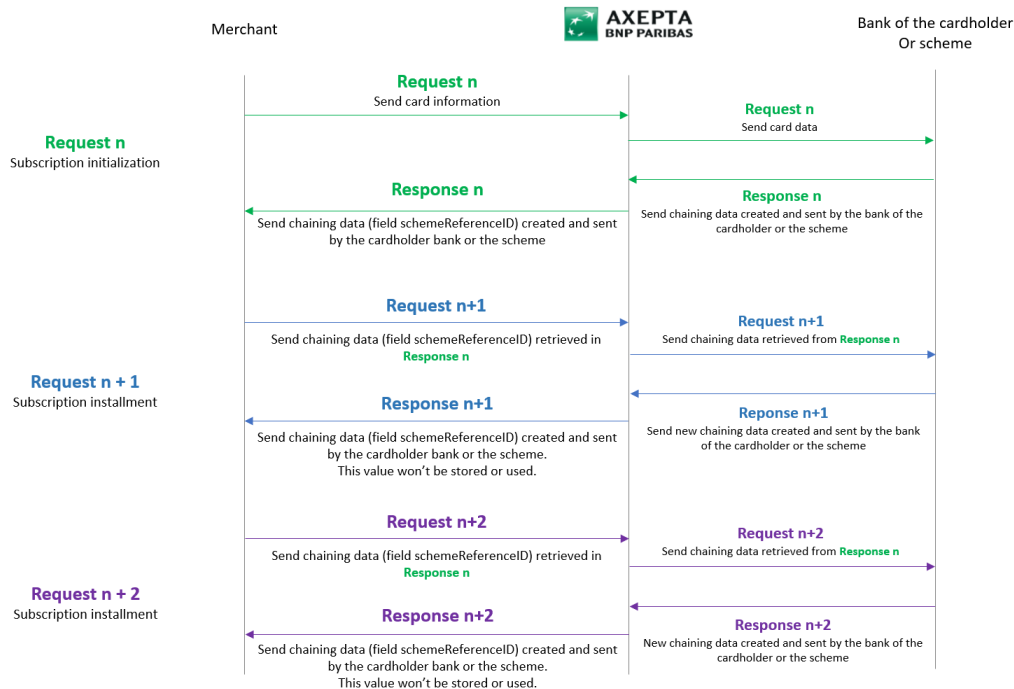**Subscription flows**

# Focus on transactions chaining

## A key data

The reponse of 1st transaction of a subscription will contain the chaining data which will be used to link ("chain") the subsequent transaction to the 1st transaction (initiation of the subscription).

The chaining data, received in response to the subscription initialization, is generated either by the bank or by the scheme (Visa, Mastercard).

In the Axepta Online documentation, the chaining data is called **schemeReferenceID**.

## Principles

**Transactions chaining**

# Subscription implementation

## Subscription for a fixed amount and frequency over a defined period

### Example

The customer subscribes to a gym for 1 year for € 34.99 per month

- Month 1: The client pays the first monthvia IVR
- Months 2 to 12: The following months, the merchant initiates transactions for €34.99 (MIT)

### 1. Client enrolement : subscription initiation transaction

The first transaction, initiation of the subscription, is sent to Axepta through direct.aspx.

**Request**

ℹ The following table describes the additional encrypted parameters added to the payment request:

| Parameter | Format | CND | Description | Exmple |
|-----------|--------|-----|-------------|--------|

| credentialOnFile | JSON | M | Object specifying the type of transaction | ```{
    "type": {
        "recurring": {
            "recurringFrequency": 30,
            "recurringStartDate": "2019-09-14",
            "recurringExpiryDate": "2020-09-14"
        }
    },
    "initialPayment": true,
    "useCase": "fixed"
}``` |

**Response**

The following table describes the parameters received in the payment response and stored by the merchant.

| Key | Format | CND | Description |
|---|---|---|---|
| card | JSON | M | Card data - Token included - card:response EN<br><br>✓ The object Card available in the response should be decrypted and stored.<br>The object card used in the next request requires less parameters than the card object in the reponse.<br><br>    • card:request EN<br>    • card:response EN |
| schemeReferenceID | ans..64 | C | Chaining data used for subscription transactions / recurring payments |

ⓘ
- JSON Object **card** and the value in **schemeReferenceID** will be used in all subsequent transactions of the subscription
- The value in **schemeReferenceID** of this transaction will be used in all subsequent transactions to link them to the initial transaction (initial transaction of the subscription)

## 2. Subsequent transactions

Subsequent transactions are initiated by the merchant through :

- Server-to-server - direct.aspx
- Batch - Create Batch payments (File)

### Server-to-server

**Request**

ⓘ The following table describes the additional encrypted parameters added to the payment request:

| Paramètre | Format | CND | Description | Exemple |
|---|---|---|---|---|

| card | JSON | M | Card data - Token included - card:request EN | -- |
|------|------|---|---------------------------------------------|----|
| | | | ✅ The object Card available in the response should be decrypted and stored. The object card used in the next request requires less parameters than the card object in the reponse.<br><br>• card:request EN<br>• card:response EN | |
| schemeReferenceID | ans..64 | M | Chaining data used for subscription transactions / recurring payments<br><br>ⓘ Use the value received in the response of the **subscription initialization** request. | -- |
| credentialOnFile | JSON | M | Object specifying the type of transaction | ```json
{
    "type": {
        "recurring": {
            "recurringFrequency": 30,
            "recurringStartDate": "2019-09-14",
            "recurringExpiryDate": "2020-09-14"
        }
    },
    "initialPayment": false,
    "useCase": "fixed"
}
``` |

**Response**

⊘ Only the value of the **schemeReferenceID** received in the response of the subscription initialization request has to be stored and used in all subsequent transactions.

Some issuers can send a new value for **schemeReferenceID** in the response, however this new data won't be used.

**Batch**

| Paramètre | Format | CND | Description |
|-----------|--------|-----|-------------|
| **RTF** | a1 | O | Subscription with **fxed** amount and duration<br><br>• Next subscriptions : RTF=R |

# Variable subscription - CIT / MIT

The variable subscription is a subscription with a variable amount during the subscription and/or a duration not known when the client suscribes.

## Examples

The customer subscribes to a service with a fixed fees and monthly consumptions

- Month 1: The client pays the first month online (CIT)
- Month n+1 : The merchant initiates transactions for 12,99 € (MIT)
- Month n+2 : The merchant initiates transactions for 35,99 € (MIT)...

Or the customer subscribes to a service with tacit monthly renewal :

- Month 1: The client pays the first month online (CIT) for 50 €
- Month n+1 : The merchant initiates transactions for 50 € (MIT)
- ....
- Month n+20 : The merchant initiates transactions for 50 € (MIT)

# 1. Client enrolement : subscription initiation transaction

The first transaction, initiation of the subscription, is sent to Axepta through direct.aspx.

**Request**

ℹ The following table describes the additional encrypted parameters added to the payment request:

| Parameter | Format | CND | Description | Exmple |
|---|---|---|---|---|
| credentialOnFile | JSON | M | Object specifying the type of transaction | ```{<br>    "type": {<br>        "unscheduled": "CIT"<br>    },<br>    "initialPayment": true,<br>        "useCase":<br>"ucof"<br>}``` |
| threeDSPolicy | JSON | M | Object specifying the type of 3DS authentication (mandatory, exemption...)<br><br>Use : **Mandate challenge** | — |

**Response**

The following table describes the parameters received in the payment response and stored by the merchant.

| Key | Format | CND | Description |
|---|---|---|---|
| card | JSON | M | Card data - Token included - card:response EN<br><br>✅ The object Card available in the response should be decrypted and stored.<br><br>The object card used in the next request requires less parameters than the card object in the reponse.<br><br>- card:request EN<br>- card:response EN |
| schemeReferenceID | ans..64 | C | Chaining data used for subscription transactions / recurring payments |

ℹ

## 2. Subsequent transactions

Subsequent transactions are initiated by the merchant through :

- Server-to-server - direct.aspx
- Batch - Create Batch payments (File)

ⓘ The subsequent transactions are not authenticated with 3D Secure because they are initated by the merchant (MIT)

### Server-to-server

#### Request

ⓘ The following table describes the additional encrypted parameters added to the payment request:

| Paramètre | Format | CND | Description | Exemple |
|---|---|---|---|---|
| card | JSON | M | Card data - Token included - card:request EN<br><br>✅ The object Card available in the response should be decrypted and stored.<br><br>The object card used in the next request requires less parameters than the card object in the reponse.<br><br>- card:request EN<br>- card:response EN | -- |
| schemeReferenceID | ans..64 | M | Chaining data used for subscription transactions / recurring payments<br><br>ⓘ Use the value received in the response of the **subscription initialization** request. | -- |
| credentialOnFile | JSON | M | Object specifying the type of transaction | ```{<br>    "type": {<br>"unscheduled": "MIT"<br>    },<br>"initialPayment":<br>false,<br>        "useCase":<br>"ucof"<br>}``` |

**Response**

> ⊘ Only the value of the **schemeReferenceID** received in the response of the subscription initialization request has to be stored and used in all subsequent transactions.
>
> Some issuers can send a new value for **schemeReferenceID** in the response, however this new data won't be used.

**Batch**

| Paramètre | Format | CND | Description |
|-----------|--------|-----|-------------|
| **RTF** | a1 | O | Subscription with <u>**variable**</u> amount and duration<br><br>• Next subscriptions : RTF=M |

# Subscription with AMEX cards

The recurring card payments, compliant with PSD2, on Axepta Online for **AMEX** require to use parameter **TransactionID** instead of schemeReferenceID (request and response).