



EBA REPORT

ON THE DATA PROVIDED BY PAYMENT SERVICE PROVIDERS ON THEIR READINESS TO APPLY STRONG CUSTOMER AUTHENTICATION FOR E-COMMERCE CARD-BASED PAYMENT TRANSACTIONS

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Background

1. The regulatory technical standards (RTS) on strong customer authentication (SCA) and common and secure communication underpin the new security requirements under the revised Payment Services Directive (PSD2) and have applied since 14 September 2019. These requirements were introduced to decrease the risk of payment fraud and to ensure the safety of payment service users' funds and personal data.
2. The EBA granted with its Opinion on the SCA elements (EBA-Op-2019-06) of June 2019, on an exceptional basis, supervisory flexibility for national competent authorities (NCAs) not to enforce the RTS from its legal application date of 14 September 2019, so as to allow issuing and acquiring payment service providers (PSPs) to migrate to SCA-compliant approaches and solutions. The subsequent EBA Opinion on the deadline for the migration to SCA for e-commerce card-based payment transactions (EBA-Op-2019-11) four months later set the deadline for the supervisory flexibility on the SCA migration to 31 December 2020. The Opinion also set out the actions to be taken by NCAs, as well as by issuing and acquiring PSPs, during that 15-month period.
3. One of the actions set out in the Opinion on the SCA migration was ad-hoc reporting of a set of defined key metrics from PSPs to NCAs on the progress made for e-commerce card-based payment transactions to meet the SCA requirements. The aim was for the EBA and NCAs to be able to track progress across time, and for NCAs to be in a position to identify any additional supervisory measures that they may need to take in order for the migration deadline to be met.
4. The Opinion on the SCA migration further specified that the EBA should develop a report on the status of SCA compliance by issuing and acquiring PSPs based on consolidated information provided by NCAs.
5. The EBA and NCAs assessed the data received from PSPs across the EU for the reporting periods in 2020 and an additional reporting period in April 2021, and, in line with the EBA Opinion on the SCA migration, developed this report. It covers the readiness of the industry to apply SCA for e-commerce card-based payment transactions from the perspective of issuing and acquiring PSPs (including merchants), as well as the impact of the SCA migration on fraud rates. The report finishes with a summary of the state of readiness of the industry.

Some cautions when interpreting the data presented in this report

6. Having assessed the SCA migration data provided by PSPs, the EBA has arrived at the view that, in some cases, the data may not accurately reflect the situation in a particular jurisdiction. By way of example, the payments markets in some jurisdictions have significant shares of cross-border transactions. This may result in lower percentage rates of compliant transactions or authentication requests for the respective jurisdiction, even if the domestic transactions and authentication requests are SCA-compliant.
7. By way of another example, it appears that some PSPs have interpreted part of the reporting requirements in a way that diverges from what the EBA had set out in EBA Opinion EBA-OP-



2019-11 and have, in turn, reported specific transactions, in particular on the SCA exemptions, inaccurately.

8. It should also be taken into account that some NCAs approached all PSPs authorised in their jurisdiction, while other NCAs approached only a representative subset of PSPs. Moreover, the concentration of larger PSPs varies across jurisdictions, which means that the degree of readiness of particular jurisdictions may be significantly driven by a few larger PSPs.
9. Finally, it should be noted that the last reporting period for the data presented in this report is the month of April 2021, and that a few jurisdictions are still to achieve full SCA readiness. The data on SCA readiness is, therefore, estimated to continue to improve further compared to the data presented in the report.

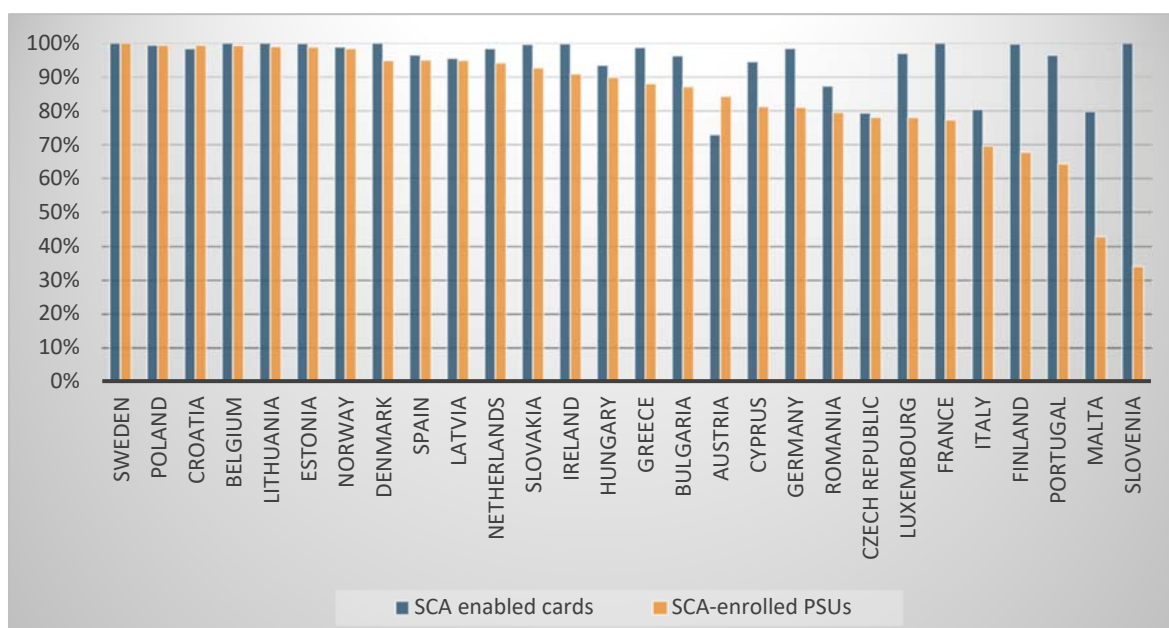
Issuing PSPs

10. The information assessed from issuing PSPs covers SCA-enabled payment cards, SCA-enrolled payment service users (PSUs), payment transactions where SCA was applied and SCA non-compliant card-based payment transactions. It is further complemented by an observation on the use of SCA exemptions.

Payment cards and PSUs

11. In terms of payment cards and PSUs, the large majority of the cards issued in the EU (94% of the total, as of April 2021) were reported to be SCA-enabled. The percentage increased from 88% as of the end of December 2020. The percentage of SCA-enrolled PSUs as of the end of April 2021 was also relatively high at 82%. It increased from 75% as of 31 December 2020. Further breakdown per Member State as of 30 April 2021 is provided in Figure 1 below.

Figure 1 – Percentage of SCA-enabled payment cards and PSUs by Member State





12. The median rate of SCA-enabled cards increased from 91% to 98% in the period from the end of December 2020 to the end of April 2021. The median rate of SCA-enrolled PSUs also increased from 77% to 89% for the same period. These trends are also reflected in Figure 2.
13. When it comes to SCA-enabled cards, issuing PSPs have been prepared for the application of SCA, since the percentage of migrated payment cards reached the expected levels of 90%-95% in December 2020 and further improved by April 2021. The expected levels are below 100% because not all payment cards offer the possibility of executing transactions through the internet, and therefore are not required to be SCA-enabled for e-commerce payments. In addition, the EBA understands that a high percentage of the payment cards that can be used to pay online but that are not yet SCA-enabled had not been used for online purchases in the past year.
14. With regard to the SCA-enabled PSUs, the SCA migration is within the expected levels of 85%-90% with a few jurisdictions lagging behind. The expected levels are below 100% because enrolling a PSU in an SCA-compliant solution requires an active role of PSUs themselves, some of which may not be interested in paying online with their cards. In addition, the EBA understands that a high percentage of the PSUs that are not yet enrolled into an SCA-compliant solution had not carried out a single online payment transaction in the past year.
15. As can also be observed in Figure 1 above, PSPs in some jurisdictions are lagging behind the others in enabling SCA on their payment cards and/or enrolling their PSUs to SCA-compliant authentication solutions.

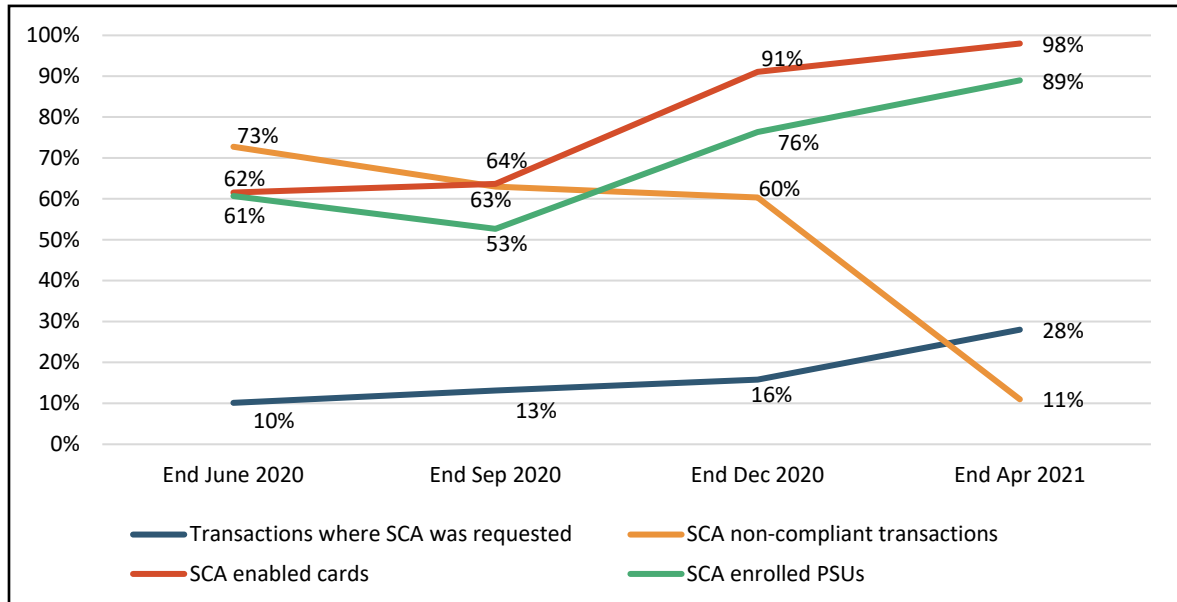
Payment transactions

16. In terms of payment transactions carried out, the data shows significant improvement over time. The median rates of the SCA non-compliant e-commerce card-based payment transactions¹ across Member States have fallen from 60% in Q4 2020 to 11% in April 2021 (the average rate stood at 19% as of April 2021). The median rate of transactions across Member States where SCA was requested increased from 16% in Q4 2020 to 28% in April 2021 (average rate stood at 29% as of April 2021). These trends are also reflected in Figure 2 below, which also takes into account the data for Q2 and Q3 of 2020.

¹ Non-compliant transactions = 100% - (% transactions where SCA was applied/requested + % transactions where SCA exemption was applied + % transactions that are out of scope of SCA)



Figure 2 - SCA migration across Member State based on median percentage rate of issuers' indicators*

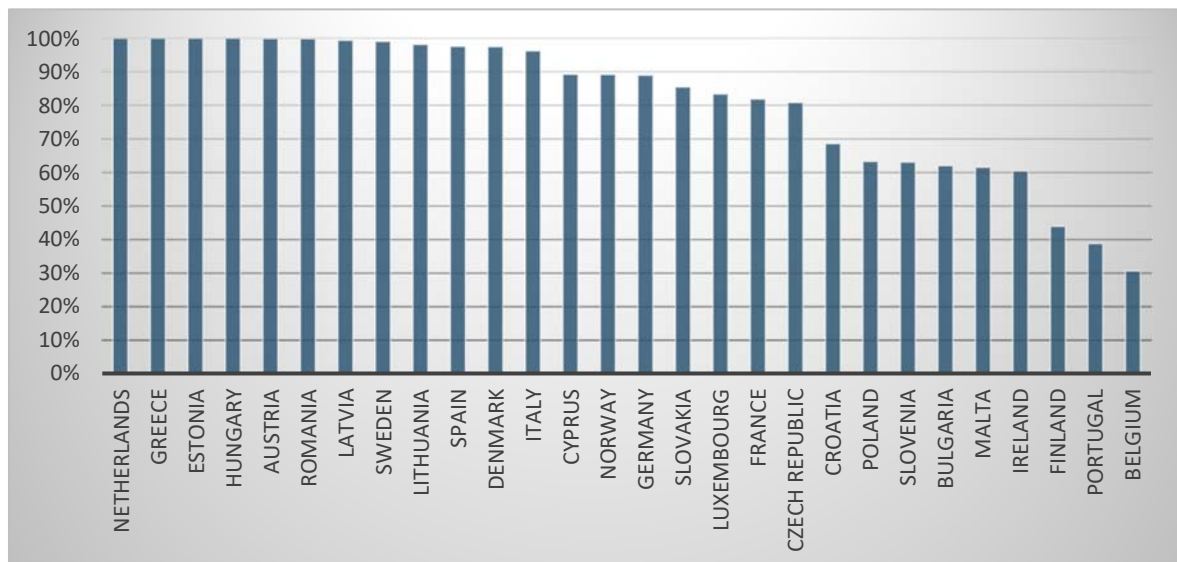


* The time series presented in the graph exclude data from Poland, as Polish PSPs reported only in April 2021 but not for previous periods, and no time series could therefore be built.

17. While the initiated SCA non-compliant e-commerce card-based payment transactions have decreased significantly, with the numbers in some jurisdictions being close to zero, some other jurisdictions still have high levels of non-compliant transactions. Figure 3 below provides a further breakdown per Member State as of 30 April 2021.

18. It should, however, be noted that the lower percentage of transactions in some jurisdictions may be due to the specificities of the respective national payments market as indicated in paragraphs 6 and 8 above.

Figure 3: E-commerce card-based payment transactions reported by issuers that are SCA-compliant





19. Finally, with regard to the transactions carried out where an SCA exemption was applied by the issuing PSP, as of April 2021, these comprised on average 35% of all executed payment transactions across the EU (12% in Q4 2020) with a median rate of 31% (6% in Q4 2020). The most frequently applied SCA exemptions were on the transaction risk analysis, followed by the low-value transactions and then the recurring transactions exemption. The trusted beneficiaries exemption, by contrast, was hardly applied in any jurisdiction.

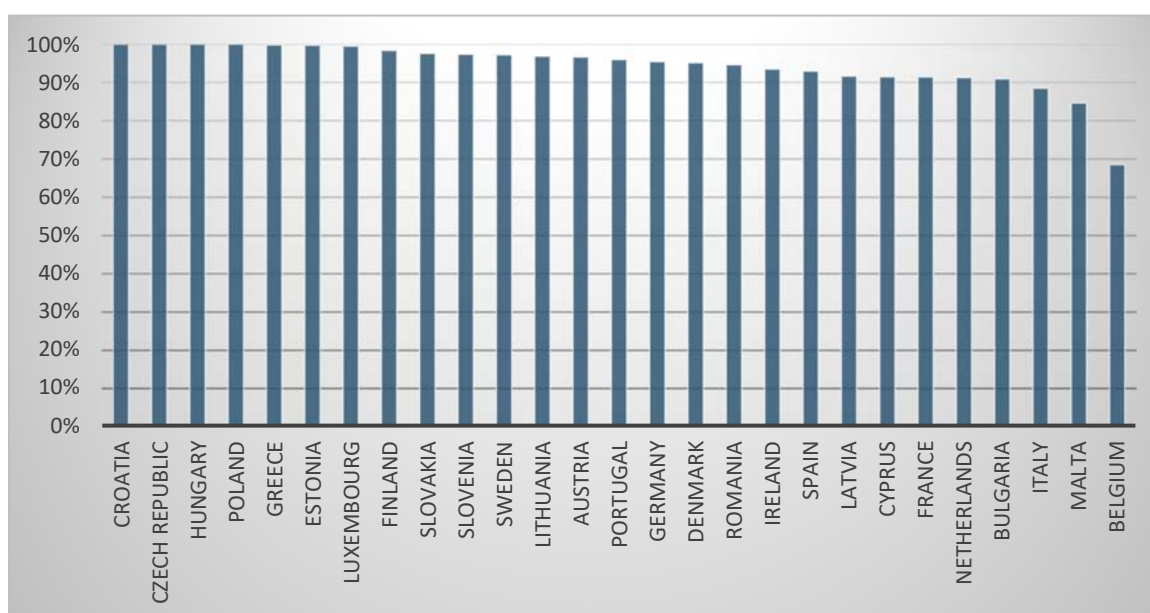
Acquiring PSPs

20. The information assessed from acquiring PSPs covers e-merchants supporting SCA, payment transactions where SCA was applied and SCA non-compliant authentication requests². It is further complemented by an observation on the use of SCA exemptions.

E-merchants supporting SCA

21. As of April 2021, 99% of all e-merchants in the EU (94% on average across Member States) were reported to be able to support SCA, which is a slight increase from 98% as of 31 December 2020. However, it should be noted that the number of merchants varies greatly between jurisdictions and that many merchants located across the EU might be connected to and serviced by a particular acquiring PSP authorised in a single jurisdiction, which operates as a platform for millions of e-merchants that are located elsewhere in the EU. Further breakdown per Member State as of 30 April 2021 is provided in Figure 4 below.

Figure 4 – Percentage of e-merchants supporting SCA by Member State*



* Data for Norway is not covered because there are no acquiring PSPs authorised in Norway.

² SCA non-compliant authentication requests = 100% - (% transactions where SCA was applied/requested + % transactions where SCA exemption was applied + % transactions that are out of scope of SCA). SCA non-compliant authentication requests cover payment transactions where a soft decline was applied and/or transactions that are not compliant with the SCA requirements.

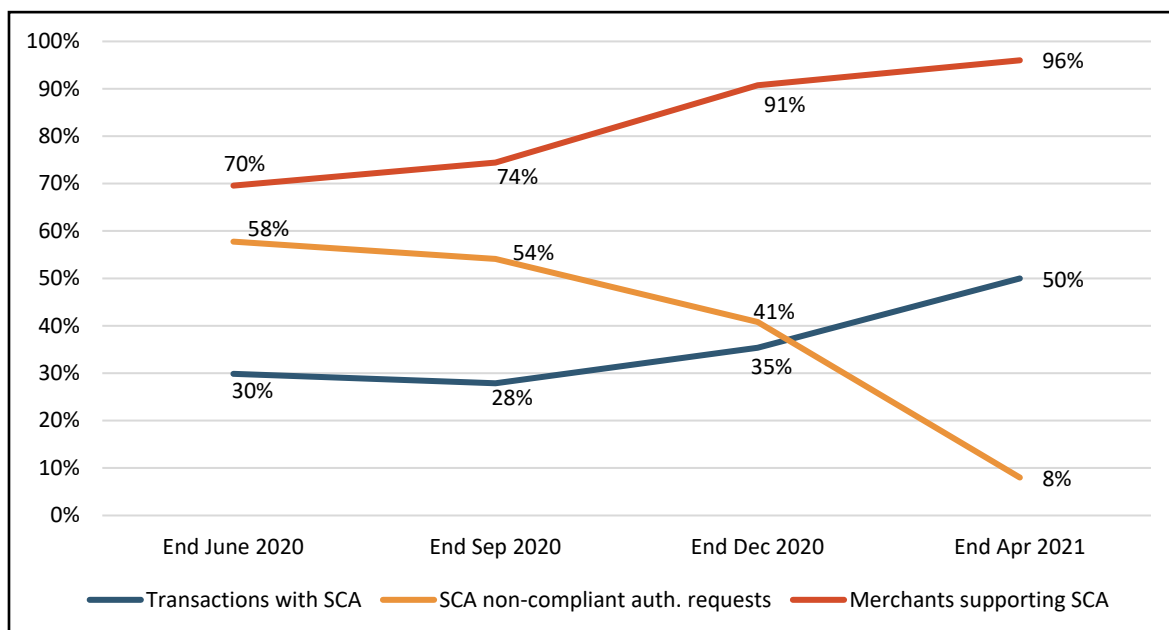


22. The median rate of e-merchants across EU Member States able to support SCA increased from 91% to 96% between end December 2020 and end April 2021. These trends are also reflected in Figure 5, which also takes into account data from Q2 and Q3 of 2020. As can be observed, the rate of merchants supporting SCA is very high across all Member States.

Payment transactions

23. In terms of payment transactions carried out, the indicators improved significantly over time. The median rates of the SCA non-compliant authentication requests sent by acquiring PSPs to issuing PSPs across Member States have fallen from 41% in Q4 2020 to 8% in April 2021. The median rate of payment transactions where SCA was applied increased across Member States from 35% in Q4 2020 to 50% in April 2021 (the average rate stood at 51% as of April 2021). These trends are also reflected in Figure 5 below, which also takes into account the data from Q2 and Q3 of 2020.

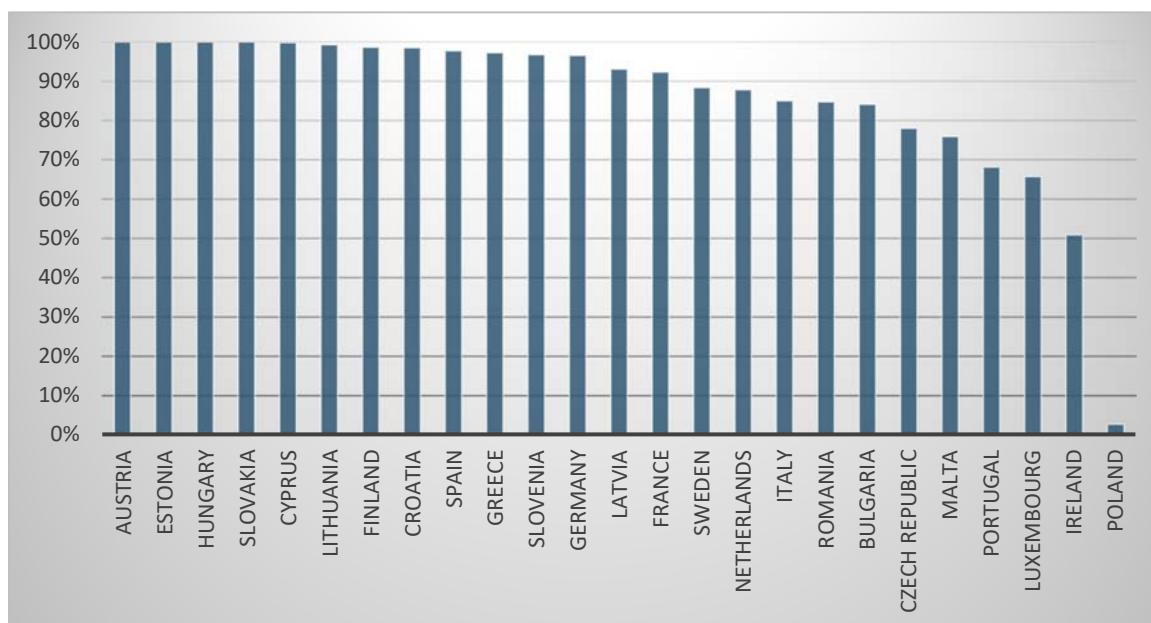
Figure 5 - SCA migration across Member State based on median percentage rate of acquirers' indicators*



* The time series presented in the graph exclude data from Poland (as Polish PSPs reported only in April 2021 but not for previous periods, and no time series could therefore be built), Norway (as no acquiring PSPs are authorised there), and Belgium (as PSPs provided data that could not be plausibly interpreted).

24. While the SCA non-compliant authentication requests have decreased significantly and many are close to the desired level of zero, there are jurisdictions where the levels remain high. Figure 6 below provides further breakdown per Member State as of 30 April 2021.

Figure 6: E-commerce card-based SCA-compliant authentication requests reported by acquirers*



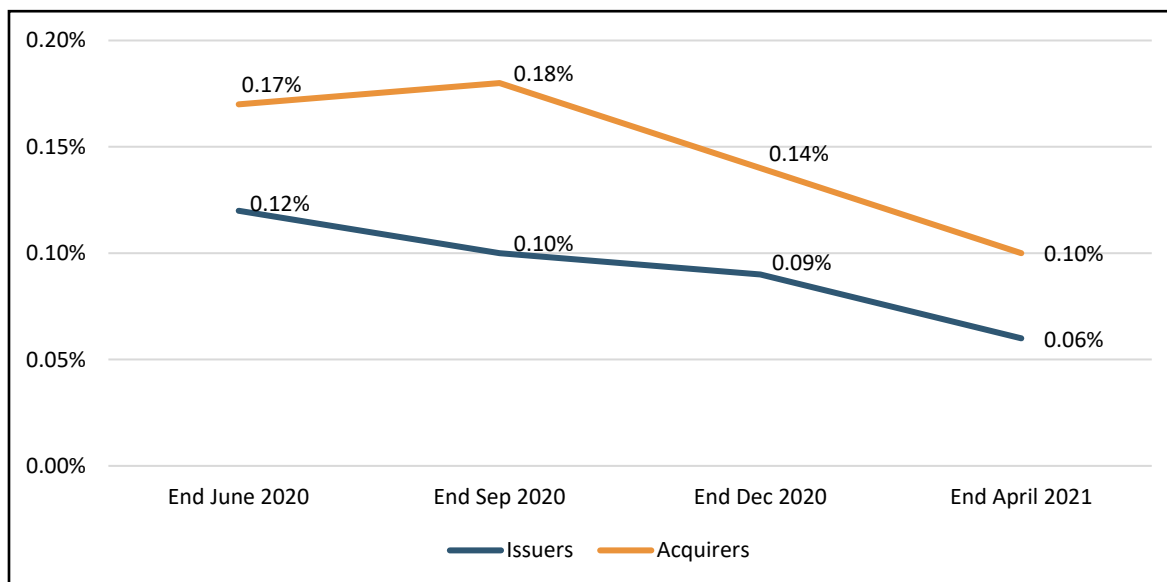
*The time series presented in the graph exclude data from Norway (as no acquiring PSPs are authorised), Belgium (as PSPs provided data that could not be plausibly interpreted) and Denmark (due to confidentiality reasons based on market concentration).

25. Finally, with regard to the transactions carried out where an SCA exemption was applied by the acquiring PSP, as of April 2021, these comprised on average 20% of all executed payment transactions across the EU (11% in Q4 2020) with a median rate of 14% (3% in Q4 2020). The most frequently used SCA exemptions were on low-value transactions and the transaction risk analysis, followed by the recurring transactions exemption.

Fraud rates

26. Two of the indicators reported by PSP were on the volume and value of fraudulent e-commerce card-based payment transactions. Based on the data collected, the increased application of SCA presented earlier in this report coincided with and may have resulted in a steady reduction of fraud levels. More specifically, as depicted in Figure 7 below, the average value of fraudulent transactions across the EU decreased from June 2020 to April 2021 by approximately 50%, from 0.12% to 0.06% for issuing PSPs and by approximately 40% from 0.17% to 0.10% for acquiring PSPs. Very similar trends are observed for the average volume of payment transactions across the four reporting periods (not shown on Figure 7).

Figure 7: Fraud rates across Member States based on average percentage rate* of the value of fraudulent transactions reported by issuers and acquirers**



*The EBA used the average percentage rate of the value of fraudulent transactions, since it provides a better overview of the situation at EU level and also because of the lack of particular outliers distorting the data.

** Data for Norway, Belgium and Poland is not covered in the fraud rate of acquiring PSPs, and data for Poland is not covered in the fraud rates for issuing PSPs. There are no acquiring PSPs authorised in Norway. The data quality received from acquiring PSPs in Belgium did not allow for meaningful interpretation. PSPs in Poland provided data only for the reporting period in April 2021.

27. The average percentage rate of the volume of fraudulent transactions for issuers across Member States fell from December 2020 to April 2021 by approximately 50% from 0.12% to 0.06% (the median rate fell from 0.06% to 0.04%), and the average rate for acquirers fell by approximately 40% from 0.10% to 0.06% (the median rate fell from 0.05% to 0.02%).

28. The average percentage rate of the value of fraudulent transactions for issuers across Member States fell from December 2020 to April 2021 by approximately 33% from 0.09% to 0.06% (the median rate fell from 0.08% to 0.05%), and the average rate for acquirers fell by approximately 30% from 0.14% to 0.10% (the median rate fell from 0.09% to 0.06%).

29. It should, however, be noted that the fraud rates presented may slightly underestimate the real fraud level, because the data was collected shortly after the end of each reporting period, which means that it does not include fraud that occurred in that period but is detected by PSPs afterwards.

Summary

30. Based on the data reported by PSPs on their migration to SCA for e-commerce card-based payment transactions, large sections of the industry appear to be prepared for the application of SCA to e-commerce card-based transactions, as demonstrated by the following headline figures:

- 99% of EU merchants are able to support SCA;
- 94% of all payment cards in the EU are SCA-enabled;



- 82% of all PSUs are enrolled into an SCA solution;
- 92% of e-commerce card-based authentication requests reported by acquirers are compliant with the SCA requirements; and
- 89% of initiated e-commerce card-based payment transactions reported by issuers are compliant with the SCA requirements.

31. The reported data for April 2021 also showed a significant reduction in the volume and value of fraudulent e-commerce card-based payment transactions, which coincided over the same time period with, and may have been a result of, the significant increase in payment transactions that are compliant with the SCA requirements.

32. However, there are still remaining points of concern, namely that PSPs in some jurisdictions are lagging behind others in enabling SCA on their payment cards and enrolling PSUs to SCA-compliant authentication solutions. In addition, while the SCA non-compliant transactions have decreased significantly, their levels in some jurisdictions remain relatively high.



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