OCTOBER 2024

REPORT

Cross–border payments in the EU

A roadmap to strengthening the Single Market and EU's competitiveness, towards a more diverse, cost-efficient, convenient and secure cross-border payments' ecosystem in the EU

The report "*Reboot of the Single Market – How to support the growth of SMEs through a strong and united Single Market*", published in November 2022, listed 11 specific and impactful policy initiatives to strengthen the effective functioning of the Single Market. This report elaborates on recommendation #11, which encourages EU policy makers to *"Create conditions for the development of easy, fast, reliable and low-cost cross-border payments for both euro and non-euro payments*."

Concretely, the report attempts to answer the following three questions:

- **Why do something?** Chapter 1 highlights the potential in increasing the efficiency and user-friendliness of cross-border payments.
- **What to do?** Chapter 2 explains the main challenges businesses and payment providers face when operating cross-border.
- **How to do it?** Chapter 3 provides a roadmap for improving the conditions for cross-border payments.

The work was commissioned by Amazon and conducted by Implement Consulting Group as an independent assessment. We are grateful for contributions from industry interviews.

11 specific and impactful recommendations

1. Adopt an ambitious Single Market Strategy.	Adopt a Single Market Strategy that clearly reinstates the Single Market at the forefront of the EU's integration project, green transition and innovation agenda.
2. Strengthen SOLVIT by establishing a Single Market Ombudsman in every EU Member State and commit SOLVIT to act more proactively on structural cases and to raise awareness.	Designate a Single Market Ombudsman (as head of or in collaboration with SOLVIT) in each Member State as a national, independent body with access to effective remedies. A network of Single Market Ombudsmen is to be set up under the auspices of the European Commission.
3. Conduct a data flow test of all existing and new EU regulation.	Implement a data flow test that acknowledges the supremacy of the principle of data protection in the EU but limits the risk of creating unjustified burdens when applying data protection rules.
4. Upgrade the European Semester to include recommendations on how to harmonise implementation of EU regulation and close the compliance gap.	Incentivise Member States to correctly apply and take political ownership of the correct application of EU rules, by integrating recommendations on closing the compliance gap and harmonising implementation of EU regulation into the European Semester.
5. Strengthen the use of the Better Regulation Toolbox by integrating implementation into the design of new regulation and consistently respecting impact assessment requirements.	Put more weight on integrating implementation into the design of new regulations and avoid deviations from the requirement to make impact assessments.
6. Map and remove regulatory barriers to trade in climate goods and services within the Single Market.	Map and remove regulatory barriers to trade in climate goods and services within the Single Market to accelerate decarbonisation by structuring market signals, incentivising innovation and reducing the price of new technologies.
7. Design the digital European product passport in a way that simplifies the circular work of businesses.	Introduce a well-designed Digital Product Passport based on stakeholder input, including SMEs.
8. Create a one-stop-shop to Member States' extended producer responsibility (EPR) systems.	Establish a truly harmonised approach to EPR: a centralised and up-to-date digital EPR one-stop-shop solution that would facilitate single EPR registration and reporting across all Member States at the product-level.
9. Create a single VAT ID and extend the VAT one-stop-shop.	Simplify VAT procedures by creating a single VAT ID in the EU and expanding the existing VAT one-stop-shop concept to cover all goods transactions.
10. Recognise digital labelling as a true substitute for physical labelling.	Bring EU labelling requirements to the digital era by providing manufacturers the option to choose whether to market their product digitally or physically.
11. Create conditions for the development of easy, fast, reliable and low-cost cross-border payments for both euro and non-euro payments.	**Create a more competitive framework for cross-border payments to ensure that EU citizens have access to a diverse range of providers.**

Executive summary

An efficient infrastructure that secures easy, fast, reliable and low-cost cross-border payments in the EU can spur cross-border trade in the Single Market, improve the cost competitiveness of producers and allow consumers to access the wider range of payment options at the lowest possible cost. It offers tangible benefits for the many, enabling businesses to pay suppliers, travellers to use their preferred digital payment services abroad, customers to make online purchases, and mobile workers abroad to support their families back home.

The potential from efficient cross-border payments will only increase as e-commerce becomes a part of our daily life. Last year, around 3/4 of all European citizens bought a product online and around 1/3 bought a product online in another EU country. With the achievement of passing the eIDAS regulation, developments in the digital euro project and active political negotiations on the final version of the PSR/PSD3 regulatory act, there is a good platform for political dialogues on the payment topic.

why

Most e-commerce purchases are carried out using traditional card payments, which require a comprehensive payment infrastructure to ensure safe, fast and reliable *in person* payments. When purchasing online, this comprehensive payment infrastructure designed for physical transactions is not strictly necessary. Instead, payment providers can make use of the more lean and direct account-to-account payment rails.

This leaner technology can reduce cost and increase user-friendliness, while maintaining the high security levels from the traditional card schemes infrastructure. Chapter 1 shows that the average transaction cost for an online purchase using **the traditional card payment infrastructure amounts to EUR 0.9-0.7, while the cost of an account-to-account transaction is typically around EUR 0.5.**

Switching from card-based payments to account-to-account payments for online transactions in the EU (both in-country and cross-border) can potentially reduce social costs by EUR 1.4 billion annually corresponding to a 21% saving in total costs. If the switch was to happen for Person-to-Business (P2B) in-store transactions, the saving potential could be as much as EUR 70 billion annually, corresponding to a 35% cost saving.

what

Chapter 2 describes the account-to-account payments technology, the current, and needed infrastructure, the regulatory opportunities while also describing the current national actors and the possibilities for further collaboration across borders which could function as an enabler for further expansion of already existing infrastructure towards the entire Single Market.

how

Stakeholders that represent different parts of the existing payment system point to 7 initiatives that can improve the digital infrastructure for account-to-account payments and create better conditions for the development of easy, fast, reliable and low-cost cross-border payments in the EU:

1. Improve conditions for account-to-account payments
2. Ensure further adoption of existing technologies and infrastructure
3. Make fees in payment processing more transparent
4. Adopt the digital euro in a smooth and harmonised way
5. Leverage the development of eIDAS in SCA
6. Design regulations to harmonise and standardise APIs
7. Increase wallet competition

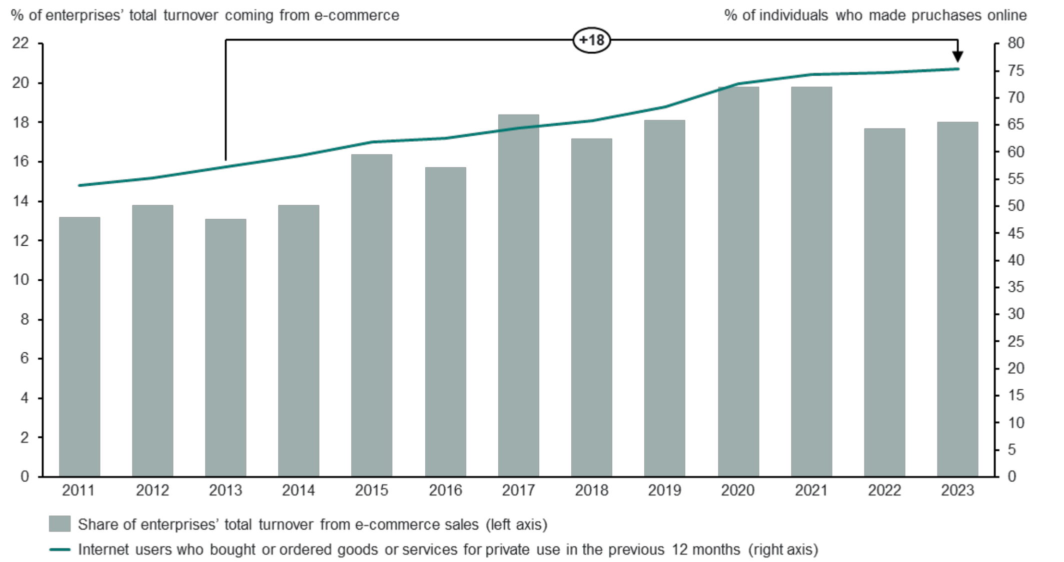
1 High fees on cross-border payments have societal costs – why is action needed?

Over the past 10 years, the surge in online shopping and digital transactions has led to a growing need for secure and cost-effective systems for cross-border payments within the EU.[1] A leaner technology designed for digital payments can reduce costs and increase the user-friendliness, while maintaining the high security levels known from the in-person card infrastructure payments. At a societal level, the shift from traditional card payments to account-to-account payments can deliver cost savings in the range of EUR 1.4 billion.

1.1 Cross-border e-commerce trade is increasing

In 2023, 75% of EU citizens placed an online order, marking a significant increase of 18 percentage points over the last decade, see Figure 1. This shift towards e-commerce has increased the share of European merchants' turnover derived from online sales by almost 37% during the same period. In 2021, business-to-consumer (B2C) e-commerce turnover in the EU reached approximately EUR 899 billion[2], equivalent to about 6% of GDP.

Figure 1: E-commerce in Europe has increased over the past decade



Note: Turnover from e-commerce is measured for enterprises with 10 persons employed or more. Individuals who bought or ordered goods or services for private use in the previous 12 months is measured as a share of individuals who used the internet the last year.
Source: Implement Economics based on Eurostat.

E-commerce trade in the European Union (EU) encompasses both national and cross-border transactions. While domestic e-commerce remains significant, cross-border sales have also gained prominence. Within the first three months of 2023, just below 1/3 of EU individuals had purchased an online product in another EU Member State, see Figure 2. Around 19% bought goods online from countries outside the EU.

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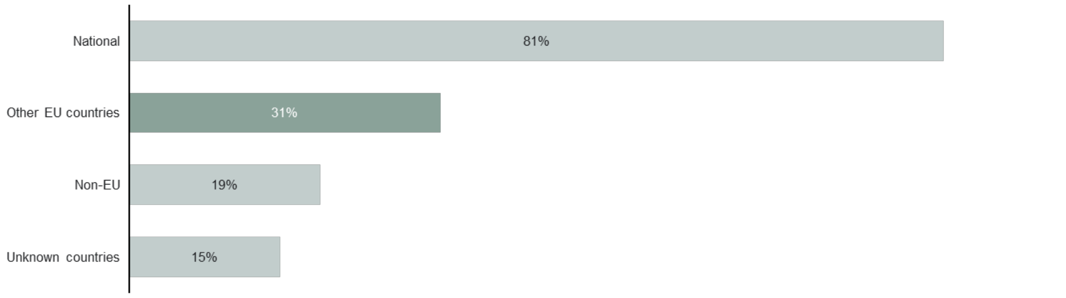
[1] European Commission (2023). *A study on the application and impact of Directive (EU) 2015/2366 on Payment Services (PSD2).*
[2] Ecommerce Europe & EuroCommerce (2023). *European e-commerce report 2023.*

Figure 2: Many European citizens buy goods online in other EU Member States
Share of individuals who purchased online in the last three months, 2022



Source: Implement Economics based on Ecommerce Europe & EuroCommerce (2023). *European e-commerce report*.

1.2 The cost of cross-border payments remains high due to reliance on card payments

The surge in e-commerce has been supported by new digital payment solutions, primarily payment cards, which have made online cross-border purchases more accessible and convenient for customers. The digital solutions have also opened new opportunities for businesses to expand into new markets and customer segments. However, as illustrated by the business cases below, merchants find that their business opportunities are constrained by high fees when receiving payments and especially when receiving cross-border payments.[3]

BUSINESS CASES – Cross border payments: high costs and lost opportunities for businesses, especially SMEs

Speedinvest Pirates is an **Austrian growth partner** for startups, offering various services, from branding and growth marketing to sales and pricing, to help startups reach their growth goals. Speedinvest Pirates observes inefficiencies and challenges in the cross-border payment infrastructures for European firms. Currently, the cross-border payment options available are dominated by a limited number of financial services corporations, charging high fees to merchants. Creating conditions for the development of low-cost cross-border payment systems would help ensure that consumers and merchants can do business with confidence across borders inside the Single Market at low cost.

Koala Babycare is an **Italian retailer**, specialising in baby care products and pregnancy products, including baby carriers, soothers, skincare and more. One barrier that the company has faced when trying to expand its sales across the EU relates to fees on cross-border transactions. Due to a limited number of cross-border payment options available in the EU, the company faces high merchant fees, which risk disadvantaging its position in foreign markets (due to higher prices) relative to domestic companies.

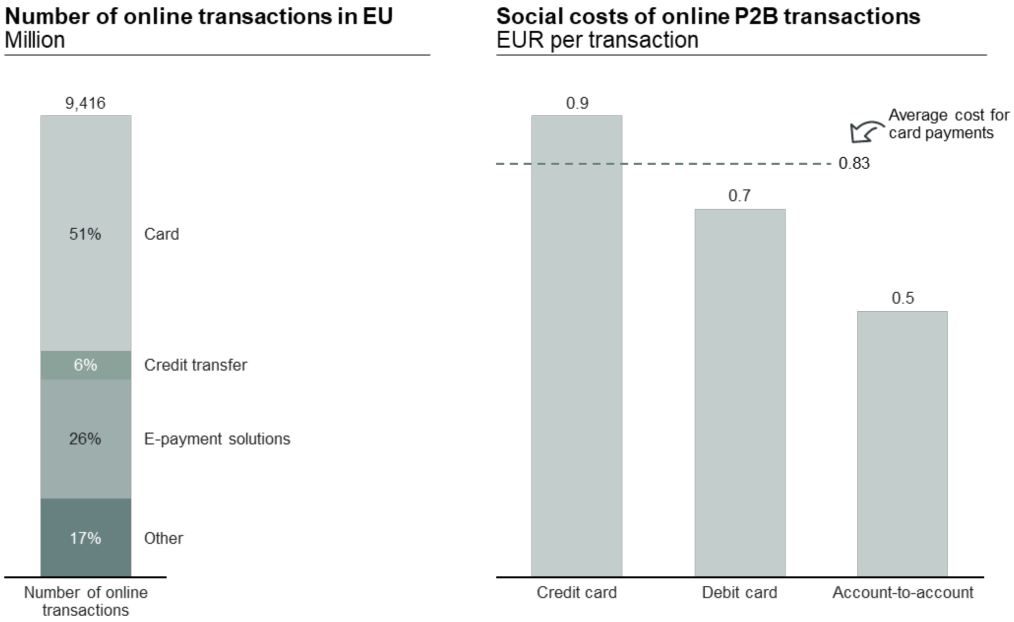
Caro Group, a **Polish retailer of home furnishing items**, finds fees on cross-border transactions disproportionately high. The company reports that it can be hard for them to remain competitive with local players, not only due to typically longer delivery times, but also due to high cross-border payment fees. A more competitive ecosystem for payment systems, bringing down merchant fees, would level the playing field for Caro Group, and enable them to increase their market potential in the Single Market.

51% of all online payments in the eurozone are executed with cards, 24% were made with other e-payment solutions (including PayPal and other online or mobile payment methods (e.g. Klarna, Sofort and iDeal) and 13% were made with other payment solutions (including loyalty points, vouchers and gift cards, crypto assets and other payment instruments). Outside the eurozone, online purchases via card payments were often below 50%.[4]

[3] See Study on the application of the Interchange Fee Regulation.
[4] The business cases and further results can be found in Implement Consulting Group (2024), *A path to prosperity, competitiveness and growth: putting SMEs back at the centre of the Single Market.*

The high merchant fees can be tied to the fact that most online payments are processed via payment cards (see Figure 3). Payment cards carry several benefits, but the infrastructure was originally developed for physical shopping leaving some of the infrastructure redundant when conducting online purchases. This combined with the fact that competition has been missing in the payment cards space for several years leaves the average transaction cost for an online purchase with cards higher when combined with an entirely digital account-to-account transaction. The average transaction cost for an online purchase using the traditional card payment infrastructure is in range EUR 0.9-0.7, while an entirely digital account-to-account transaction typically cost around EUR 0.5, see Figure 3. This being the case, without consumers not necessarily experiencing any additional services coming from the increased cost of paying with cards.

Figure 3: Social costs of online transactions in 2022 were higher for credit card than account-to-account



Note: Social costs capture all resources used by the parties involved in the process to complete the payment, thus representing the overall costs to society for providing payment services. Along the payment chain, costs incurred by one party may be the revenue of another, and these costs are net out in the assessment of social costs.[5] Data on social costs of online transactions are from Sweden and have been used as a proxy for EU costs. Sweden might be more advanced in cost optimising online payment solutions, which could suggest that they could have lower social costs than the EU average. However, Sweden is not a part of the European Economic Area, and cannot leverage scale of economies, which can increase social costs of online transactions.

Source: Implement Economics based on Sveriges Riksbank (2023). *Cost of payments in Sweden*; ECB (2022). *Study on the payment attitudes of consumers in the euro area (SPACE) 2022*; Payment Industry Intelligence Payments, Cards & Mobile (2023). *Feature: The European Payments landscape for 2023*; Eurostat.

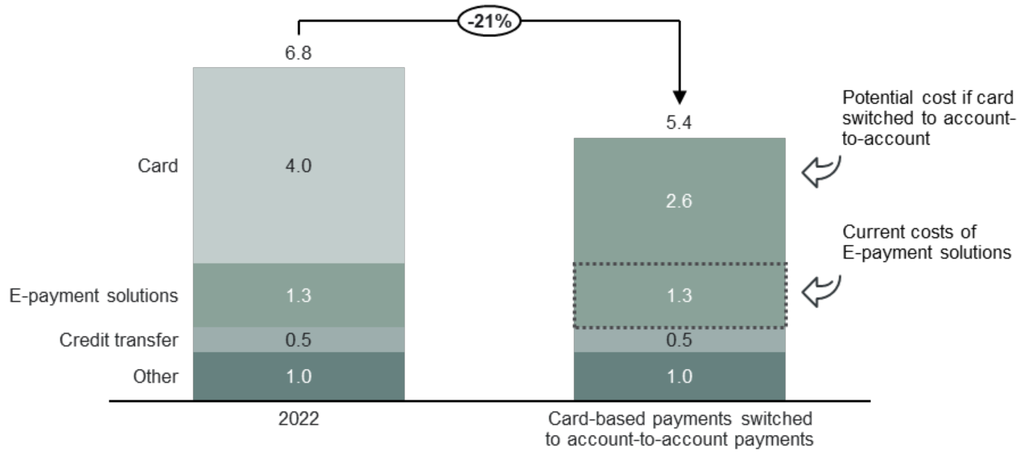
1.3 A shift to account-to-account payments can reduce fees

Cost differences of cross-border payments by credit card compared to account-to-account scale up at a societal level. In 2022, each European made approximately 21 online transactions, amounting to a total of around 9.4 billion online transactions in the EU, see Figure 3. 4.8 billion of these were card-based transactions, with an additional cost of around EUR 0.3 for the average transaction compared to account-to-account payments.

[5] ECB (2022). *Costs of retail payments – an overview of recent national studies in Europe*.

Switching from card-based payments to account-to-account payments for online transactions in the EU (both in-country and cross-border) can potentially reduce social costs by EUR 1.4 billion annually corresponding to a 21% saving in total costs, see Figure 4. If the switch was to happen for Person-to-Business (P2B) in-store transactions, the saving potential could be as much as EUR 70 billion annually, corresponding to a 35% cost saving.

Figure 4: Switching to account-to-account payments can reduce social costs by 21% at the EU level
EUR billion



Note: Social costs are based on Swedish numbers. For the costs of e-payment solutions, costs for the use of Swish are used. Costs of “Other” payment methods are calculated as a weighted average of the costs for the three other types of transactions.

Source: Implement Economics based on Sveriges Riksbank (2023). *Cost of payments in Sweden*; ECB (2022). *Study on the payment attitudes of consumers in the euro area (SPACE) 2022*; Payment Industry Intelligence Payments, Cards & Mobile (2023). *Feature: The European Payments landscape for 2023*; Eurostat.

2 Account-to-account payments and national infrastructures: a dual challenge

The existing infrastructure around cross-border payments was originally designed for physical shopping and card-based transactions, and an improved digital infrastructure is a prerequisite for the direct money transfer from one account to another – without a payment card. Also, reducing regulatory fragmentation and compliance costs can foster an environment where national infrastructure can be easier leveraged across borders creating widespread benefits for the Single Market as a whole. The following chapter provides a short explanation of A2A payments while also looking at some of the current national actors.

2.1 A digital infrastructure fit for account-to-account payments

Traditional card scheme infrastructure needs instructions and communication across several actors to ensure that the acquiring bank expects the same payment as the issuing bank sends (Figure 5). The existing payment infrastructure system is designed for payments using physical cards, with an infrastructure designed to handle these types of transactions. Account-to-account payments have the potential to streamline the payment process (Figure 6), thereby lowering the cost of payments.

The adoption of the account-to-account technology can be done by both incumbent card scheme operators and new third-party payment providers. The process described in the box below is *not* an adoption of new type of payment providers – but an adoption of a new type of payment technology.

How account-to-account payments work?

In a typical account-to-account payment system, a customer might use a Third-Party Payment Service Provider (TPP) to initiate a payment. The TPP, acting as a Payment Initiation Service Provider (PISP), sends a payment initiation request to the customer's bank, the Account Servicing Payment Service Provider (ASPSP), through an API. An API is a general tool and protocol that is used to build software and applications. In banking, APIs allow financial institutions to exchange data with TPPs, connecting them with businesses and consumers.

An example of a TPP is an Account Information Service Provider (AISP) that allows access to a customer's account information held by the bank. An AISP acts as an intermediary between the customer and their bank, providing access to their account data through APIs.

Once the customer has authenticated themselves through Strong Customer Authentication (SCA), the bank authorises the payment, and it is transferred directly from the customer's account to the recipient's account. The AISP's role comes into play when there is a need to access and retrieve the customer's account information from the bank, again using APIs for secure data transfer. This process enhances the security of transactions, reduces reliance on physical cards, and can offer a more seamless and efficient payment experience for customers.

Figure 5: Traditional card-based cross-border payments

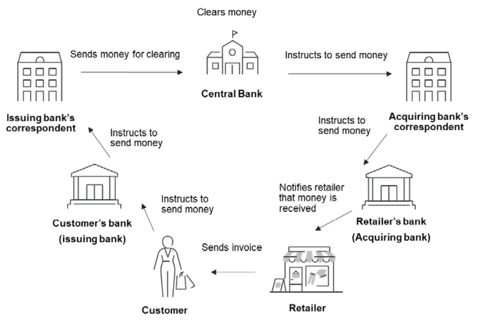
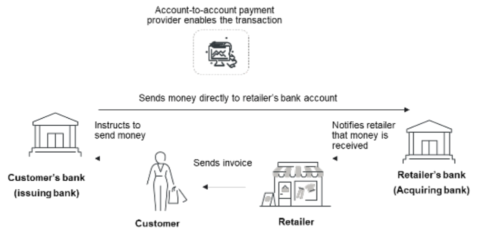


Figure 6: Account-to-account cross-border payments



Source: Implement Economics based on The Digital Fifth (2021). *Cross Border Payments: The Evolution.*

2.2 An integrated market for account-to-account payments

Although the account-to-account payment technology is still in its development phase, there are already today a range of different types of operators across EU (see Figure 7). The existing actors in account-to-account payments can be categorised in three types:[6]

1. **National mobile-based payment systems** such as Swish, Bizum and MobilePay. These are solutions that leverage open banking systems to make transactions using your smart phone.
2. **Bank-owned solutions,** most noteworthy the European Payment Initiative (EPI), which is a unified platform created by 16 banks across the EU that is using the same standards all over the EU. It is currently building the single solution Wero, which is a digital wallet solution that also supports additional payment methods from TPPs. In October 2023, they acquired iDEAL and Payconiq.
3. **Open banking solutions** leveraged by TPPs. One example is the SEPA[7] Payment Account Access (SPAA) scheme: a voluntary scheme for banks across the EU. It sets the rules, practices, and standards of data sharing for banks that will allow TPPs to deliver open banking solutions.

[6] Please note that this is only to exemplify that several operators offer account-to-account payments. The listed operators are not offering cross-border account-to-account payments.
[7] "SEPA" being the Singe European Payments Area which covers all EU member states and the members in the EEA.

Figure 7: Examples of account-to-account systems in the EU

Note: This is not an exhaustive list of account-to-account systems.
Source: Implement Economics based on desktop research on Bluecode, Payconiq, MobilePay, GiroPay, IRIS, Bancomat Pay, iDeal, Blik, MB Way, Bizum, Swish and EMPSA.

'National mobile-based payment systems' are already quite widespread. Many European countries have successful mobile-based account-to-account payment operators in place. The systems are particularly prevalent for person-to-person transfer but are also gaining momentum for domestic online shopping. In general, 'Bank-owned solutions' and 'Open-banking solutions' are still in the development phase. Neither Wero nor SEPA schemes are fully operational at this stage, but they are expected to become operational in the coming 2-3 years. To accelerate and improve the adoption of these schemes, it is important that national actors continue to collaborate and that the developed solutions are adopted by users. This development can be fostered by roadmaps and guidelines, and the development of these is reflected under the recommendations chapter.

2.3 Potential benefits from increased adoption of A2A payments

Empirical research shows that costs of payments are ultimately transferred to consumers through higher retail prices.[8] Consumers will therefore benefit from lower fees on cross-border payments through lower retail prices, which can increase demand for e-commerce products and benefit EU merchants. An efficient account-to-account payment infrastructure in the EU can also ease the process of doing business for e-commerce merchants:

- **Cross-border expansion |** Setting up an efficient account-to-account payment infrastructure for intra-EU cross-border payments can ease the expansion of e-commerce businesses in the Single Market, particularly for SMEs. Currently, when companies expand to other countries, they typically need to adopt their business to national payment schemes, adding to the cost of international expansion.
- **Logistics |** A digital payment system could facilitate the integration of data and information flows between different actors in the supply chain, such as merchants and logistics providers. Therefore, instant payment setup, would give third-party suppliers faster confirmation that the payment went through, meaning less delay in shipping.

[8] See Copenhagen Economics/EY (2020). *Study on the application of the Interchange Fee Regulation*, Chapter 5.

- **Payment acceptance |** Account-to-account transfer could in some instances increase the payment acceptance rate, for example for purchases of expensive investment goods, where payment cards typically have a debit limit.

To summarise, a truly digital, international account-to-account payment solutions hold a lot of promise, in terms of cost savings for consumers and merchants, better user experience and improved logistics for merchants as well as third-party suppliers. Future regulation needs to ensure that **incentives are in place, needed standards are available and that regulations are harmonised**.

We recommend the next Commission to ensure easy, fast, reliable and low-cost cross-border payments by putting in place EU regulations that will accelerate the transition towards more account-to-account payments for intra-EU ecommerce. The next chapter therefore puts forward specific and actionable initiatives to implement our recommendation to create improve conditions for cross-border payments in the EU:

11. Create conditions for the development of easy, fast, reliable and low-cost cross-border payments for both euro and non-euro payments.	Create a more competitive framework for cross-border payments to ensure that EU citizens have access to a diverse range of providers.

3 Better conditions for account-to-account payments in the EU – how to do it?

The PSD2 has in many ways been a gamechanger for the payments industry in Europe. It ignited an open banking momentum, spurring commercial innovation beyond being merely compliant with the directive. Yet, the adoption of account-to-account payments is still trailing behind the use of card-based payments despite the numerous benefits associated with account-to-account payments, e.g. lower societal costs and less reliance on non-European actors.

Our overall recommendation is for the next Commission and European policy makers to **put in place the digital infrastructure** needed to:

1. Create better conditions for account-to-account payments
2. Ensure further development of national solutions

Also, we put forward specific initiatives that would improve the digital infrastructure needed for account-to-account payments and that would foster a more competitive market for cross-border payments in general.

As a starting point, policy makers should make **fees in payment processing more transparent** by taking initiative to:

3. Make benchmarks of payment processing fees publicly available
4. Amend regulation in the current draft for PSD3/PSR towards a regulatory framework that offers more precise technical standards for API's

Also, policy makers should **adopt the digital euro in a smooth and harmonised way** by taking initiative to:

5. Secure a strong political mandate
6. Set and keep an ambitious timeline
7. Prioritise low merchant fees
8. Ensure tangible consumer benefits

In addition, the **implementation of eIDAS frameworks should be complete, even and timely** by taking initiatives to:

9. Leverage the development of eIDAS in SCA
10. Ensure a unified technical implementation

Finally, policy makers are encouraged to:

11. Design regulations to harmonise and standardise APIs
12. Increase wallet competition

3.1 Improve conditions for account-to-account payments

While account-to-account payments have the potential to improve efficiency, enhance user-friendliness and lower the costs of cross-border payments, the existing infrastructure around cross-border payments was originally designed for physical shopping and card-based transactions. The shift towards account-to-account payments can be accelerated by putting in place a **digital infrastructure** that enables the direct money transfer from one account to another – without a payment card.

For online cross-border payments, the use of account-to-account payments is still quite limited. Few payment providers offer merchants to accept account-to-account payments from other countries. Interviews with industry stakeholders suggest that two main obstacles must be overcome to leverage the user-friendliness and cost-efficiency of account-to-account technologies:

- **Reduce regulatory fragmentation |** Payment service providers that operate across the EU often need to adapt to API, AISP and SCA standards of 27 Member States, which considerably increases the cost of setting up a cross-border account-to-account payment system. One explanation is the uneven implementation of the revised Payment Service Directive 2 (PSD2) across Member States. This will to a large extent be changed if the current proposal for PSR is approved in its current form. That being said, it is important that secondary regulation (e.g. guidelines from the ESA's and national authorities) also reflect the principles of reducing fragmentation.
- **Improve quality of regulatory enablers |** Banks play a key role in setting up a payment system that complies with the requirement of the regulatory enablers, mainly APIs, but they have limited incentive to create enablers of high quality. The solutions are designed for compliance purposes rather than commercial use, with the consequence that solutions are not fully fit for third-party payment providers. This increases operating costs and creates market entry barriers. Banks should have more incentives to provide API's and in general participate in collaboration with TPP's and other actors in the payment sphere.

3.2 Ensure further adoption of existing technologies and infrastructure

As described in chapter 2, there are already several national technologies in place capable of facilitating cross border account-to-account payments, yet many current cross border payments still rely on a payments card technology. To accelerate the development and adoption of A2A cross border payments, there is a need to facilitate harmonisation of mobile based payments systems to capitalise their widespread adoption in-country across the EU. Currently, there are no limitations as such, but neither are there any incentives for the private sector to accelerate this development, and with the investments needed to do so being relatively large, it is recommended that the Commission (or another EU organ) undertakes a facilitating role. Concretely, it is suggested that the Commission is required to:

- **Develop concrete guidelines to accelerate adoption |** By developing concrete guidelines and/or roadmaps on how national actors could develop their A2A technology to easier facilitate cross border payments, the adoption of A2A technology for payments would likely accelerate due to the fact that actors would have more clarity into the implications of a potential investment in new technology.
- **Facilitate a forum with central actors |** Similarly, by facilitating a meeting forum with the central national actors, the continuous collaboration needed between actors would be facilitated centrally to further accelerate the development and adoption of A2A cross border payments. This could also increase the interoperability of the technology as actors could share their experiences in the development of their infrastructure.

3.3 Make fees in payment processing more transparent

Stakeholders point towards the fact that prices for payment processing is relatively untransparent both for the consumer and for merchants. Lacking transparency will make it difficult for consumers and/or merchants to make an informed choice regarding their choice of payment system, which is why increased transparency is recommended. To increase the transparency on this matter we recommend the following initiatives:

- Make benchmarks of payment processing fees publicly available
- Amend regulation in the current draft for PSD3/PSR

To create gains in the **short term**, policy makers should commit the Commission to benchmark payment processing fees and make the information easily available as it has been done in other economic sectors where legal provisions oblige disclosure of intermediate costs that would otherwise not be provided to customers (e.g. in the energy sector on transport and distribution costs).

This recommendation could increase transparency in the price of payment processing, enhance customer choice and push consumer behaviour towards a higher adoption of account-to-account payments, which would be a cheaper alternative, especially when doing cross-border payments.

Specifically, the Commission should be required to:

- **Collect data |** Collaborate with financial institutions, payment service providers and industry associations to gather accurate and timely data on payment processing fees.
- **Analyse and benchmark data |** Analyse collected data to establish benchmarks for payment processing fees across different payment methods and service providers.
- **Report insights |** Develop a user-friendly online platform where consumers can access updated benchmarks and compare payment processing fees.
- **Raise awareness |** Undertake occasional informative campaigns.
- **Engage stakeholder |** Engage with business representatives, consumer groups, and payment service providers to ensure the benchmark remains relevant and useful.

In the **longer term**, European policy makers should create transparency via regulatory improvements. The current PSR proposal suggests that the information requirements for single payment transactions PSD2 (Article 61-62) is carried into PSR and harmonised across all EU Member States in PSR (Chapter 1). The scope for transparency and information in the proposal is on currency conversion (Article 5), additional charges/reductions (Article 6) and cash withdrawal services (Article 7) and not on a more general transparency into the cost of different payments solutions.

Policymakers could elaborate further on the information requirements in the proposal focusing on the transparency for merchants. When using a payment system (e.g. cards of A2A) merchants will naturally be charged a number of fees, but merchants often find the fees to be untransparent and/or presented in an aggregated way. Therefore, policymakers are encouraged to consider whether requirements can be placed on payment system owners to present fees in a specific way that leaves very little room for aggregation and intransparency.

3.4 Adopt the digital euro in a smooth and harmonised way

As a means of offering more payment solutions and adding to the overall competition in payment solutions while also reducing reliance on traditional PSPs (by providing full interoperability[9]) would be a widespread adoption of the digital euro. In this adoption, it is important that the fee structure regarding the digital euro is designed in a manner that makes it very cheap for merchants to receive payments completed using the digital euro. Otherwise, there is a risk that the digital euro will have lower adoptability and not realise its full potential due to low use.

There are good opportunities for keeping costs for merchants low as the setup needed to operate a digital euro is ECB-owned infrastructure with no scheme to maintain. Furthermore, payments are settled instantly, thereby eliminating settlement risk. Fees would therefore mainly be coming from the PSPs who are still to hold a central role in the current proposed setup.

While merchant adoption of the digital euro as a payment solution is important, the consumer is naturally as important, since consumers will ultimately be deciding if it is beneficial for merchants to accept the digital euro as a payment method.

To promote consumer adoption, the digital euro should have clear and tangible benefits for consumers to actively change their payments behaviour. Examples of tangible benefits could include the possibility for customers to hold self-custody wallets, a tiered approach to KYC or a broad range of conditional payment functionalities.

In summary, the digital euro can help the maturation of cross border payments, by e.g. reducing costs for merchants, improving accessibility, reducing barriers to entry for smaller actors and providing a standardised and efficient framework for facilitating payments. However, there are still several unknowns in the framework around the digital Europe, and structures and systems are still being developed. Stakeholders point to the following roadmap to:

- **Secure a strong political mandate |** European policy makers should send a clear signal to the market that there is a strong political mandate to pass the regulation needed to support the digital euro.
- **Set and keep an ambitious timeline |** To underline the political mandate, policy makers should push for a timeline that delivers the digital euro within a short period of time. Consequently, policy makers should ensure fast approvals of needed regulation with no delays.
- **Prioritise low merchant fees |** Structure compensation model around the digital euro such that merchants pay low fees on receiving payments using the digital euro.
- **Clear and tangible benefits for consumers |** Ensure that the features in the digital euro will present clear and tangible benefits for consumers.

3.5 Leverage the development of EU Digital Identity Wallet for Payment Use Cases

The authentication of a payer attempting to initiate a payment is central to enable safe and secure payments. However, post-SCA enforcement, 17% of authenticated transactions of one of our interviewees fail, resulting in an Authentication Approval Rate of 83%. Customers either received authentication related declines (5%) or had to abandon the transaction (12%) due to issues impacting the customer experience. 83% of these failed transactions are not fraudulent but did not go through due to issues in the payments supply chain. A unified regulatory framework for Strong Customer Authentication (SCA) and reviewed SCA

[9] A stocktake on the digital euro - Summary report on the investigation phase and outlook on the next phase, p. 17.

requirements should strike a balance between customer protection against fraud and broader goals to support good commerce and legitimate transactions for the benefit of European consumers and businesses. The requirements for SCA are covered by the draft PSR Chapter 4 and will therefore be harmonised across all EU Member States upon adoption.

The technology available to complete the SCA varies across Member States. Some have national solutions for SCA, while other Member States have more decentralised solutions. Today, only 14% of key public services providers across all Member States allow cross-border authentication using an e-Identity system.[10]

For the further maturing of cross-border payments, stakeholders point to the following initiatives:

- **Ensure clear consumer benefits in the European Digital Identity** (EUDI) **|** With the proposal for eIDAS being approved, it should be considered to the largest extent possible that the SCA requirements in PSR leverage the technological developments being achieved as part of the eIDAS implementation. It is central to ensure tangible benefits for consumers as this will be a driver for further maturing the payments landscape in the EU. Examples of tangible consumer benefits include a unified and frictionless user experience and coverage of a variety of use-cases (e.g. travel, health and banking).
- **Ensure unified technical standards |** A digital identity wallet, like the one in the eIDAS, could be leveraged as a payment instrument based on SEPA rails (and potentially also the digital euro) which could promote non-card EU payments, spur card diversification, and reduce the cost of payments. It could also significantly streamline the existing flow for unregistered users who could potentially register at the time they execute a payment through eIDAS. Therefore, it is important that the needed resources are provided for the working groups to provide the technical standards a smoot, even and fast implementation.[11]

  Policymakers are recommended to obtain a political mandate for the coming election period that maintains the timeline for implementation of eIDAS while also focusing on a unified technical implementation. The mandate should reflect that policymakers will aim at ensuring that the eIDAS wallet supports Account on File and Recurring Payments as this would increase customer adoption. Furthermore, as stated above, SCA should be a functionality of the EU Digital Wallets, which would allow for compliance with the requirements proposed in PSD3/PSE, with minimal customer friction, as customers would be able to authenticate the transaction directly at the merchant's portal with no bank re-direct.

3.6 Design regulations to harmonise and standardise APIs

If cross-border payments should be made easier and less costly, policymakers need to consider the regulatory framework for APIs.[12] Stakeholder express concerns with the current solution where banks provide APIs merely from a compliance perspective and in a fragmented way.

The shift to PSR/PSD3 is likely to incur greater standardisation of APIs since requirements regarding APIs will move from PSD2 and into PSR and thereby being directly applicable to all Member States. As described in the previous chapters, however, there is still a structural challenge in the current setup where Third-Parties Providers (TPPs) can access account data without a contractual relation to PSPs (i.e. by using the universal right provided in PSR,

[10] European Digital Identity - European Commission (europa.eu).
[11] EU Digital Identity Wallet Toolbox Process | Shaping Europe's digital future (europa.eu).
[12] Application Programming Interfaces.

title 3). On one hand, the TPPs struggle with the quality in the APIs and PSPs. On the other hand, TPPs are dissatisfied with the amount of effort they must put into the APIs while having limited economic upside.

Policymakers are recommended to **take regulatory or market-driven initiatives to ensure standardisation of APIs**. Below, we illustrate two potential paths to follow in the pursuit of this – developing a fully harmonised regulatory framework for APIs or develop a dynamic framework with relevant market actors.

Option 1. Develop fully harmonised API standards

One way to address the challenge with varying quality in APIs is to introduce a fully harmonised and standardised set of requirements to APIs, e.g. standards that would mirror the SPAA scheme or other broadly recognised schemes, which have grown since the introduction of PSD2 due to the inconsistency of quality in APIs. This idea was examined by the European Commission when reviewing the PSD2, where it was initially concluded that the costs would outweigh the benefits.[13] It must be noted that the commission provides limited transparency into how these conclusions were reached.

Stakeholder interviews show that a full harmonisation/standardisation of APIs would be highly beneficial for TPPs and would greatly increase the opportunities for TPPs to change the current structures in the payments landscape, which remains dominated by traditional banks and payment networks (i.e. Visa and Mastercard).

The recommendation for a practical alteration of the PSR would be to add an article in Chapter 3 that would give the European Banking Association (EBA) a mandate to implement regulatory technical standards to the largest extent possible aims to ensure that the APIs provided by payment service providers fulfil a standard that complies with relevant regulations. This will increase flexibility since adjustments of standards are likely to be needed ongoingly.

Option 2. Develop a dynamic framework

Another solution is for policymakers to consider a dynamic regulatory framework, where the universal right to accessing account information is kept while the exact standards are less defined in the regulation but are instead to be defined by a joint committee between the EBA and other central market actors.

This model could potentially present a good balance between regulation on one hand and market sentiment on the other. In practice, the regulation should require the EBA to establish a joint committee with central market actors and issue regulatory technical standards regarding the quality and standards for APIs.

Such a model is also supported well by the proposed Financial Data Access Act (FIDA), which allows PSPs to further commercialise the use of payments data. A joint committee could be a good facilitation ground for maturing commercial models between PSPs and TPPs inside the scope of the PSR and FIDA, which could then also potentially address the dissatisfaction from PSPs on the lack of commercial upside in providing APIs.

3.7 Increase wallet competition

To promote an equitable payment landscape, encourage the participation of diverse industry players, and drive innovation, the EU Commission should focus on fostering competition in mobile wallets.

[13] Report from the Commission to the European Parliament, the Council, the European Central Bank and the European Economic- and Social Committee.

Firstly, the use of the NFC Technical Solutions should remain free, and the process for selecting a default payment application on a mobile phone and its implications should be more precisely defined by the providers. Moreover, a general "no self-preferencing" clause should be established to prevent any preferential treatment within the ecosystem. Restrictions on access to NFC technology should be narrowly focus solely on maintaining security standards. Furthermore, the requirement for a license to offer payment services in the EEA under PSD2 should not impose stricter eligibility requirements on third-party digital wallet providers than those applied to the primary digital wallet provider by legislation.

About us

Implement Economics is the economics expert unit of Implement Consulting Group. Our experts are advisers to corporate and government decision-makers within regulation, trade, digitisation, decarbonisation and globalisation.

The team has conducted several studies on the Single Market and provided a series of studies for the European Commission and governments in Europe, Asia and the Americas.

The team applies economic modelling, data analytics and econometrics to help solve worthwhile problems.

Headquartered in Copenhagen and with offices in Aarhus, Stockholm, Malmo, Gothenburg, Oslo, Zurich, Munich, Hamburg and Raleigh (NC), Implement Consulting Group employs more than 1,200 consultants working for multinational clients on projects worldwide.

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