

SECURE PAYMENT CONFIRMATION (SPC)

EXPLORING USE-CASES

2022-11-10

PROGRESS THUS FAR

- SPC has received a lot of interest and traction.
- Most adoption/interest is for 3D Secure Card payments (included in EMV 2.3.1 spec)
- SPC designed for Open banking (PISP) too, but not aware of any experiments
 - SPC today does not cover all Open Banking use cases (e.g. Consent/Future Dated)
- 3D Secure also has a number of 'other'/similar transaction types
 - Recurring transaction, ID&V (proving customer consent)

EXISTING SPC CAPABILITY

Current set of fields

- Amount & Currency
- Merchant Name (and domain)
- Source-of-Funds Description and Logo (could be card or account)

Existing use-case/transaction type

- Person to Merchant Payment
- Supports Card Pull Payment and potentially Open Banking Payment (Merchant card pull, Account push to merchant)

Authentication mechanism

- Full 2FA Authentication (possession + knowledge/inherence)
- Platform Authenticators only (due to technical limitation)

TODAY'S TOPIC IS...

What's next for Secure Payment Confirmation?

POSSIBLE AREAS OF EXTENSION

Additional fields



New Use-cases/Transactions



Other forms of Authentication



EMV 3DS Design: <https://3ds-ux-guidelines.emvco.com/>

Open Banking API: Customer Experience Guidelines v1-1

OPEN TICKETS (6 / 16)



<https://github.com/w3c/secure-payment-confirmation/issues>

- #197: Additional fields: Issuer & payment network logos

Additional fields



- #187 Understanding of who is authenticating for whom (“*psp.com, on behalf of bank.com*”)

- #185: SPC for Recurring payments

New Use-cases/Transactions

- #186: SPC for non-payment use cases

- Authenticating the End User for the purpose of granting access to account information for a Third-Party Provider (TPP)



- #12: Support roaming authenticators.

Other forms of Authentication

- #34: Suggestion to enable Frictionless Flow



Additional fields



- Trust this merchant (*required by EMV 3DS 2.2*)
- Trust this device
- Additional network/association logos & merchant context
- Potentially 'redirect back' ability (*first party use-case*)
- (*also List of Accounts/ selected Account on next page*)

Secure checkout

Cancel



Payment authenticated

Your payment as been authenticated.

Same security, faster payments i

For stores you trust, you can remove these steps for future payments so payments go straight through.



Fast-track future payments

You can change this at anytime within the settings of your banking app.

CONTINUE

> Learn more about authentication

> Need some help?

ASPSP

YOUR ASPSP

Select and confirm account(s) to share information with TPP AISP

Current Account 48-59-60 72346879	<input checked="" type="checkbox"/>
Savings Account 10-159-60 789012345	<input type="checkbox"/>
Credit Card Account 3456 8126 2193 8271	<input type="checkbox"/>

4 Review the data you will be sharing >

TPP AISP will access your information from your account(s) until: **Monday 20th March 2020**

Cancel Proceed 5

ACCOUNT SELECTION (ASPSP)

Perhaps not now

Additional fields



New Use-cases/Transactions



- Consent to store/issue a payment token to a merchant (ID&V Tokenization)
 - E.g. Card loaded into a wearable / Card stored at Merchant
 - Large focus on Tokenization. Including for Delegated Authentication.
- Recurring purchases (including subscription services)
 - E.g. sign up for streaming services on a monthly amount
 - Some support various limitations/consents
- Future dated payments
- Consent to Standing-orders/

- Person to Person payments

Featured journeys

4.1.1 Single Domestic Payments - a/c selection @ PISP

4.1.2 Single Domestic Payments - a/c selection @ PISP
(Supplementary info)

4.1.2.1 Single Domestic Payments - BACS and CHAPS

4.1.3 Single Domestic Payments - a/c selection @ ASPSP

4.1.4 Single Domestic Scheduled Payments (Future Dated)

4.1.5 Standing Orders

4.1.6 International Payments

4.1.7 Bulk/Batch Payments

4.1.8. Multi-authorisation Payments

4.1.9. Confirmation of Funds for PISP - Y/N Response



YOUR ASPSP

Confirm payment details


Please check the details below are correct.

Payee:	MERCHANT
Sort code:	20-40-60
Account number:	98765432
Reference:	MERCHANT LTD
Amount:	£31.94
Payment date:	19.01.2020

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Payment date 

19.01.20 is a Sunday and future dated payments can be made during business days only.

This payment will be made on 20.01.20

Press Proceed to make payment

Cancel **Proceed**

FUTURE DATED PAYMENTS



RECURRING PAYMENTS

EMV 3D Secure

Field	Format/Size	Description
recurringAmount	Numeric max 48 chars	Recurring amount in minor units of currency with all punctuation removed.
recurringDate	Numeric 8 chars Format: YYYYMMDD	Effective date of new authorised amount following first/promotional payment in recurring transaction.
recurringExpiry	Numeric 8 chars Format: YYYYMMDD	Date after which no further authorisations are performed.
recurringFrequency	Numeric max 4 chars	Indicates the minimum number of days between authorisations.
recurringInd.amountInd	•01 = Fixed Purchase Amount •02 = Variable Purchase Amount	Indicates whether the recurring or instalment payment has a fixed or variable amount.
recurringInd.frequencyInd	•01 = Fixed Frequency •02 = Variable Frequency	Indicates whether the recurring or instalment payment has a fixed or variable frequency.

Open Banking UK

Field	Format/Size	Description
MaximumIndividualAmount.Amount	Numeric with decimal point	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
ValidFromDateTime	ISODateTime	Start date time for which the consent remains valid. The time element of the date should be disregarded in computing the date range and pro-rating.
ValidToDateTime	ISODateTime	End date time for which the consent remains valid. The time element of the date should be disregarded in computing the date range and pro-rating.
PeriodicLimits.Amount		Maximum amount that can be specified in all payment instructions in a given period under this VRP consent. If the PeriodAlignment is Calendar, the limit is pro-rated in the first period to the remaining number of days.
PeriodicLimits.PeriodType	Day, Week, Fortnight, Month, Half-year, Year	Period type for this period limit.
PeriodicLimits.PeriodAlignment	Consent, Calendar	Specifies whether the period starts on the date of consent creation or lines up with a calendar. As the ISO calendar does not support or provide any guidance on when a fortnight should start, hence for a PeriodType of Fortnight the PeriodAlignment must be Consent.
VRPType	UK.OBIE.VRPTYPE.Sweeping UK.OBIE.VRPTYPE.Other	The types of payments that can be made under this VRP consent. This can be used to indicate whether this includes sweeping payment or e-commerce payments. Currently in the UK sweeping is used within customer's accounts but there is a potential for third parties to use it for other payments use cases.
PSUInteractionTypes	OffSession InSession	Indicates interaction type, currently if customer is present or not present. If the PSU IP address is supplied, it is inferred that the PSU is present during the interaction.



YOUR ASPSP

9 Confirm payment details
Please check the details below are correct.

Payee:	MERCHANT
Sortcode:	09-01-29
Account No.:	12347891
IBAN:	BE68539007657040
Reference:	MERCHANT LTD
Recipient Country:	Belgium
Currency:	Euros €
Exchange Rate:	1 GBP=1.1234 EUR

10 This rate is valid for the next 5 minutes, if you navigate away from this page now the rate we've quoted you may change

Amount:	411.31 EUR - 308.07 GBP
Charges:	15.00 GBP
Amount to pay:	323.07 GBP
Payment Date:	20/01/18

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Please select your charges model

SHARE SENDER RECEIVER

Review payment account:

From:	Current Account
	48-59-60 12346879

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13 Press Proceed to make payment

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Cancel Proceed

INTERNATIONAL PAYMENTS

Perhaps not now

New Use-cases/Transactions



YOUR ASPSP

Confirm payment account
Please check the details below are correct.

Reference:	0223_ABC
Description:	Payroll 200418
No. of Payees:	25
Currency:	GBP £
Payment Method:	BACS
Amount:	75,064.71 GBP
Date to send:	20/01/2018

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Business Account 48-59-60 72346879	<input checked="" type="checkbox"/>
Current Account 10-11-12 789012345	

10 Press Proceed to submit bulk/batch payments

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Cancel Proceed

BULK/BATCH PAYMENTS



YOUR ASPSP

7 Payment authorisation:
Please check the details below are correct.

Payee:	MERCHANT
Sort code:	20-40-60
Account number:	98765432
Reference:	MERCHANT LTD
Amount:	£1299.00

This payment needs authorisation from the below list of signatories:

David Willis	(You)
Justin Clark	(Pending)
Susan Black	(Pending)

10 Press Proceed to authorise payment

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MULTI-AUTH PAYMENTS



ADDITIONAL FORMS OF AUTHENTICATION

- Possession Factor only (not European SCA)
 - WebAuthn based 'User Presence' only
 - Browser based keypair
- Frictionless based on Silent cryptogram (Risk based Auth)
- Browser based 'Trust this browser' logic (for possession based)



DISCUSSION

		Interest	Priority
Additional field	Trust this merchant		
Additional field	Trust this device		
Additional field	Additional network/association logos		
New Use-case	List of accounts		
New Use-case	ID&V: consent to 'issue payment credential'		
New Use-case	Future dated Payment		
New Use-case	Recurring payments		
Alt Auth	Only Possession (with OS backed)		
Alt Auth	Possession with Browser only		
Alt Auth	Silent Authentication		

Thank you...