SafeCharge

SafeCharge Smart 3DS Service

Strong Customer Authentication, Security and Conversions

The need for Strong Customer Authentication

The Second Payment Service Directive (PSD2) comes in full effect in September 2019 and one of the most important aspect of PSD2 is Strong Customer Authentication (SCA). As a part of SCA, businesses across Europe are required to authenticate customers payment transactions using two or three forms of authentications whenever necessary.

Strong Customer Authentication

Something the customer knows
(e.g password or pin)

Something the customer has
(e.g phone or hardware token)

Something the customer is
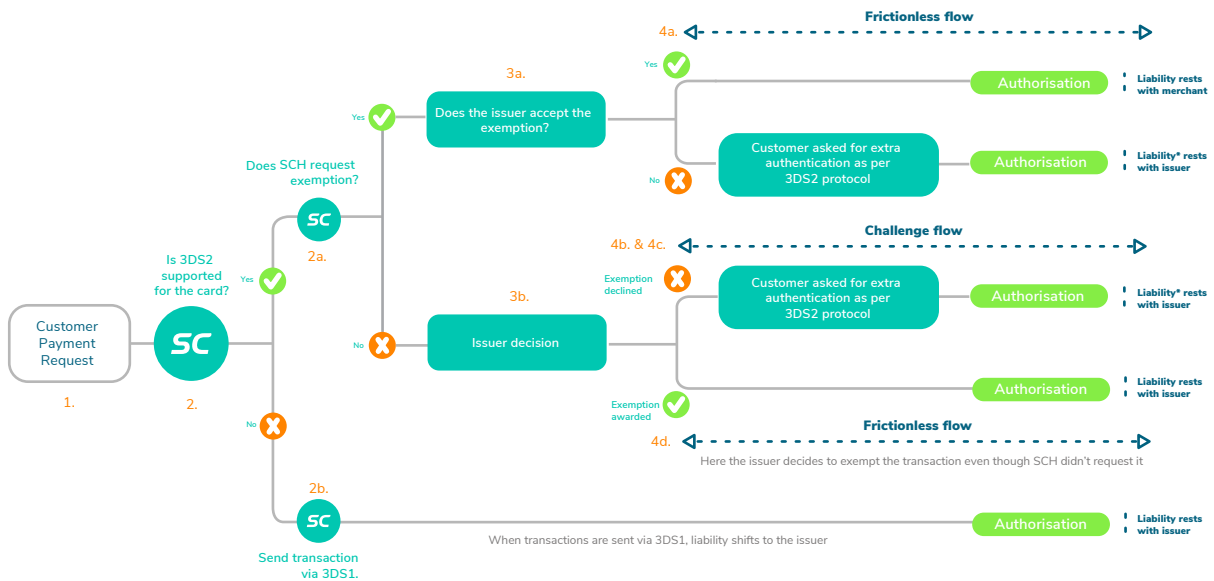(e.g fingerprint or face recognition)

3D Secure2 protocol (3DS2) is an effective means of managing the SCA requirements. An updated protocol by EMVCo, (a collaboration between card schemes, banks, processors and other industry stakeholders), 3DS2 supports seamless payment experience that was lacking in the mobile behaviour with 3DS1, while ensuring security of transactions. Businesses, issuers and acquirers are required to be ready with the 3DS2 protocol by September 2019.

SafeCharge Smart 3DS Service

SafeCharge Smart 3DS service is a solution that supports merchants in managing requirements related to strong customer authentication checks, optimising customer's user experience and maximising authorisation rates. The service dynamically routes transactions via the appropriate 3DS flow. Its online exemption submission engine takes decisions in real-time and based on merchant preferences passes on all the relevant data to the issuer, to facilitate a frictionless flow when possible. With SafeCharge Smart 3DS various parameters are analysed in a fraction of a second and decisions are made to ensure that the transaction is routed in the most efficient way to maximise conversions.

Our customisable risk engine also works behind the scenes to assess the risk of each transaction based on parameters set by the merchants. Every transaction is scored and goes through our risk engine to ensure secure transactions, even if the transaction is exempt.

How does SafeCharge Smart 3DS work?

Frictionless flow

4a.

3a.

Does the issuer accept the exemption?

Yes

Authorisation — Liability rests with merchant

Does SCH request exemption?

No

Customer asked for extra authentication as per 3DS2 protocol

Authorisation — Liability* rests with issuer

Yes

SC

2a.

Is 3DS2 supported for the card?

Yes

Challenge flow

4b. & 4c.

Exemption declined

Customer asked for extra authentication as per 3DS2 protocol

Authorisation — Liability* rests with issuer

3b.

No

Issuer decision

Authorisation — Liability rests with issuer

Customer Payment Request

SC

No

Exemption awarded

Frictionless flow

4d.

Here the issuer decides to exempt the transaction even though SCH didn't request it

1.

2.

2b.

SC

Authorisation — Liability rests with issuer

When transactions are sent via 3DS1, liability shifts to the issuer

Send transaction via 3DS1.

* Liability rests with the issuer only if the chargeback is from a fraud category

All exemption decisions rest with the issuer

Step 1. Customer initiates a payment request on the payment page of a merchant website or in a mobile app.

Step 2. SafeCharge Smart 3DS initiates a sequence of commands behind the scenes. First it checks with the cardholder bank (issuer)to determine if 3DS2 is supported.

Step 2a. In case the issuer supports 3DS2, SafeCharge Smart 3DS initiates the exemption request sequence where appropriate. Based on machine learning and merchant's risk appetite, the acquirer can either opt for the exemption or leave the decision to the issuer whether to initiate frictionless or challenge flow. For every 3DS2 transaction,

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Smart 3DS shares data (based on merchant's approval) such as shipping address, device ID, order and product details and previous transaction history with the issuer in order to assess the risk level of the transaction. The issuer may accept or reject the request for an exemption, or may apply their own exemption. The final decision about exemption solely rests with the issuer.

Step 3a. If the issuer accepts the exemption, there are two possible scenarios:

Step 4a. If the transaction falls under exemptions and the issuer authorises it, it goes through the **frictionless flow**. For all the transactions exempted in this way, the liability rests with the merchant.

Step 4b. In case the exemption is not accepted, the transaction is passed on for extra authentication. The customer is requested by his card issuer to provide additional authentication information such as a password, biometric id etc. Based on this data the issuer can either refuse or authorise the transaction. **This is called the Challenge flow.**

Step 3b. If the exemption is not requested, there are two scenarios.

Step 4c. If the issuer accepts the request (that is to send the transaction without exemption), then the transaction is routed via 3DS2 and goes through the **Challenge flow.**

Step 4d. There may be a scenario where the issuer awards exemption even though Smart 3DS did not request it. In this case the transaction goes through **frictionless flow.**

Step 2b. Now in case 3DS2 is not supported by the Issuer, SafeCharge Smart 3DS routes the transactions via 3DS1. This is beneficial to the merchant as the liability for the transaction rests with the issuer even if the issuer does not support 3DS1.

Using algorithms and merchant rules, SafeCharge Smart 3DS service sends as much information as possible to the issuing banks to enable exemption decisions for transactions that can be sent through the frictionless flow and improve the authorisation rates for the merchant. Whether the transaction follows a 3DS2 or 3DS1 flow, the chargeback liability rests with the issuer. **The decision on authorising the exemptions solely rests with the issuer.**

Exemptions include:

- Low value and low risk transactions
- Secure corporate cards
- Trusted beneficiaries: customer's whitelisted merchants
- Recurring transactions and subscriptions: exempt after the first payment

Out of scope:

- Merchant Initiated Transaction
- One leg transactions: Issuer / Acquirer is out of the EEA
- MOTO (Mail orders and telephone orders)
- SCA delegation: Delegates SCA to third party providers such as wallets (e.g Apple Pay) or to merchants (e.g Amazon) that initiate SCA on their side.

Get started with SafeCharge Smart 3DS Service

SafeCharge Smart 3DS service is available for all SafeCharge customers, regardless of their technical integration and acquiring bank set-up. We enable various ways for businesses to integrate SafeCharge Smart 3DS service including

SafeCharge hosted payment page

This is the easiest kind of integration where dynamic 3DS checks flows are embedded within the hosted payment page. All the required actions are managed by SafeCharge Smart 3DS service offering a smooth checkout and authentication flow.

SafeCharge API

This **server to server** connection offers great flexibility for businesses to enable SafeCharge Smart 3DS service on their payment pages.

SafeCharge WebSDK

WebSDK offers a convenient and easy way to manage all the complexities around 3DS. Businesses have complete control over the user interface and the user experience with minimum customisation required.

Merchant Plugin (MPI)

SafeCharge also enables merchants to use SafeCharge Smart 3DS as a stand-alone solution, regardless of the payment partner used through its Merchant Plug In (MPI).

SafeCharge Smart 3DS service in a nutshell

- **More security:** Enabled by Strong Customer Authentication and smart 3DS protocol routing

- **Better user experience:** Fills the UX gaps left by 3DS1, particularly for mobile payments leading to higher checkout conversions and reduced abandonments.

- **Sales boost:** 3DS2 provides diverse data points enabling the issuer to get more information for transaction authentication, leading to higher approval rates.

- **Acquirer agnostic:** SafeCharge Smart 3DS service can be used for authentication with SafeCharge acquiring or in collaboration with other acquirers. SafeCharge transaction risk scoring adds extra accuracy with SafeCharge acquiring.

- **Ease of integration:** Various options to integrate based on business requirement.

- **Detailed reporting and analysis:** Business have a clear view and better control over their transaction check statuses in SafeCharge Control Panel

SafeCharge Smart 3DS service can be used in various scenarios

Online payments
Ecommerce, Retail, Digital goods etc

Recurring & Subscription:
Same amount
Memberships, Content streaming etc

Recurring & Subscription:
Variable amount
Ride sharing, insurance, car rental etc.

3D Secure is an evolving topic. To keep up to date about the product and its features please get in touch at info@safecharge.com

SafeCharge offices:

Austria, Bulgaria, China, Cyprus, Guernsey, Hong Kong, Israel, Italy, Netherlands, Singapore, United Kingdom, United States of America, Mexico

www.safecharge.com