



3DS Working Group Update – TPAC 2023

Sep 2023



AGENDA



SPC in 3DS [Current State]

Blockers for SPC Adoption

SPC in 3DS [Ideal future state]

Mock-ups for suggested UX Changes

3DS Specs & SPC – Current State [1/2]



EMV 3DS Reference	RP	SPC API invoked By	Supported by EMV 3DS Versions	Supported Channels
Merchant initiated SPC	Issuer	Merchant	EMV 3DS v2.3.1.1	Browser (Chrome, Edge)
Issuer Initiated SPC	Issuer	Issuer	All active EMV 3DS versions	Browser (Chrome, Edge)
Delegated Authentication	Merchant/PSP	Merchant/PSP	EMV 3DS v2.2+	Browser (Chrome, Edge)

3DS Specs & SPC – Current State [2/2]



EMV 3DS Reference	Supported Use-Cases
Merchant initiated SPC	All Payment [PA] Use-cases with one time/simplified payments
Issuer Initiated SPC	All Payment [PA] Use-cases with one time/simplified payments
Delegated Authentication	All Payment [PA] Use-cases with one time/simplified payments
Identified Unsupported Use-Cases/Gaps	
Recurring Payments, Subscriptions, Installments Issue#185 Non-payment [NPA] Issue#186 UX [issuer, network logos] Issue #197	

3DS Specs & SPC – Blockers for Industry Adoption



Support for Recurring Payments	Lack of more Channels	Feature Awareness	UX
<ul style="list-style-type: none"> Regulated markets require users to be informed of the complete transaction details (frequency, amount etc.) The check-out/issuer challenge pages and SPC modal window may show different information 	<ul style="list-style-type: none"> Currently only Chrome supports SPC Investment in SPC based solutions hindered if not supported on Safari <p>* SPC supported in Apps through Android will help address some of these</p>	<ul style="list-style-type: none"> SPC is a new feature and not very well understood across providers in Payments domain <p>* EMVCo is educating industry through spec literature and white papers</p>	<ul style="list-style-type: none"> Existing 3DS users are educated to look for issuer, network logos on authentication pages Feedback welcome

3DS Specs & SPC – Ideal Future State



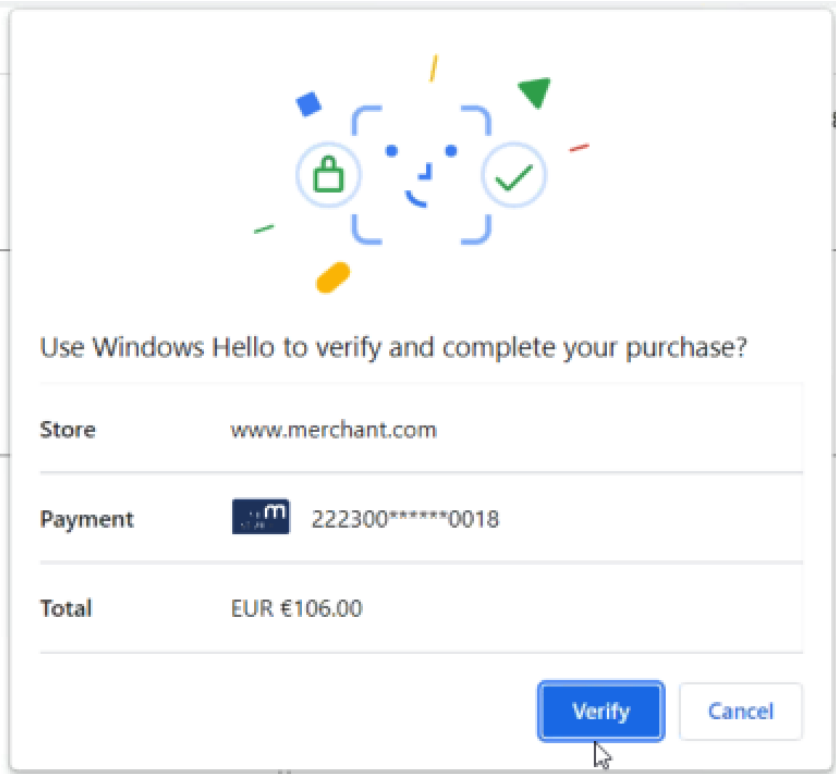
Support for other use-cases	Support on all channels	Industry Adoption	Others?
<ul style="list-style-type: none"> • Recurring transactions supported through SPC API • Non-payment supported for ID&V • UX Changes 	<ul style="list-style-type: none"> • Chrome, Safari • Support through Apps on Android, iOS 	<p>In the wild implementations of all SPC flows in 3DS</p>	<ul style="list-style-type: none"> • Feedback welcome

SPC UI Mock-Ups



Enhanced 3DS UI

Current SPC UI



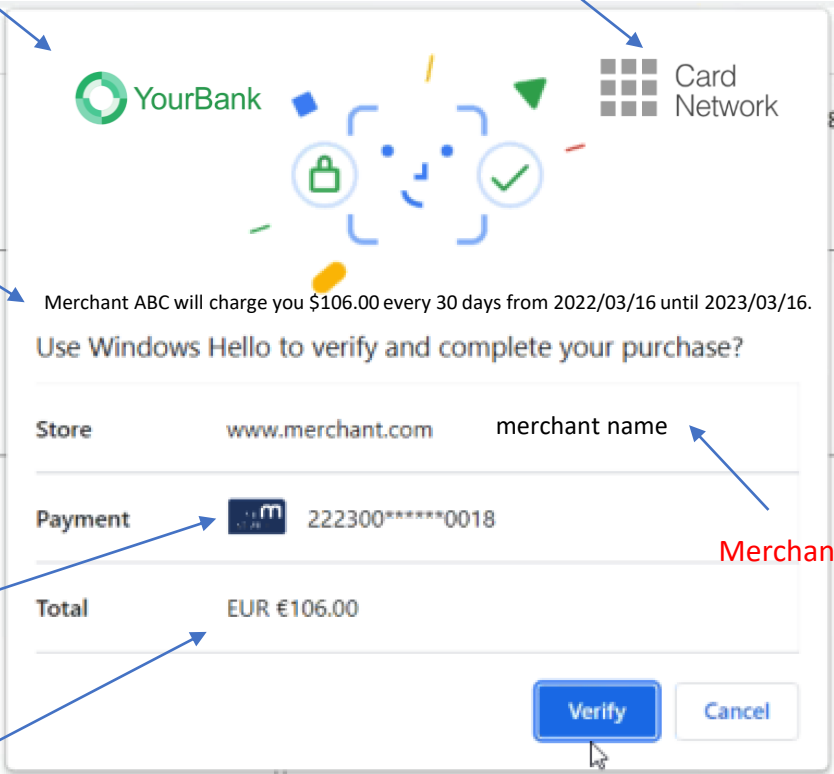
spcTransData.issuerImageSpc

spcTransData.pslImageSpc

ACS information to CH

Card Art size and resolution

SPC for non-payment

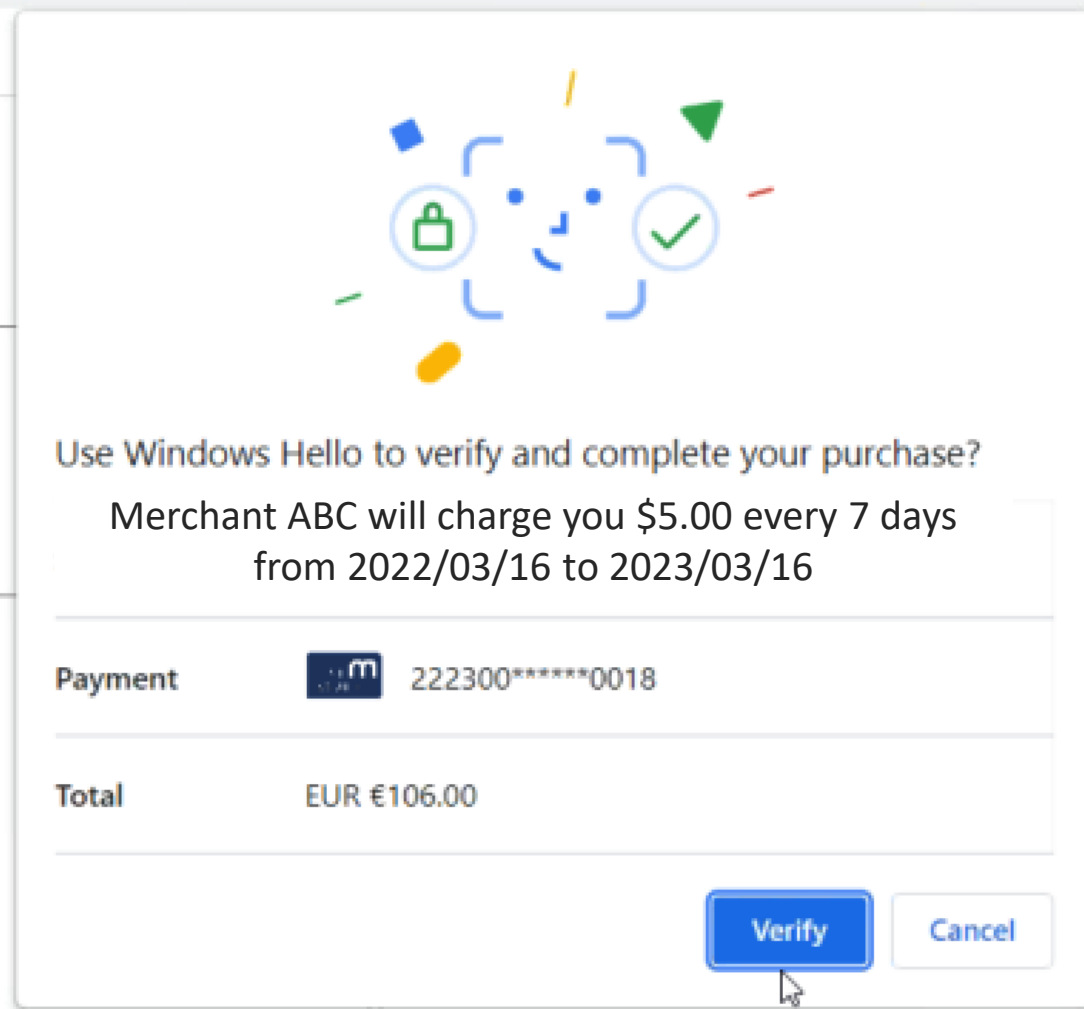


Merchant name by ACS

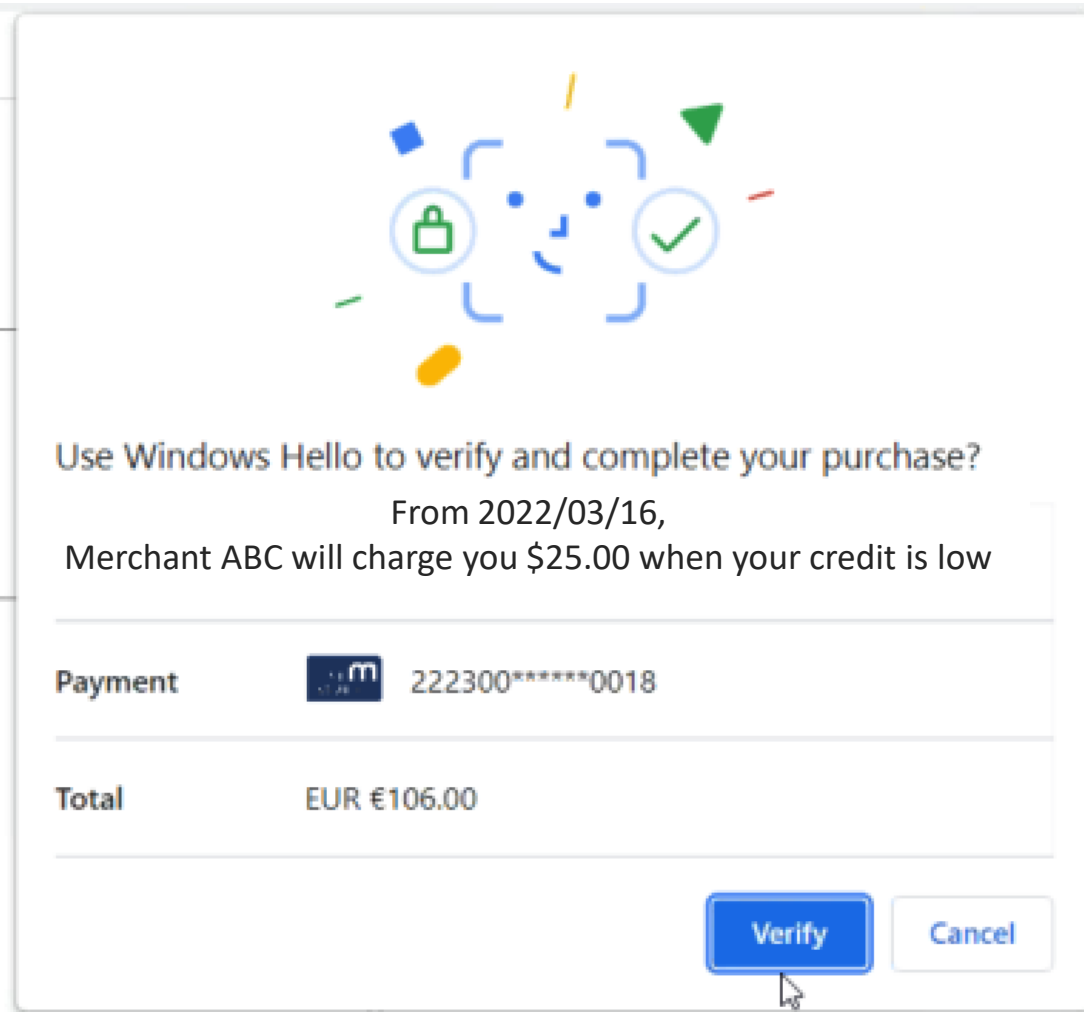
RECURRING TRANSACTION 1/4



Fixed amount and fixed frequency:
example subscription newspaper,
cloud service

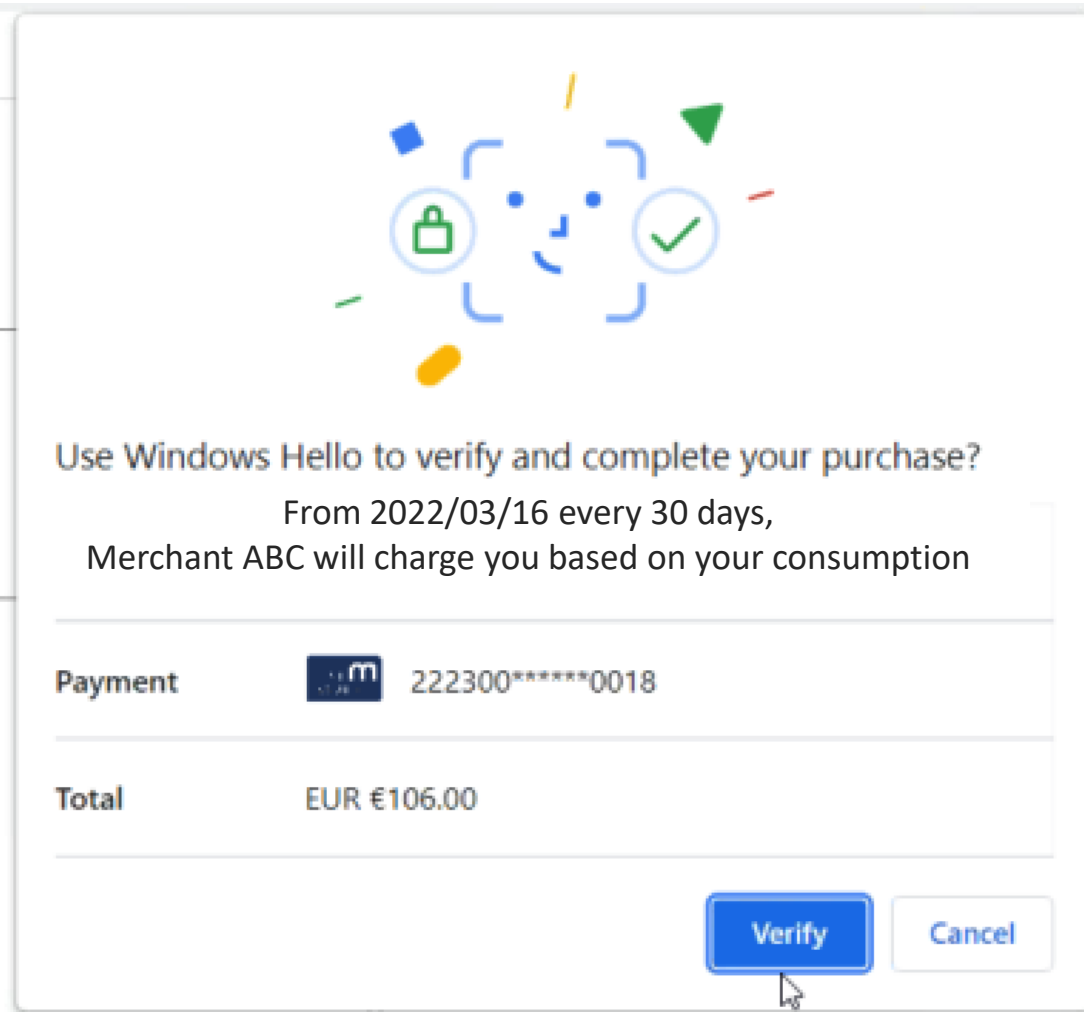


RECURRING TRANSACTION 2/4



Fixed amount and variable frequency : example prepaid train travel card with automatic top up.

RECURRING TRANSACTION 3/4

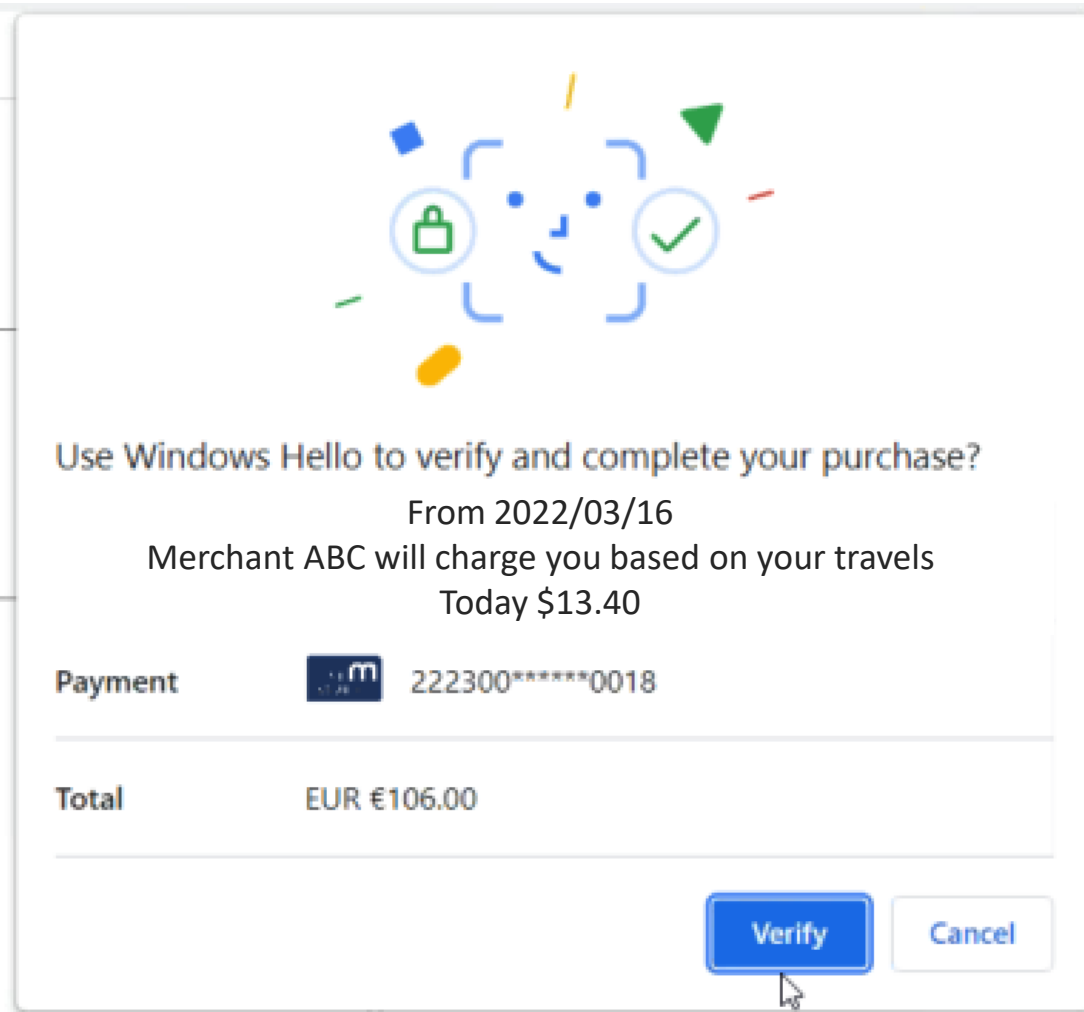


Variable amount, fixed frequency:
example utility bills

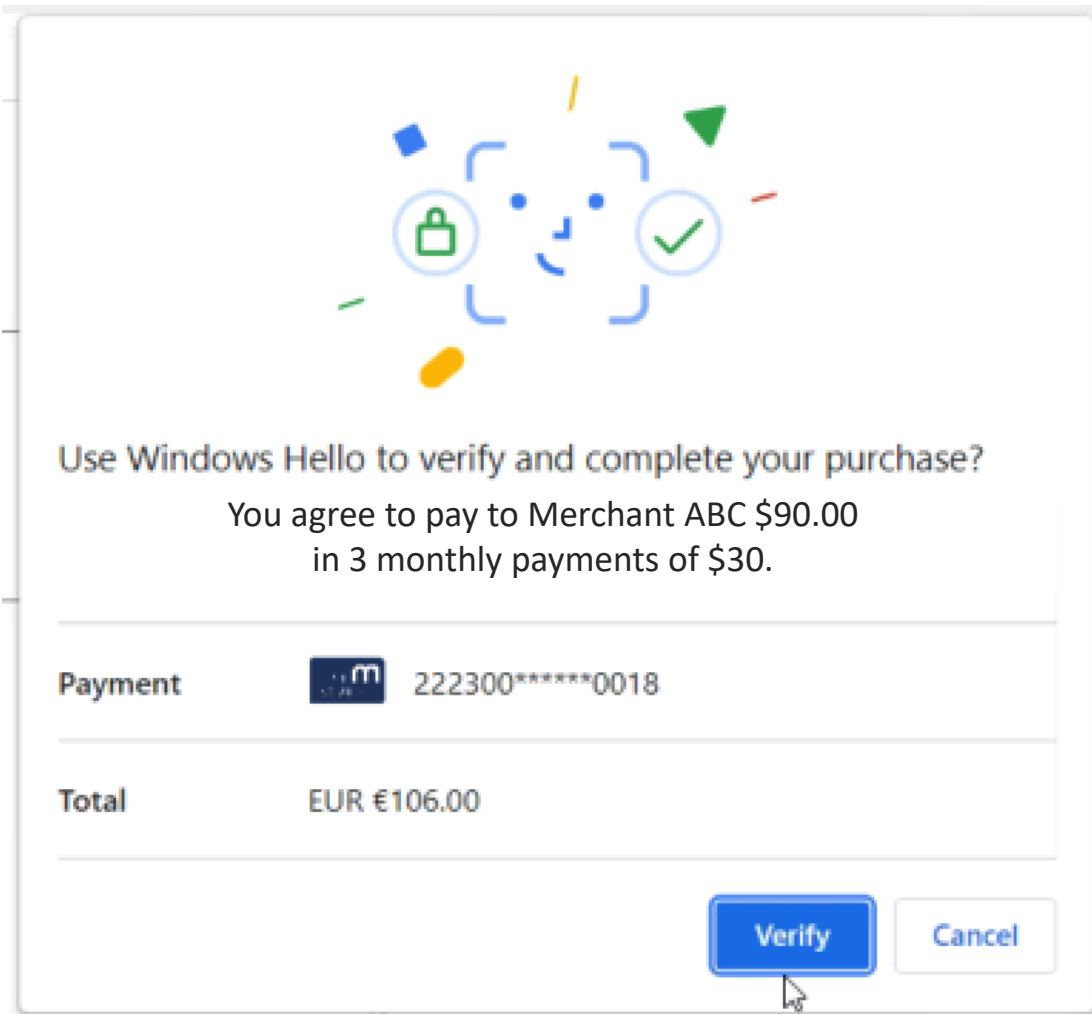
RECURRING TRANSACTION 4/4



Variable amount, variable frequency: example pay per use travel journey




Installment transaction



Use Windows Hello to verify and complete your purchase?

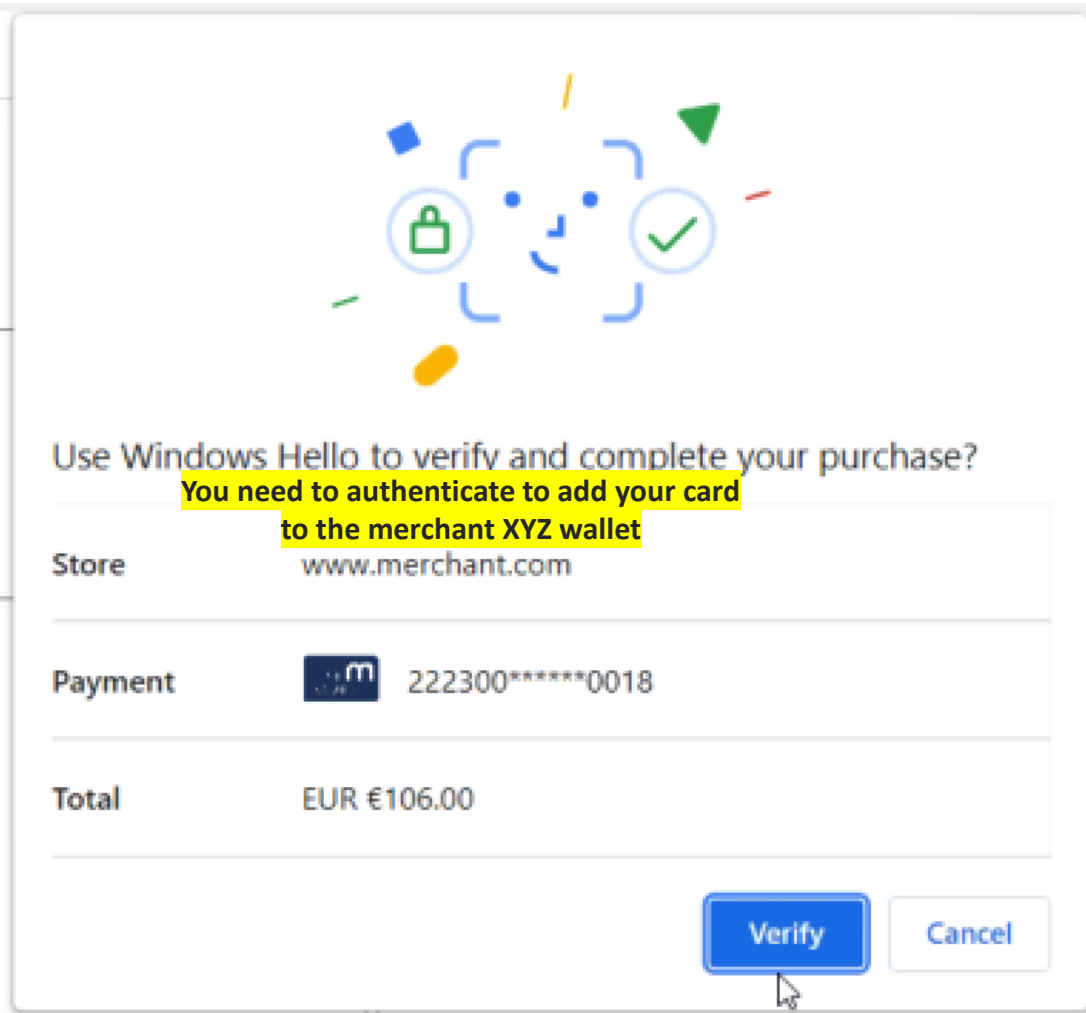
You agree to pay to Merchant ABC \$90.00
in 3 monthly payments of \$30.

Payment  222300*****0018

Total EUR €106.00


The dialog box features a decorative graphic at the top with a shopping bag icon and a checkmark icon. The text is centered and uses a clean, sans-serif font. The payment details are presented in a structured layout with horizontal lines separating the sections. The buttons are located at the bottom right of the dialog.

Non-Payment Transaction



Use Windows Hello to verify and complete your purchase?

You need to authenticate to add your card to the merchant XYZ wallet

Store	www.merchant.com	
Payment		222300*****0018
Total	EUR €106.00	

Suggested Data Dictionary



Challenge Info Text/Cardholder Info

Start Date

End Date (Optional)

Amount + Currency – already specified in SPC

Frequency (days)

Instalment amount + Currency

Instalment number

Suggested Data Dictionary - Examples



1. Fixed amount and fixed frequency

- From **2022/03/16** until **2023/03/16**, Merchant ABC will charge you **\$5.00** every **7** days.

Start date

End date

Amount

Frequency

2. Fixed amount and variable frequency

- Today **2022/03/16**, Merchant ABC will charge you *the agreed amount of* **\$25.00** based on your usage.

Start date

Amount

3. Variable amount, fixed frequency

- From **2022/03/16** until **2023/03/16**, Merchant ABC will charge you based on your usage every **30** days, today **\$14.40**

Start date

End date

Frequency

Amount

4. Variable amount, variable frequency

- Today **2022/03/16**, Merchant ABC will charge you **\$13.40** based on your usage.

Start date

Amount

5. installment

- Today **2022/03/16**, Merchant ABC will charge you **\$90.00** in **3** payments of **\$30** every **30** days.

Start date

Amount

Instalment nb

Instalment amount

Frequency

Thank You

