

Brexit – Regulatory Technical Standards for Strong Customer Authentication and Common and Secure Open Standards of Communication

Consultation Paper

CP18/44**

December 2018



How to respond

We are asking for comments on this Consultation Paper (CP) by 19 February 2019.

You can send them to us using the form on our website at: www.fca.org.uk/cp18-44-response-form

Or in writing to:

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returns you to the contents list



takes you to helpful abbreviations

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1 Summary

Why we are consulting

- 1.1** On 14 March 2018, the EU Regulatory Technical Standards for strong customer authentication and common and secure open standards of communication (SCA-RTS)¹ came into force. The SCA-RTS support the security and safety of electronic payments. They form part of EU law, and supplement the Payment Services Directive 2015 (PSD2).
- 1.2** From 14 March 2019, firms will need to start following some of the provisions of the SCA-RTS.² However, the remainder of the standards will not take effect fully until 14 September 2019.
- 1.3** On 29 March 2019, the UK will leave the EU. If the UK leaves the EU without a withdrawal agreement (a 'no-deal exit'), the SCA-RTS will be left partially converted into UK law. This would leave a gap in the UK's regulatory framework, causing potential disruption and considerable regulatory uncertainty. Despite the investments made by banks and other payment service providers to meet the 14 March 2019 deadline, consumer protections for the security and safety of payments would be at risk unless we made similar technical standards which would apply in the UK after exit day.
- 1.4** In this Consultation Paper (CP) we propose to make regulatory technical standards for strong customer authentication and common and secure open standards of communication (UK-RTS) substantially the same as the SCA-RTS, which will apply in the UK from 14 September 2019 in the event of a no-deal exit.³

Who this applies to

- 1.5** The proposals apply to payment service providers, including banks, building societies, e-money issuers, payment institutions, registered account information service providers and payment initiation service providers.
- 1.6** The paper will also be of interest to:
- retailers
 - consumers and micro-enterprises
 - consumer groups

1 Commission Delegated Regulation (EU) 2018/389 of 27 November 2017, supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council.

2 Sub-articles 30(3) and (5)

3 As referred to in paragraph 4.8 of the CP, we are proposing to amend the Glossary definition of "SCA-RTS" to refer to the SCA-RTS made by the FCA. However, in this CP we refer to the SCA-RTS made by the FCA as the "UK-RTS" for ease of distinguishing between the EU's SCA-RTS and the SCA-RTS made by the FCA



- industry representative bodies
- those involved in open banking initiatives

The wider context of this consultation

- 1.7** In March 2018, the UK and the EU agreed the terms of an implementation period, which will start on 29 March 2019 and last until 31 December 2020. During this period, common rules will continue to apply and access to each other's markets will continue on current terms⁴.
- 1.8** However, the implementation period is part of the withdrawal agreement which is subject to further negotiations between the UK and the EU. Both sides must agree the final terms of the withdrawal agreement and, to take effect, it must be ratified by the UK and the EU. To be ready for all scenarios, we have worked to put the necessary arrangements in place for us to continue to meet our statutory objectives and reduce harm should the withdrawal agreement not come into effect.
- 1.9** The European Union (Withdrawal) Act 2018 (EUWA) will transfer and convert the EU laws which apply on exit day into UK law⁵. However, (apart from the provisions mentioned above in paragraph 1.2), the SCA-RTS will not take effect fully until 14 September 2019. This would leave a gap in the UK's regulatory framework, as described in paragraph 1.3.
- 1.10** We propose to make the UK-RTS substantially in the form of the SCA-RTS. The SCA-RTS are security standards being introduced under PSD2.
- 1.11** We propose to make the UK-RTS under Regulation 106A of the Payment Services Regulations 2017 (PSRs 2017), as amended by the Electronic Money, Payment Services and Payment Systems (Amendment and Transitional Provisions) (EU Exit) Regulations 2018 (Exit SI). The Exit SI, and the power to make the UK-RTS under Regulation 106A, will only apply if the UK leaves the EU without a withdrawal agreement.

Outcome we are seeking

- 1.12** In a no-deal exit scenario, the amended PSRs 2017 will require firms to apply strong customer authentication and to communicate securely, in line with technical standards made by us.
- 1.13** We propose to make those technical standards based on the SCA-RTS. We are doing this to support consumer protection and to provide firms with certainty and clarity about the systems they have been building as needed under the PSRs 2017. The EBA has already consulted on the SCA-RTS, which are already in force, and industry has invested heavily to prepare for their implementation.

4 For more detail on the implementation period please refer to the Treasury's approach to financial services legislation under the European Union Withdrawal Act (27 June) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/720298/HM_Treasury_s_approach_to_financial_services_legislation_under_the_European_Union_Withdrawal_Act.pdf

5 This assumes that the withdrawal agreement is not ratified by the UK and EU.

- 1.14** In this consultation, we are also proposing to make minor amendments to certain provisions of the SCA-RTS. We are proposing to do this to maintain the current legal basis for API interfaces and access testing facilities, and to provide certainty for account servicing payment service providers and third party payment service providers. We will ensure these provisions will operate effectively by making the remainder of the UK-RTS.

Next steps

- 1.15** Please consider our proposals and send us your comments on the questions in this CP by 19 February 2019. Use the online [response form](#) on our website or write to us at the address on page 2 of this document.
- 1.16** We will consider your comments and publish our feedback, along with our rules, in a Policy Statement in April 2019.



2 The wider context

Why we are proposing the UK-RTS

- 2.1** The EU Regulatory Technical Standards for strong customer authentication and common and secure open standards of communication (SCA-RTS)⁶ set out how payment service providers (PSPs) must verify a customer's identity where a customer accesses a payment account online, initiates an electronic payment transaction (such as when shopping online), or carries out any action through a remote channel which may create a risk of payment fraud. This verification is referred to in the SCA-RTS as strong customer authentication, and is based on the use of 2 or more elements, categorised as:
- knowledge – something only the user knows, such as a password or personal identification number
 - possession – something only the user possesses, such as a card or mobile device
 - inherence – something inherent to the user, such as a fingerprint
- 2.2** The SCA-RTS also set out requirements for the secure communication between account servicing payment service providers (ASPSPs) such as banks, and new types of open banking service providers including account information service providers, payment initiation service providers, and card-based payment instrument issuers. These are collectively referred to as third-party payment service providers (TPPs). The SCA-RTS explain how TPPs and ASPSPs should interact and communicate securely to enable TPPs to access ASPSPs' customers' accounts (with customers' consent) to provide open banking services to customers. The SCA-RTS seek to increase the security of customers' payments made by card and other electronic means.
- 2.3** Some of the provisions of the Payment Services Regulations 2017 (PSRs 2017) require PSPs to follow the SCA-RTS when conducting certain activities. For example, the PSRs 2017 need any ASPSP offering payment accounts that are accessible online (such as bank and e-money accounts, credit card accounts, and some savings accounts) to comply by 14 September 2019 with the SCA-RTS's provisions on how TPPs can access these accounts.
- 2.4** In a no-deal exit scenario, the Exit SI will amend the PSRs 2017 by replacing provisions that refer to the SCA-RTS with provisions that refer to technical standards made by us (for strong customer authentication and common and secure open standards of communication). The amended PSRs 2017 would provide that ASPSPs and TPPs must comply with the technical standards made by us.
- 2.5** We propose to make the technical standards under powers given to us in the amended PSRs 2017. Paragraph 4.4 below explains how we propose to do this.

⁶ Commission Delegated Regulation (EU) 2018/389 of 27 November 2017, supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council.

2.6 By making the proposed technical standards in the form set out in Appendix 2 (UK-RTS), we seek to:

Support consumer protections around strong customer authentication and security of payments

2.7 One of the aims of the PSRs 2017 is to prevent harm to consumers caused by payment fraud. They introduce measures to combat unauthorised payments by strengthening the process for authorising a payment. From 14 September 2019, all PSPs will need to ask customers for more information to verify their identity before an electronic payment is made. This strong customer authentication will be a requirement under the PSRs 2017 unless an exemption is used or applies (for example, for low value payments).

2.8 Making the UK-RTS will support strong customer authentication by setting out certain security measures. These include, for example, requirements for the number of consecutive failed authentication attempts which can be made before access must be blocked, and the time spent accessing a payment account online without activity after authentication. These types of security measures should further consumer protection, in line with our objectives.

Support market integrity and provide certainty and clarity about requirements for firms to implement common and secure open standards of communication

2.9 The UK-RTS will include requirements addressing threats to the security of electronic payments and payment data, and will support open banking (such as standards governing the security of communication sessions and data exchanges when TPPs are accessing customers' current account data or initiating a payment). As a result, the UK-RTS should enhance market integrity, help to improve trust in the financial system, and allow competition and innovation.

Proposal to make the UK-RTS substantially in the form of the SCA-RTS

2.10 At the time of publication of this consultation paper, ASPSPs will need to have decided how they will implement the requirements of the SCA-RTS. Because the SCA-RTS require ASPSPs to have built testing interfaces for TPPs by 14 March 2019, ASPSPs will also need to have made certain investment decisions such as:

- ASPSPs will need to have decided whether to enable TPPs to access customers' accounts by building a new dedicated interface or by modifying their existing customer online banking portal to comply with requirements in the PSRs 2017 regarding security, information exchange and identification. The SCA-RTS provide different requirements depending on which type of access ASPSPs choose to offer. ASPSPs will need to be able to rely on those requirements remaining in place in order to complete implementation on time.
- ASPSPs which have decided to build a dedicated interface will also need to decide whether they want to apply to us for an exemption from having to provide a 'contingency mechanism', which would provide 'fall-back' access if the dedicated interface failed. Unless ASPSPs have been granted this exemption ahead of 14 September 2019, based on the quality of access provided by the interface, they will have to build a contingency mechanism. The SCA-RTS set out conditions that must be met for an ASPSP to be granted an exemption. ASPSPs which want to rely on this exemption need certainty about the process and conditions for obtaining the exemption as they will need to have started building a dedicated interface for testing by March 2019.



- 2.11** Having decided which type of access ASPSPs want to offer to TPPs, ASPSPs will need to be able to rely on other requirements of the SCA-RTS still being in place to finish building interfaces for testing by March 2019. These include the provisions of the SCA-RTS regarding security of communication sessions between ASPSPs and TPPs.
- 2.12** Card schemes and payment service providers have also been preparing to implement the SCA-RTS's requirements on strong customer authentication. For remote electronic payments (such as when shopping online), additional authentication steps will be needed unless a transaction qualifies for one of the permitted exemptions. Card schemes have reported⁷ how they have been upgrading their platforms and related fraud identification and prevention tools to support the implementation of strong customer authentication in compliance with the SCA-RTS, and to allow early compliance by card issuers and banks.
- 2.13** The European Banking Authority (EBA) has already consulted on and finalised the SCA-RTS. We believe that the SCA-RTS should be effective in protecting consumers, supporting market integrity, and promoting competition in the interests of consumers. While we acknowledge that some of the EBA's proposals were subject to differing views from consultation respondents, we believe that it could cause significant uncertainty and potential disruption if we did not make technical standards substantially the same as the SCA-RTS.
- 2.14** The SCA-RTS have been in force since 14 March 2018. Industry participants have invested considerable sums to build the processes needed based on the SCA-RTS. As outlined in paragraphs 2.10 and 2.11 above, ASPSPs must build testing facilities and make available technical specifications to TPPs by March 2019. Similarly, card schemes and payment service providers have been developing new processes to follow the strong customer authentication requirements of the SCA-RTS, as referred to in paragraph 2.12 above. Making technical standards in a materially different form from the SCA-RTS at this stage could cause firms to incur further significant costs and risk non-compliance.
- 2.15** Our view is that the cost and confusion that could arise out of making UK-RTS in a different form from the SCA-RTS at this late stage of their implementation would be disproportionate to the benefits that any changes could bring.

Why we are amending sub-articles 30(3) and (5) of the SCA-RTS

- 2.16** Sub-articles 30(3) and (5) of the SCA-RTS require ASPSPs to offer testing facilities and technical specifications for their access interfaces for TPPs by 14 March 2019. Those provisions will become part of UK law under the European Union (Withdrawal) Act 2018 if the UK leaves the EU without an agreement. We propose to amend those provisions so that they are operable in the UK, using our powers in the Regulators' Powers Financial Regulators' Powers (Technical Standards etc.) (Amendment etc.) (EU Exit) Regulations 2018 (Regulators' Powers SI) if no implementation period is agreed.

7 <https://newsroom.mastercard.com/eu/files/2018/02/Security-Matters-Authentication-under-PSD2-and-SCA-Mastercard-White-Paper.pdf>

3 Our proposals to amend technical standards (sub-articles 30(3) and (5) of the SCA-RTS)

- 3.1** Sub-articles 30(3) and (5) of the EU Regulatory Technical Standards for strong customer authentication and common and secure open standards of communication (SCA-RTS)⁸ will become UK law on exit day in line with the EU Withdrawal Act, if there is no implementation period.
- 3.2** We propose to use our power under section 7 of the Financial Regulators' Powers (Technical Standards etc.) Powers SI (Amendment etc.) (EU Exit) Regulations 2018 to make changes to sub-articles 30(3) and (5) of the SCA-RTS to ensure that they operate effectively in the UK once the UK has left the EU. For example, references in the SCA-RTS to the 'EBA' and 'competent authorities' will be replaced with 'FCA', and references to articles of the PSD2 will be replaced with references to the equivalent provisions of the PSRs 2017.
- 3.3** There is no change to the existing requirement that by 14 March 2019:
- Account servicing payment service providers (ASPSPs) must make available documentation specifying the routines, protocols and tools needed by third party payment service providers (TPPs) to allow their software and applications to interoperate with the systems of the ASPSPs.
 - ASPSPs must make available an access interface to enable TPPs to test their software and applications used for offering payment services to their customers.
- 3.4** We have included our proposed amendments to sub-articles 30(3) and (5) of the SCA-RTS in the proposed technical standards set out in Appendix 1.

Q1: Do you agree with our proposed amendments to sub-articles 30(3) and (5) of the SCA-RTS? If not, please explain why.

⁸ Commission Delegated Regulation (EU) 2018/389 of 27 November 2017, supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council.



4 Our proposals to make technical standards (UK-RTS)

- 4.1** As set out in Regulation 106A of the Electronic Money, Payment Services and Payment Systems (Amendment and Transitional Provisions) (EU Exit) Regulations 2018 (Exit SI) we may make certain technical standards specifying:
- requirements that must be met by the strong customer authentication referred to in Regulation 100 of the PSRs 2017, which will come into force on 14 September 2019
 - exemptions from strong customer authentication
 - requirements to protect the confidentiality and integrity of payment service users' personalised security credentials
 - requirements for common and secure open standards of communication for the purposes of identification, authentication, notification and information, as well as for the implementation of security measures
- 4.2** Certain provisions of the amended Payment Services Regulations 2017 (PSRs 2017) (such as provisions which refer to our standards regarding strong customer authentication and secure common communication) will be uncertain and could put the delivery of consumer protections in doubt unless and until we make technical standards.
- 4.3** For the reasons outlined in paragraphs 2.1 – 2.15 above, we propose to use our power under Regulation 106A of the Exit SI (on exit day, if it is in force) to make technical standards.
- 4.4** We propose to make the technical standards substantially in the form of the EU Regulatory Technical Standards for strong customer authentication and common and secure open standards of communication (SCA-RTS)⁹ (which are already in force).
- 4.5** In making the proposed technical standards in the form set out in Appendix 2 (UK-RTS) in substantially similar form to the SCA-RTS, we propose to make some changes to the text to ensure that the UK-RTS operate effectively in the UK once the UK has left the EU. For example, references in the SCA-RTS to the 'EBA' and 'competent authorities' will be 'FCA' in the UK-RTS, and references to articles of the PSD2 will be references to the relevant provisions of the amended PSRs 2017. This will also ensure that the provisions of sub-articles 30(3) and (5) from the SCA-RTS will function within the UK-RTS, and that they will explain the requirements for access interface testing. We also propose that financial thresholds in the UK-RTS will be denominated in sterling, calculated by converting the euro denominated thresholds in the SCA-RTS, using the Bank of England's spot exchange rate on exit day, and rounded-down to the nearest £5. For this consultation we have used the spot rate for 30 November 2018, the end of the month preceding publication of this consultation. This rate is £0.8876.

⁹ Commission Delegated Regulation (EU) 2018/389 of 27 November 2017, supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council.

- 4.6** As a result, by 14 September 2019, we propose that payment service providers will still need to have systems and processes in place that follow technical standards substantially in the same form as the SCA-RTS. Therefore, we would introduce provisions on strong customer authentication and common and secure open standards of communication as set out in Appendix 2, including:
- transaction monitoring mechanisms to detect unauthorised or fraudulent transactions for the purposes of application of strong customer authentication and associated permitted exemptions
 - documentation for security measures, and testing and auditing of those security measures in line with applicable law
 - application of strong customer authentication resulting in the generation of an authentication code which is subject to certain security measures and which can only be accepted once by the PSP and where: (i) no information on any of the authentication elements can be derived from the disclosure of the authentication code; (ii) it is not possible to generate a new authentication code based on the knowledge of any other authentication code previously generated; and (iii) the authentication code cannot be forged
 - application of dynamic linking security measures for remote electronic payments, which include generating authentication codes specific to the amount of the payment transaction and to the payee which have been agreed by the payer
 - mitigation of the risk that any of the authentication elements of strong customer authentication is disclosed to unauthorised third parties
 - ensuring that a breach of one of the elements of strong customer authentication does not compromise the other elements
 - permitted exemptions from application of strong customer authentication
 - ensuring the confidentiality and integrity of personalised security credentials of customers during all stages of the authentication
 - ensuring that personalised security credentials are created in a secure environment
 - ensuring that only the customer is associated in a secure manner with their personalised security credentials
 - ensuring that personalised security credentials are delivered to customers, and renewed, in a secure manner
 - having effective processes to ensure the secure destruction, deactivation and revocation of personalised security
 - ensuring secure identification when communicating between the payer's device and the payee's acceptance device, and ensuring that the risk of misdirection of communication to unauthorised parties is effectively mitigated
 - ensuring that all payment transactions and instructions and other interactions with customers are traceable



- requiring ASPSPs to establish interfaces for access by TPPs to customers' accounts (with customers' consent) for provision of payment services by TPPs to customers that meet certain general obligations
- ensuring that ASPSPs' dedicated interfaces offer the same level of availability and performance as the ASPSPs' customer online portals
- provision by ASPSPs of a contingency mechanism as part of the design of a dedicated interface (subject to exemption)
- ensuring that payment service providers rely on qualified certificates for electronic seals or qualified certificates for website authentication, used by TPPs to identify themselves to ASPSPs
- ensuring that ASPSPs and TPPs communicate and exchange data with each other securely

4.7 We propose to make the technical standards in the form of the draft set out in Appendix 2.

Q2: **Do you agree that we should make technical standards on strong customer authentication and common and secure open standards of communication? If not, please explain why.**

Q3: **Do you agree with our proposed technical standards as set out in Appendix 2? If not, please explain why.**

4.8 If there is no implementation period, and we make the UK-RTS, we propose minor consequential changes to the Handbook as set out in Appendix 3. These include:

- amending the Glossary definition of "SCA-RTS" to refer to the SCA-RTS made by the FCA
- replacing euro denominated amounts with sterling denominated amounts in Form NOT004 (Notification that the fraud rate exceeds the reference fraud rate under SCA-RTS Article 20), to reflect conversion from euro to sterling referred to in paragraph 4.5 above
- adding guidance in SUP to clarify that for the purposes of Form REP 17 (Fraud report), after EU withdrawal, we will continue to require fraud transaction data to be reported broken down into domestic (ie within the UK), cross-border within EEA (ie between UK and another EEA country), and cross-border outside EEA (ie between UK and a third country).

Q4: **Do you agree with our proposed changes to the Handbook as set out in Appendix 3? If not, please explain why.**

Annex 1

Questions in this paper

- Q1:** Do you agree that we should make technical standards on strong customer authentication and common and secure open standards of communication, if there is no implementation period after exit day? If not, please explain why.
- Q2:** Do you agree with our making proposed amendments to sub-articles 30(3) and (5) of the SCA-RTS if there is no implementation period after exit day? If not, please explain why.
- Q3:** Do you agree with our proposed technical standards as set out in Appendix 2? If not, please explain why.
- Q4:** Do you agree with our proposed changes to the Handbook as set out in Appendix 3? If not, please explain why.
- Q5:** Do you agree with the costs and benefits we have identified? If not, please explain why.



Annex 2

Cost benefit analysis

Introduction

1. We must complete a cost benefit analysis if we make technical standards under Regulation 106A in the Electronic Money, Payment Services and Payment Systems (Amendment and Transitional Provisions) (EU Exit) Regulations 2018 (Exit SI). This requires that we publish a cost benefit analysis (CBA) of our proposed technical standards. This is defined as 'an analysis of the costs, together with an analysis of the benefits that will arise if the proposed rules are made'. We must also include estimates of those costs and benefits, unless these cannot reasonably be estimated or it is not reasonably practicable to produce as estimates.

Rationale for intervention

2. The European Banking Authority (EBA) carried out a public consultation on their draft technical standards in 2016 and submitted their impact assessment, including a CBA, to the Commission. The Commission approved the final version of the technical standards. The EBA's analysis is available on their website.¹ We note that the EBA concluded their analysis with this statement:

'Overall, the requirements contained in these draft RTS are expected to contribute significantly to increased competition, cross-border activities and efficiency in the market for retail payment services while at the same time sufficiently protecting consumers. In particular, the sufficient protection against fraud and theft of confidential customer information has been carefully considered in the development of these draft RTS. Its overall impact is expected to be net beneficial for providers, consumers and businesses.'

3. The UK will leave the EU on 29 March 2019. The EU Regulatory Technical Standards for strong customer authentication and common and secure open standards of communication (SCA-RTS)² are EU technical standards that support the security and safety of electronic payments. The SCA-RTS have been in force since 14 March 2018. However, aside from sub-articles 30(3) and (5), they will not apply in the UK after exit day³, unless UK and EU agree and ratify the withdrawal agreement.

1 <https://eba.europa.eu/documents/10180/1548183/Consultation+Paper+on+draft+RTS+on+SCA+and+CSC+%28EBA-CP-2016-11%29.pdf>

2 Commission Delegated Regulation (EU) 2018/389 of 27 November 2017, supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council.

3 Sub-articles 30(3) and (5) of the SCA-RTS, will apply in the UK with effect from 14 March 2019.

4. If the withdrawal agreement is not ratified, the Exit SI will amend the PSRs 2017 by replacing provisions that refer to the SCA-RTS, with provisions that refer to technical standards (on strong customer authentication and common and secure open standards of communication) made by us using the power in Regulation 106A. These provisions will come into force on 14 September 2019. For example, account servicing payment service providers (ASPSPs) and third party payment service providers (TPPs) will be required under the Payment Services Regulations 2017(PSRs 2017)⁴ to comply with the FCA's technical standards when communicating with each other. If we do not make technical standards, some provisions of the PSRs 2017 will need firms to comply with technical standards which will not have been made. This would cause regulatory uncertainty for firms and consumers, and be likely negatively to affect the implementation of consumer protections in the UK (such as strong customer authentication and security of payments, where a customer accesses their payment account online, initiates an electronic payment transaction, or carries out any action through a channel which may create the risk of payment fraud).

Baseline

5. We will have the discretion to make the technical standards in the UK under the amended PSRs 2017. The baseline for our proposals in this consultation paper is that if we decided to take no action, if the UK and EU do not agree and ratify a withdrawal agreement, there will be no technical standards on strong customer authentication and secure communication in the UK after exit day. This would cause significant uncertainty and potential disruption regarding the implementation of the technical standards referred to in the amended PSRs 2017.
6. It is also relevant to the baseline that industry has invested heavily to develop interfaces to follow the common and secure standards of communication in the SCA-RTS. For example, we have received reports through discussions with some firms and industry bodies that individual credit institutions have estimated their implementation costs as being in excess of £100m, and smaller payment institutions have estimated spending up to £500k on implementation.⁵
7. We believe that many firms will have incurred costs in building systems and processes to follow the SCA-RTS. The SCA-RTS have been in force since March 2018. Under these, ASPSPs must make access interfaces available for testing by TPPs by 14 March 2019. Therefore, ASPSPs will need to have started incurring costs to build those interfaces well in advance of 14 March 2019 (before exit day). Although firms are at different stages of implementation, the Open Banking Implementation Entity published a roadmap in July 2018 setting out the phased timelines for firms implementing open banking.⁶ The roadmap shows that those firms' main implementation activity started in February 2018, and that most of their planned implementation would have been carried out by exit day. The costs of implementation incurred before exit day will relate to the SCA-RTS, and not to our proposal to make the UK-RTS.

4 Regulations 69(2)(a) and 70(2)(a)

5 Our information does not apply to all PSPs affected by our proposals.

6 www.openbanking.org.uk/wp-content/uploads/Open-Banking-Revised-Roadmap-July-2018.pdf



Costs

8. The costs of our proposals include firms' familiarisation and gap analysis costs and firms' implementation and ongoing costs.
9. We estimate a total of 1,557 firms are affected by the proposals, comprising credit institutions, payment institutions and e-money institutions.
10. UK payment firms support 74 million transactions with a total value of £229 billion every day. All customers who make electronic payments in the UK will be affected by the new technical standards on strong customer authentication if the proposed technical standards in the form set out in Appendix 2 (UK-RTS) are made.
11. There would be limited costs to firms associated with familiarising themselves with the proposals in this CP and carrying out a gap analysis on the differences between the UK-RTS and the SCA-RTS. Those differences would be minimal changes as set out in Appendix 2, rather than differences of substance.
12. We estimate the total one-off familiarisation and gap analysis costs are around £980,000. Based on our data, we anticipate a total of 1,557 firms are affected by the proposals (57 large, 193 medium and 1,307 small firms). Using data on salaries from the Willis Towers Watson UK Financial Services survey, the length of the consultation paper (CP) and the UK-RTS documents and a typical time spent by compliance and legal officers on reviewing the CP, we estimate the cost per firm will be: £4,900 for large, £1,630 for medium and £300 for small firms.⁷
13. If the UK-RTS are made substantially in the form of the SCA-RTS, we believe that the cost of implementing the UK-RTS⁸, and any ongoing costs of compliance, will be no greater than the remaining costs of following and implementing the existing SCA-RTS.
14. Many firms have already incurred costs in building systems and processes to comply with the SCA-RTS. The implementation costs which firms have incurred to date relate to the SCA-RTS developed by the EBA. Implementation costs relating to the UK-RTS would be limited to costs incurred after exit day. On that basis, there would be relatively little cost saving if we did not make the UK-RTS. Moreover, unless we make the UK-RTS, the benefits outlined below will not be realised.
15. We believe it would not be reasonably practicable to estimate the remaining costs of following and implementing our proposals. Firms are at different stages of implementation of the SCA-RTS, have different solutions for implementation with different costs implications, and have different amounts of implementation costs remaining to be spent. We do not have full information about these amounts. The time in which to obtain information from firms, conduct a new analysis, and produce quantitative estimates has by necessity been constrained by external dependencies, and the deadline for finalising this work is fixed as we must make the UK-RTS in time for firms to implement by September 2019.

7 We assume that 20 compliance staff at large firms, 5 compliance staff at medium firms, and 2 compliance staff at small firms read the relevant documentation. The reading speed is assumed 100 words per minute. We have assumed that 4 legal staff at large firms, 2 legal staff at medium firms, and 1 member of legal staff at small firms will review our final technical standards. It is further assumed that each legal staff member can review 50 pages of legal text per day. Using data on salaries from the Willis Towers Watson UK Financial Services survey, the hourly compliance staff salary is assumed to be £57 at large firms, £60 at medium firms, and £42 at small firms, while the hourly legal staff salary is assumed to be £66 at large firms, £66 at medium firms, and £51 at small firms, including 30% overheads.

8 Except for familiarisation and gap analysis costs

16. In addition, we believe it is not reasonably practicable (given the time constraints referred to above) and not proportionate to conduct another analysis of the ongoing costs of complying with our proposals (eg monitoring and maintaining systems and controls, IT system maintenance, etc.) given that the EBA has conducted the impact assessment and concluded that the SCA-RTS proposals will deliver net benefits.

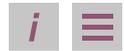
Benefits

17. Benefits resulting from our proposals include:
- enhancing consumer protections on strong customer authentication and security of payments where a customer accesses their payment account online, initiates an electronic payment transaction, or carries out any action through a remote channel which may create a risk of payment fraud⁹
 - providing certainty regarding the technical standards on which some of the provisions of the PSRs 2017¹⁰ will depend following Brexit
 - maintaining market integrity, certainty and clarity about the requirements for firms to implement common and secure open standards of communication, which will address threats to the security of electronic payments, and help to improve trust in the financial system
 - continuing to drive competition and supporting open banking
18. We believe that these benefits would be the same benefits derived from implementing the SCA-RTS as identified in the EBA's consultation and summarised above. However, we believe it would not be reasonably practicable to estimate the potential benefits of our proposals for the same reasons that are mentioned in paragraphs 15 and 16 above.
19. Overall, we believe that the implementation of the UK-RTS (if made substantially in the form of the SCA-RTS) will deliver net benefits to consumers.

Q5: Do you agree with the costs and benefits we have identified? If not, please explain why.

⁹ Industry figures put losses due to financial fraud at nearly £1 billion in 2017

¹⁰ Regulations 68(3)(c), 69(2)(a), 69(3)(d), 70(2)(a), 70(3)(c), and 100



Annex 3

Compatibility statement

Compliance with legal requirements

Compliance with legal requirements

1. Under Regulation 106A of the Payment Services Regulations 2017, when making technical standards we must consider the principles set out in Regulation 106(3) and 106A(2).
2. This Annex also includes our assessment of the equality and diversity implications of these proposals.

The FCA's objectives and regulatory principles: Compatibility statement

3. Our proposed technical standards set out in Appendix 2 (UK-RTS) are compatible with our strategic objective of ensuring that the relevant markets function well.
4. The UK-RTS give effect to policies put in place by the PSRs 2017, and so contribute to fulfilling their aims. These align with our operational objectives of ensuring an appropriate level of consumer protection and promoting effective competition in the interests of consumers.

Compatibility with the principles of regulation 106 of the PSRs 2017 as amended by the Exit SI.

5. In preparing the proposals set out in this consultation paper, we have considered the regulatory principles set out in regulation 106(3) and 106A(2) of the PSRs 2017. We set out below how our proposals are compatible with each principle.

Ensuring an appropriate level of security for payment service users and payment service providers through the adoption of effective and risk-based requirements.

6. We believe that our proposals comply with this principle on the basis that the UK-RTS would enhance security for payment service users and payment service providers by supporting strong customer authentication and common secure standards of communication between account servicing payment service providers (ASPSPs) and third party payment service providers (TPPs), in the same way as the EU Regulatory Technical Standards for strong customer authentication and common and secure open standards of communication (SCA-RTS).¹¹

Ensuring the safety of payment service users' funds and personal data

7. We believe that our proposals are aligned with this principle as the common secure communication standards and strong customer authentication standards in the UK-RTS are intended to enhance the safety and security of payment service users' funds and personal data.

11 Commission Delegated Regulation (EU) 2018/389 of 27 November 2017, supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council.

Securing and maintaining fair competition among all payment service providers

8. We believe that our proposals are aligned with this principle. The UK-RTS will allow the access by TPPs to customers' current account data needed under the PSRs 2017. Where developed according to common standards and using secure common infrastructure, this type of access can support competition by reducing barriers to entry, as TPPs will not have to integrate with different technology on a firm-by-firm basis.

Ensuring technology and business-model neutrality

9. We believe that our proposals comply with this principle on the basis that they do not discriminate against any particular business model or approach. We have considered specific requirements for PSPs conducting new payment services, ie account information services, payment initiation services and card based payment instrument issuers.

Allowing for the development of user-friendly, accessible and innovative means of payment.

10. We believe that our proposals are aligned with this principle as the UK-RTS' common standards of communication are intended to support ASPSPs' implementation of standardised APIs which support open banking. Open banking is designed to bring more competition and innovation to financial services by enabling customers to make payments directly and securely from their bank or building society without using a credit card or debit card. Also, the UK-RTS specify the same exemptions as the SCA-RTS where Payment Service Providers (PSPs) do not need to apply strong customer authentication.

The need to use our resources in the most efficient and economic way

11. For the proposals in this CP, and in implementing Regulation 106A of the amended PSRs 2017, we have considered the burden on the FCA of assessing how best to implement.

The principle that a burden or restriction should be proportionate to the benefits

12. We believe the proposals in this consultation paper (CP) containing burdens or restrictions are proportionate to the benefits, and set out our analysis of the costs and benefits of our proposals in our cost benefit analysis.

The desirability of sustainable growth in the economy of the United Kingdom in the medium or long term.

13. The proposals support implementation of open banking, which seeks to improve competition in payment services, and improve access for payment services businesses.

The general principle that consumers should take responsibility for their decisions

14. We do not propose any requirements which are inconsistent with this principle.

The responsibilities of senior management

15. We believe the proposals in this CP are consistent with this principle. Senior managers of PSPs will need to ensure compliance with the PSRs 2017, UK-RTS and the relevant parts of our Handbook.

The desirability of exercising our functions in a way that recognises differences in the nature and objectives of businesses carried on by different persons

16. We do not believe that our proposals discriminate against any particular business model or approach. We have considered specific requirements for PSPs conducting



new payment services (account information services (AIS) and payment initiation services (PIS)) and card based payment instrument issuers (CBPIIs).

The desirability of publishing information relating to persons subject to requirements imposed under the Financial Services and Markets Act 2000 (FSMA), or requiring persons to publish information

17. This principle is not relevant to our proposals as they do not involve any requirements imposed under FSMA, nor do we require persons subject to such requirements to publish information.

The principle that we should exercise our functions as transparently as possible

18. We believe that by consulting on our proposals we are acting in line with this principle.

Expected effect on mutual societies

19. Section 138K of FSMA requires us to provide an opinion on whether the impact of a proposed rule on mutual societies is significantly different to the impact on other authorised persons.
20. Our proposals are intended to increase consumer protection to make sure businesses have secure systems in place to minimise the risk of fraud where online transactions are offered.
21. We are satisfied that the impact of our proposals on mutual societies, such as building societies, are not significantly different to that on other authorised firms.
- Equality and diversity**
22. We are required under the Equality Act 2010 in exercising our functions to 'have due regard' to the need to eliminate discrimination, harassment, victimisation and any other conduct prohibited by or under the Act, advance equality of opportunity between persons who share a relevant protected characteristic and those who do not, and to foster good relations between people who share a protected characteristic and those who do not.
23. As part of this, we ensure the equality and diversity implications of any new policy proposals are considered.

Annex 4

Abbreviations used in this paper

API	Application Programme Interface
ASPSP	Account servicing payment service provider
CBA	Cost benefit analysis
EBA	European Banking Authority
Exit day	The date on which the UK ceases to be a member of the European Union
Exit SI	The Electronic Money, Payment Services and Payment Systems (Amendment and Transitional Provisions) (EU Exit) Regulations 2018
EUWA	The European Union (Withdrawal) Act 2018
FSMA	Financial Services and Markets Act 2000
PSD2	Payment Services Directive 2
PSP	Payment Service Provider
PSR	Payment Systems Regulator
PSRs 2017	Payment Services Regulations 2017
Regulators' Powers SI	Financial Regulators' Powers (Technical Standards etc.) Powers SI (Amendment etc.) (EU Exit) Regulations 2018
SCA-RTS	Commission Delegated Regulation (EU) 2018/389
TPP	Third Party Payment Service Provider
UK-RTS	Technical standards proposed to be made by the FCA in the form set out in Appendix 2



We have developed the policy in this Consultation Paper in the context of the existing UK and EU regulatory framework. The Government has made clear that it will continue to implement and apply EU law until the UK has left the EU. We will keep the proposals under review to assess whether any amendments may be required in the event of changes in the UK regulatory framework in the future.

We make all responses to formal consultation available for public inspection unless the respondent requests otherwise. We will not regard a standard confidentiality statement in an email message as a request for non-disclosure.

Despite this, we may be asked to disclose a confidential response under the Freedom of Information Act 2000. We may consult you if we receive such a request. Any decision we make not to disclose the response is reviewable by the Information Commissioner and the Information Rights Tribunal.

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Appendix 1

Draft amendments to technical standards (sub-articles 30(3) and (5) of the SCA-RTS)

TECHNICAL STANDARDS ON STRONG CUSTOMER AUTHENTICATION AND COMMON AND SECURE METHODS OF COMMUNICATION (AMENDMENT OF TESTING PROVISIONS) INSTRUMENT 201[9]

Powers exercised

- A. The Financial Conduct Authority, being the appropriate regulator within the meaning of the Financial Regulators' Powers (Technical Standards etc.) (Amendment etc.) (EU Exit) Regulations 2018 ("The Regulations"), with the approval of the Treasury, makes this instrument in exercise of the power conferred by Regulation 3 of the Regulations.

Pre-conditions to making

- B. The FCA is the appropriate regulator for the EU Regulations specified in Part 1 of the Schedule to the Regulations.
- C. The FCA has consulted the Prudential Regulation Authority and the Bank of England as appropriate in accordance with Regulation 5 of the Regulations.
- D. A draft of this instrument has been approved by the Treasury, the Minister considering that it makes appropriate provision to prevent, remedy or mitigate any failure of retained EU law to operate effectively, or any other deficiency in retained EU law, arising from the withdrawal of the United Kingdom from the European Union.

Note: This instrument amends Article 30(3) and (5) only. They are the only Articles in the Commission Delegated Regulation that will be in force on exit day, and therefore will become part of UK law in accordance with the European Union (Withdrawal) Act 2018.

Modifications

- E. The FCA makes the modifications contained in the Annex to Article 30(3) and (5) of the Commission Delegated Regulation (EU) 2018/389 of 27 November 2017 supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council with regard to regulatory technical standards for strong customer authentication and common and secure open standards of communication.

Commencement

- F. This instrument comes into force at 11 p.m. on the 29 March 2019.

Citation

- G. This instrument may be cited as the Technical Standards on Strong Customer Authentication and Common and Secure Methods of Communication (Amendment of Testing Provisions) Instrument 201[9].

By order of the Board
[*date*]

Annex

Article 30(3) and (5) of the COMMISSION DELEGATED REGULATION (EU) 2018/389 of 27 November 2017 supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council with regard to regulatory technical standards for strong customer authentication and common and secure open standards of communication

In this Annex, underlining indicates new text and striking through indicates deleted text.

Article 30

General obligations for access interfaces

3. Account servicing payment service providers shall ensure that their interfaces follow standards of communication which are issued by international or European standardisation organisations.

Account servicing payment service providers shall also ensure that the technical specification of any of the interfaces is documented specifying a set of routines, protocols, and tools needed by payment initiation service providers, account information service providers and payment service providers issuing card-based payment instruments for allowing their software and applications to interoperate with the systems of the account servicing payment service providers.

Account servicing payment service providers shall at a minimum, and no less than 6 months before ~~the application date referred to in Article 38(2), 14 September 2019~~ or before the target date for the market launch of the access interface when the launch takes place after ~~the date referred to in Article 38(2), 14 September 2019~~, make the documentation available, at no charge, upon request by authorised payment initiation service providers, account information service providers and payment service providers issuing card-based payment instruments or payment service providers that have applied to ~~their competent authorities~~ the FCA for the relevant authorisation, and shall make a summary of the documentation publicly available on their website.

5. Account servicing payment service providers shall make available a testing facility, including support, for connection and functional testing to enable authorised payment initiation service providers, payment service providers issuing card-based payment instruments and account information service providers, or payment service providers that have applied for the relevant authorisation, to test their software and applications

used for offering a payment service to users. This testing facility should be made available no later than 6 months before ~~the application date referred to in Article 38(2)~~ 14 September 2019 or before the target date for the market launch of the access interface when the launch takes place after ~~the date referred to in Article 38(2)~~. 14 September 2019.

However, no sensitive information shall be shared through the testing facility.



Appendix 2

Draft technical standards (UK-RTS)

**TECHNICAL STANDARDS ON STRONG CUSTOMER AUTHENTICATION AND
COMMON AND SECURE METHODS OF COMMUNICATION INSTRUMENT
201[9]**

Powers exercised

- A. The Financial Conduct Authority makes this standards instrument, save for Article 30(3) and (5), in the exercise of the powers and related provisions in or under:
- (1) the following Regulations of the Payment Services Regulations as amended by the Electronic Money, Payment Services and Payment Systems (Amendment and Transitional Provisions) (EU Exit) Regulations 2018:
 - (a) Regulation 106A (Technical Standards); and
 - (b) Regulation 120 (Guidance); and
 - (2) the following sections of the Financial Services and Markets Act 2000 (“The Act”) as amended by the Financial Regulators’ Powers (Technical Standards etc.) (Amendment etc.) (EU Exit) Regulations 2018:
 - (a) section 138P (Technical Standards);
 - (b) section 138Q (Standards instruments);
 - (c) section 138S (Application of Chapters 1 and 2);
 - (d) section 137T (General supplementary powers);
 - (e) section 138F (Notification of rules); and
 - (f) section 138I (Consultation by the FCA).

Note: Article 30(3) and (5) are not made by the Board in this instrument, but are included in this instrument for clarity and completeness. Article 30(3) and (5) are copied out from the Technical Standards on Strong Customer Authentication and Common and Secure Methods of Communication (Amendment of Testing Provisions) Instrument 2019.

Pre-conditions to making

- B. The FCA have consulted the Prudential Regulation Authority and the Bank of England as appropriate in accordance with section 138P of the Act.
- C. A draft of this instrument has been approved by the Treasury, in accordance with section 138R of the Act.

Modifications

- D. The FCA thereafter makes the Technical Standards on Strong Customer Authentication and Common and Secure Methods of Communication in accordance with the Annex to this instrument, save for Article 30(3) and (5).

Commencement

- E. This instrument comes into force on 14 September 2019.

Citation

- F. This instrument may be cited as the Technical Standards on Strong Customer Authentication and Common and Secure Methods of Communication Instrument 201[9].

By order of the Board
[date]

Annex

Technical standards regarding strong customer authentication and common and secure open standards of communication.

Chapter -2

Application and Definitions

Application

1. These Standards, save for Articles 30(3) and (5), are made by the Financial Conduct Authority pursuant to Regulation 106A of the Payment Services Regulations 2017 as amended by the Electronic Money, Payment Services and Payment Systems (Amendment and Transitional Provisions) (EU Exit) Regulations 2018 in order to specify:
 - (a) the requirements that must be met by strong customer authentication referred to in Regulation 100(1) and (2);
 - (b) the exemption from the application of Regulation 100(1), (2) and (3);
 - (c) the requirements with which security measures have to comply to protect the confidentiality and integrity of the payment service users' personalised security credentials;
 - (d) the requirements for common and secure open standards of communication for the purpose of identification, authentication, notification and information, as well as for the implementation of security measures, between account servicing payment service providers, account information service providers, payers, payees and other payment service providers.
2. Articles 30(3) and (5) are not made by the FCA in accordance with its powers under Regulation 106A of the Payment Services Regulations 2017 but are included for clarity and completeness.
3. These Standards apply to payment service providers, including account servicing payment service providers and account information service providers.

Definitions

References to the Payment Services Regulations 2017 (SI 2017/752) are references to the Payment Services Regulations as amended by the Electronic Money, Payment Services and Payment Systems (Amendment and Transitional Provisions) (EU Exit) Regulations 2018.

Where a term in these Standards is defined in the Payment Services Regulations 2017 (SI 2017/752), that definition shall apply for the purposes of these Standards unless the contrary intention appears.

Chapter -1

Guidance

1. Payment services offered electronically should be carried out in a secure manner, adopting technologies able to guarantee the safe authentication of the user and to reduce, to the maximum extent possible, the risk of fraud. The authentication procedure should include, in general, transaction monitoring mechanisms to detect attempts to use a payment service user's personalised security credentials that were lost, stolen, or misappropriated and should also ensure that the payment service user is the legitimate user and therefore is giving consent for the transfer of funds and access to its account information through a normal use of the personalised security credentials. Furthermore, it is necessary to specify the requirements of the strong customer authentication that should be applied each time a payer accesses its payment account online, initiates an electronic payment transaction or carries out any action through a remote channel which may imply a risk of payment fraud or other abuse, by requiring the generation of an authentication code which should be resistant against the risk of being forged in its entirety or by disclosure of any of the elements upon which the code was generated.
2. As fraud methods are constantly changing, the requirements of strong customer authentication should allow for innovation in the technical solutions addressing the emergence of new threats to the security of electronic payments. To ensure that the requirements to be laid down are effectively implemented on a continuous basis, it is also appropriate to require that the security measures for the application of strong customer authentication and its exemptions, the measures to protect confidentiality and integrity of the personalised security credentials, and the measures establishing common and secure open standards of communication are documented, periodically tested, evaluated and audited by auditors with expertise in IT security and payments, and operationally independent. In order to allow the FCA to monitor the quality of the review of these measures, such reviews should be made available to the FCA upon its request.
3. As electronic remote payment transactions are subject to a higher risk of fraud, it is necessary to introduce additional requirements for the strong customer authentication

of such transactions, ensuring that the elements dynamically link the transaction to an amount and a payee specified by the payer when initiating the transaction.

4. Dynamic linking is possible through the generation of authentication codes which is subject to a set of strict security requirements. To remain technologically neutral a specific technology for the implementation of authentication codes should not be required. Therefore authentication codes should be based on solutions such as generating and validating one-time passwords, digital signatures or other cryptographically underpinned validity assertions using keys or cryptographic material stored in the authentication elements, as long as the security requirements are fulfilled.
5. It is necessary to lay down specific requirements for the situation where the final amount is not known at the moment the payer initiates an electronic remote payment transaction, in order to ensure that the strong customer authentication is specific to the maximum amount that the payer has given consent for as referred to in the Payment Services Regulations 2017 (SI 2017/752).
6. In order to ensure the application of strong customer authentication, it is also necessary to require adequate security features for the elements of strong customer authentication categorised as knowledge (something only the user knows), such as length or complexity, for the elements categorised as possession (something only the user possesses), such as algorithm specifications, key length and information entropy, and for the devices and software that read elements categorized as inherence (something the user is) such as algorithm specifications, biometric sensor and template protection features, in particular to mitigate the risk that those elements are uncovered, disclosed to and used by unauthorised parties. It is also necessary to lay down the requirements to ensure that those elements are independent, so that the breach of one does not compromise the reliability of the others, in particular when any of these elements are used through a multi-purpose device, namely a device such as a tablet or a mobile phone which can be used both for giving the instruction to make the payment and in the authentication process.
7. The requirements of strong customer authentication apply to payments initiated by the payer, regardless of whether the payer is a natural person or a legal entity.
8. Due to their very nature, payments made through the use of an anonymous payment instrument are not subject to the obligation of strong customer authentication. Where the anonymity of such instruments is lifted on contractual or legislative grounds, payments are subject to the security requirements that follow from the Payment Services Regulations 2017 (SI 2017/752) and this Regulatory Technical Standard.
9. In accordance with the Payment Services Regulations 2017 (SI 2017/752) exemptions to the principle of strong customer authentication have been defined based on the level of risk, amount, recurrence and the payment channel used for the execution of the payment transaction
10. Actions which imply access to the balance and the recent transactions of a payment account without disclosure of sensitive payment data, recurring payments to the same payees which have been previously set up or confirmed by the payer through the use of strong customer authentication, and payments to and from the same natural or legal

person with accounts with the same payment service provider, pose a low level of risk, thus allowing payment service providers not to apply strong customer authentication. This leaves aside that in accordance with Regulations 68, 69 and 70 of the Payment Services Regulations 2017 (SI 2017/752), payment initiation service providers, payment service providers issuing card-based payment instruments and account information service providers should only seek and obtain the necessary and essential information from the account servicing payment service provider for the provision of a given payment service with the consent of the payment service user. Such consent can be given individually for each request of information or for each payment to be initiated or, for account information service providers, as a mandate for designated payment accounts and associated payment transactions as established in the contractual agreement with the payment service user.

11. Exemptions for low-value contactless payments at points of sale, which also take into account a maximum number of consecutive transactions or a certain fixed maximum value of consecutive transactions without applying strong customer authentication, allow for the development of user friendly and low risk payment services and should therefore be provided for. It is also appropriate to establish an exemption for the case of electronic payment transactions initiated at unattended terminals where the use of strong customer authentication may not always be easy to apply due to operational reasons (e.g. to avoid queues and potential accidents at toll gates or for other safety or security risks).
12. Similar to the exemption for low value contactless payments at the point of sale, a proper balance needs to be struck between the interest in enhanced security in remote payments and the needs of user-friendliness and accessibility of payments in the area of e-commerce. In line with those principles, thresholds below which no strong customer authentication needs to be applied should be set in a prudent manner, to cover only online purchases of low value. The thresholds for online purchases should be set more prudently, considering that the fact that the person is not physically present when making the purchase is posing a slightly higher security risk.
13. The requirements of strong customer authentication apply to payments initiated by the payer, regardless of whether the payer is a natural person or a legal entity. Many corporate payments are initiated through dedicated processes or protocols which guarantee the high levels of payment security that the Payment Services Regulations 2017 (SI 2017/752) aims to achieve through strong customer authentication. Where the FCA establishes that those payment processes and protocols that are only made available to payers who are not consumers achieve the objectives of The Payment Services Regulations 2017 (SI 2017/752) in terms of security, payment service providers may, in relation to those processes or protocols, be exempted from the strong customer authentication requirements.
14. In the case of real-time transaction risk analysis that categorise a payment transaction as low risk, it is also appropriate to introduce an exemption for the payment service provider that intends not to apply strong customer authentication through the adoption of effective and risk-based requirements which ensure the safety of the payment service user's funds and personal data. Those risk-based requirements should combine the scores of the risk analysis, confirming that no abnormal spending or behavioural pattern of the payer has been identified, taking into account other risk factors including information on the location of the payer and of the payee with monetary

thresholds based on fraud rates calculated for remote payments. Where, on the basis of the real-time transaction risk analysis, a payment cannot be qualified as posing a low level of risk, the payment service provider should revert to strong customer authentication. The maximum value of such risk based exemption should be set in a manner ensuring a very low corresponding fraud rate, also by comparison to the fraud rates of all the payment transactions of the payment service provider, including those authenticated through strong customer authentication, within a certain period of time and on a rolling basis.

15. For the purpose of ensuring an effective enforcement, payment service providers, that wish to benefit from the exemptions from strong customer authentication should regularly monitor and make available to the FCA upon its request, for each payment transaction type, the value of fraudulent or unauthorised payment transactions and the observed fraud rates for all their payment transactions, whether authenticated through strong customer authentication or executed under a relevant exemption.
16. The collection of this new historical evidence on the fraud rates of electronic payment transactions will also contribute to an effective review by the FCA of the thresholds for an exemption to strong customer authentication based on a real-time transaction risk analysis. The FCA should review and if appropriate update these Standards, including where appropriate the thresholds and fraud rates, with the aim of enhancing the security of remote electronic payments, on a regular basis to take account of innovation and technical developments as well as other relevant matters.
17. Payment service providers that make use of any of the exemptions to be provided for should be allowed at any time to choose to apply strong customer authentication to the actions and to the payment transactions referred to in those provisions.
18. The measures that protect the confidentiality and integrity of personalised security credentials, as well as authentication devices and software, should limit the risks relating to fraud through unauthorised or fraudulent use of payment instruments and unauthorised access to payment accounts. To this end it is necessary to introduce requirements on the secure creation and delivery of the personalised security credentials and their association with the payment service user, and to provide conditions for the renewal and deactivation of those credentials.
19. In order to ensure effective and secure communication between the relevant actors in the context of account information services, payment initiation services and confirmation on the availability of funds, it is necessary to specify the requirements of common and secure open standards of communication to be met by all relevant payment service providers. The Payment Services Regulations 2017 (SI 2017/752) provide for the access and use of payment account information by account information service providers. These Standards therefore do not change the rules of access to accounts other than payment accounts.
20. Each account servicing payment service provider with payment accounts that are accessible online should offer at least one access interface enabling secure communication with account information service providers, payment initiation service providers and payment service providers issuing card-based payment instruments. The interface should enable the account information service providers, payment initiation service providers and payment service providers issuing card-based payment

instruments to identify themselves to the account servicing payment service provider. It should also allow account information service providers and payment initiation service providers to rely on the authentication procedures provided by the account servicing payment service provider to the payment service user. To ensure technology and business-model neutrality, the account servicing payment service providers should be free to decide whether to offer an interface that is dedicated to the communication with account information service providers, payment initiation service providers, and payment service providers issuing card-based payment instruments, or to allow, for that communication, the use of the interface for the identification and communication with the account servicing payment service providers' payment service users.

21. In order to allow account information service providers, payment initiation service providers, and payment service providers issuing card-based payment instruments to develop their technical solutions, the technical specification of the interface should be adequately documented and made publicly available. The effect of Articles 30(3) and (5) which have been in force since the 14 March 2019 and modified by the Technical Standards on Strong Customer Authentication and Common and Secure Methods of Communication (Amendment of testing provisions) Instrument 2019 is that the account servicing payment service provider should offer a facility enabling the payment service providers to test the technical solutions at least six months before 14 September 2019 or, if the launch takes place after the application date of these Standards, prior to the date on which the interface will be launched to the market. To ensure the interoperability of different technological communication solutions, the interface should use standards of communication which are developed by international standardisation organisations.
22. The quality of the services provided by account information service providers and payment initiation service providers will be dependent on the proper functioning of the interfaces put in place or adapted by account servicing payment service providers. It is therefore important that in case of non-compliance of such interfaces with the provisions included in these Standards, measures are taken to guarantee business continuity for the benefit of the users of those services. It is the responsibility of the FCA to ensure that account information service providers and payment initiation service providers are not blocked or obstructed in the provision of their services.
23. Where access to payment accounts is offered by means of a dedicated interface, in order to ensure the right of payment service users to make use of payment initiation service providers and of services enabling access to account information, as provided for in the Payment Services Regulations 2017 (SI 2017/752), it is necessary to require that dedicated interfaces have the same level of availability and performance as the interface available to the payment service user. Account servicing payment service providers should also define transparent key performance indicators and service level targets for the availability and performance of dedicated interfaces that are at least as stringent as those for the interface used for their payment service users. Those interfaces should be tested by the payment service providers who will use them, and should be stress-tested and monitored by the FCA.
24. To ensure that payment service providers who rely on the dedicated interface can continue to provide their services in case of problems of availability or inadequate performance, it is necessary to provide, subject to strict conditions, a fallback

mechanism that will allow such providers to use the interface that the account servicing payment service provider maintains for the identification of, and communication with, its own payment service users. Certain account servicing payment service providers will be exempted from having to provide such a fallback mechanism through their customer facing interfaces where the FCA establishes that the dedicated interfaces comply with specific conditions that ensure unhampered competition. In the event that the exempted dedicated interfaces fail to comply with the required conditions, the granted exemptions shall be revoked by the FCA.

25. In order to allow the FCA to effectively supervise and monitor the implementation and management of the communication interfaces, the account servicing payment service providers should make a summary of the relevant documentation available on their website, and provide, upon request, the FCA with documentation of the solutions in case of emergencies. The account servicing payment service providers should also make publicly available the statistics on the availability and performance of that interface.
26. In order to safeguard the confidentiality and the integrity of data, it is necessary to ensure the security of communication sessions between account servicing payment service providers, account information service providers, payment initiation service providers and payment service providers issuing card-based payment instruments. It is in particular, necessary to require that secure encryption is applied between account information service providers, payment initiation service providers, payment service providers issuing card-based payment instruments and account servicing payment service providers when exchanging data.
27. To improve user confidence and ensure strong customer authentication, the use of electronic identification means and trust services as set out in Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust service for electronic transactions in the internal market as amended by Electronic Identification and Trust Services for Electronic Transactions (Amendment etc.) (EU Exit) Regulations 2018 should be taken into account, in particular with regard to notified electronic identification schemes.

Technical Standards

Chapter 1

General Provisions

Article 1

Subject matter

These Standards establish the requirements to be complied with by payment service providers for the purpose of implementing security measures which enable them to do the following:

- (a) apply the procedure of strong customer authentication in accordance with Regulation 100 of the Payment Services Regulations 2017 (SI 2017/752);
- (b) exempt the application of the security requirements of strong customer authentication, subject to specified and limited conditions based on the level of risk, the amount and the recurrence of the payment transaction and of the payment channel used for its execution;
- (c) protect the confidentiality and the integrity of the payment service user's personalised security credentials;
- (d) establish common and secure open standards for the communication between account servicing payment service providers, payment initiation service providers, account information service providers, payers, payees and other payment service providers in relation to the provision and use of payment services in application of Part 7 of the Payment Services Regulations 2017 (SI 2017/752).

Article 2

General Authentication Requirements

1. Payment service providers shall have transaction monitoring mechanisms in place that enable them to detect unauthorised or fraudulent payment transactions for the purpose of the implementation of the security measures referred to in points (a) and (b) of Article 1.

Those mechanisms shall be based on the analysis of payment transactions taking into account elements which are typical of the payment service user in the circumstances of a normal use of the personalised security credentials.

2. Payment service providers shall ensure that the transaction monitoring mechanisms take into account, at a minimum, each of the following risk-based factors:

- (a) lists of compromised or stolen authentication elements;
- (b) the amount of each payment transaction;
- (c) known fraud scenarios in the provision of payment services;
- (d) signs of malware infection in any sessions of the authentication procedure;
- (e) in case the access device or the software is provided by the payment service provider, a log of the use of the access device or the software provided to the payment service user and the abnormal use of the access device or the software.

Article 3

Review of the security measures

1. The implementation of the security measures referred to in Article 1 shall be documented, periodically tested, evaluated and audited in accordance with the applicable legal framework of the payment service provider by auditors with expertise in IT security and payments and operationally independent within or from the payment service provider.
2. The period between the audits referred to in paragraph 1 shall be determined taking into account the relevant accounting and statutory audit framework applicable to the payment service provider.

However, payment service providers that make use of the exemption referred to in Article 18 shall be subject to an audit of the methodology, the model and the reported fraud rates at a minimum on a yearly basis. The auditor performing this audit shall have expertise in IT security and payments and be operationally independent within or from the payment service provider. During the first year of making use of the exemption under Article 18 and at least every three years thereafter, or more frequently at the FCA's request, this audit shall be carried out by an independent and qualified external auditor.

3. This audit shall present an evaluation and report on the compliance of the payment service provider's security measures with the requirements set out in these Standards.

The entire report shall be made available to the FCA upon its request.

Chapter 2

Security Measures for the Application of Strong Customer Authentication

Article 4

Authentication code

1. Where payment service providers apply strong customer authentication in accordance with Regulation 100 of the Payment Services Regulation 2017 (SI 2017/752), the authentication shall be based on two or more elements which are categorised as knowledge, possession and inherence and shall result in the generation of an authentication code.

The authentication code shall be only accepted once by the payment service provider when the payer uses the authentication code to access its payment account online, to initiate an electronic payment transaction or to carry out any action through a remote channel which may imply a risk of payment fraud or other abuses.

2. For the purpose of paragraph 1, payment service providers shall adopt security measures ensuring that each of the following requirements is met:
 - (a) no information on any of the elements referred to in paragraph 1 can be derived from the disclosure of the authentication code;
 - (b) it is not possible to generate a new authentication code based on the knowledge of any other authentication code previously generated;
 - (c) the authentication code cannot be forged.
3. Payment service providers shall ensure that the authentication by means of generating an authentication code includes each of the following measures:
 - (a) where the authentication for remote access, remote electronic payments and any other actions through a remote channel which may imply a risk of payment fraud or other abuses has failed to generate an authentication code for the purposes of paragraph 1, it shall not be possible to identify which of the elements referred to in that paragraph was incorrect;
 - (b) the number of failed authentication attempts that can take place consecutively, after which the actions referred to in Regulation 100(1) of the Payment Services Regulations 2017 (SI 2017/752) shall be temporarily or permanently blocked, shall not exceed five within a given period of time;
 - (c) the communication sessions are protected against the capture of authentication data transmitted during the authentication and against manipulation by unauthorised parties in accordance with the requirements in Chapter 5.
 - (d) the maximum time without activity by the payer after being authenticated for accessing its payment account online shall not exceed five minutes.

4. Where the block referred to in paragraph 3(b) is temporary, the duration of that block and the number of retries shall be established based on the characteristics of the service provided to the payer and all the relevant risks involved, taking into account, at a minimum, the factors referred to in Article 2(2).

The payer shall be alerted before the block is made permanent.

Where the block has been made permanent, a secure procedure shall be established allowing the payer to regain use of the blocked electronic payment instruments.

Article 5

Dynamic linking

1. Where payment service providers apply strong customer authentication in accordance with Regulation 100(2) of the Payment Services Regulations 2017 (SI 2017/752), in addition to the requirements of Article 4 of these Standards, they shall also adopt security measures that meet each of the following requirements:
 - (a) the payer is made aware of the amount of the payment transaction and of the payee;
 - (b) the authentication code generated is specific to the amount of the payment transaction and the payee agreed to by the payer when initiating the transaction;
 - (c) the authentication code accepted by the payment service provider corresponds to the original specific amount of the payment transaction and to the identity of the payee agreed to by the payer;
 - (d) any change to the amount or the payee results in the invalidation of the authentication code generated.
2. For the purpose of paragraph 1, payment service providers shall adopt security measures which ensure the confidentiality, authenticity and integrity of each of the following:
 - (a) the amount of the transaction and the payee throughout all of the phases of the authentication;
 - (b) the information displayed to the payer throughout all of the phases of the authentication including the generation, transmission and use of the authentication code.
3. For the purpose of paragraph 1(b) and where payment service providers apply strong customer authentication in accordance with Regulation 100(2) of the Payment Services Regulations 2017 (SI 2017/752) the following requirements for the authentication code shall apply:

- (a) in relation to a card-based payment transaction for which the payer has given consent to the exact amount of the funds to be blocked pursuant to Regulation 78 of the Payment Services Regulations 2017 (SI 2017/752), the authentication code shall be specific to the amount that the payer has given consent to be blocked and agreed to by the payer when initiating the transaction;
- (b) in relation to payment transactions for which the payer has given consent to execute a batch of remote electronic payment transactions to one or several payees, the authentication code shall be specific to the total amount of the batch of payment transactions and to the specified payees.

Article 6

Requirements of the elements categorised as knowledge

1. Payment service providers shall adopt measures to mitigate the risk that the elements of strong customer authentication categorised as knowledge are uncovered by, or disclosed to, unauthorised parties.
2. The use by the payer of those elements shall be subject to mitigation measures in order to prevent their disclosure to unauthorised parties.

Article 7

Requirements of the elements categorised as possession

1. Payment service providers shall adopt measures to mitigate the risk that the elements of strong customer authentication categorised as possession are used by unauthorised parties.
2. The use by the payer of those elements shall be subject to measures designed to prevent replication of the elements.

Article 8

Requirements of devices and software linked to elements categorised as inherence

1. Payment service providers shall adopt measures to mitigate the risk that the authentication elements categorised as inherence and read by access devices and software provided to the payer are uncovered by unauthorised parties. At a minimum,

the payment service providers shall ensure that those access devices and software have a very low probability of an unauthorised party being authenticated as the payer.

2. The use by the payer of those elements shall be subject to measures ensuring that those devices and the software guarantee resistance against unauthorised use of the elements through access to the devices and the software.

Article 9

Independence of the elements

1. Payment service providers shall ensure that the use of the elements of strong customer authentication referred to in Articles 6, 7 and 8 is subject to measures which ensure that, in terms of technology, algorithms and parameters, the breach of one of the elements does not compromise the reliability of the other elements.
2. Payment service providers shall adopt security measures, where any of the elements of strong customer authentication or the authentication code itself is used through a multi-purpose device, to mitigate the risk which would result from that multi-purpose device being compromised.
3. For the purposes of paragraph 2, the mitigating measures shall include each of the following:
 - (a) the use of separated secure execution environments through the software installed inside the multi-purpose device;
 - (b) mechanisms to ensure that the software or device has not been altered by the payer or by a third party;
 - (c) where alterations have taken place, mechanisms to mitigate the consequences thereof.

Chapter 3

Exemptions from Strong Customer Authentication

Article 10

Payment account information

1. Payment service providers shall be allowed not to apply strong customer authentication, subject to compliance with the requirements laid down in Article 2 and to paragraph 2 of this Article and, where a payment service user is limited to

accessing either or both of the following items online without disclosure of sensitive payment data:

- (a) the balance of one or more designated payment accounts;
 - (b) the payment transactions executed in the last 90 days through one or more designated payment accounts.
2. For the purpose of paragraph 1, payment service providers shall not be exempted from the application of strong customer authentication where either of the following conditions are met:
- (a) the payment service user is accessing online the information specified in paragraph 1 for the first time;
 - (b) more than 90 days have elapsed since the last time the payment service user accessed online the information specified in paragraph 1(b) and strong customer authentication was applied.

Article 11

Contactless payments at point of sale

Payment service providers shall be allowed not to apply strong customer authentication, subject to compliance with the requirements laid down in Article 2, where the payer initiates a contactless electronic payment transaction provided that the following conditions are met:

- (a) the individual amount of the contactless electronic payment transaction does not exceed £40; and
- (b) the cumulative amount of previous contactless electronic payment transactions initiated by means of a payment instrument with a contactless functionality from the date of the last application of strong customer authentication does not exceed £130; or
- (c) the number of consecutive contactless electronic payment transactions initiated via the payment instrument offering a contactless functionality since the last application of strong customer authentication does not exceed five.

Article 12

Unattended terminals for transport fares and parking fees

Payment service providers shall be allowed not to apply strong customer authentication, subject to compliance with the requirements laid down in Article 2, where the payer initiates

an electronic payment transaction at an unattended payment terminal for the purpose of paying a transport fare or a parking fee.

Article 13

Trusted beneficiaries

1. Payment service providers shall apply strong customer authentication where a payer creates or amends a list of trusted beneficiaries through the payer's account servicing payment service provider.
2. Payment service providers shall be allowed not to apply strong customer authentication, subject to compliance with the general authentication requirements, where the payer initiates a payment transaction and the payee is included in a list of trusted beneficiaries previously created by the payer.

Article 14

Recurring transactions

1. Payment service providers shall apply strong customer authentication when a payer creates, amends, or initiates for the first time, a series of recurring transactions with the same amount and with the same payee.
2. Payment service providers shall be allowed not to apply strong customer authentication, subject to compliance with the general authentication requirements, for the initiation of all subsequent payment transactions included in the series of payment transactions referred to in paragraph 1.

Article 15

Credit transfers between accounts held by the same natural or legal person

Payment service providers shall be allowed not to apply strong customer authentication, subject to compliance with the requirements laid down in Article 2, where the payer initiates a credit transfer in circumstances where the payer and the payee are the same natural or legal person and both payment accounts are held by the same account servicing payment service provider.

Article 16

Low-value transactions

Payment service providers shall be allowed not to apply strong customer authentication, where the payer initiates a remote electronic payment transaction provided that the following conditions are met:

- (a) the amount of the remote electronic payment transaction does not exceed £25; and
- (b) the cumulative amount of previous remote electronic payment transactions initiated by the payer since the last application of strong customer authentication does not exceed £85; or
- (c) the number of previous remote electronic payment transactions initiated by the payer since the last application of strong customer authentication does not exceed 5 consecutive individual remote electronic payment transactions.

Article 17

Secure corporate payment processes and protocols

Payment service providers shall be allowed not to apply strong customer authentication, in respect of legal persons initiating electronic payment transactions through the use of dedicated payment processes or protocols that are only made available to payers who are not consumers, where the FCA is satisfied that those processes or protocols guarantee at least equivalent levels of security to those provided for by the Payment Services Regulations 2017 (SI 2017/752).

Article 18

Transaction risk analysis

1. Payment service providers shall be allowed not to apply strong customer authentication where the payer initiates a remote electronic payment transaction identified by the payment service provider as posing a low level of risk according to the transaction monitoring mechanisms referred to in Article 2 and in paragraph 2(c) of this Article.
2. An electronic payment transaction referred to in paragraph 1 shall be considered as posing a low level of risk where all the following conditions are met:

- (a) the fraud rate for that type of transaction, reported by the payment service provider and calculated in accordance with Article 19, is equivalent to or below the reference fraud rates specified in the table set out in the Annex for ‘remote electronic card-based payments’ and ‘remote electronic credit transfers’ respectively;
 - (b) the amount of the transaction does not exceed the relevant Exemption Threshold Value (‘ETV’) specified in the table set out in the Appendix;
 - (c) payment service providers as a result of performing a real time risk analysis have not identified any of the following:
 - (i) abnormal spending or behavioural pattern of the payer;
 - (ii) unusual information about the payer’s device/software access;
 - (iii) malware infection in any session of the authentication procedure;
 - (iv) known fraud scenario in the provision of payment services;
 - (v) abnormal location of the payer;
 - (vi) high risk location of the payee.
3. Payment service providers that intend to exempt electronic remote payment transactions from strong customer authentication on the ground that they pose a low risk shall take into account at a minimum, the following risk-based factors:
- (a) the previous spending patterns of the individual payment service user;
 - (b) the payment transaction history of each of the payment service provider’s payment service users;
 - (c) the location of the payer and of the payee at the time of the payment transaction in cases where the access device or the software is provided by the payment service provider;
 - (d) the identification of abnormal payment patterns of the payment service user in relation to the user’s payment transaction history.

The assessment made by a payment service provider shall combine all those risk-based factors into a risk scoring for each individual transaction to determine whether a specific payment should be allowed without strong customer authentication.

Article 19

Calculation of fraud rates

1. For each type of transaction referred to in the table set out in the Annex, the payment service provider shall ensure that the overall fraud rates covering both payment transactions authenticated through strong customer authentication and those executed under any of the exemptions referred to in Articles 13 to 18 are equivalent to, or lower than, the reference fraud rate for the same type of payment transaction indicated in the table set out in the Appendix.

The overall fraud rate for each type of transaction shall be calculated as the total value of unauthorised or fraudulent remote transactions, whether the funds have been recovered or not, divided by the total value of all remote transactions for the same type of transactions, whether authenticated with the application of strong customer authentication or executed under any exemption referred to in Articles 13 to 18 on a rolling quarterly basis (90 days).

2. The calculation of the fraud rates and resulting figures shall be assessed by the audit review referred to in Article 3(2), which shall ensure that they are complete and accurate.
3. The methodology and any model, used by the payment service provider to calculate the fraud rates, as well as the fraud rates themselves, shall be adequately documented and made fully available to the FCA, upon its request.

Article 20

Cessation of exemptions based on transaction risk analysis

1. Payment service providers that make use of the exemption referred to in Article 18 shall immediately report to the FCA where one of their monitored fraud rates, for any type of payment transactions indicated in the table set out in the Appendix exceeds the applicable reference fraud rate and shall provide to the FCA a description of the measures that they intend to adopt to restore compliance of their monitored fraud rate with the applicable reference fraud rates.
2. Payment service providers shall immediately cease to make use of the exemption referred to in Article 18 for any type of payment transactions indicated in the table set out in the Annex in the specific exemption threshold range where their monitored fraud rate exceeds for two consecutive quarters the reference fraud rate applicable for that payment instrument or type of payment transaction in that exemption threshold range.

3. Following the cessation of the exemption referred to in Article 18 in accordance with paragraph 2 of this Article, payment service providers shall not use that exemption again, until their calculated fraud rate equals to, or is below, the reference fraud rates applicable for that type of payment transaction in that exemption threshold range for one quarter.
4. Where payment service providers intend to make use again of the exemption referred to in Article 18, they shall notify the FCA in a reasonable timeframe and shall before making use again of the exemption, provide evidence of the restoration of compliance of their monitored fraud rate with the applicable reference fraud rate for that exemption threshold range in accordance with paragraph 3 of this Article.

Article 21

Monitoring

1. In order to make use of the exemptions set out in Articles 10 to 18, payment service providers shall record and monitor the following data for each type of payment transactions, with a breakdown for both remote and non-remote payment transactions, at least on a quarterly basis:
 - (a) the total value of unauthorised or fraudulent payment transactions in accordance with Regulation 67(2) of the Payment Services Regulations 2017 (SI 2017/752), the total value of all payment transactions and the resulting fraud rate, including a breakdown of payment transactions initiated through strong customer authentication and under each of the exemptions;
 - (b) the average transaction value, including a breakdown of payment transactions initiated through strong customer authentication and under each of the exemptions;
 - (c) the number of payment transactions where each of the exemptions was applied and their percentage in respect of the total number of payment transactions.
2. Payment service providers shall make the results of the monitoring in accordance with paragraph 1 available to the FCA upon its request.

Chapter 4

Confidentiality and Integrity of the Payment Service Users' Personalised Security Credentials

Article 22

General requirements

1. Payment service providers shall ensure the confidentiality and integrity of the personalised security credentials of the payment service user, including authentication codes, during all phases of the authentication
2. For the purpose of paragraph 1, payment service providers shall ensure that each of the following requirements is met:
 - (a) personalised security credentials are masked when displayed and are not readable in their full extent when input by the payment service user during the authentication;
 - (b) personalised security credentials in data format, as well as cryptographic materials related to the encryption of the personalised security credentials are not stored in plain text;
 - (c) secret cryptographic material is protected from unauthorised disclosure.
3. Payment service providers shall fully document the process related to the management of cryptographic material used to encrypt or otherwise render unreadable the personalised security credentials.
4. Payment service providers shall ensure that the processing and routing of personalised security credentials and of the authentication codes generated in accordance with Chapter 2 take place in secure environments in accordance with strong and widely recognised industry standards.

Article 23

Creation and transmission of credentials

Payment service providers shall ensure that the creation of personalised security credentials is performed in a secure environment.

They shall mitigate the risks of unauthorised use of the personalised security credentials and of the authentication devices and software following their loss, theft or copying before their delivery to the payer.

Article 24

Association with the payment service user

1. Payment service providers shall ensure that only the payment service user is associated, in a secure manner, with the personalised security credentials, the authentication devices and the software.
2. For the purpose of paragraph 1, payment service providers shall ensure that each of the following requirements is met:
 - (a) the association of the payment service user's identity with personalised security credentials, authentication devices and software is carried out in secure environments under the payment service provider's responsibility comprising at least the payment service provider's premises, the internet environment provided by the payment service provider or other similar secure websites used by the payment service provider and its automated teller machine services, and taking into account risks associated with devices and underlying components used during the association process that are not under the responsibility of the payment service provider;
 - (b) the association by means of a remote channel of the payment service user's identity with the personalised security credentials and with authentication devices or software is performed using strong customer authentication.

Article 25

Delivery of credentials, authentication devices and software

1. Payment service providers shall ensure that the delivery of personalised security credentials, authentication devices and software to the payment service user is carried out in a secure manner designed to address the risks related to their unauthorised use due to their loss, theft or copying.
2. For the purpose of paragraph 1, payment service providers shall at least apply each of the following measures:
 - (a) effective and secure delivery mechanisms ensuring that the personalised security credentials, authentication devices and software are delivered to the legitimate payment service user;
 - (b) mechanisms that allow the payment service provider to verify the authenticity of the authentication software delivered to the payment services user by means of the internet;

- (c) arrangements ensuring that, where the delivery of personalised security credentials is executed outside the premises of the payment service provider or through a remote channel:
 - (i) no unauthorised party can obtain more than one feature of the personalised security credentials, the authentication devices or software when delivered through the same channel;
 - (ii) the delivered personalised security credentials, authentication devices or software require activation before usage;
- (d) arrangements ensuring that, in cases where the personalised security credentials, the authentication devices or software have to be activated before their first use, the activation shall take place in a secure environment in accordance with the association procedures referred to in Article 24.

Article 26

Renewal of personalised security credentials

Payment service providers shall ensure that the renewal or re-activation of personalised security credentials adhere to the procedures for the creation, association and delivery of the credentials and of the authentication devices in accordance with Articles 23, 24 and 25.

Article 27

Destruction, deactivation and revocation

Payment service providers shall ensure that they have effective processes in place to apply each of the following security measures:

- (a) the secure destruction, deactivation or revocation of the personalised security credentials, authentication devices and software;
- (b) where the payment service provider distributes reusable authentication devices and software, the secure re-use of a device or software is established, documented and implemented before making it available to another payment services user;
- (c) the deactivation or revocation of information related to personalised security credentials stored in the payment service provider's systems and databases and, where relevant, in public repositories.

Chapter 5

Common and Secure Open Standards of Communication

Section 1

General requirements for communication

Article 28

Requirements for identification

1. Payment service providers shall ensure secure identification when communicating between the payer's device and the payee's acceptance devices for electronic payments, including but not limited to payment terminals.
2. Payment service providers shall ensure that the risks of misdirection of communication to unauthorised parties in mobile applications and other payment services users' interfaces offering electronic payment services are effectively mitigated.

Article 29

Traceability

1. Payment service providers shall have processes in place which ensure that all payment transactions and other interactions with the payment services user, with other payment service providers and with other entities, including merchants, in the context of the provision of the payment service are traceable, ensuring knowledge ex-post of all events relevant to the electronic transaction in all the various stages.
2. For the purpose of paragraph 1, payment service providers shall ensure that any communication session established with the payment services user, other payment service providers and other entities, including merchants, relies on each of the following:
 - (a) a unique identifier of the session;
 - (b) security mechanisms for the detailed logging of the transaction, including transaction number, timestamps and all relevant transaction data;
 - (c) timestamps which shall be based on a unified time-reference system and which shall be synchronised according to an official time signal.

Section 2

Specific requirements for the common and secure open standards of communication

Article 30

General obligations for access interfaces

1. Account servicing payment service providers that offer to a payer a payment account that is accessible online shall have in place at least one interface which meets each of the following requirements:
 - (a) account information service providers, payment initiation service providers and payment service providers issuing card-based payment instruments are able to identify themselves towards the account servicing payment service provider;
 - (b) account information service providers are able to communicate securely to request and receive information on one or more designated payment accounts and associated payment transactions;
 - (c) payment initiation service providers are able to communicate securely to initiate a payment order from the payer's payment account and receive all information on the initiation of the payment transaction and all information accessible to the account servicing payment service providers regarding the execution of the payment transaction.
2. For the purposes of authentication of the payment service user, the interface referred to in paragraph 1 shall allow account information service providers and payment initiation service providers to rely on all the authentication procedures provided by the account servicing payment service provider to the payment service user.

The interface shall at least meet all of the following requirements:

- (a) a payment initiation service provider or an account information service provider shall be able to instruct the account servicing payment service provider to start the authentication based on the consent of the payment service user;
- (b) communication sessions between the account servicing payment service provider, the account information service provider, the payment initiation service provider and any payment service user concerned shall be established and maintained throughout the authentication;
- (c) the integrity and confidentiality of the personalised security credentials and of authentication codes transmitted by or through the payment initiation service provider or the account information service provider shall be ensured.

3. Account servicing payment service providers shall ensure that their interfaces follow standards of communication which are issued by international standardisation organisations.

Account servicing payment service providers shall also ensure that the technical specification of any of the interfaces is documented specifying a set of routines, protocols, and tools needed by payment initiation service providers, account information service providers and payment service providers issuing card-based payment instruments for allowing their software and applications to interoperate with the systems of the account servicing payment service providers.

Account servicing payment service providers shall at a minimum, and no less than six months before 14 September 2019, or before the target date for the market launch of the access interface when the launch takes place after 14 September 2019, make the documentation available, at no charge, upon request by authorised payment initiation service providers, account information service providers and payment service providers issuing card-based payment instruments or payment service providers that have applied to the FCA for the relevant authorisation, and shall make a summary of the documentation publicly available on their website.

4. In addition to paragraph 3, account servicing payment service providers shall ensure that, except for emergency situations, any change to the technical specification of their interface is made available to authorised payment initiation service providers, account information service providers and payment service providers issuing card-based payment instruments, or payment service providers that have applied to the FCA for the relevant authorisation, in advance as soon as possible and not less than 3 months before the change is implemented.

Payment service providers shall document emergency situations where changes were implemented and make the documentation available to the FCA on request.

5. Account servicing payment service providers shall make available a testing facility, including support, for connection and functional testing to enable authorised payment initiation service providers, payment service providers issuing card-based payment instruments and account information service providers, or payment service providers that have applied for the relevant authorisation, to test their software and applications used for offering a payment service to users. This testing facility should be made available no later than six months before 14 September 2019 or before the target date for the market launch of the access interface when the launch takes place after 14 September 2019.

However, no sensitive information shall be shared through the testing facility.

6. The FCA shall ensure that account servicing payment service providers comply at all times with the obligations included in these Standards in relation to the interface(s) that they put in place. In the event that an account servicing payment services provider fails to comply with the requirements for interfaces laid down in these Standards, the FCA shall ensure that the provision of payment initiation services and account information services is not prevented or disrupted to the extent that the respective providers of such services comply with the conditions defined under Article 33(5).

Article 31

Access interface options

Account servicing payment service providers shall establish the interface(s) referred to in Article 30 by means of a dedicated interface or by allowing the use by the payment service providers referred to in Article 30(1) of the interfaces used for authentication and communication with the account servicing payment service provider's payment services users.

Article 32

Obligations for a dedicated interface

1. Subject to compliance with Article 30 and 31, account servicing payment service providers that have put in place a dedicated interface shall ensure that the dedicated interface offers at all times the same level of availability and performance, including support, as the interfaces made available to the payment service user for directly accessing its payment account online.
2. Account servicing payment service providers that have put in place a dedicated interface shall define transparent key performance indicators and service level targets, at least as stringent as those set for the interface used by their payment service users both in terms of availability and of data provided in accordance with Article 36. Those interfaces, indicators and targets shall be monitored by the FCA and stress-tested.
3. Account servicing payment service providers that have put in place a dedicated interface shall ensure that this interface does not create obstacles to the provision of payment initiation and account information services. Such obstacles may include, among others, preventing the use by payment service providers referred to in Article 30(1) of the credentials issued by account servicing payment service providers to their customers, imposing redirection to the account servicing payment service provider's authentication or other functions, requiring additional authorisations and registrations in addition to those provided for in Regulations 4 and 6 of the Payment Services Regulations 2017 (SI 2017/752), or requiring additional checks of the consent given by payment service users to providers of payment initiation and account information services.
4. For the purpose of paragraphs 1 and 2, account servicing payment service providers shall monitor the availability and performance of the dedicated interface. Account servicing payment service providers shall publish on their website quarterly statistics on the availability and performance of the dedicated interface and of the interface used by its payment service users.

Article 33

Contingency measures for a dedicated interface

1. Account servicing payment service providers shall include, in the design of the dedicated interface, a strategy and plans for contingency measures for the event that the interface does not perform in compliance with Article 32, that there is unplanned unavailability of the interface and that there is a systems breakdown. Unplanned unavailability or a systems breakdown may be presumed to have arisen when five consecutive requests for access to information for the provision of payment initiation services or account information services are not replied to within 30 seconds.
2. Contingency measures shall include communication plans to inform payment service providers making use of the dedicated interface of measures to restore the system and a description of the immediately available alternative options payment service providers may have during this time.
3. Both the account servicing payment service provider and the payment service providers referred to in Article 30(1) shall report problems with dedicated interfaces as described in paragraph 1 to the FCA without delay.
4. As part of a contingency mechanism, payment service providers referred to in Article 30(1) shall be allowed to make use of the interfaces made available to the payment service users for the authentication and communication with their account servicing payment service provider, until the dedicated interface is restored to the level of availability and performance provided for in Article 32.
5. For this purpose, account servicing payment service providers shall ensure that the payment service providers referred to in Article 30(1) can be identified and can rely on the authentication procedures provided by the account servicing payment service provider to the payment service user. Where the payment service providers referred to in Article 30(1) make use of the interface referred to in paragraph 4 they shall:
 - (a) take the necessary measures to ensure that they do not access, store or process data for purposes other than for the provision of the service as requested by the payment service user;
 - (b) continue to comply with the obligations following from Regulations 69(3) and 70(3) of the Payment Services Regulations 2017 (SI 2017/752) respectively;
 - (c) log the data that are accessed through the interface operated by the account servicing payment service provider for its payment service users, and provide, upon request and without undue delay, the log files to the FCA;
 - (d) duly justify to the FCA, upon request and without undue delay, the use of the interface made available to the payment service users for directly accessing its payment account online;
 - (e) inform the account servicing payment service provider accordingly.

6. The exemption will apply to the Account servicing payment service providers that have opted for a dedicated interface from the obligation to set up the contingency mechanism described under paragraph 4 where the dedicated interface meets all of the following conditions:
 - (a) it complies with all the obligations for dedicated interfaces as set out in Article 32;
 - (b) it has been designed and tested in accordance with Article 30(5) to the satisfaction of the payment service providers referred to therein;
 - (c) it has been widely used for at least three months by payment service providers to offer account information services, payment initiation services and to provide confirmation on the availability of funds for card-based payments;
 - (d) any problem related to the dedicated interface has been resolved without undue delay.
7. The exemption referred to in paragraph 6 will be revoked where the conditions (a) and (d) are not met by the account servicing payment service providers for more than two consecutive calendar weeks. The FCA will ensure that the account servicing payment service provider establishes, within the shortest possible time and at the latest within two months, the contingency mechanism referred to in paragraph 4.

Article 34

Certificates

1. For the purpose of identification, as referred to in Article 30(1)(a), payment service providers shall rely on qualified certificates for electronic seals as referred to in Article 30(3) of the Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust service for electronic transactions in the internal market as amended by the Electronic Identification and Trust Services for Electronic Transactions (Amendment etc.) (EU Exit) Regulations 2018 or for website authentication as referred to in Article 3(39) of the same Regulation.
2. For the purpose of this Regulation, the registration number as referred to in the official records in accordance with Annex III(c) or Annex IV(c) to Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust service for electronic transactions in the internal market as amended by the Electronic Identification and Trust Services for Electronic Transactions (Amendment etc.) (EU Exit) Regulations 2018 shall be the authorisation number of the payment service provider issuing card-based payment instruments, the account information service providers and payment initiation service providers, including account servicing payment service providers providing such services, available in the public register of the UK pursuant to Regulation 4 of the Payment

Services Regulations (SI 2017/752) or section 347 of the Financial Services and Markets Act 2000, or in the case of such payment service providers incorporated and registered or authorised in Gibraltar, their incorporation number available in the Regulated Entities Register of the Gibraltar Financial Services Commission.

3. For the purposes of this Regulation, qualified certificates for electronic seals or for website authentication referred to in paragraph 1 shall include, in a language customary in the sphere of international finance, additional specific attributes in relation to each of the following:
 - (a) the role of the payment service provider, which maybe one or more of the following:
 - (i) account servicing;
 - (ii) payment initiation;
 - (iii) account information;
 - (iv) issuing of card-based payment instruments;
 - (b) the name of the competent authorities where the payment service provider is registered.
4. The attributes referred to in paragraph 3 shall not affect the interoperability and recognition of qualified certificates for electronic seals or website authentication.

Article 35

Security of communication session

1. Account servicing payment service providers, payment service providers issuing card-based payment instruments, account information service providers and payment initiation service providers shall ensure that, when exchanging data by means of the internet, secure encryption is applied between the communicating parties throughout the respective communication session in order to safeguard the confidentiality and the integrity of the data, using strong and widely recognised encryption techniques.
2. Payment service providers issuing card-based payment instruments, account information service providers and payment initiation service providers shall keep the access sessions offered by account servicing payment service providers as short as possible and they shall actively terminate any such session as soon as the requested action has been completed.
3. When maintaining parallel network sessions with the account servicing payment service provider, account information service providers and payment initiation service providers shall ensure that those sessions are securely linked to relevant sessions

established with the payment service user(s) in order to prevent the possibility that any message or information communicated between them could be misrouted.

4. Account information service providers, payment initiation service providers and payment service providers issuing card-based payment instruments with the account servicing payment service provider shall contain unambiguous references to each of the following items:
 - (a) the payment service user or users and the corresponding communication session in order to distinguish several requests from the same payment service user or users;
 - (b) for payment initiation services, the uniquely identified payment transaction initiated;
 - (c) for confirmation on the availability of funds, the uniquely identified request related to the amount necessary for the execution of the card-based payment transaction.

5. Account servicing payment service providers, account information service providers, payment initiation service providers and payment service providers issuing card-based payment instruments shall ensure that where they communicate personalised security credentials and authentication codes, these are not readable, directly or indirectly, by any staff at any time.

In case of loss of confidentiality of personalised security credentials under their sphere of competence, those providers shall inform without undue delay the payment services user associated with them and the issuer of the personalised security credentials.

Article 36

Data exchanges

1. Account servicing payment service providers shall comply with each of the following requirements:
 - (a) they shall provide account information service providers with the same information from designated payment accounts and associated payment transactions made available to the payment service user when directly requesting access to the account information, provided that this information does not include sensitive payment data;
 - (b) they shall, immediately after receipt of the payment order, provide payment initiation service providers with the same information on the initiation and execution of the payment transaction provided or made available to the payment service user when the transaction is initiated directly by the latter;

- (c) they shall, upon request, immediately provide payment service providers with a confirmation in a simple 'yes' or 'no' format, whether the amount necessary for the execution of a payment transaction is available on the payment account of the payer.
2. In case of an unexpected event or error occurring during the process of identification, authentication, or the exchange of the data elements, the account servicing payment service provider shall send a notification message to the payment initiation service provider or the account information service provider and the payment service provider issuing card-based payment instruments which explains the reason for the unexpected event or error.

Where the account servicing payment service provider offers a dedicated interface in accordance with Article 32, the interface shall provide for notification messages concerning unexpected events or errors to be communicated by any payment service provider that detects the event or error to the other payment service providers participating in the communication session.

3. Account information service providers shall have in place suitable and effective mechanisms that prevent access to information other than from designated payment accounts and associated payment transactions, in accordance with the user's explicit consent.
4. Payment initiation service providers shall provide account servicing payment service providers with the same information as requested from the payment service user when initiating the payment transaction directly.
5. Account information service providers shall be able to access information from designated payment accounts and associated payment transactions held by account servicing payment service providers for the purposes of performing the account information service in either of the following circumstances:
- (a) whenever the payment service user is actively requesting such information;
- (b) where the payment service user does not actively request such information, no more than four times in a 24 hour period, unless a higher frequency is agreed between the account information service provider and the account servicing payment service provider, with the payment service user's consent.

Chapter 6

Final Provisions

Article 37

Review

The FCA will review by 14 March 2021 the fraud rates referred to in the Appendix to this Regulation as well as the exemptions granted under Article 33(6) in relation to dedicated interfaces.

Appendix

	Reference Fraud Rate (%) for:	
ETV	Remote electronic card-based payments	Remote electronic credit transfers
£440	0.01	0.005
£220	0.06	0.01
£85	0.13	0.015



Appendix 3

Draft changes to the Handbook

PAYMENT SERVICES (AMENDMENT No 2) INSTRUMENT 201[9]

Powers exercised

- A. The Financial Conduct Authority makes this instrument in the exercise of the powers and related provisions in or under:
- (1) the following regulations of the Payment Services Regulations 2017:
 - (a) regulation 98(3) (Management of operational and security risks);
 - (b) regulation 109 (Reporting requirements); and
 - (c) regulation 120 (Guidance); and
 - (2) section 3 (Delegation) of the Financial Regulators' Powers (Technical Standards etc.) (Amendment etc.) (EU Exit) Regulations 2018.

Commencement

- B. This instrument comes into force at 11 p.m. on 29 March 2019, except for part 2 of Annex B which comes into force on 14 September 2019.

Amendments to the Handbook

- C. The Glossary of definitions is amended in accordance with Annex A to this instrument.
- D. The Supervision manual (SUP) is amended in accordance with Annex B to this instrument.

Notes

- E. In this instrument, the “notes” (indicated by “**Note:**”) are included for the convenience of readers but do not form part of the legislative text.

Citation

- F. This instrument may be cited as the Payment Services (Amendment No 2) Instrument 201[9].

By order of the Board
[date]

Annex A**Amendments to the Glossary of definitions**

In this Annex, underlining indicates new text and striking through indicates deleted text.

SCA RTS

~~Regulation (EU) 2018/389 (RTS)~~ Technical standards made by the *FCA* on strong customer authentication and common and secure open standards of communication under Regulation 106A of the *Payment Services Regulations 2017* as amended by the *Electronic Money, Payment Services and Payment Systems (Amendment and Transitional Provisions) (EU Exit) Regulations 2018*.

Annex B

Amendments to the Supervision manual (SUP)

In this Annex, underlining indicates new text and striking through indicates deleted text.

Part 1: Comes into force 11 p.m. on 29 March 2019

15C Applications under the Payment Services Regulations

...

15C.2 Request for exemption from the obligation to set up a contingency mechanism (Article 33(6) of the SCA RTS)

...

15C.2.3 G The *EBA* issued the Guidelines on the conditions to ~~be met to~~ benefit from an exemption from the contingency ~~measures~~ mechanism under article 33(6) of Regulation (EU) 2018/389 (RTS on SCA and CSC) (EBA/GL/2018/07) on the 4 December 2018 ~~the SCA RTS~~. The Guidelines clarify the requirements *account servicing payment service providers* need to meet to obtain an exemption and the information competent authorities should consider to ensure the consistent application of these requirements across jurisdictions. The *FCA* provides further guidance on making an exemption request in chapter 17 of the *FCA*'s Approach Document.

[~~Note: see [insert link to final EBA guidelines] and https://www.fca.org.uk/publication/finalised_guidance/fca_approach_payment_services_electronic_money_2017.pdf~~]

...

15C.2.5 G *Account servicing payment service providers* should ~~note that article 16(3) of Regulation (EU) 1093/2010 also requires them to~~ make every effort to comply with the *EBA*'s Guidelines on the conditions to be met to benefit from an exemption from contingency measures under article 33(6) of the *SCA RTS*.

...

15C Annex 1D Form: Request for exemption from the obligation to set up a contingency mechanism

...

ASPSPs completing the form should also ~~comply with~~ apply the Guidelines on the conditions ~~to be met~~ to benefit from an exemption from the contingency ~~measures~~ mechanism under article 33(6) of Regulation (EU) 2018/389 (RTS on SCA & CSC) (*EBA Guidelines*).

[~~Note: see~~

~~<https://eba.europa.eu/documents/10180/2250578/Final+Report+on+Guidelines+on+the+exemption+to+the+fall+back.pdf/4e3b9449-ecf9-4756-8006-cbbe74db6d03>.~~]

...

Form B: (EBA Guideline 6) design of the dedicated interface

		Column A	Column B	Column C
Article	Requirement	...	Summary of how the implementation of these specifications fulfils the requirements of <u>PSD2 the Payment Services Regulations</u>, <u>SCA RTS</u> and <u>FCA Guidelines</u>	...
PSD2 Article 65,66 &67 <u>Regulations 68, 69 and 70</u> <u>Payment Services Regulations</u> SCA RTS <u>SCA RTS</u> Article 30 RTS	Enabling AISP's to access the necessary data from payment accounts accessible online			
PSD2 Article 65 & 66 & 67 <u>Regulations 68, 69 and 70</u> <u>Payment Services Regulations</u> SCA RTS <u>SCA RTS</u> Article 30	Enabling provision or availability to the PISP, immediately after receipt of the payment order, of all the information on the initiation of the payment transaction and all information accessible to the ASPSP regarding the execution of the payment transaction			

...				
PSD2 Article 64(2) Regulation 67(2) <i>Payment Services Regulations</i> SCA-RTS <i>SCA RTS</i> Article 30(1)(c)	Allowing the payment service user to authorise and consent to a payment transaction via a PISP			
PSD2 Article 66(3)(b) and 67(2)(b) Regulations 69(3)(b) and 70(3)(b) of the <i>Payment Services Regulations</i>	Enabling PISPs and AISPs to ensure that when they transmit the personalised security credentials issued by the ASPSP, they do so through safe and efficient channels.			
PSD2 Article 65(2)(e), 66(2)(d) and 67(2)(e) Regulations 68(3)(c), 69(3)(d) and 70(3)(c) <i>Payment Services Regulations</i> SCA-RTS <i>SCA RTS</i> Article 30(1)(a) and 34	Enabling the identification of the AISP/PISP/CBPII and support eIDAS for certificates			
...				
PSD2 Article 64(2) and 80(2) and 80(4) Regulations 67(2), 83(2) and 83(4) <i>Payment Services Regulations</i>	Allowing for the possibility for an initiated transaction to be cancelled in accordance with PSD2 <i>the Payment Services Regulations</i> , including recurring transactions			
...				
PSD2 Article 19(6) Regulation 25(1) <i>Payment Services Regulations</i>	Supporting access via technology service providers on behalf of authorised actors			

<p>PSD2 Article 97(5) <u>Regulation 100(4)</u> <u>Payment Services</u> <u>Regulations</u> and SCA- RTS <u>SCA RTS</u> Article 30(2)</p>	<p>Allowing AISPs and PISPs to rely on all authentication procedures issued by the ASPSP to its customers</p>			
<p>PSD2 Article 67 (2) (d) <u>Regulation 70(3)(d)</u> <u>Payment Services</u> <u>Regulations</u> and 30 (1)(b) and SCA-RTS <u>SCA RTS</u> Article 36(1)(a)</p>	<p>Enabling the AISP to access the same information as accessible to the payment servicer user in relation to their designated payment accounts and associated payment transactions</p>			
...				
<p>PSD2 Article 97(2) <u>Regulation 100(2)</u> <u>Payment Services</u> <u>Regulations</u> and SCA- RTS <u>SCA RTS</u> Article 5</p>	<p>Enabling the dynamic linking to a specific amount and payee, including batch payments</p>			
...				
<p>PSD2 Article 97(3) <u>Regulation 100(3)</u> <u>Payment Services</u> <u>Regulations</u> SCA-RTS <u>SCA RTS</u> Articles 30(2)(c) and 35</p>	<p>Ensuring security at transport and application level</p>			
<p>PSD2 Article 97(3) <u>Regulation 100(3)</u> <u>Payment Services</u> <u>Regulations</u> SCA-RTS <u>SCA RTS</u> Articles 22, 35 and 3</p>	<p>Supporting the needs to mitigate the risk for fraud, have reliable and auditable exchanges and enable providers to monitor payment transactions</p>			
...				

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...

16 Reporting requirements

...

16.13 Reporting under the Payment Services Regulations

...

16.13.8A G ~~Payment service providers should use the~~ The return in SUP 16 Annex 27ED to comply with reflects the EBA's Guidelines on fraud reporting under the Payment Services Directive 2 (PSD2), published on 18 July 2018 (EBA/GL/2018/05). ~~Payment service providers should note that article 16(3) of Regulation (EU) 1093/2010 requires them to make every effort to comply with the EBA's Guidelines.~~ The return also includes fraud reporting for registered account information service providers, as required by regulation 109 of the Payment Services Regulations.

[~~Note: see~~
<https://eba.europa.eu/documents/10180/2281937/Guidelines+on+fraud+reporting+under+Article+96%286%29%20PSD2+%28EBA-GL-2018-05%29.pdf>]

...

16 Annex Notes on completing REP017 Payments Fraud Report 27FG

These notes contain guidance for payment service providers that are required to complete the Payments Fraud Report in accordance with Regulation 109(4) of the Payment Services Regulations 2017, SUP 16.13.7D ~~and~~. The notes also build on the EBA Guidelines on fraud reporting under the ~~Second~~ Payment Services Directive 2 (PSD2) (EBA/GL/2018/05) ("the EBA Guidelines").

The following completion notes should be read in conjunction with the EBA Guidelines.

...

Table 1 - Payment transactions and fraudulent payment transactions for payment services

The form provides the means for PSPs to provide the FCA with statistical data on fraud related to different means of payment. ~~In turn, the FCA is required to aggregate this data and share it with the EBA and the ECB.~~

...

Table 1 -What is a fraudulent transaction?

...

The payment service provider should not report data on payment transactions that, however linked to any of the circumstances referred to in the definition of fraudulent transaction (EBA Guideline 1.1), have not been executed and have not resulted in a transfer of funds in accordance with ~~PSD2~~ the provisions in the *Payment Services Regulations*.

...

Data elements

<p>Table 1 – Payment transactions and fraudulent payment transactions for payment services</p> <p><i>Value should be reported in pounds sterling throughout (£)</i></p>	
<p>...</p>	
<p>2A-2L 38A-38L 48A-48L 103A-103L 155A-155L 167A-167L 199A-199L 200A-200L</p>	<ul style="list-style-type: none"> • total domestic transaction volume (i.e. the number of transactions) for payment type – Column A; • total domestic transaction value for payment type Column B; • total transaction volume for payments made cross-border within the EEA – Column C; • total transaction value for payments made cross-border within the EEA – Column D; • total transaction volume for payments made cross-border outside the EEA – Column E; • total transaction value for payments made cross-border outside the EEA – Column F; • total domestic fraudulent transaction volume (i.e. the number of transactions) for payment type – Column G; • total domestic fraudulent transaction value for payment type Column H; • total fraudulent transaction volume for payments made cross-border within the EEA – Column I;

	<ul style="list-style-type: none"> • total fraudulent transaction value for payments made cross-border within the EEA – Column J; • total fraudulent transaction volume for payments made cross-border outside the EEA – Column K; and • total fraudulent transaction value for payments made cross-border outside the EEA – Column L. <p><u>PSPs should continue to report fraud data broken down into domestic, cross border within EEA, and cross border outside EEA as set out in Columns A-F, notwithstanding the UK’s withdrawal from the EU.</u></p>
...	
Payment initiation channel – initiated non-electronically	
<p>4A–4L (credit transfers)</p> <p>49A–49L (card payments)</p> <p>104A-104L (card payments acquired)</p>	<p>Of the total transaction and total fraudulent transaction volumes and values for credit transfers and card payments only, PSPs should report the volume and value of those initiated non-electronically.</p> <p>Transactions initiated non-electronically include payment transactions initiated and executed with modalities other than the use of electronic platforms or devices. This includes paper-based payment transactions, mail orders or telephone orders Recital 95 of the revised Payment Services Directive.</p>
...	
Remote transactions	
<p>6A-6L (credit transfers)</p> <p>51A–51L (card payments)</p> <p>106A–106L (card payments acquired)</p> <p>168A–168L (e-money payment transactions)</p>	<p>Of the total transaction and total fraudulent transaction volumes and values for credit transfers, card payments and E-money payment transactions only PSPs should report the volume and value of those that are remote transactions.</p> <p>A ‘remote transaction’ means a payment transaction initiated via the internet or through a device that can be used for distance communication (revised Payment Services Directive)</p>

	<p>article 4(1)(6)) (Regulation 2 of the <i>Payment Services Regulations</i>).</p>
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...

<p>Losses due to fraud per liability bearer</p>	
<p>35A, 36A, 37A, 45A, 46A, 47A, 100A, 101A, 102A, 152A, 153A, 154A</p>	<p>PSPs are required to report the general value of losses borne by them and by the relevant payment service user, not net fraud figures. The figure that should be reported as ‘losses borne’ is understood as the residual loss that is finally registered in the PSP’s books after any recovery of funds has taken place. The final fraud losses should be reported in the period when they are recorded in the payment service provider’s books. We expect one single figure for any given period, unrelated to the payment transactions reported during that period.</p> <p>Since refunds by insurance agencies are not related to fraud prevention for the purposes of PSD2 <i>the Payment Services Regulations</i>, the final fraud loss figures should not take into account such refunds.</p>

...

Part 2: Comes into force on 14 September 2019

15 Notifications to the FCA

...

15 Annex Form NOT004 Notification that the fraud rate exceeds the reference fraud rate under SCA-RTS article 20

NOT004 - Notification that the fraud rate exceeds the reference fraud rate under SCA-RTS Article 20

	Name of service provider			
	FRN			
...				
	Notification that the reference fraud rate is exceeded			
...				
Q4	Please provide the PSP's fraud rate(s), where they exceed the applicable reference fraud rate		Remote electronic card-based payments	Remote electronic credit transfers
		EUR 500 GBP 440		
		EUR 250 GBP 220		
		EUR 100 GBP 85		
Q5	For how many consecutive quarters has the fraud rate exceeded the applicable reference rate (if more than 1 quarter, please continue to question 6; otherwise, go to question 7)?		Remote electronic card-based payments	Remote electronic credit transfers
		EUR 500 GBP 440		

		<u>EUR</u> <u>250</u> <u>GBP</u> <u>220</u>		
		<u>EUR</u> <u>100</u> <u>GBP 85</u>		
Q6	Please provide the date on which the PSP ceased to apply the transactional risk analysis exemption for the type(s) of transaction which exceeded the applicable reference fraud rate (DD/MM/YYYY)		Remote electronic card-based payments	Remote electronic credit transfers
		<u>EUR</u> <u>500</u> <u>GBP</u> <u>440</u>		
		<u>EUR</u> <u>250</u> <u>GBP</u> <u>220</u>		
		<u>EUR</u> <u>100</u> <u>GBP 85</u>		
...				
Notification that you intend to make use again of the transaction risk analysis exemption				
Q8	Please provide the PSP's fraud rate(s) from the last quarter that have been restored to compliance with the applicable reference fraud rate.		Remote electronic card-based payments	Remote electronic credit transfers
		<u>EUR</u> <u>500</u> <u>GBP</u> <u>440</u>		
		<u>EUR</u> <u>250</u> <u>GBP</u> <u>220</u>		

		EUR 100 GBP 85		
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15 Annex 13D	Form NOT005 Notification that there are problems with a dedicated interface under SCA-RTS article 33(3)
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...

NOT005 - Notification that there are problems with a dedicated interface under *SCA RTS* Article 33(3)

	Name of service provider	
	FRN	
	...	
...		
	Details of the problem with the dedicated interface	
...		
Q3	In what way is the dedicated interface failing to comply with Article 32? (select the option which best describes the problem)	<p><input type="checkbox"/> The uptime of the dedicated interface, as measured by the key performance indicators described in Guidelines 2.2 and 2.4 of the EBA Guidelines on the conditions to be met to benefit from an exemption from contingency measures under Article 33(6) of the SCA-RTS <i>SCA RTS</i>, falls below the uptime of the interface used by the ASPSP's payment service users.</p> <p><input type="checkbox"/> There isn't the same level of support offered to AISP's and PISP's using the ASPSP's dedicated interface, in comparison to the customer interface.</p> <p><input type="checkbox"/> The dedicated interface poses obstacles to the provision of payment initiation and account information services (see SCA-RTS <i>SCA RTS</i> Article 32(3) and the EBA Guidelines <u>on the conditions to</u></p>

		<p><u>benefit from an exemption from the contingency mechanism under Article 33(6) of Regulation (EU) 2018/389 (RTS on SCA and CSC) published on 4 December 2018 (EBA/GL/2018/07) and Opinion on the implementation of the RTS on SCA and CSC (EBA-2018-Op-04).</u></p> <p>[] Other failure to comply with Article 32.</p>
...		

16 Reporting requirements

...

16.13 Reporting under the Payment Services Regulations

...

16.13.18 G Article 17 of the *SCA RTS* permits *payment service providers* not to apply strong customer authentication in respect of legal persons initiating electronic *payment transactions* through the use of dedicated payment processes or protocols that are only made available to *payers* who are not consumers, where the *FCA* is satisfied that those processes and protocols guarantee at least equivalent levels of security to those provided for by the ~~*Payment Services Directive*~~ *Payment Services Regulations*.

16.13.19 D ...

...

(2) an explanation of how the *payment service provider's* processes and protocols achieve at least equivalent levels of security to those provided for by the ~~*Payment Services Directive*~~ *Payment Services Regulations*.

...

16 Annex 46BG Notes on completing REP020 Statistics on the availability and performance of a dedicated interface

These notes contain guidance for quarterly reporting by Account Servicing Payment Service Providers (ASPSPs) with payment accounts accessible online that are required to publish on

their website quarterly statistics on the availability and performance of the dedicated interface and of the interface used by its payment service users under article 32(4) ~~EBA Regulator Technical Standards on Strong Customer Authentication and Common and Secure Communication (“the SCA-RTS”)~~ SCA RTS.

...

Performance

Performance should be reported for each interface based on the daily average time in milliseconds.

At column F, ASPSPs should report daily statistics for each payment service user interface on the daily average time (in milliseconds) taken, per request, for the ASPSP to respond to payment service user requests in that interface.

At column G, ASPSPs should report daily statistics for each dedicated interface on the daily average time (in milliseconds) taken, per request, for the ASPSP to provide to the account information service provider (AISP) all the information requested in accordance with ~~article 66(4)(b) of PSD2~~ Regulation 69(2)(b) of the Payment Services Regulations and article 36(1)(b) of the ~~SCA-RTS~~ SCA RTS.

At column H, ASPSPs should report daily statistics for each dedicated interface on the daily average time (in milliseconds) taken, per request, for the ASPSP to provide to the payment initiation service provider (PISP) all the information requested in accordance with article 36(1)(a) of the ~~SCA-RTS~~ SCA RTS.

At column I, ASPSPs should report daily statistics for each dedicated interface on the daily average time (in milliseconds) taken, per request, for the ASPSP to provide to the card based payment instrument issuer (CBPII) or to the PISP a ‘yes/no’ confirmation in accordance with ~~article 65(3) of PSD2~~ Regulation 68(4), (7) and (8) of the Payment Services Regulations and article 36(1)(c) of the ~~SCA-RTS~~ SCA RTS.

At column J, ASPSPs should report daily statistics for each dedicated interface on the daily error response rate as a percentage – calculated as the number of error messages concerning errors attributable to the ASPSP sent by the ASPSP to the PISPs, AISPs and CBPIIs in accordance with article 36(2) of the *SCA RTS* per day, divided by the number of requests received by the ASPSP from AISPs, PISPs and CBPIIs in the same day and multiplied by 100.

Data elements

Quarterly statistics on availability and performance of dedicated interfaces	
...	
Dedicated interface	

2G – AISP response (milliseconds)	<p>Only to be completed if “Dedicated interface” has been selected at 2B.</p> <p>ASPSPs should provide the daily average time (in milliseconds expressed as a whole number, e.g. 1.5 seconds is represented as 1500 milliseconds) taken, per request, for the ASPSP to provide to the account information service provider (AISP) all the information requested in accordance with article 66(4)(b) of PSD2 <u>Regulation 69(2)(b) of the <i>Payment Services Regulations</i></u> and article 36(1)(b) of the <i>SCA RTS</i>.</p>
2H – PISP response (milliseconds)	<p>Only to be completed if “Dedicated interface” has been selected at 2B.</p> <p>ASPSPs should provide the daily average time (in milliseconds expressed as a whole number, e.g. 1.5 seconds is represented as 1500 milliseconds) taken, per request, for the ASPSP to provide to the payment initiation service provider (PISP) all the information requested in accordance with article 36(1)(a) of the <i>SCA RTS</i>.</p>
2I – CBPII response (milliseconds)	<p>Only to be completed if “Dedicated interface” has been selected at 2B.</p> <p>ASPSPs should provide the daily average time (in milliseconds expressed as a whole number, e.g. 1.5 seconds is represented as 1500 milliseconds) taken, per request, for the ASPSP to provide to the card based payment instrument issuer (CBPII) or to the PISP a ‘yes/no’ confirmation in accordance with article 65(3) of PSD2 <u>Regulation 68(4), (7) and (8) of the <i>Payment Services Regulations</i></u> and article 36(1)(c) of the RTS <u><i>SCA RTS</i></u>.</p>
2J – Error response rate	<p>Only to be completed if “Dedicated interface” has been selected at 2B.</p> <p>ASPSPs should provide the daily error response rate – calculated as the number of error messages concerning errors attributable to the ASPSP sent by the ASPSP to the PISPs, AISPs and CBPIIs in accordance with article 36(2) of the RTS <u><i>SCA RTS</i></u> per day, divided</p>

	by the number of requests received by the ASPSP from AISPs, PISPs and CBPIIs in the same day. Percentage figure should be provided to two decimal places.
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