



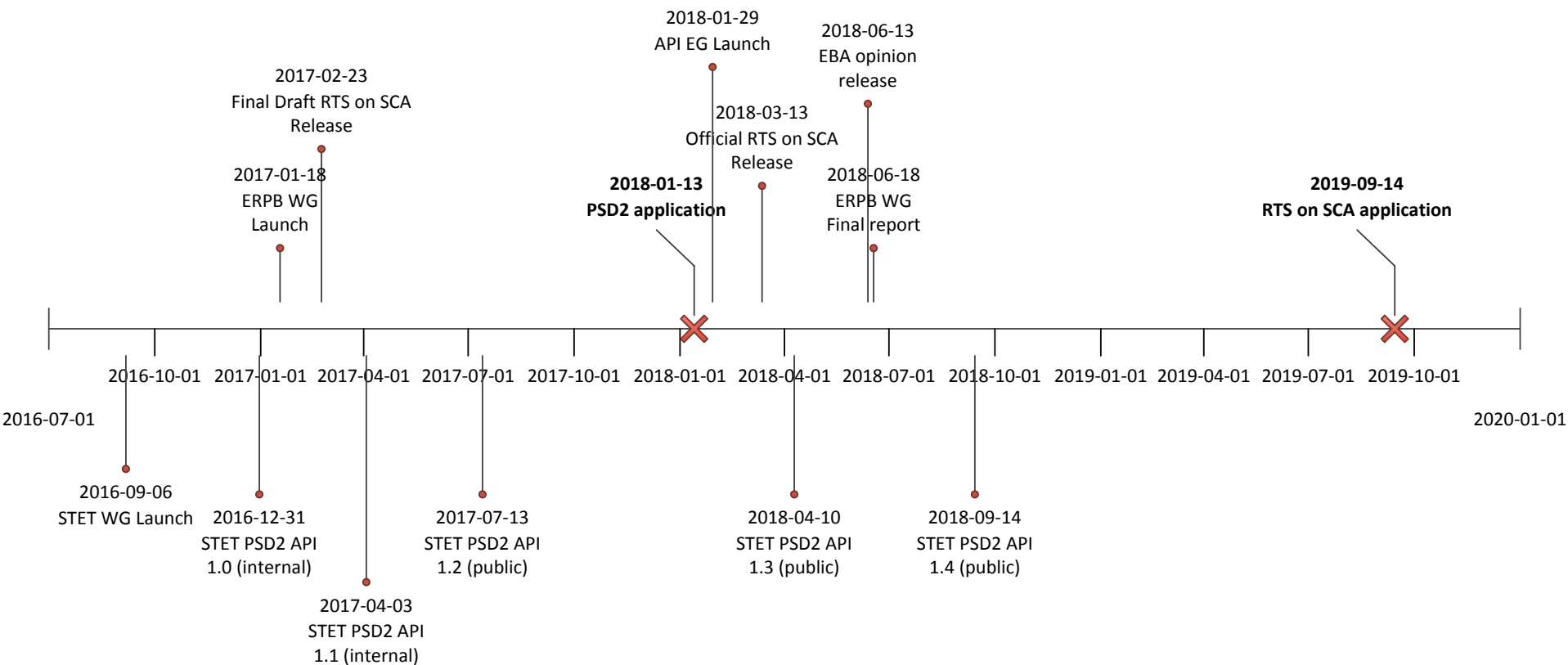
STET PSD2 API - VERSION 1.4

Hervé Robache – October 2018

©STET – Internal use - Any use or copy without STET authorisation are prohibited



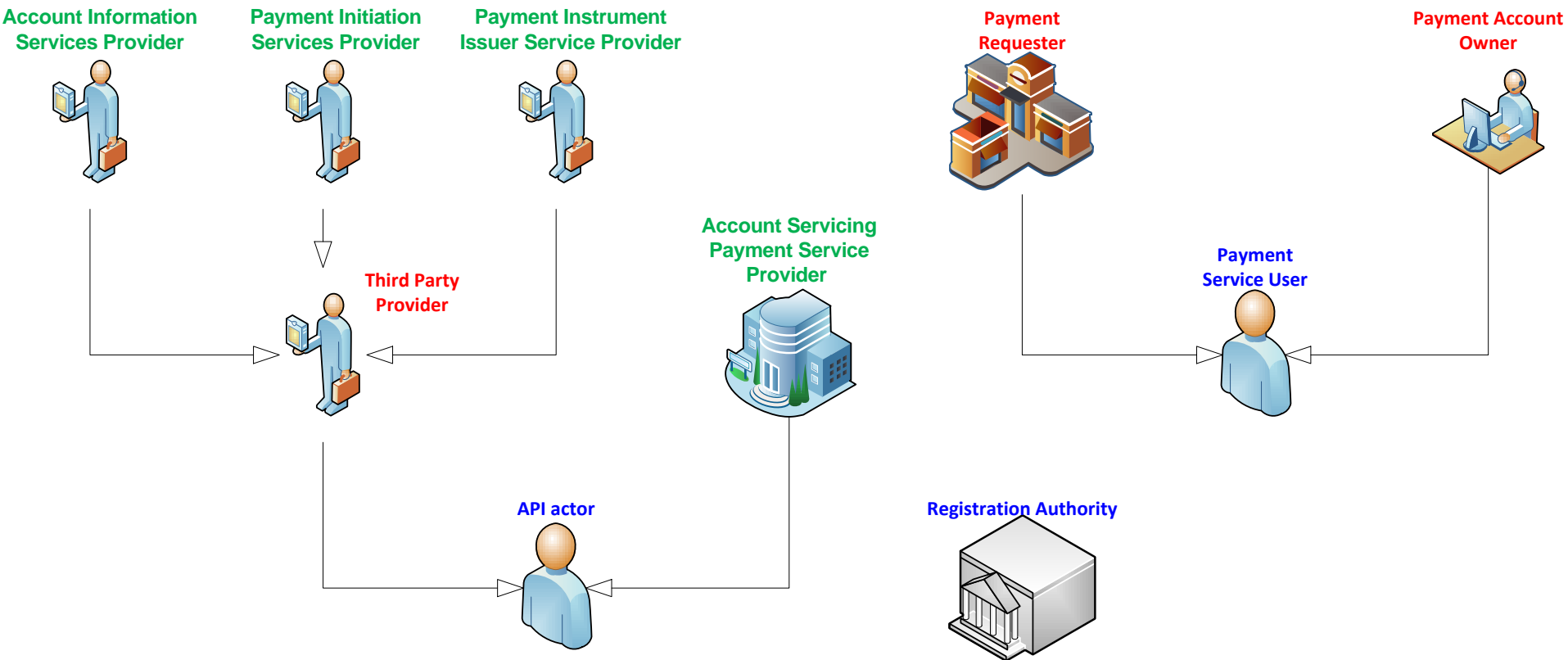
API Timeline



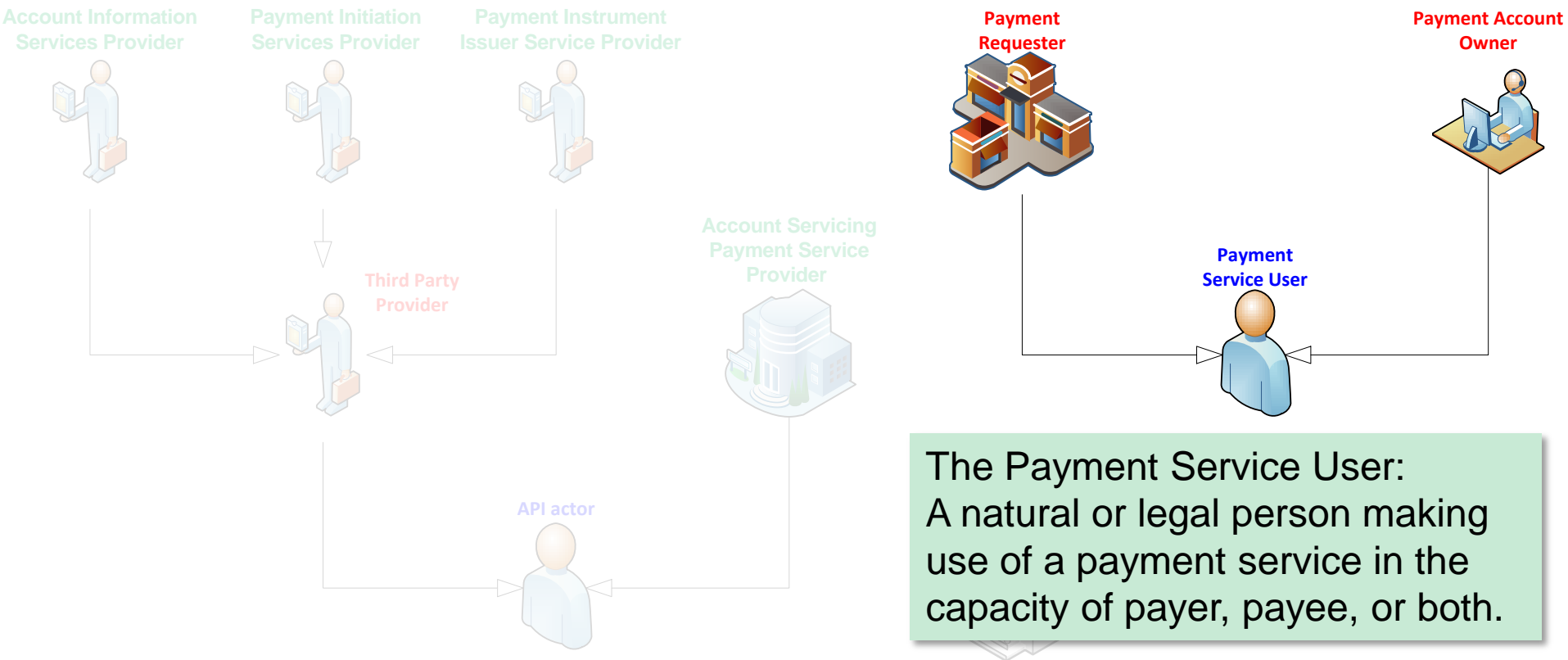
Key Standards

THEME	STANDARD	COMMENTS
Access Network	Internet	
Transport Protocol	HTTP 1.1	
	TLS 1.2	Provides data encryption during transportation Provides cross-authentication of the actors May be enforced by STS and/or TFS
	OAuth2	Authorisation Code Grant (AISP + PIISP)
Authorisation Protocol	MTLS	Client Credentials (PISP)
Applicative Protocol	REST	Richardson Maturity Model on level three
Data Format	JSON/UTF8	Transposition of ISO20022 structures
Technical Documentation	SWAGGER 2.0 (AOS2)	AOS3 format also available

PSD2 Actors



PSD2 Actors: The Payment Service User



PSD2 Actors: The PSD2 API actors

Account Information
Services Provider



Payment Initiation
Services Provider



Payment Instrument
Issuer Service Provider



Third Party
Provider



Account Servicing
Payment Service
Provider



API actor



Payment
Requester



Payment Account
Owner

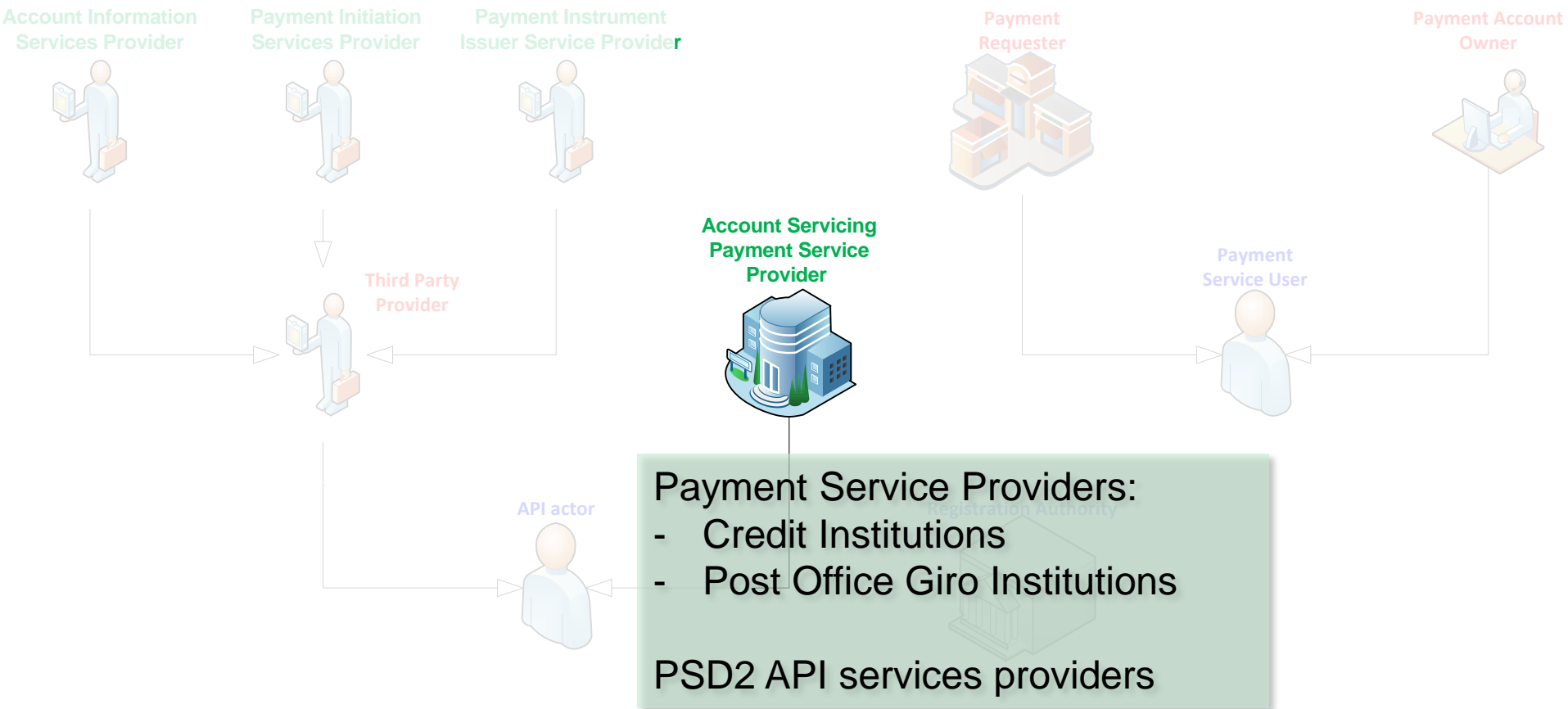


The Payment Service Provider:

- Credit Institutions
- Electronic Money Institutions
- Post Office Giro Institutions
- Payment Institutions
- ECB and National Central Banks
- Member States or Regional/Local Authorities



PSD2 Actors: Account Servicing Payment Service Providers



PSD2 Actors: Account Information Service Providers

Account Information
Services Provider



Payment Initiation
Services Provider

Payment Instrument
Issuer Service Provider

Payment
Requester

Payment Account
Owner

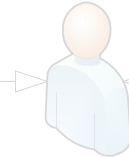


Account Information Services Providers (AISP) allow the Payment Account Owner to get information about all of his/her payment accounts:

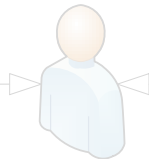
- through a single interface,
- whatever the bank holding those accounts.

PSD2 API services clients

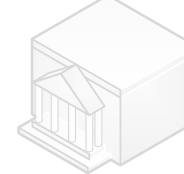
Payment
Service User



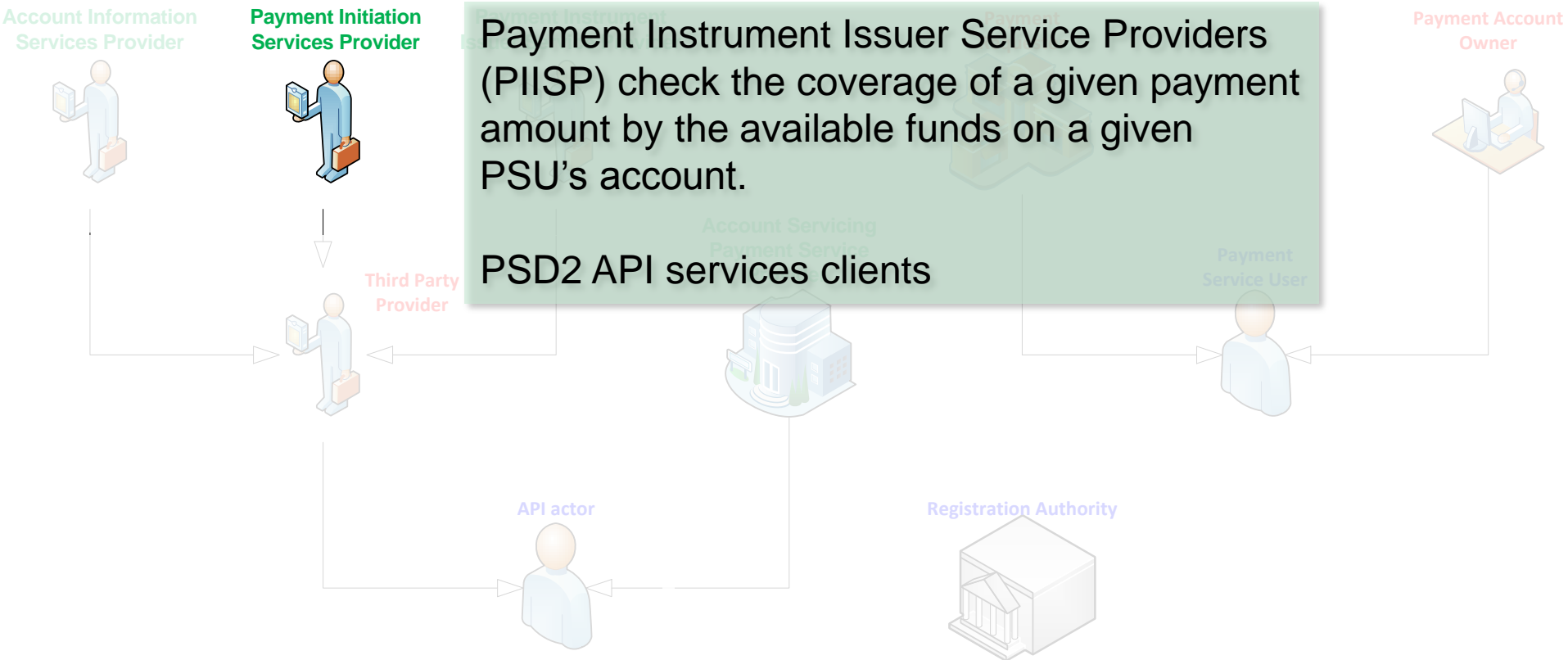
API actor



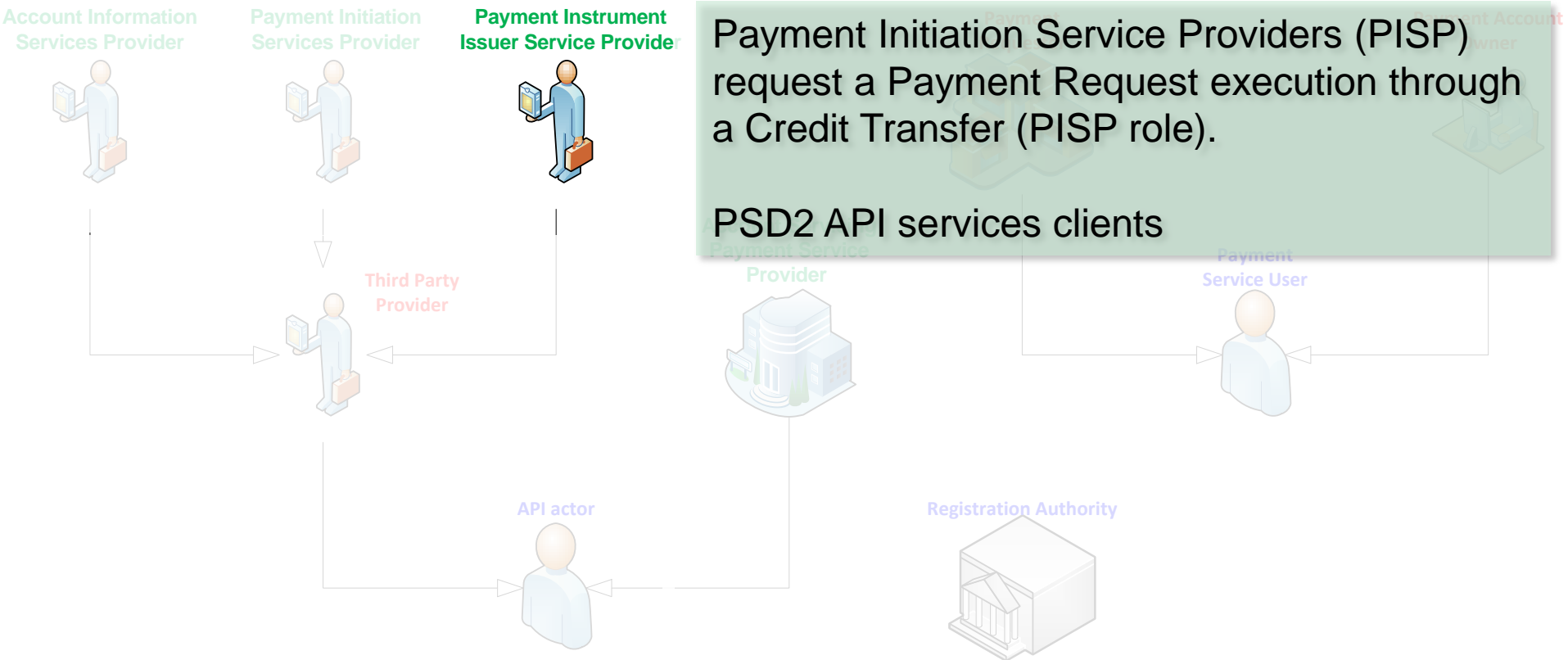
Registration Authority



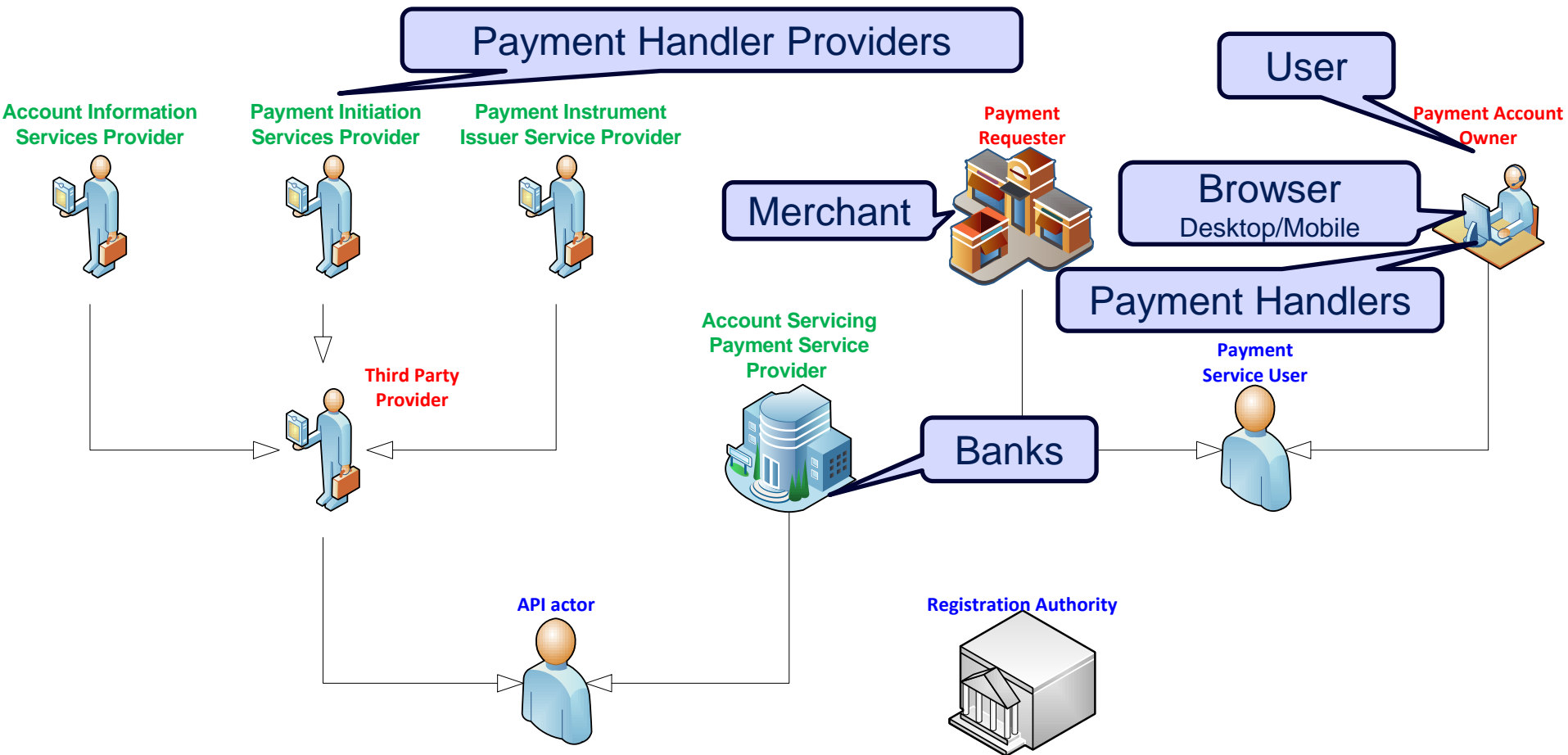
PSD2 Actors: Payment Instrument Issuer Service Providers



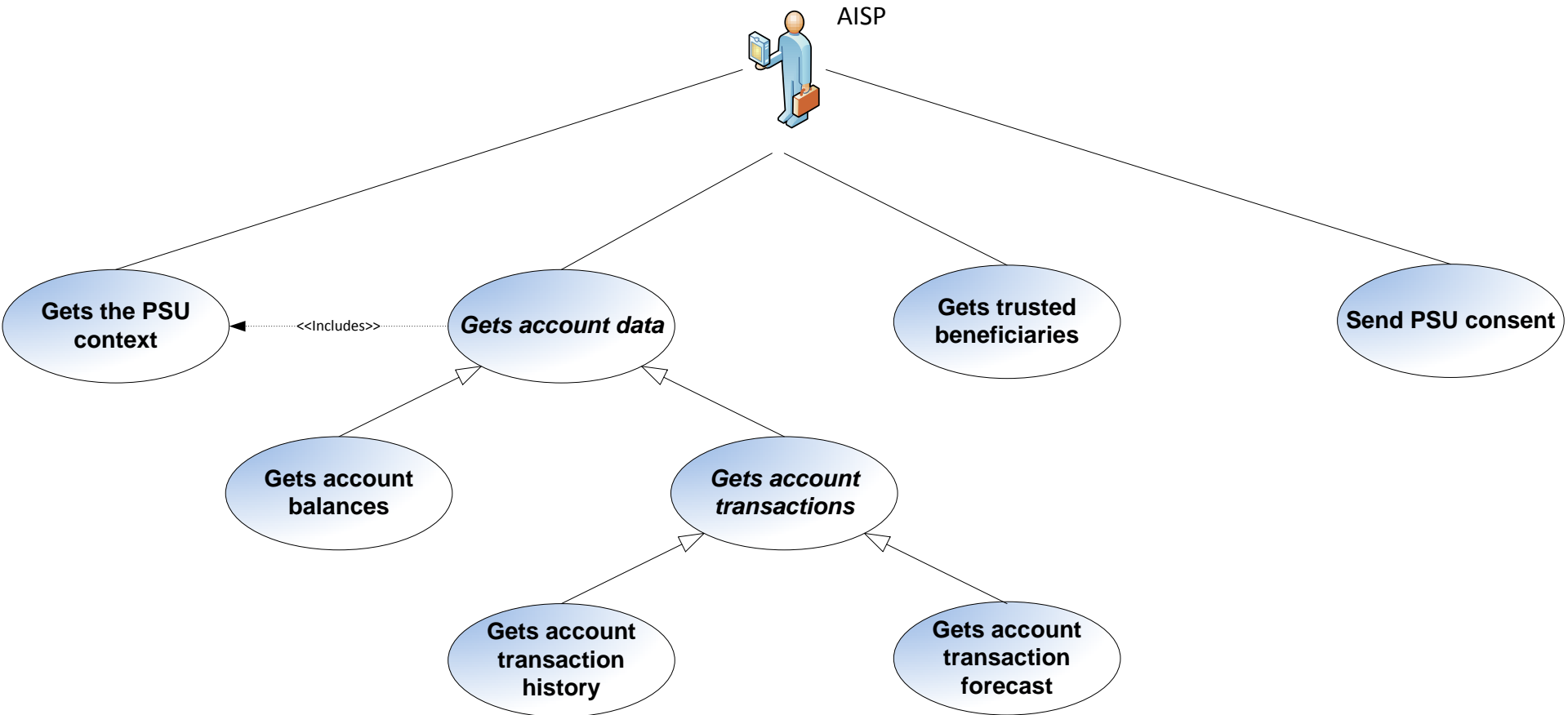
PSD2 Actors: Payment Initiation Service Providers



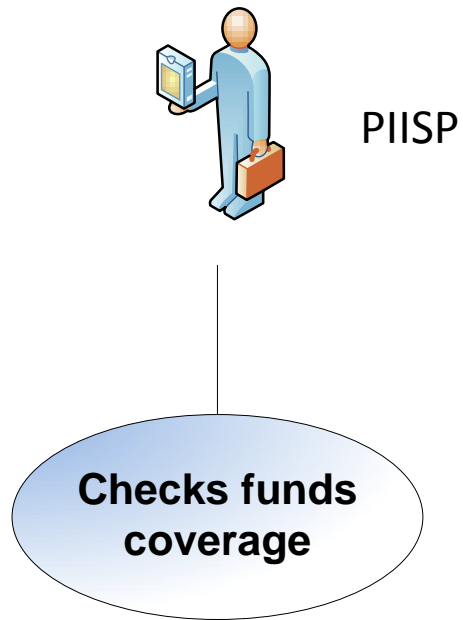
PSD2 Actors vs W3C Model



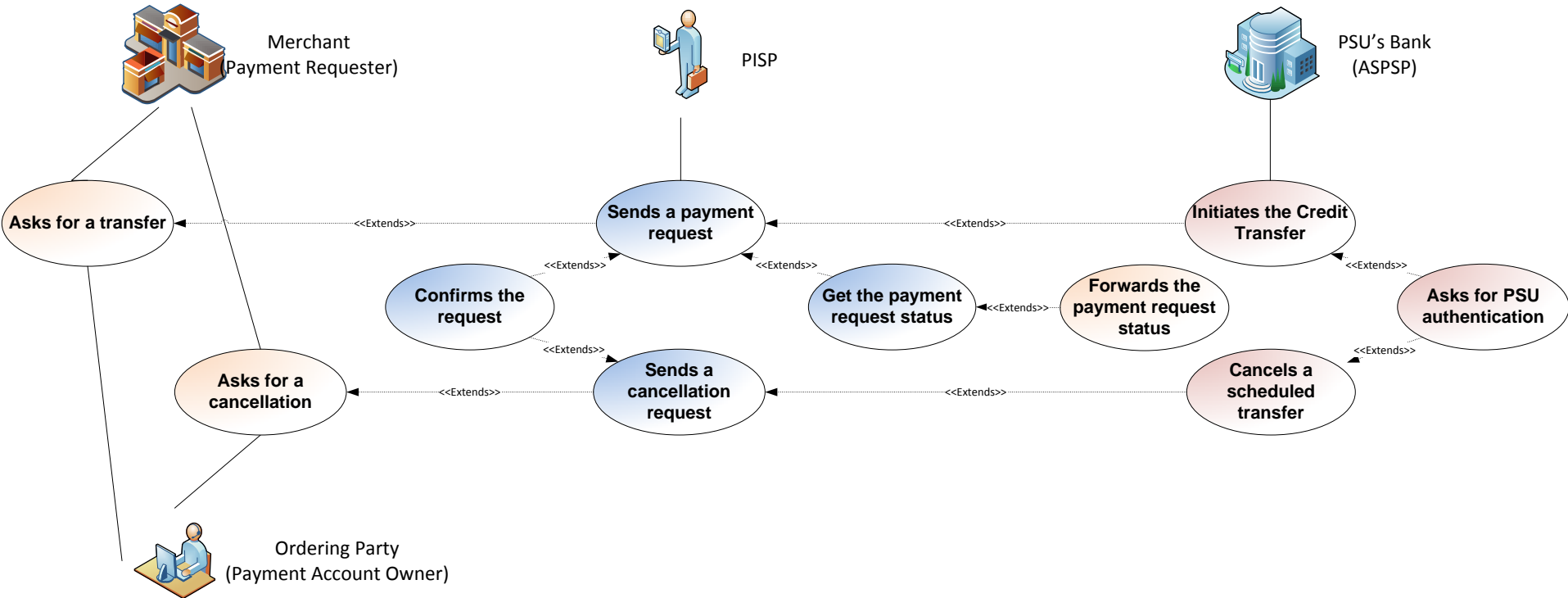
AISP Use Cases



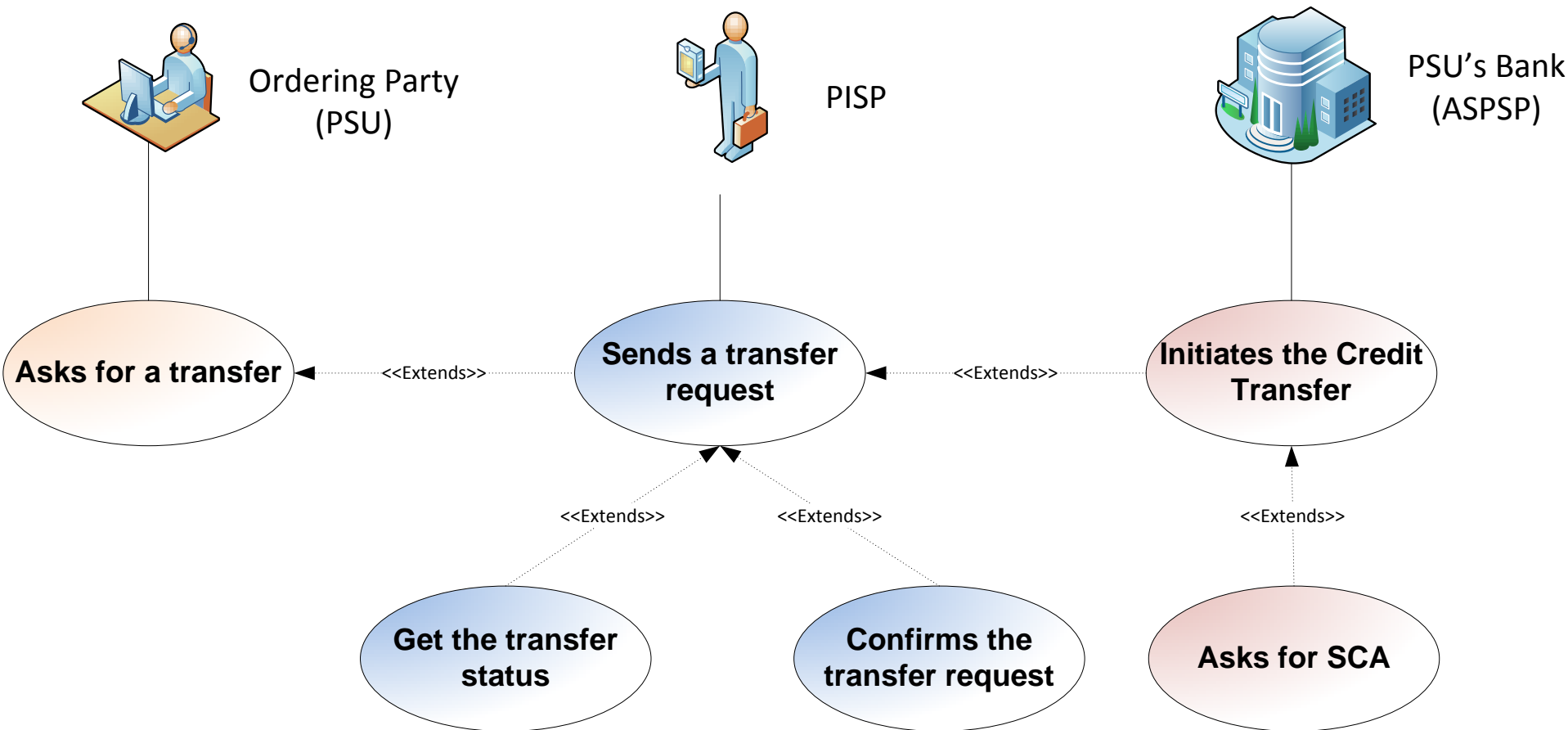
PIISP Use Case



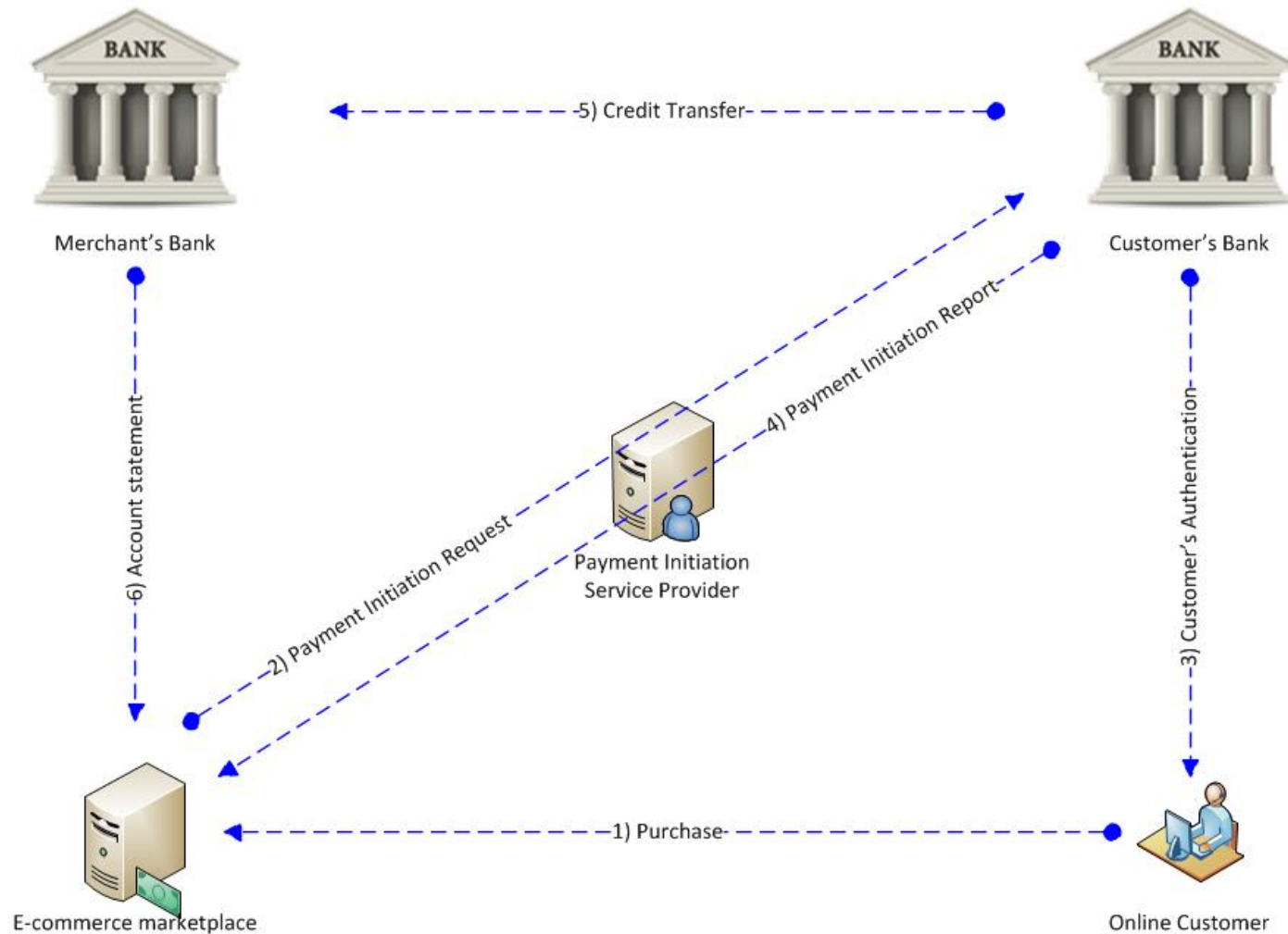
PISP Purchase Use Cases



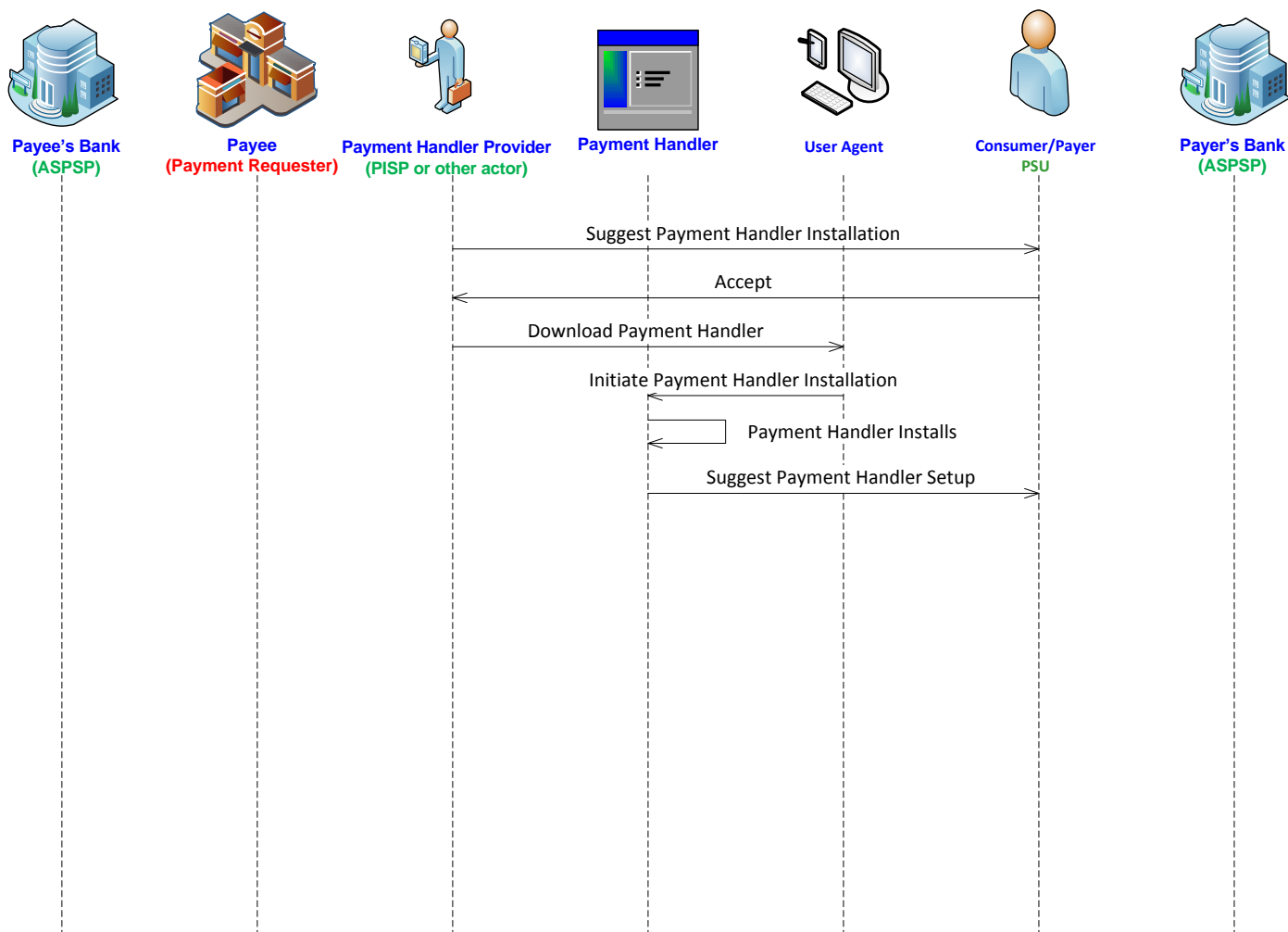
PISP Transfer Use Cases



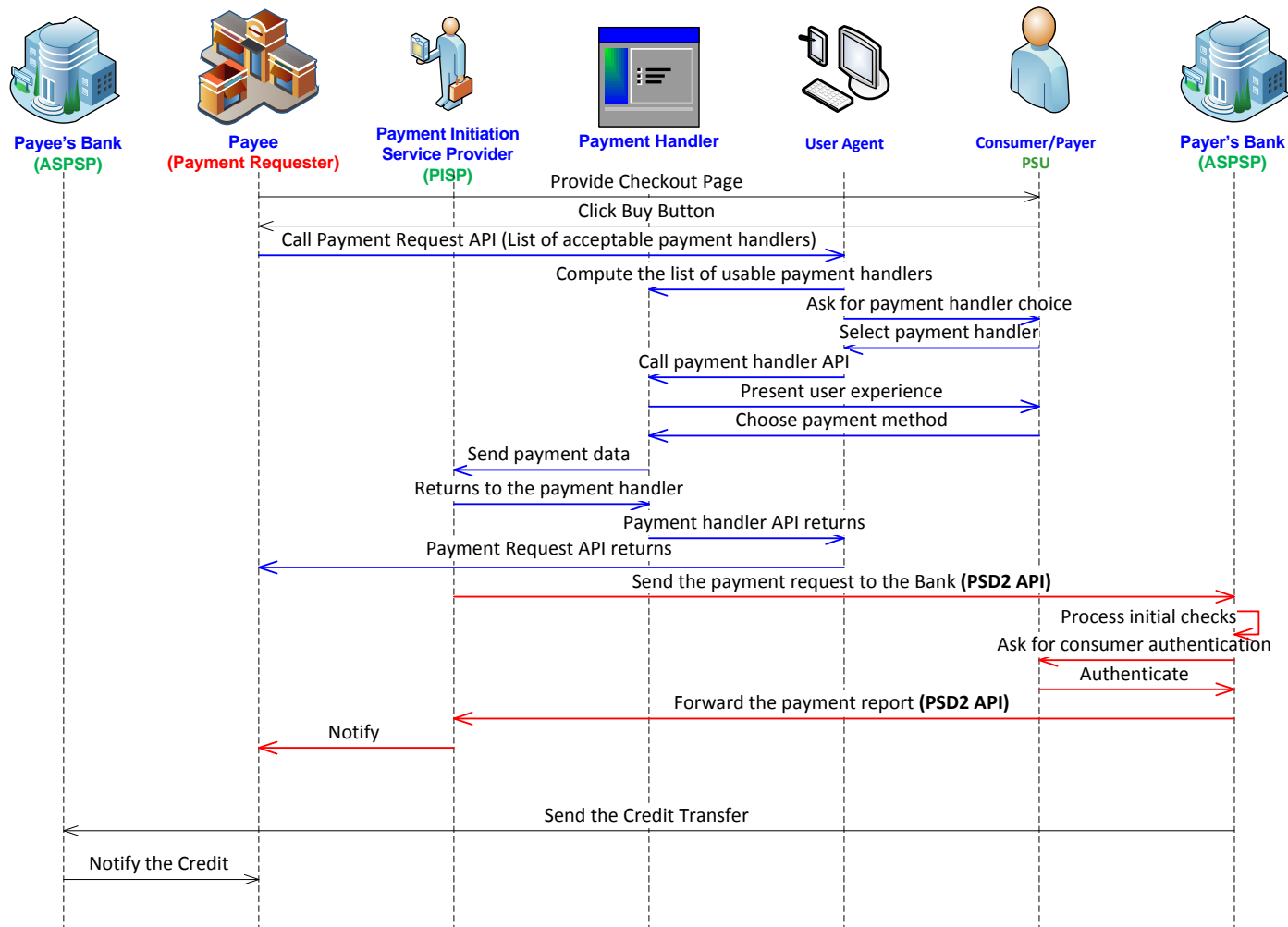
PISP Purchase Use Case



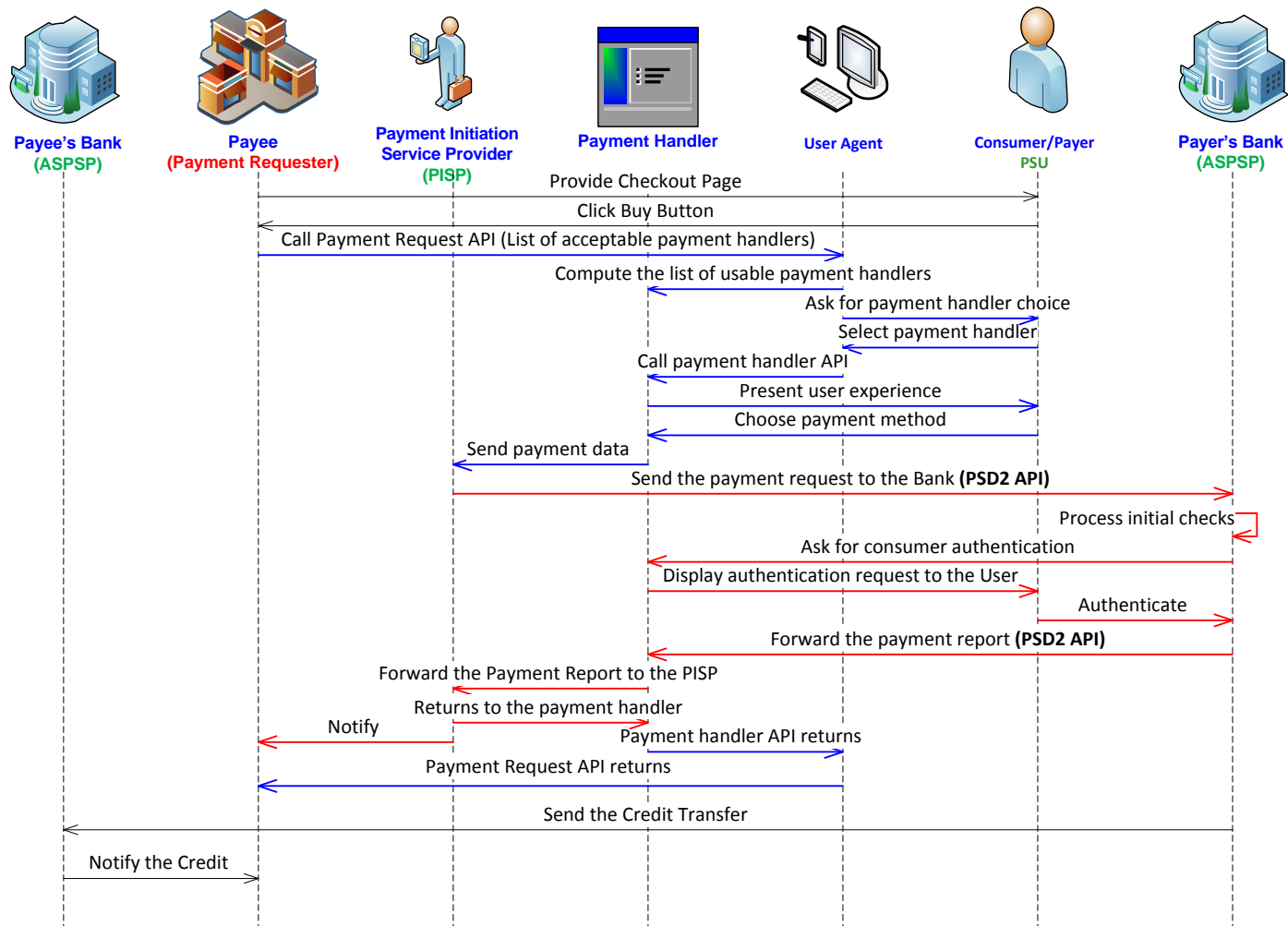
PISP Purchase Use Case in a W3C approach (initial setup)



PSD2 decoupled from Payment Request API



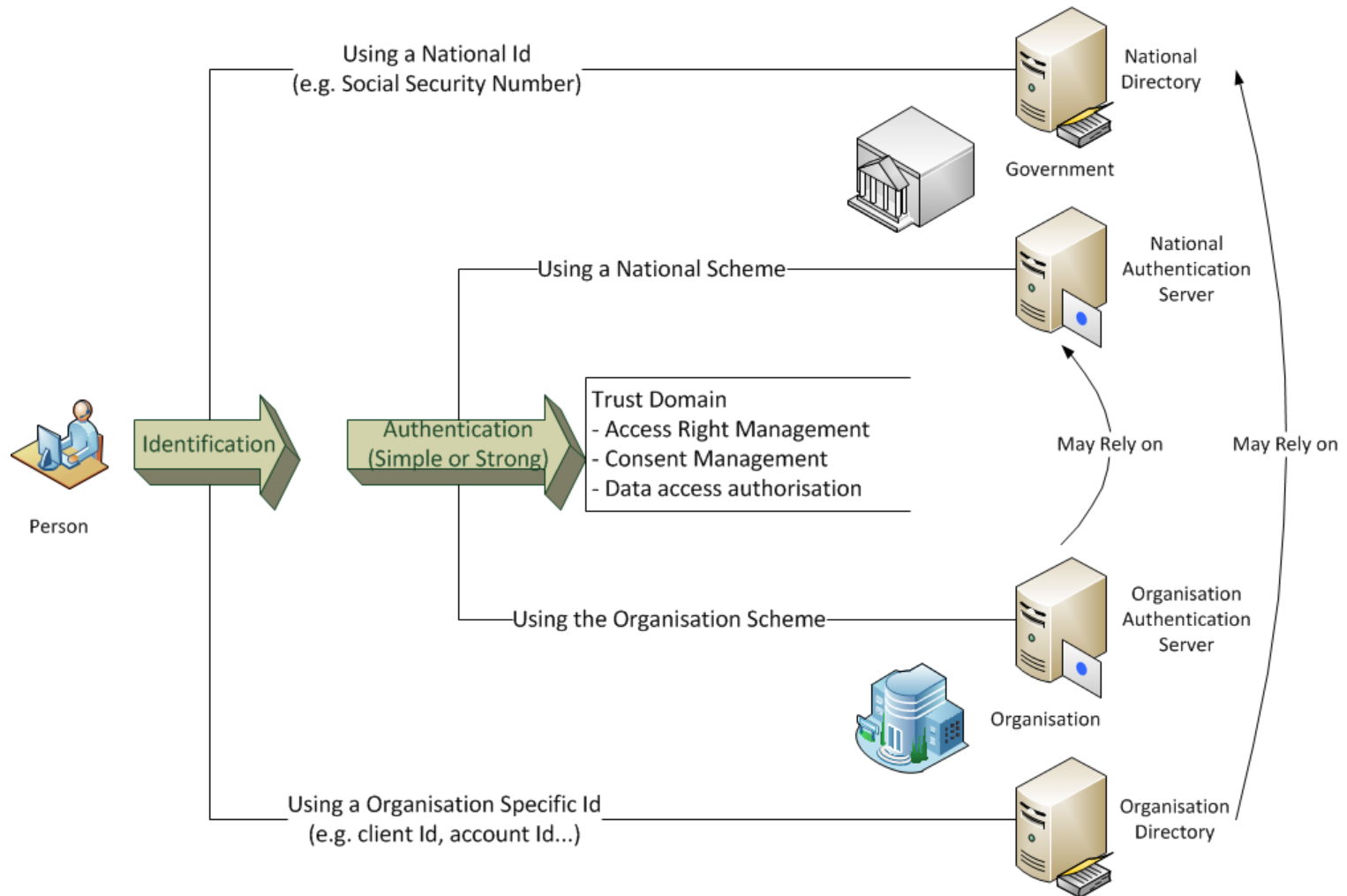
PSD2 During Payment Request API



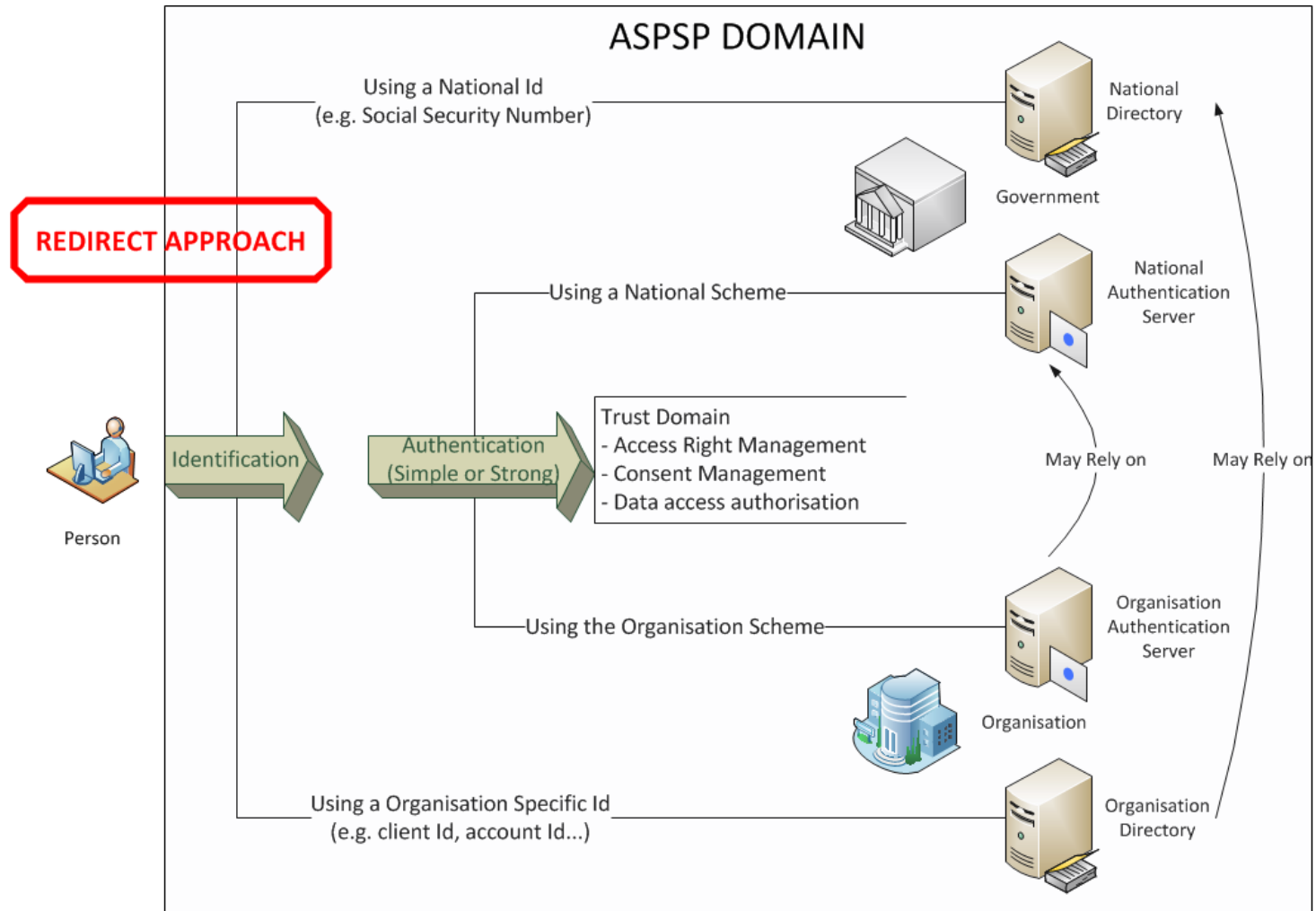
PSD2 API and ISO20022

- STET already experienced ISO20022 through
 - SEPA payments implementation (from 2008)
 - Account Management messages (2009)
 - SEPAmail messages (2011)
- So using ISO20022 was a strategic choice. It was also a recommendation from the RTS on SCA.
 - V1.0, V1.1 and V1.2 used
 - ISO20022 data structures for AIS and PIISP
 - a whole copy/paste of some messages for PIS
- ISO20022 Modelling of STET API work started in Fall 2017
 - Reflexions about API resources and automatic documentation
 - V1.3 and V1.4 provide a smarter use of ISO20022 building blocks
 - Berlin Group joined in June 2018
- ISO TC68/SC9/WG2 started to work on general usage of ISO20022 in Spring 2018

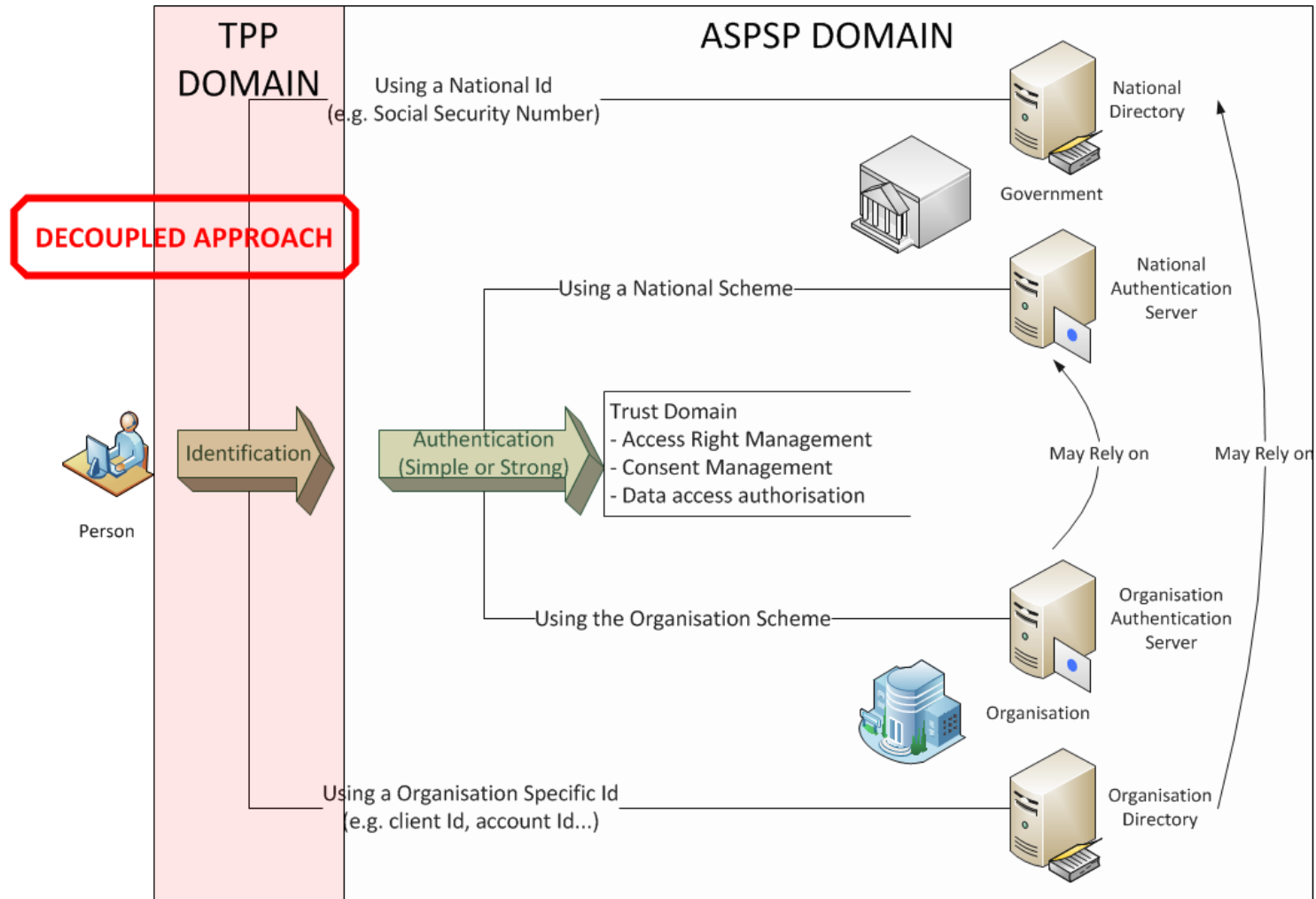
Identification and Authentication (1/4)



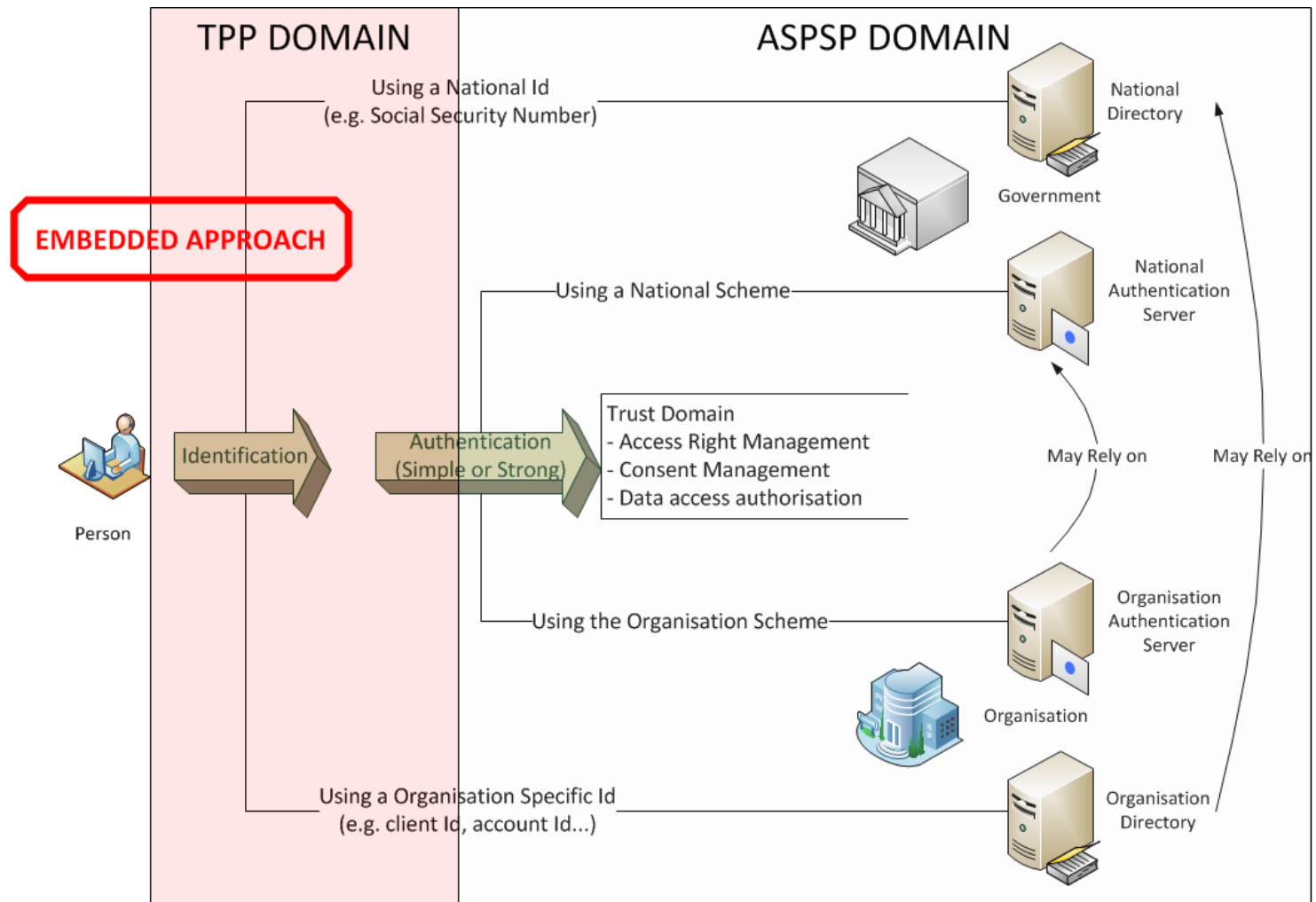
Identification and Authentication (2/4)



Identification and Authentication (3/4)



Identification and Authentication (4/4)





THANK YOU!