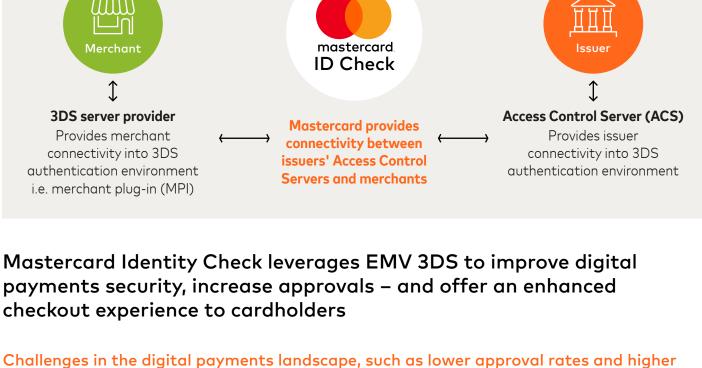


service providers with Mastercard as the connecting link

Merchants and issuers participate in EMV 3DS via third-party

need to act in a coordinated way and adopt uniform strategies, unfailing solutions and a

consistent user experience (UX).



fraud, mean there's a need for better authentication. Specific improvements under the new standards and capabilities include: Elimination of static passwords for stronger two-factor authentication

Enhanced decisioning devices, including via increased merchant



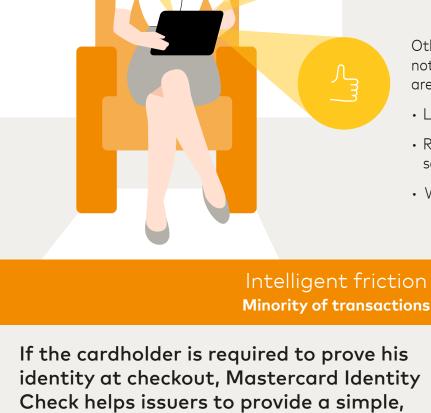
authenticate those with a low risk for fraud silently, without unnecessary cardholder friction. This helps balancing fraud reduction and user experience.

Risk-based authentication (RBA) utilises the richer data exchange

or behavioral patterns to determine the risk of a transaction - and

RBA systems leverage information such as device information, merchant data

The so-called TRA (transaction risk analysis) that enables RBA is an exemption from SCA and can only be applied if certain requirements are met, i.e. for transactions thresholds



enabled by EMV 3DS

 Low value remote transactions Recurring transactions of the same value Whitelist of trusted beneficiaries

up to €500 and if reference fraud rates are below a defined level.

Other exemptions where SCA may not need to be applied include, but

are not limited to:

secure, and user-friendly authentication solution meeting SCA requirements



Merchant

Acquirer

Issuer

Select and deploy

Merchant Integration/

PSP, 3DS SDK.

Merchants

Biometrics

voice, other.

• The cardholder is prompted to authenticate on mobile device. Authenticates with pre-selected biometric method: fingerprint, face,

Richer, more secure data • Improved decisioning, higher approval rates and lower fraud via...

Ensure all required EMV

3DS data is captured

and provided.

score by Mastercard or an ACS.

Stronger security, less friction

Increased revenues because of more completed transactions. Key tasks for customers in 2018-2019

Implement

authentication policy using

EMV 3DS flags, BIN table,

including recurring payments,

acquirer TRA exemption.

Select and deploy ACS with EMV 3DS

and whitelisting, register BIN ranges

with Identity Check.

Improve digital payment security and cardholder experience –

Global onboarding

while meeting PSD2 RTS requirements and timelines

Mastercard support of early adopters

EMVCo testing

Sub-region Europe

UK and Nordics

Western Europe

Germany and Switzerland

Central Eastern Europe

High growth markets

new regulatory environment

at trusted merchants and enhance the cardholder experience with up-to-date account data and

Reduce lost transactions

during the authentication process with simple and

biometric or token-based

with intelligent, data-driven

transactional insight or mobile

decisioning tools, providing

transaction alerts.

secure authentication

solutions, such as

• Helps drive approval rates and revenue through sharing of rich data.

Authenticated transactions have higher approval rates of +10pp³.

• Hassle-free authentication helps gain greater share.

• Up to **70% reduced cart abandonment** when biometric identification is used².

• Richer data available, supporting delivery of a transaction risk analysis (TRA)

Stronger consumer authentication with data-driven flows (browser and IoT).

Ensure terms and

conditions allow sharing

of additional data.

Promote whitelisting,

ensure merchant

name consistency.

3DS 1.0 not supported on

Mastercard network

Adapt authorisation and fraud

prevention system (new AAV, transaction

monitoring and TRA, reduced fraud risk,

use of Validation Insights).

Issuer

1 Apr

1 Apr

1 Apr

1 Sep

31 Dec

Design the best SCA user-experience (UX)

with one SCA UX for all

the new authentication

experience and its advantage.

purposes, including

Consider acquirer TRA exemption and Ensure merchants are compliant with Register merchants for PSD2 RTS and Mastercard mandates. EMV 3DS with Mastercard. fraud prevention strategy.

3DS 2.1.0 compliance

Acquirer

1 Apr

1 Apr

1 Apr

1 Sep

31 Dec

adapt T&Cs (including whitelisting).

Inform, migrate or enroll cardholders

to new authentication methods,

EMV 3-D Secure 2.1.0 2017 2018 2019 2020 Mastercard **Identity Check** Launched Q1 2017 Mastercard risk-based Enhanced to support Identity 3DS 2.1.0 authentication available for Check compliance 3DS 2.1.0

*Q4 for CEE countries Take full advantage of the fast growing e-commerce business: select the right payment security to reduce fraud, false declines and unnecessary friction Mastercard Digital Security Roadmap: make payments safe, simple, and frictionless,

SCA exemptions via merchant whitelisting, credential-on-file and recurring payment flows. **Issuers** Reduce friction

enhancing profitability and customer loyalty while meeting the requirements of the

e-commerce, e-banking identification, meeting SCA requirements. and call centres. Reduce fraud Educate your customer base and false declines and stakeholders such as without increasing the risk cardholders, staff, etc. about

For more information please contact your Mastercard representative

¹ This may require an additional knowledge factor to comply with the EBA regulatory technical standards (RTS).

² Identity Check Program and EMV 3-D Secure Version 2 (EMV 3DS) Update 2017. ³ Mastercard. January through November 2017 data, across all card types 2017.

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