



EPMSG

European
Payments
Stakeholders
Group

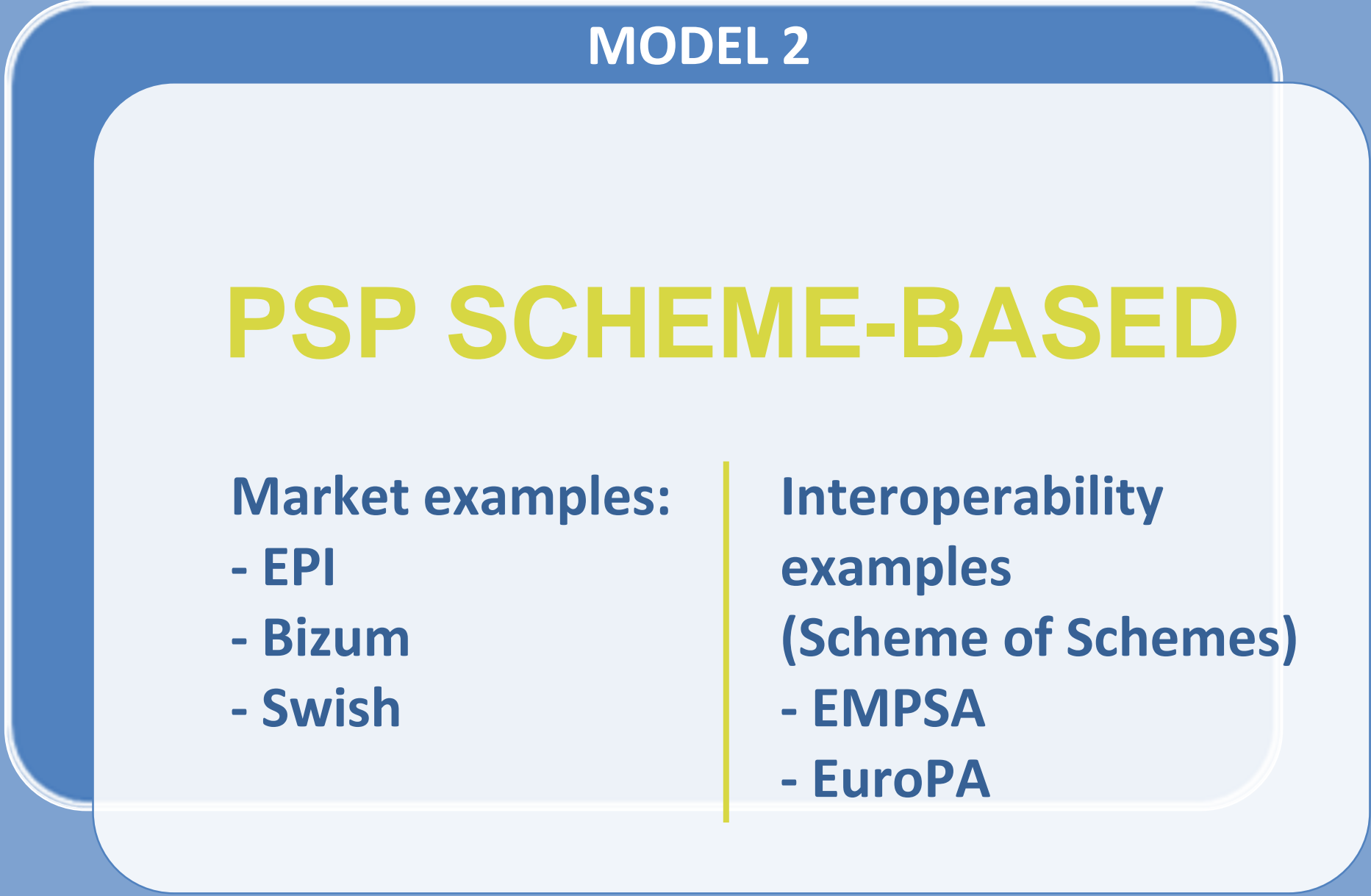
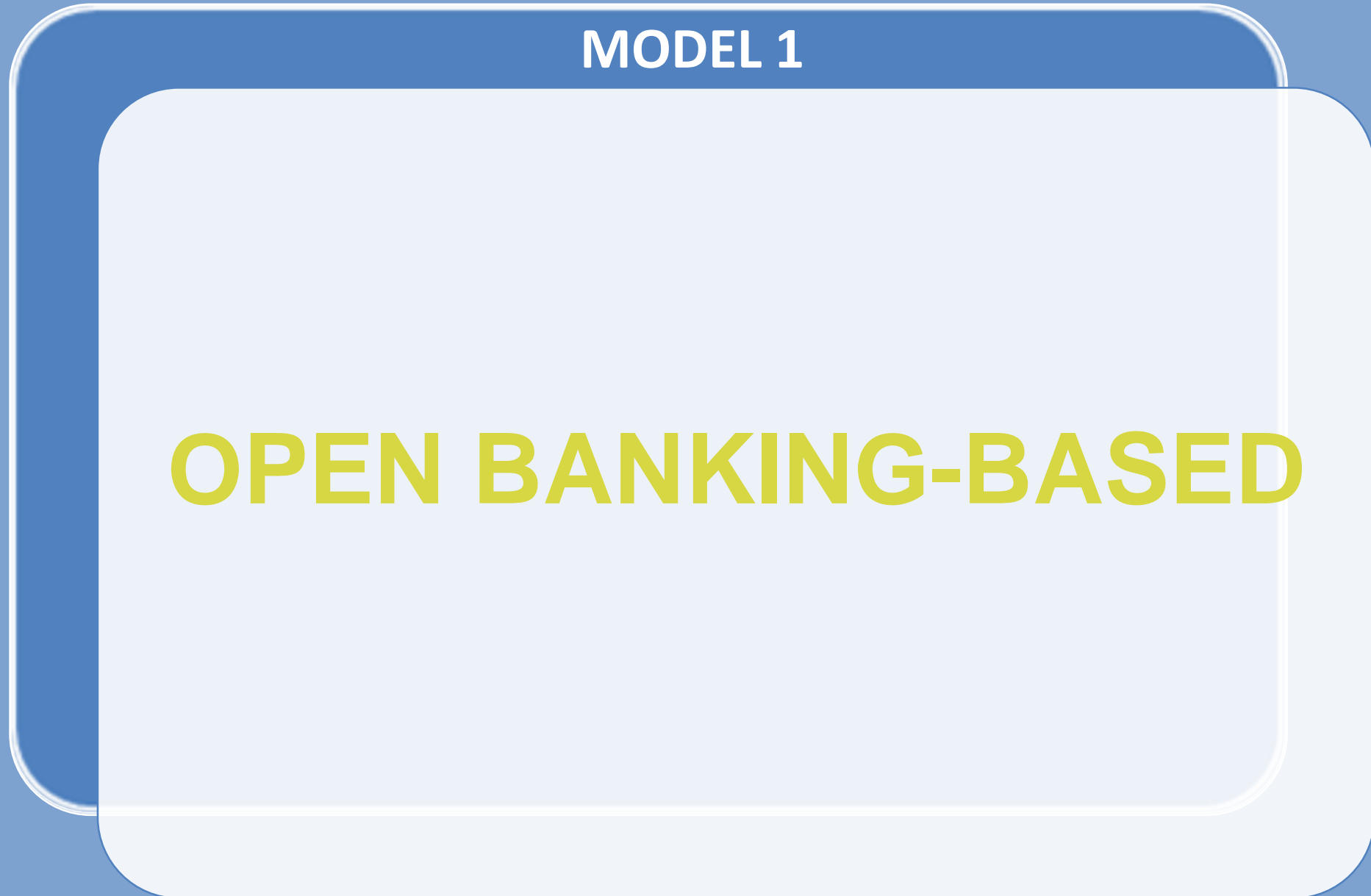
Instant Payments Models and Flows

IPFSG 10/12/2024

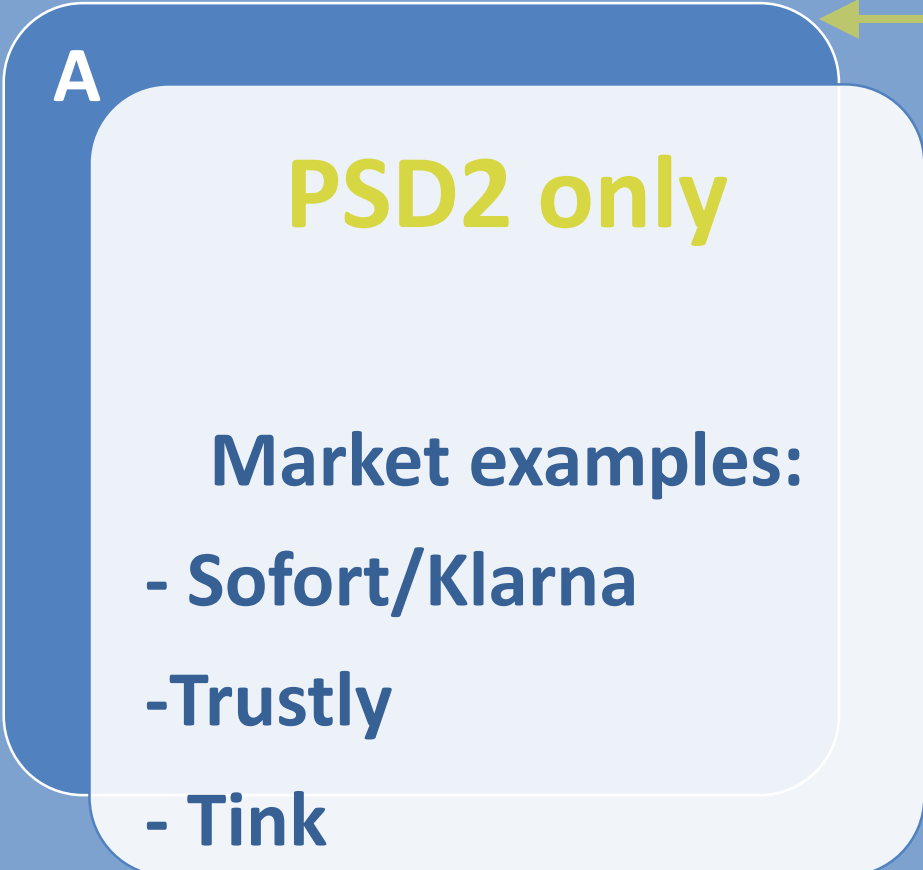
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Instant Payments Models identified by the IPFSG



VARIANTS



Note that the market examples provided are intended to be indicative and non-exhaustive.

Model 1

Open Banking-based

It is based on the Open Banking part of PSD2 (and later) regulation.
There is a contract between Customer (Payer) and ASPSP and between Acceptor (Payee) and PISP.

Technical aspects to consider: It may use the EPC SCT_Inst or other IP schemes.

Variants

A) PSD2 ONLY: There is no contract between PISP and ASPSP

B) OPEN BANKING SCHEME: There is a contract between PISP and ASPSP to provide additional non-regulated functionalities.

→ The flows are described within slides 5 to 9.

Differences between variant A and B are related to the information exchanged between PISP and ASPSP.

Model 2

PSP Scheme-based

The PSPs organise themselves through a Scheme, which is “*a set of formal, standardised, and common technical and business rules, enabling the transfer of value between end users by means of Payment instruments. It is easily identifiable at the Point of Interaction by payers and payees, and in general by the rest of the payment chain participants.*”

To increase coverage, Schemes can connect to other Schemes through interoperability agreements (e.g. EMPSA, EuroPA, ...).

FLOWS

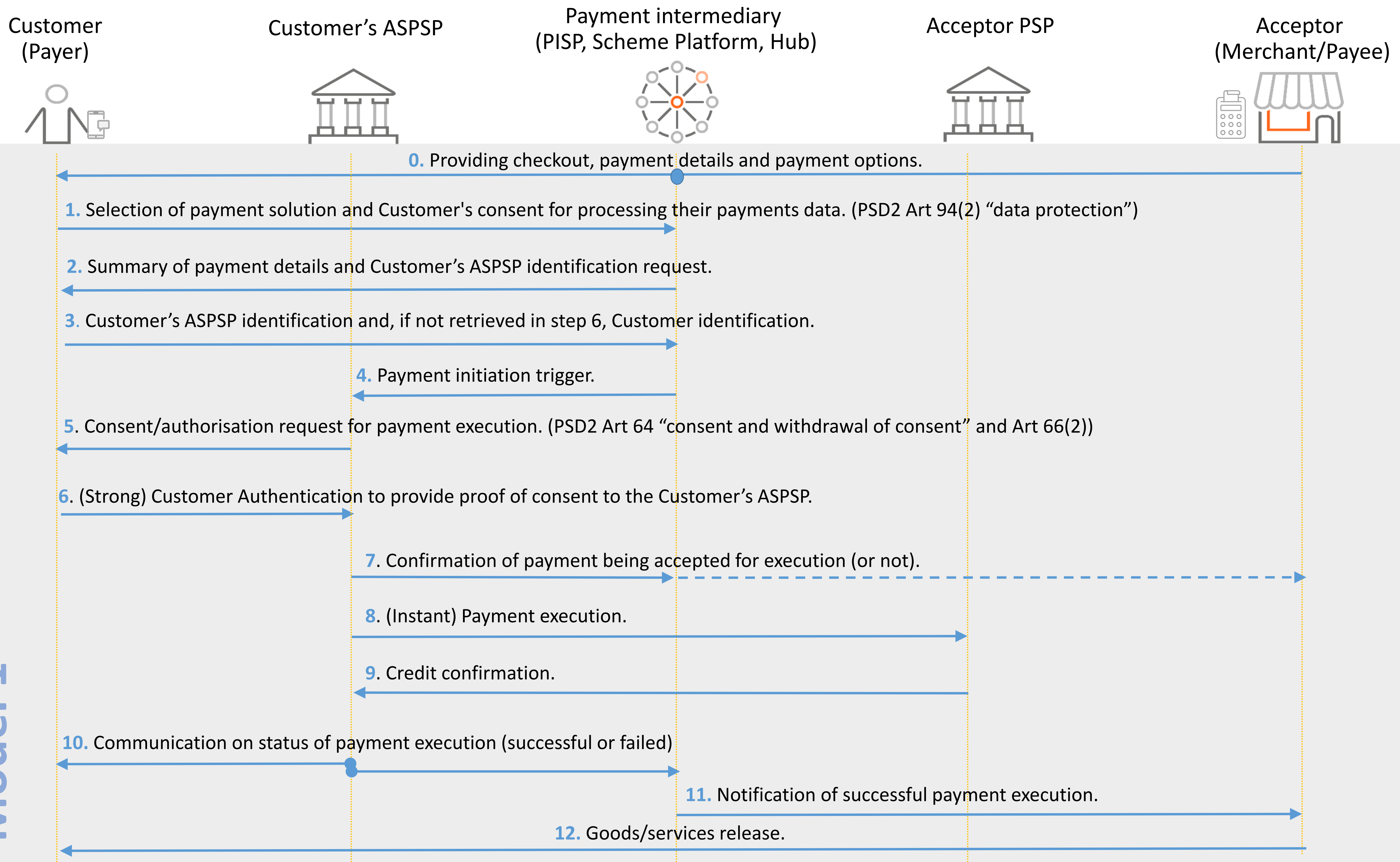
Standard (One-off) Payment initiation

- **General flow** (based on Model 1)
- **Model 1 variants A and B**
 - Merchant-presented
 - Consumer-presented
 - Consumer- or Merchant-presented (BLE or non-EMV-based NFC)
 - NFC @ POI - EMV-technology-based
- **Model 2**
 - Merchant-presented QR-code
 - Interoperability example

→ For other Payment Services, additional flows must be provided

General one-off payment flow

Model 1



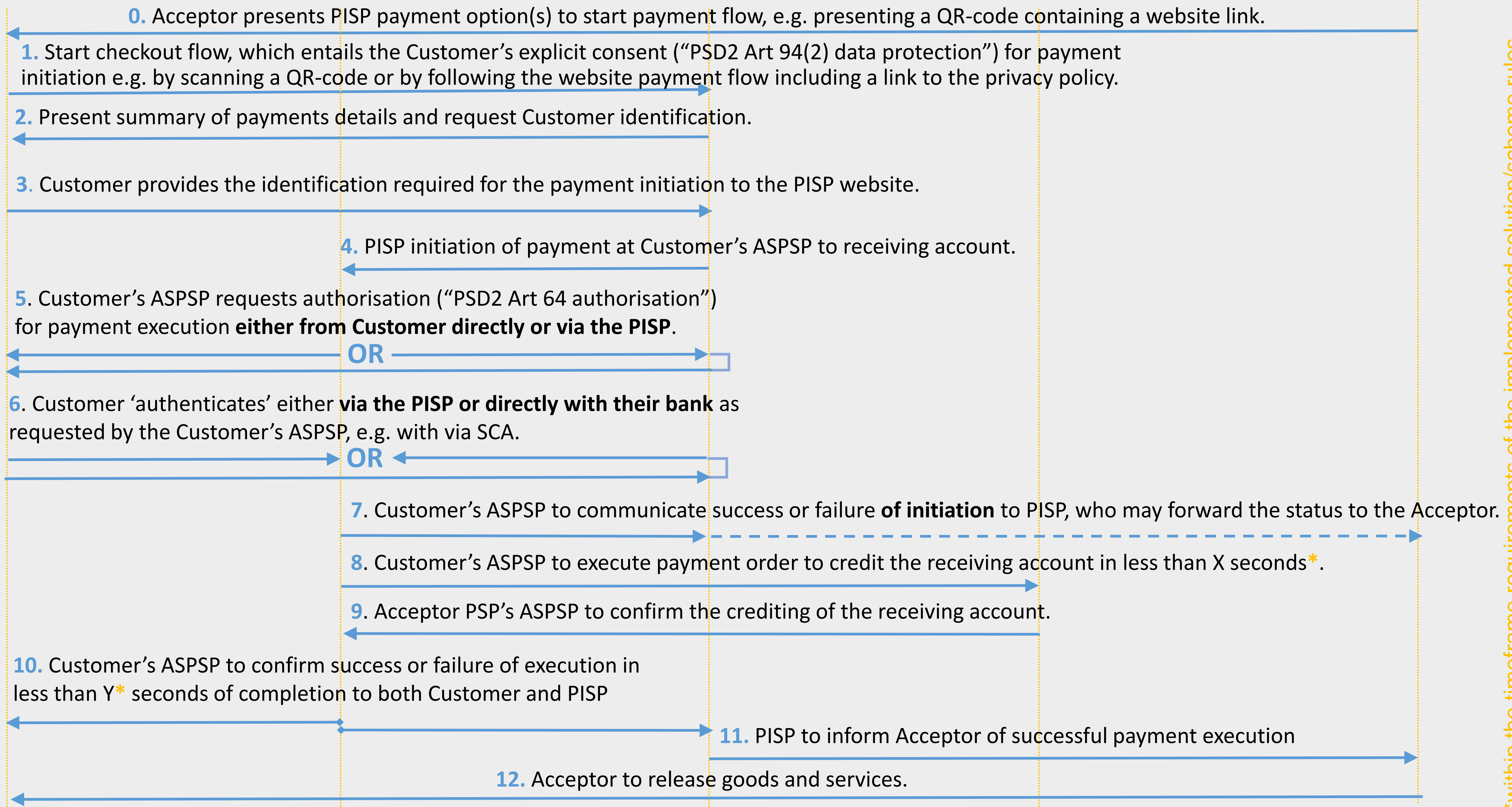
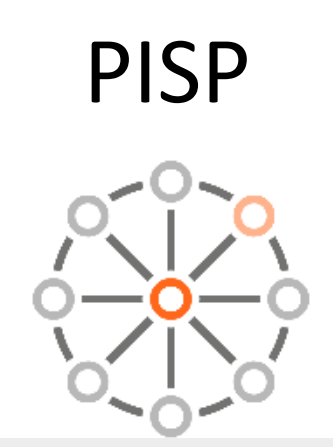
Model 1

A) PSD2 only

B) Open banking scheme

Open Banking-based

Merchant-presented



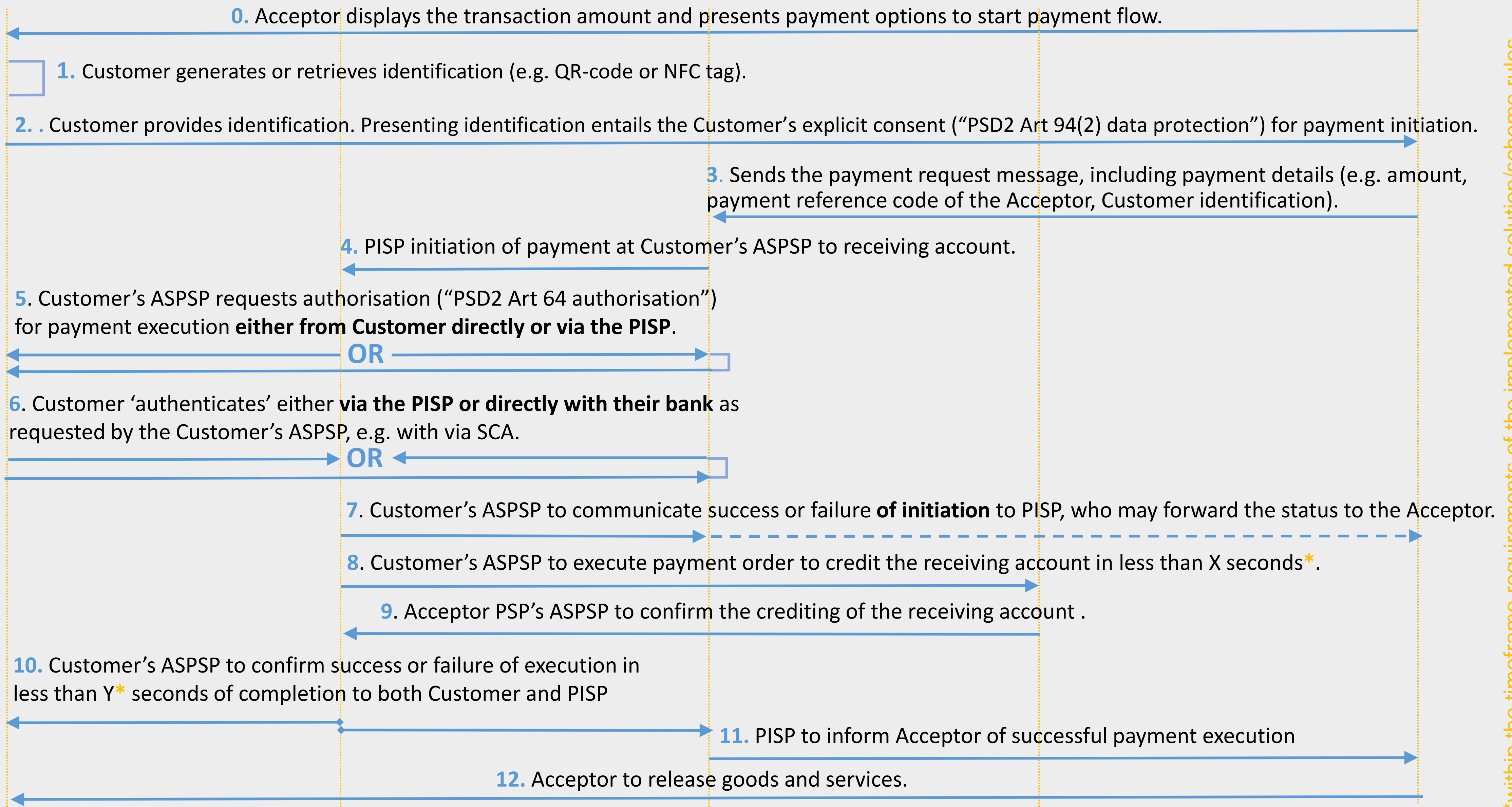
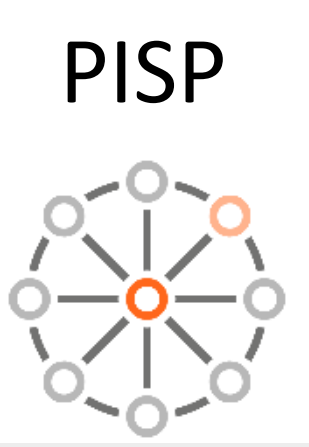
*within the timeframe requirements of the implemented solution/scheme rules

Model 1

A) PSD2 only
B) Open banking scheme

Open Banking-based

Consumer-presented



*within the timeframe requirements of the implemented solution/scheme rules

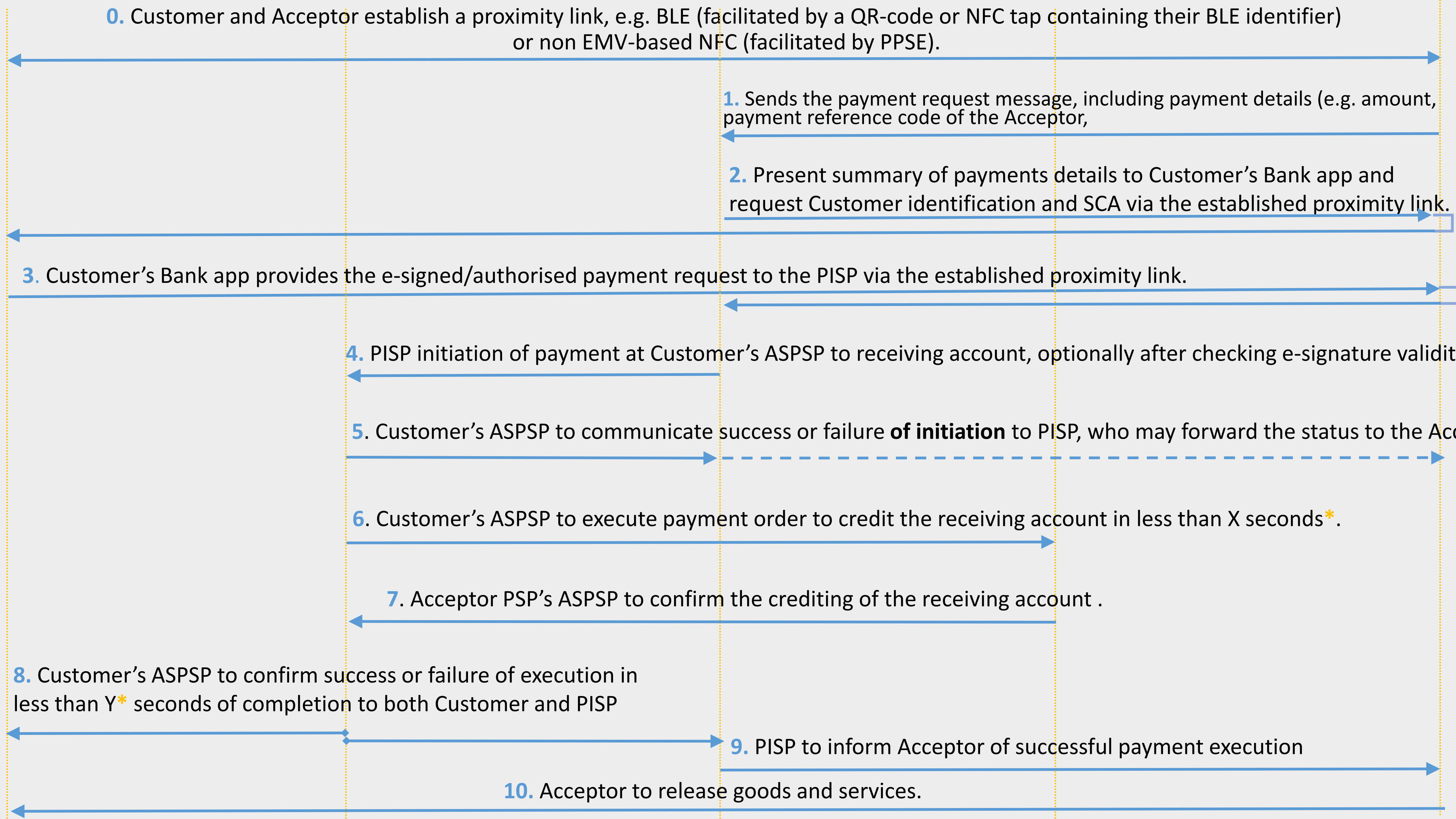
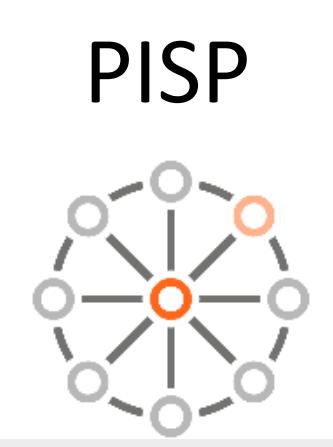
Model 1

A) PSD2 only

B) Open banking scheme

Open Banking-based

Consumer- or Merchant-presented (BLE or non-EMV-based NFC)



*within the timeframe requirements of the implemented solution/scheme rules

Model 1

A) PSD2 only
B) Open banking scheme

Open Banking-based

NFC @ POI
EMV-technology-based

Customer (Payer)



Customer's ASPSP



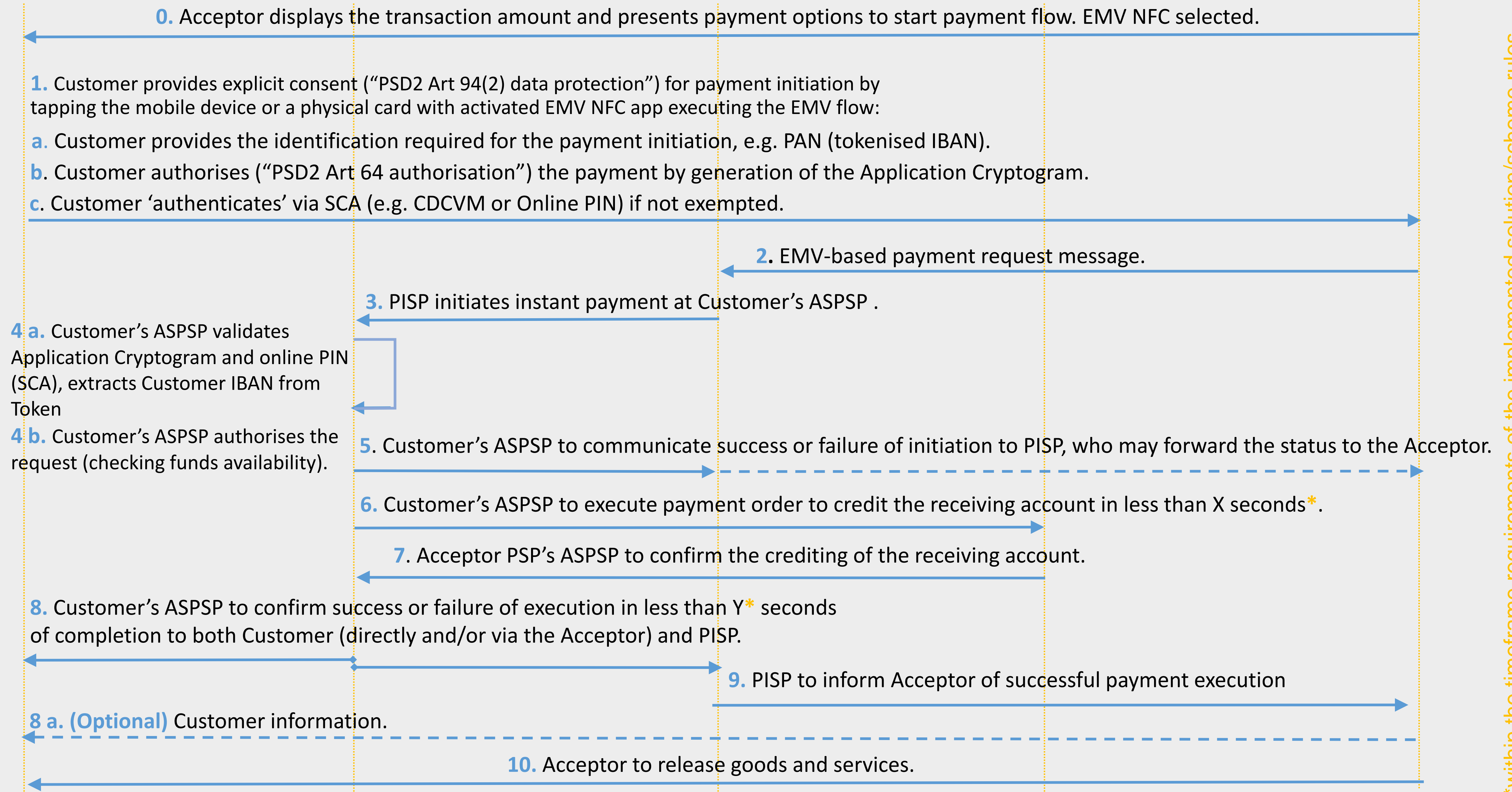
PISP



Acceptor PSP



Acceptor (Merchant/Payee)



*within the timeframe requirements of the implemented solution/scheme rules

Model 2

PSP scheme-based

Merchant-presented

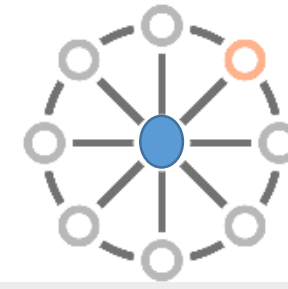
Customer (Payer)



Customer's ASPSP



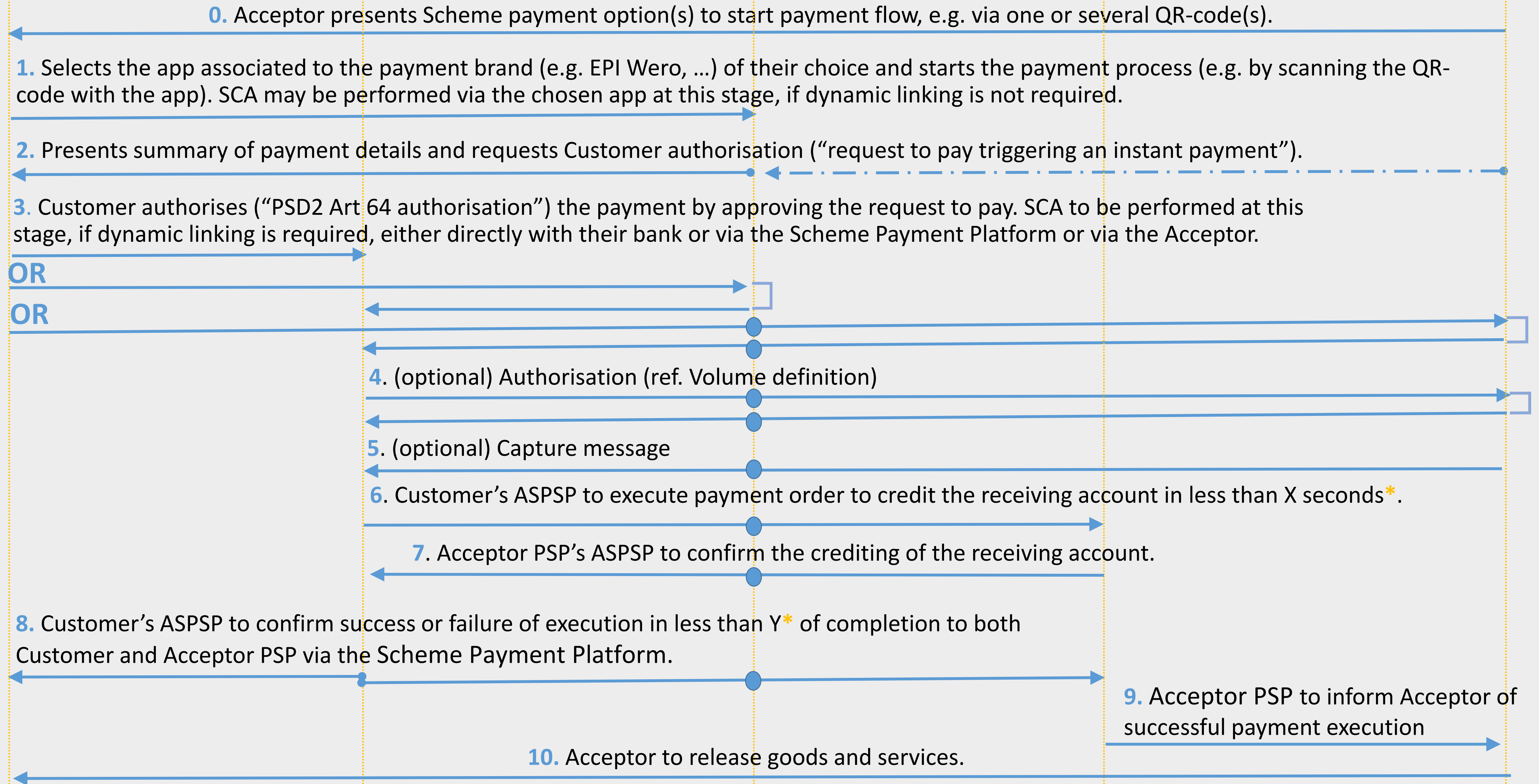
Scheme Payment Platform



Acceptor PSP



Acceptor (Merchant/Payee)



*within the timeframe requirements of the implemented solution/scheme rules

Model 2

Interoperability example

PSP scheme-based

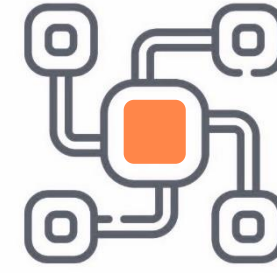
Customer (Payer)



Scheme A



Hub



Scheme B



Acceptor (Merchant/Payee)



0. Customer and Acceptor establish a link according to the existing interoperability agreements between the involved schemes, e.g. via a QR-code.

1. The Acceptor sends the transaction details (amount, Acceptor details, etc.) to the Scheme A, through Scheme B and the hub.

2. The Scheme A presents the payment summary and requests authorisation.

3. Customer authorises within Scheme A.

4. Scheme A confirms authorisation to Scheme B.

5. Execution of payment from Customer's ASPSP within Scheme A to receiving account within Scheme B in less than X seconds*.

6. Acceptor PSP within Scheme B to confirm the crediting of the Acceptor account.

7. Scheme B to confirm the crediting of the receiving account.

8. Customer's ASPSP within Scheme A to confirm success or failure of execution in less than Y* of completion to the Customer.

9. Acceptor to release goods and services.

*within the timeframe requirements of the implemented solution/scheme rules

ACTORS

- Acceptor (Merchant/Payee)
- Acceptor PSP
- Customer/Consumer/Payer
- Customer's ASPSP
- HUB
- Payment Initiation Service Provider (PISP)
- Receiving Account
- Scheme Payment Platform

Acceptor (Merchant/Payee): *(different from current Volume definition)*

A retailer or any other entity, firm or corporation that enters into an agreement with a PISP/Acceptor's PSP to process Payment Services. For the Acceptor, the Payment Service will normally result in receiving or sending funds. The Acceptor may also be an entity operating as a Marketplace, provided that this is the entity that enters into an agreement with the PISP/Acceptor's PSP.

Acceptor PSP:

A payment service provider contracting with an Acceptor to accept and process Payment Services, which result in a transfer of funds to/from the Acceptor. The Acceptor PSP must be an ASPSP or have a contract with an ASPSP to receive or send funds, and may also play the role of the PISP. The role of the Acceptor PSP in the IP domain encompasses Acquirers.

Customer/Consumer/Payer:

Economic agent (natural or legal) buying goods or services and using Payment Services.

Customer's ASPSP:

A payment service provider contracting with the Customer to provide them with a payment instrument to initiate and process the Customer's Payment Services. The role of the Customer's ASPSP in the IP domain encompasses Issuers.

HUB

An intermediary in inter-Scheme Payment Transactions that facilitates the flow of data between different Schemes, such as the secure transfer of transaction data, communication of authorisation, and payment execution details. Its role is defined by interoperability agreements between the involved Schemes.

Payment Initiation Service Provider (PISP): *(elaborated from PSD2)*

A payment service provider offering services to initiate a Payment Order at the request of the Payment Service user (Customer or Acceptor, Payer or Payee) with respect to a Payment Account held at another payment service provider.

Receiving Account

An account used by a PSP or an Acceptor that is designated to receive funds from the Customer's ASPSP for Payment Services. Sometimes this account is also used to transfer funds to the Customer's ASPSP (e.g. for a refund or chargeback).

Scheme Payment Platform:

A processing infrastructure implementing the functionalities according to the Scheme rules allowing the Scheme participants (Customer/Customer's ASPSP and Acceptor/Acceptor PSP) interaction to perform Payment Transactions.

QUESTIONS?

Thank You



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