EPC SRTP related API Specifications – Preliminary Information

EPC137-22
Version 1.0
Date issued: 30 June 2022

European Payments Council

European Payments Council AISBL,
Cours Saint-Michel 30 B-1040 Brussels
T +32 2 733 35 33
Enterprise N°0873.268.927
secretariat@epc-cep.eu

Public

Approved

EPC SRTP related API Specifications – Preliminary Information

Abstract	The present document provides preliminary information about the EPC SRTP scheme rulebook V2.1 related API specifications, available on the EPC website.
Document Reference	EPC137-22
Issue	Version 1.0
Date of Issue	30 June 2022
Reason for Issue	The approved Version 1.0 of the present document was issued on 30 June 2022.
Reviewed by	EPC
Produced by	EPC
Circulation	Publicly available

Table of Contents

1. Background 3
2. Preliminary remarks 3
3. High level default EPC SRTP related API specifications flows 3
3.1 Generic flow 3
3.2 SRTP Status Update 5
3.3 SRTP Cancellation Request 6
3.4 SRTP Cancellation Request Status Update 7
3.5 Resource Tree 7

1. Background

The use of APIs for the exchanges between SRTP Service Providers will be mandatory for reachability purposes as of 30 November 2023 for all the SRTP scheme participants.

The SRTP scheme participants are free to use market developed APIs or the default EPC SRTP related API specifications. The version V1.0 of the EPC SRTP related API specifications was published on the EPC website on 30 June 2022.

The SRTP scheme participants are already allowed to use APIs (market APIs or default EPC APIs) as SRTP related messages transmission means.

2. Preliminary remarks

The approach followed by the EPC was to develop default SRTP related API specifications based on the translation of the existing XML messages detailed in the SRTP scheme Implementation Guidelines into API JSON format.
Therefore, the API flows and architecture can still be optimised, but based on the possible market feedback received, it is foreseen to enhance these SRTP related API specifications in the future.

Security related topics (i.e., identification, authentication, authorisation…) are not covered in the SRTP related API specifications. Recommendations will be provided at a later stage, by the end of 2022, in a separated document.

The SRTP related API specifications cover the SRTP related messages exchanged between the Payee's SRTP Service Provider and the Payer's SRTP Service Provider, in both directions. The two actors being API client or server depending on the situation.

Since some interactions may not be completed synchronously, a call back possibility has been set to send back asynchronous responses.

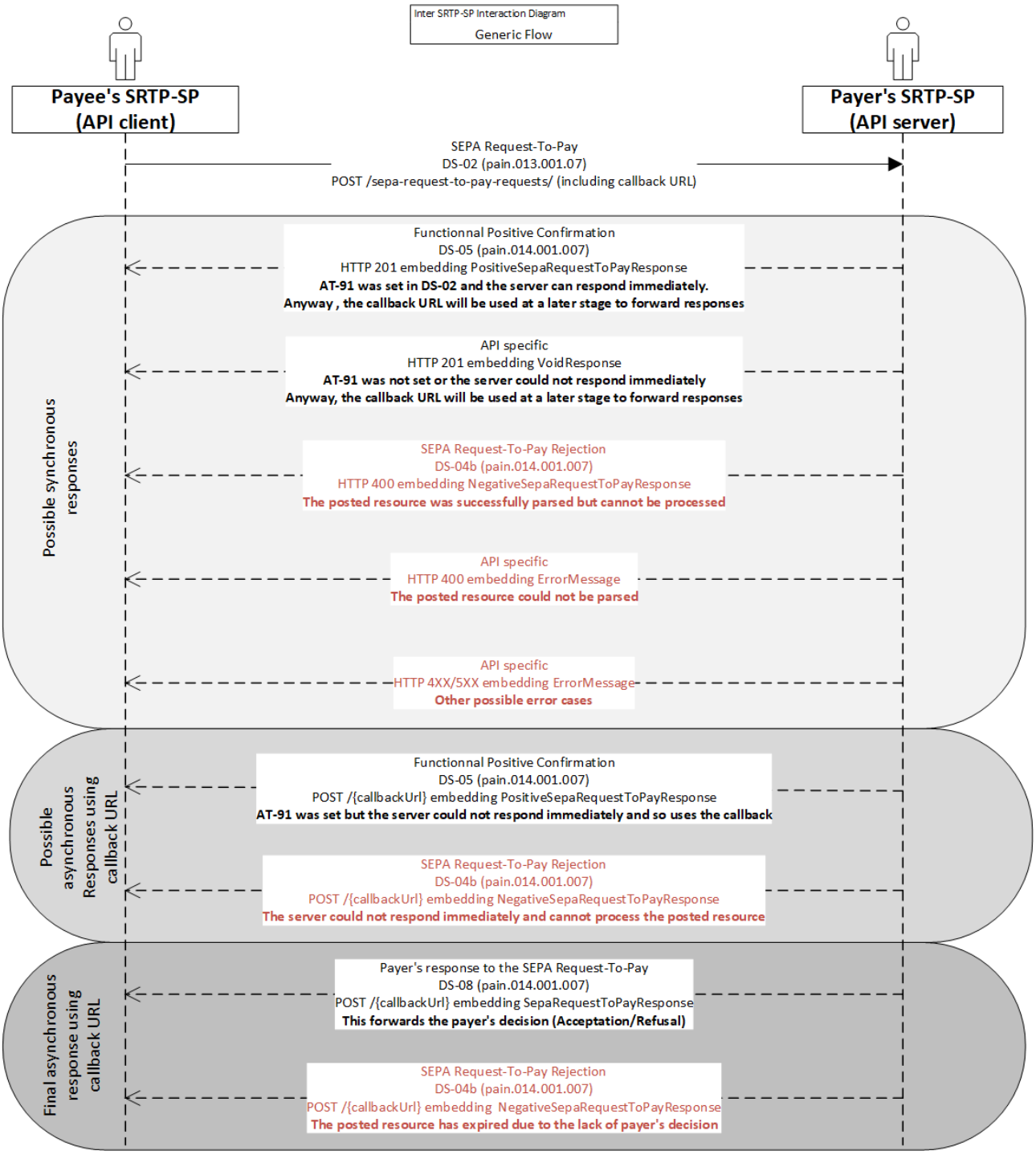
The following character case conventions are used:

- Upper CamelCase for components definition's names
- Lower CamelCase for properties name
- Spinal-case for path components

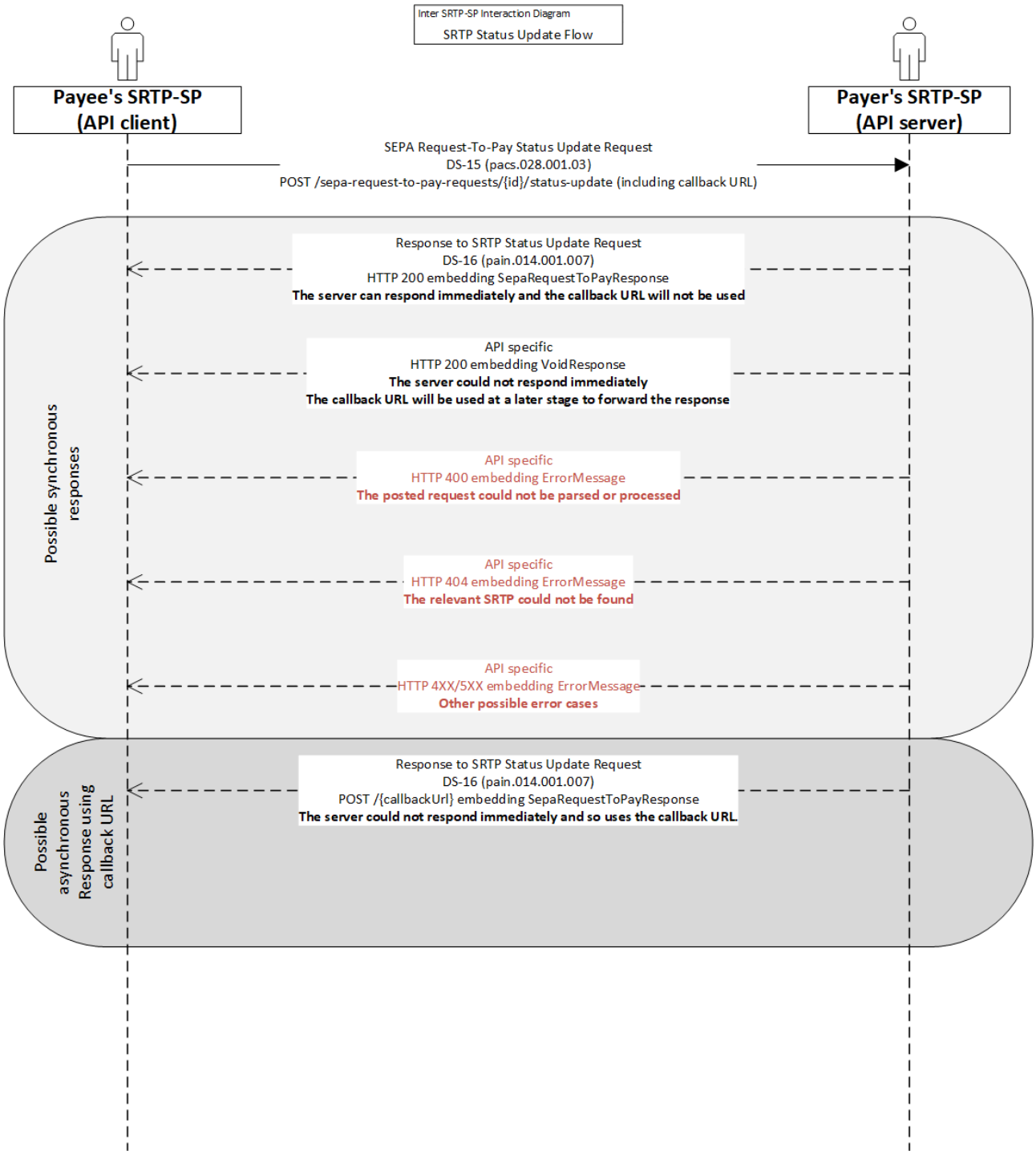
3. High level default EPC SRTP related API specifications flows

Generally, the default SRTP related API specifications flows follow the same logic as the one of the messages described in the SRTP scheme Implementation Guidelines.

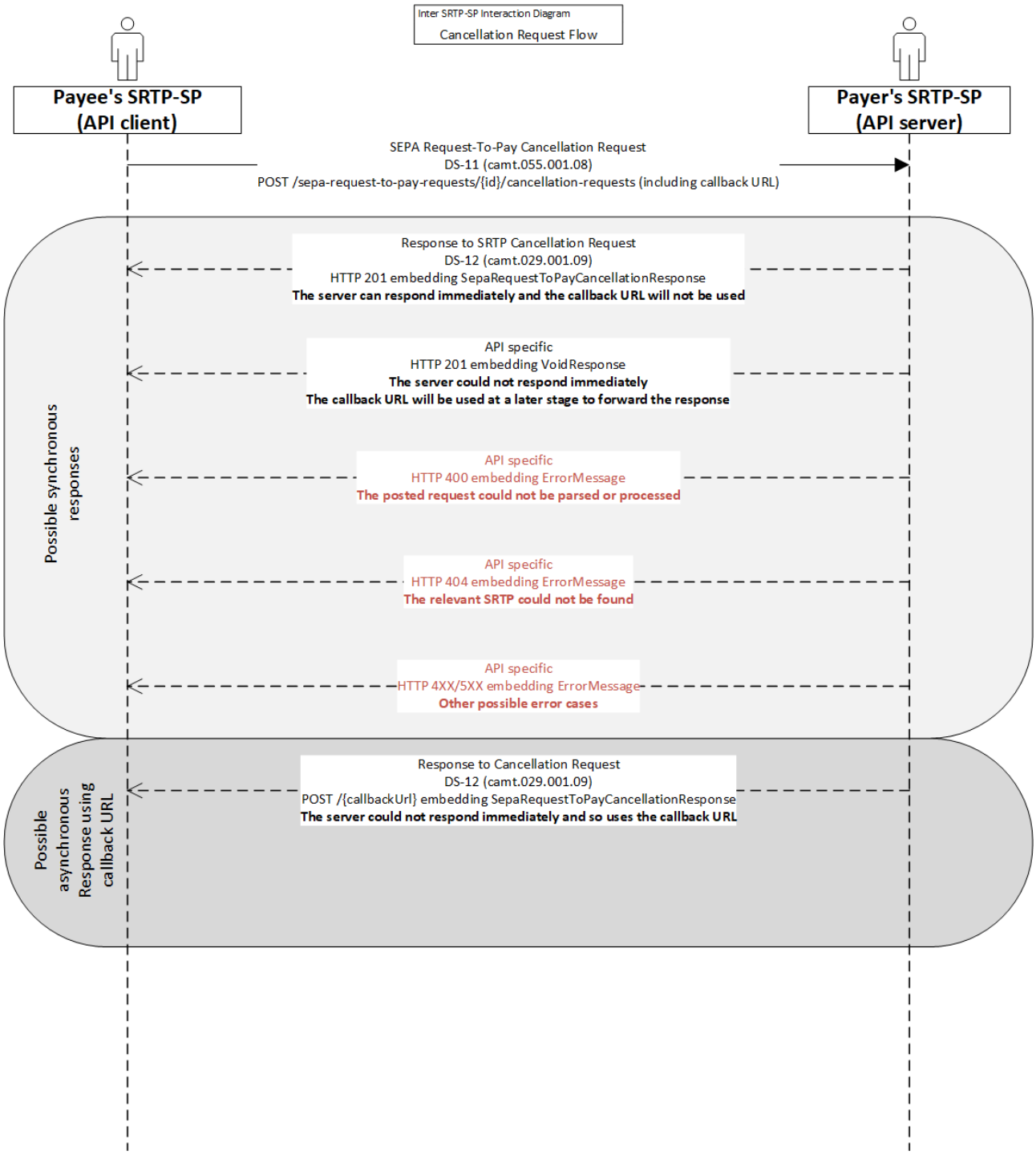
3.1 Generic flow


Inter SRTP-SP Interaction Diagram
Generic Flow
Payee's SRTP-SP
(API client)
Payer's SRTP-SP
(API server)
SEPA Request-To-Pay
DS-02 (pain.013.001.07)
POST /sepa-request-to-pay-requests/ (including callback URL)
Possible synchronous responses
Functionnal Positive Confirmation
DS-05 (pain.014.001.007)
HTTP 201 embedding PositiveSepaRequestToPayResponse
AT-91 was set in DS-02 and the server can respond immediately.
Anyway , the callback URL will be used at a later stage to forward responses
API specific
HTTP 201 embedding VoidResponse
AT-91 was not set or the server could not respond immediately
Anyway, the callback URL will be used at a later stage to forward responses
SEPA Request-To-Pay Rejection
DS-04b (pain.014.001.007)
HTTP 400 embedding NegativeSepaRequestToPayResponse
The posted resource was successfully parsed but cannot be processed
API specific
HTTP 400 embedding ErrorMessage
The posted resource could not be parsed
API specific
HTTP 4XX/5XX embedding ErrorMessage
Other possible error cases
Possible asynchronous Responses using callback URL
Functionnal Positive Confirmation
DS-05 (pain.014.001.007)
POST /{callbackUrl} embedding PositiveSepaRequestToPayResponse
AT-91 was set but the server could not respond immediately and so uses the callback
SEPA Request-To-Pay Rejection
DS-04b (pain.014.001.007)
POST /{callbackUrl} embedding NegativeSepaRequestToPayResponse
The server could not respond immediately and cannot process the posted resource
Final asynchronous response using callback URL
Payer's response to the SEPA Request-To-Pay
DS-08 (pain.014.001.007)
POST /{callbackUrl} embedding SepaRequestToPayResponse
This forwards the payer's decision (Acceptation/Refusal)
SEPA Request-To-Pay Rejection
DS-04b (pain.014.001.007)
POST /{callbackUrl} embedding NegativeSepaRequestToPayResponse
The posted resource has expired due to the lack of payer's decision

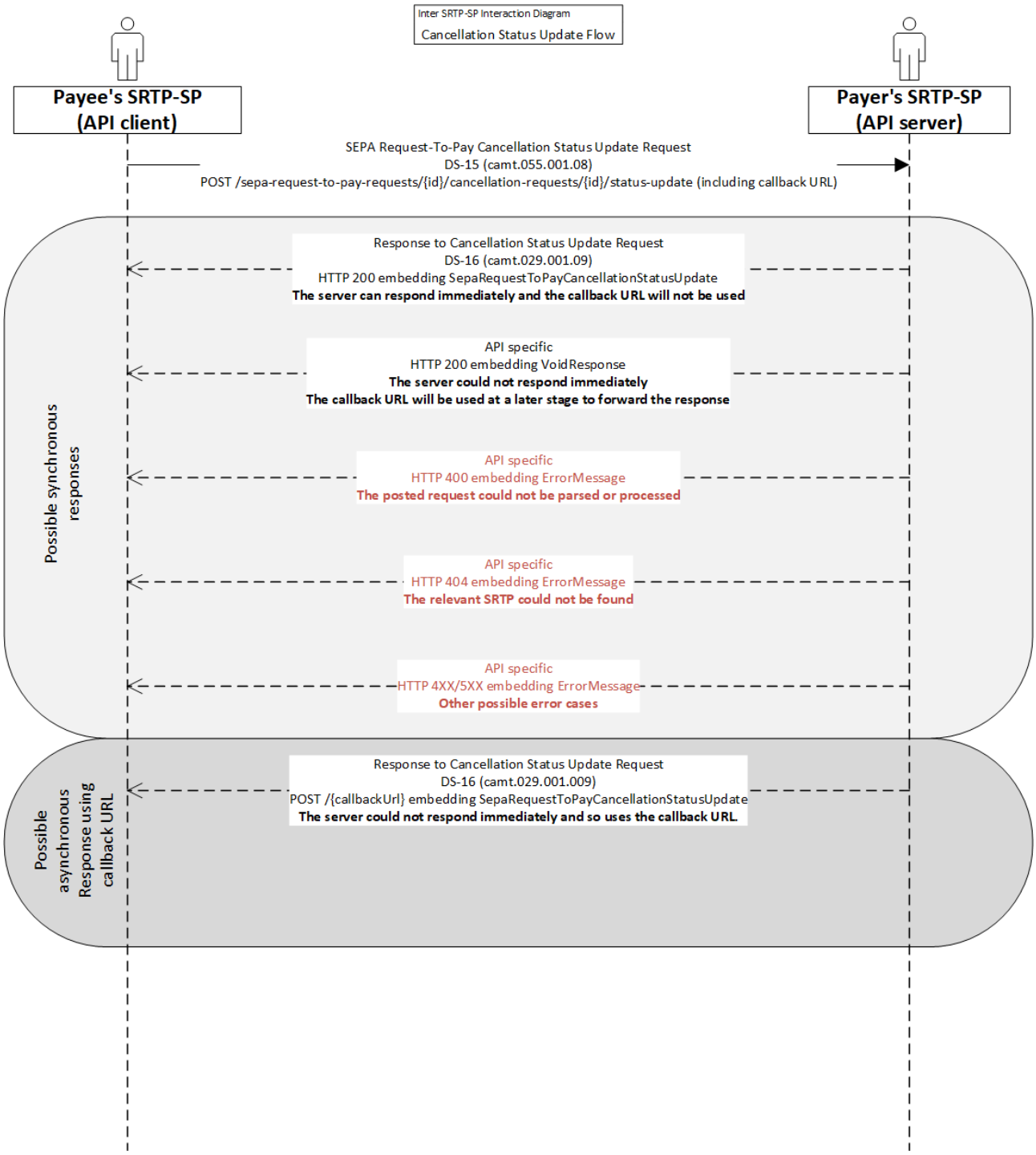
3.2 SRTP Status Update



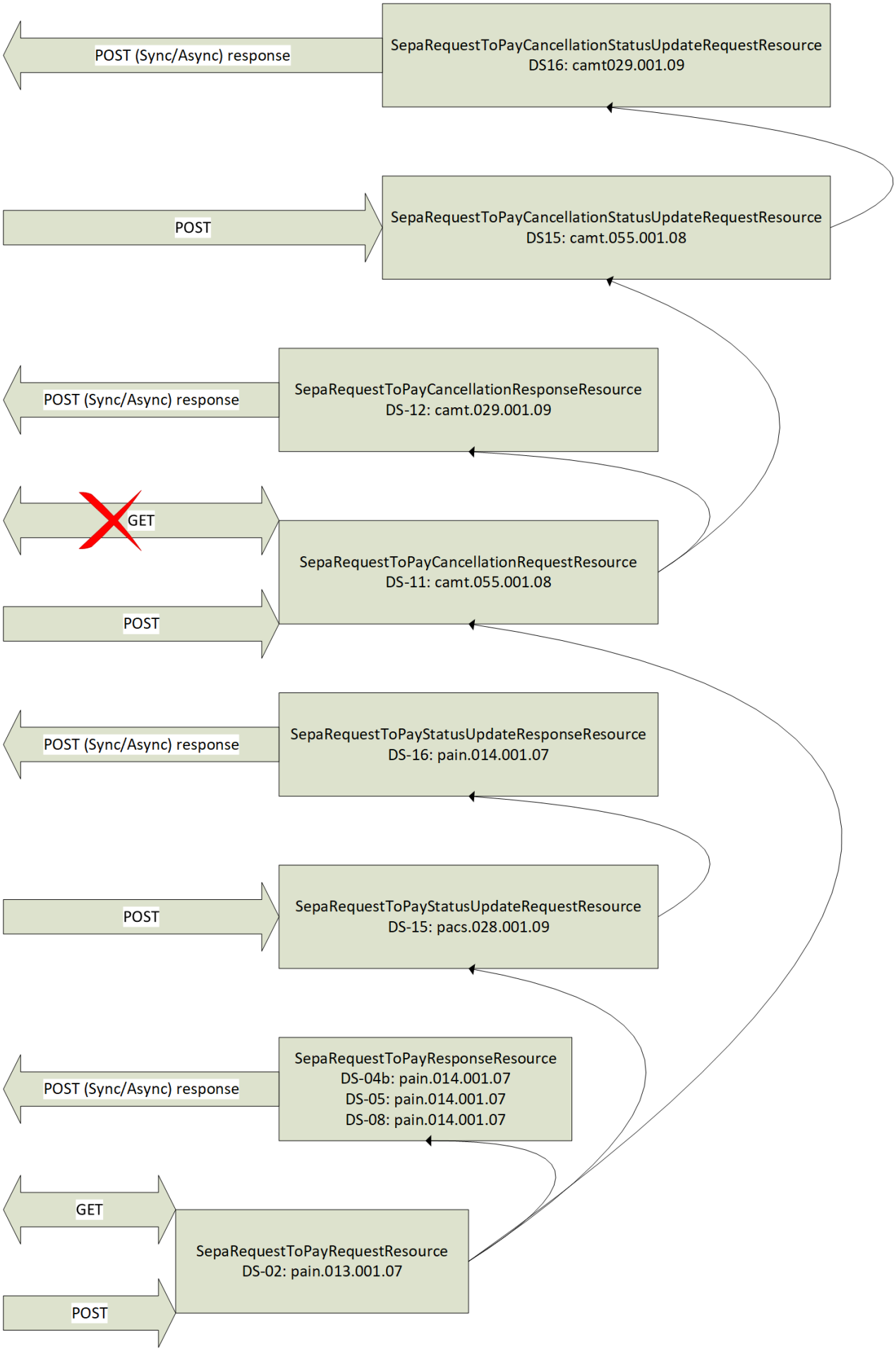
3.3 SRTP Cancellation Request



3.4 SRTP Cancellation Request Status Update



3.5 Resource Tree


POST (Sync/Async) response
SepaRequestToPayCancellationStatusUpdateRequestResource
DS16: camt029.001.09
POST
SepaRequestToPayCancellationStatusUpdateRequestResource
DS15: camt.055.001.08
POST (Sync/Async) response
SepaRequestToPayCancellationResponseResource
DS-12: camt.029.001.09
GET
SepaRequestToPayCancellationRequestResource
DS-11: camt.055.001.08
POST
POST (Sync/Async) response
SepaRequestToPayStatusUpdateResponseResource
DS-16: pain.014.001.07
POST
SepaRequestToPayStatusUpdateRequestResource
DS-15: pacs.028.001.09
POST (Sync/Async) response
SepaRequestToPayResponseResource
DS-04b: pain.014.001.07
DS-05: pain.014.001.07
DS-08: pain.014.001.07
GET
SepaRequestToPayRequestResource
DS-02: pain.013.001.07
POST