Yves Mersch: Challenges of retail payments innovation

Speech by Mr Yves Mersch, Member of the Executive Board of the European Central Bank, at the Belgian Financial Forum, organised by the National Bank of Belgium, Brussels, 26 October 2015.

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Introduction

I am sure that almost all of you in this room today have a smartphone in your pocket. With the smartphone, you feel as if you have the world at your fingertips: you can call or message anyone across the globe, access up-to-the-minute information and news on the internet, and stay entertained by downloading music, films or books. You can do all this at any time of day, wherever you are. This is the smartphone's great innovation: making communication, information and entertainment available 24/7, on the spot, around the globe.

I am also sure that all of you have a wallet in your pocket, containing banknotes, coins and some credit or debit cards. You use these to pay for things, but there are limitations. What if there were none? What if you could pay anyone, anytime, wherever you are? Be it with cash, by card, online or with your smartphone? And what if all these payments were instant?

In a nutshell, this is what I will talk about today: how we can make this happen. We already have the euro, making it possible for you to pay with the same banknotes and coins throughout the euro area. Now we want to make cashless payments as easy, fast, and far reaching as smartphone services. Users – be they consumers, retailers or businesses – do not see why payments cannot be instant and boundless like e-mails, text messages or WhatsApp.

What are the challenges of innovation in cashless payments? How do public authorities contribute to the process? Who is involved in the market, and how can a level playing field be ensured? How should innovative payment services be designed? These are some of the questions I will address.

To give you a broad roadmap, in the first part of my speech I will talk about the key institutions involved in bringing innovation to the payments arena. The Eurosystem, which comprises the European Central Bank and the national central banks of the euro area, plays a key role, as does the European Commission and the European Retail Payments Board.

The second part of my speech will address the supply side of the market, i.e. the retail payments service providers. Here, we are seeing new payment service providers – i.e. non-banks – emerging alongside the traditional providers – i.e. banks. These new payment service providers have the potential to play an important role in the payments market, contributing to a wider choice of products and services and increased competition.

The third part of my speech will address the payment services that are ripe for innovation. One of the central building blocks of payments innovation is instant payments, i.e. electronic payment solutions that are available 24/7, every day of the year, resulting in the immediate or close to immediate interbank clearing of the transaction and in the immediate crediting of the payee's account with confirmation to the payer.

At present, we associate the word "instant" with instant movie streaming, instant messaging and Instagram. There is still a gap between the instant nature of these services on the one hand and the non-instant nature of the payments for these services on the other. What is "normal" for messages, movie streaming and Instagram is not normal for euro payments – yet. I hope that by the end of my speech, you will see how we can get there.

Part 1: The key institutions involved in payments innovation

Let us return to the wallet in your pocket, containing, most likely, some euro banknotes. This is the most tangible result of one of the roles of the Eurosystem in payments, namely that of an issuer of currency. Since the introduction of euro banknotes and coins in 2002, the single currency has enabled everybody in the euro area to make cash payments across the euro area countries from a single wallet.

In the payments industry, we use the term "retail payments" to mean all payments made by private persons, companies, etc., for example to buy goods and services or to transfer money. For cashless retail payments, the Eurosystem has strongly supported the creation of SEPA, the Single Euro Payments Area, i.e. a single market for retail payments in euro across Europe. SEPA was initiated by the European banking industry as a reaction to the Eurosystem's call for more efficiency in cross-border retail payments[1] and to the introduction of the cross-border payments regulation, which eliminated the differences in charges for cross-border and national payments in euro. Those of you who were involved in the work towards SEPA know that harmonising the retail payments market for euro credit transfers and direct debits was a huge task. More than a year has now passed since full migration to SEPA and we can conclude that Europe has achieved a Single Euro Payments Area for credit transfers and direct debits in euro.

Introducing innovative services without re-introducing fragmentation in the market is also going to be a huge task. On the one hand, we have to be aware that the innovation of retail payments services has a global perspective. Innovation in the United States, such as the payment services launched by international giants Google, Apple, Facebook and Amazon, makes its way over to Europe. In Asia, in China, the companies Alibaba and Tencent, via their payment arms Alipay and Tenpay, are expanding their platforms for online shopping, and their internet communication platforms, into complete ecosystems for digital payments and financial services.

On the other hand, we are seeing that innovative retail payment solutions are often developed based on local or regional regimes. For example, mobile payment initiatives are often launched by individual banks, individual mobile operators, individual card schemes or partnerships between different entities. Where do we position ourselves between these two opposite ends of the innovation movement?

From the perspective of the Eurosystem, our unique responsibilities in the payments domain relate to the smooth functioning of payment systems ***for the euro***. Hence, our main focus in retail payments innovation is on pan-European retail payment solutions in euro. We support innovation in retail payments because it can increase the efficiency of the market, thereby promoting economic growth and overall social welfare. We are neutral as to the providers of such services, be they market incumbents or new players, provided that they fulfil the applicable regulatory requirements.

Central banks serve three principal roles in relation to market infrastructure and payments: these are the roles of operator, overseer and catalyst. The Eurosystem is the operator of TARGET2, the large-value payment system for the euro; of the correspondent central banking model, which allows the cross-border transfer of collateral in Eurosystem credit operations; and of TARGET2-Securities, which is a service for the integrated settlement of securities transactions in central bank money. As the owner and operator of these systems, the Eurosystem has immediate and powerful tools to ensure their safety and efficiency.

Safety and efficiency are also the main drivers for the oversight of payment systems and payment instruments. The Eurosystem monitors both existing and planned systems, assesses them against a set of objectives and, where necessary, fosters change. To give an

[1] "Improving cross-border retail payment services – The Eurosystem's view", September 1999.

example, the Eurosystem, as part of its involvement in international standard setting, for example through the Committee on Payments and Market Infrastructures, is working together with the industry to strengthen financial market infrastructure's resilience against cyber-attacks. Work is also underway to enhance the security of retail payments within the EU. For instance, the European Banking Authority and the European Central Bank are closely cooperating in the preparation of regulatory technical standards for retail payments services.

In its role as catalyst, the Eurosystem is active in helping the industry to find safe and effective payment, clearing and settlement solutions for the euro area. I have already mentioned the Eurosystem's contribution to the creation of the SEPA. Another example is its involvement in the work towards removing barriers to cross-border securities clearing and settlement in Europe.

The Eurosystem, the European Commission and the European Retail Payments Board have distinct mandates and responsibilities, but they are also connected to each other. The European Central Bank has been in regular contact with the European Commission about their endeavour to harmonise the legal framework underlying payments, i.e. the Payment Services Directive, which we refer to as PSD 1 & 2, the E-Money Directive, the SEPA Regulation, the Directive on Payment Accounts and the Interchange Fee Regulation. This strong cooperation between both institutions has enabled us to get where we are now with the Single Euro Payments Area.

This brings me to the project currently underway at the European Commission with the aim of creating a Capital Markets Union, or CMU. CMU has the potential to complement banking union and strengthen Economic and Monetary Union by improving cross-border risk-sharing and making the financial system more resilient. CMU will also be key to supporting European growth by diversifying sources of funding and increasing companies' access to financing. While the improved access to capital for small and medium-sized enterprises foreseen by the vision for Capital Markets Union is currently very much in the limelight, we should not forget that SMEs could also benefit substantially from more innovative retail payments services. Let me give you some examples here.

First, now that SEPA is up and running, SMEs are able to use one single account for euro payments throughout the EU.

Second, the experiences of other markets – particularly the United Kingdom, where instant payments have been available since 2008 – show that SMEs greatly benefit from faster payment execution. Receiving and making credit transfers instantly can free up cash flow and ease working capital needs.

Third, electronic invoicing has long been on the agenda of European policy-makers. By replacing paper invoices with electronic ones and creating a seamless link between the invoicing process and the payment process, resources may be freed up and used for other purposes.

Fourth, as many SMEs are small merchants accepting hundreds or thousands of payments every day from consumers, at physical points of sale or online, they may benefit from progress in contactless payments where a payment can be made by simply holding the mobile device or card above a merchant's terminal.

Last but not least, the technical standardisation of payment cards may contribute to more competitive card acquiring, i.e. the processing of card payments on behalf of the merchant. In the longer term, this may lead to significantly lower costs for handling card terminals and accepting cards, especially for small merchants.

The points I just made illustrate that, despite all the effort that has gone into the integration of the euro retail payments market in Europe, we are not there yet. Only last month, the European Commission published a roadmap for an upcoming Green Paper on Financial Services and Insurance.[2] The main purpose of this initiative is to investigate obstacles and gaps in previous legislation that prevent the supply side from providing services across the Single Market and the demand side from enjoying the benefits of the Single Market. With regard to innovation, the European Commission roadmap recognises that the current trend of digitalisation in retail payment services – i.e. the development of new models and approaches through technology and the internet – provides a particular opportunity to further integrate markets and solve a number of pending issues in the retail payments sector.

The European Central Bank very much welcomes this initiative as it should complement the efforts of the Eurosystem and the Euro Retail Payments Board to further develop open, fair and competitive retail payments in the EU.

The Euro Retail Payments Board, or ERPB, is the third body working towards innovation in payments, alongside the Eurosystem and the European Commission. The ERPB was created by the European Central Bank in 2013 as a strategic body that formulates guidance and a common starting point for the development of an integrated, innovative and competitive market for retail payments in euro in the European Union. It also provides recommendations on work priorities, including standardisation needs. The ERPB is composed of high-level representatives from both the supply and demand side. On the supply side, there are representatives of the banking community, payment institutions and e-money institutions. On the demand side, there are representatives of consumers, retailers with physical premises, internet retailers, businesses/corporates, small and medium-sized enterprises and national public administrations. Representatives of national central banks participate in the board's work on a rotating basis and the European Commission participates as an observer.

The activities of the ERPB are very much linked to the challenges and priorities for innovation in retail payments. I will talk about some of these issues, in particular instant payments, in more detail in the third part of my speech. Next, however, I would like to talk about the new payment service providers that have been emerging in the market.

New payment service providers

The wallet in your pocket containing euro banknotes and coins and some debit or credit cards tells you something about payment service providers. The cards you have may be issued by a bank – if you have for example Visa or Mastercard – but they may also be issued by a card scheme – if you have for example Amex or Diners. Card schemes and money transfer service providers such as Western Union or Moneygram are examples of established non-bank payment service providers. These are new market entrants, different to the traditional banks, and history shows us that new entrants have long been a part of the retail payments market. For example, merchants were the initial drivers of the introduction of payment cards in the US in the 1930s, and, just a couple of years ago, it was a mobile network operator in Kenya that succeeded in making mobile payments widespread in that country.

In Europe, it is expected that non-banks will have a stronger role in payment markets in the years to come. This will contribute to a wider choice of products and increased competition.

One category of non-bank payment service providers is that of payment institutions. Payment institutions came into being as a result of the enactment of the Payment Services Directive,

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2 http://ec.europa.eu/smart-regulation/roadmaps/docs/2015_fisma_031_other_outside_cwp_green_paper_retail_en.pdf.

or PSD1. Among other things, payment institutions can execute payment transactions for you. With the revised Payment Services Directive, or PSD2, the list of activities that payment institutions can carry out is being expanded to include the initiation of payments, i.e. they can initiate a payment on your behalf. They can also provide account information for accounts held at other payment service providers.

Actually, payment initiation services provided by third parties have existed in the market for some time now. They have been emerging in parallel with e-commerce, i.e. online shopping, offering an alternative to established payment instruments and services that were – understandably – neither conceived nor wholly suitable for the e-commerce environment. In particular, these third parties have been serving as an alternative way to carry out card-not-present payments, i.e. card payments via the phone, internet or other channels where the cardholder cannot physically present the card to the payee.

This is how it works. When you make a payment online, instead of having to input the payment details into the online banking tool provided by your bank, typing in the amount, the recipient's account details, etc., you access your online banking tool via the third party service provider, which provides the transaction-related data for you. Simultaneously, the e-commerce merchant, or online retailer, receives an automatic payment notification that the payment has been completed successfully.

While in some European countries, for example in the Netherlands, banks began offering these payment initiation services, in other countries, such as Germany, new providers entered the market. Legally, these third party service providers have been operating in a grey zone. At the same time, their emergence demonstrates that an actual market need was not being covered sufficiently by the traditional market.

The rationale behind the regulatory formalisation of payment initiation service providers and account information service providers with Payment Services Directive 2 has many aspects. On the one hand, it is meant to increase competition in the market. It should remove obstacles that have been hindering non-banks from entering the payments service market. In particular, banks will not be allowed to reject access of third party service providers to the accounts that they hold.

More indirectly, the provisions in PSD2 may also push banks to innovate in order not to be forsaken by customers in favour of non-bank payment service providers. Last but not least, the directive may also stimulate new business models and forms of cooperation between banks and non-banks.

The need for a level playing field on which to compete goes both ways. All entities providing retail payment services to end-users within the EU should be licensed and supervised. The licensing of third party service providers needs to be proportionate, as is currently the case for banks, for e-money institutions and for payment institutions.

An important follow-up work to PSD2, which was adopted by the European Parliament on 8 October and is expected to be formally adopted by the EU Council of Ministers in the near future, is the drawing up of so-called regulatory technical standards. This includes, in particular, the requirements for strong customer authentication[3] and for secure and open communication standards between third party service providers and account servicing entities. As I mentioned in the first part of my speech, the European Central Bank and the European Banking Authority are closely cooperating in this area under the remit of SecuRe Pay. It has to be said, however, that the timeframe for developing regulatory technical

[3] Strong customer authentication is a procedure based on the use of two or more of the following elements: (i) something only the user knows, e.g. a static password, code, personal identification number; (ii) something only the user possesses, e.g. a token, smart card, mobile phone; (iii) something the user is, e.g. biometric characteristic, such as a fingerprint.

standards is challenging. At the same time, both the third party payment initiation service providers and the account servicing banks will have to adapt their systems to the new regulatory requirements.

It is encouraging to see that the market is pro-active in taking up the requirements of Payment Services Directive 2. For instance, some existing retail payment processors see a role for themselves in facilitating payment initiation services, thereby assisting banks and third-party service providers in supplying them to end-users and making them a more valuable service proposal. Some banks are changing their strategies to become active as third party service providers or even to set up special purpose subsidiaries. These subsidiaries will provide their parent bank's services bundled with the services offered by competing banks, making the increased competition really work for the benefit of payment service users – be it consumers or merchants.

Instant payments

And now let us return to instant payments, and to the wallet in your pocket. If you went for a coffee before this meeting and paid for the coffee with coins or banknotes, you made an instant payment – in cash. If you paid for the coffee with a card, it may take some time before the merchant actually receives the money in its account and before you receive the confirmation of the payment in your account statement.

Intuitively, the idea behind instant payments is that cashless payments become as instantaneous as cash payments, meaning that funds are immediately available to the payment recipient. Some may say that there is no real need for instant payments, that a payment guarantee is sufficient in e-commerce. But we have to be aware that we are not only dealing with customer needs but also with customer expectations. At the European Central Bank, we receive quite frequently requests and comments from European citizens and companies regarding retail payments, and one comment that appears time and again perfectly illustrates my point. This is the comment that in the digital era, it is incomprehensible why e-payments should take longer than e-mails. People expect instant payments to be as self-evident as other services delivered via the internet, e.g. instant messages, movie streaming or Instagram. Nobody would accept an e-mail being delivered with the same time lag of a letter sent by surface mail. Why then does an electronic payment still take a full day at least?

In the following, I will discuss the three layers that are required for us to achieve instant payments: the scheme layer, the clearing layer and the settlement layer.

The scheme layer refers to a set of rules and technical standards that have to be followed by payment service providers. It can be understood as a common instruction manual on how to move funds from one account to another.

You may ask why we need a common scheme for instant payments. After all, innovative payment services based on instant payments are already being implemented by some national communities in Europe. However, even if they are often based on the same technical standards, these services lack common rules and the harmonised implementation of standards and are therefore not easily interoperable. This means that, for example, a service deployed in Germany cannot be easily used in France. What we want is for electronic payment means to work for you wherever you are, whether you are paying by card, online, or using your smartphone.

With the creation of SEPA, we have made huge efforts to integrate the European retail payments market. Why should we not take advantage of the harmonisation and integration already achieved with the SEPA project in working towards instant payments? I believe that payment service users do not want to be swamped by dozens of different solutions, having to subscribe to different platforms depending on what they want to do. What they want is a solution that gives them a wide reach, and this can only be achieved by having a common scheme. If you allow me to take one more analogy from the mobile phone sphere, it is quite obvious that users expect to be able to reach any person anywhere with a phone. Nobody would accept having to subscribe to a Spanish mobile operator just to be able to phone a friend in Spain.

The European Retail Payments Board mandated the payments industry to design a scheme for instant payment services by November 2015. The European Payments Council, which represents payment service providers, is working on a proposal for the design of a common scheme based on the SEPA credit transfer. This proposal is to be delivered in the next meeting of the European Retail Payments Board in November 2015.

A common scheme for instant payments should harmonise how payment service providers interact with their users and with other payment service providers.

This leads us to the second layer: the clearing layer, i.e. the process of transmitting, reconciling and, possibly, confirming payment orders prior to settlement. Here, we have to consider that, typically, retail payments are processed and cleared in batches. Payment service providers collect payments and process them one or several times a day through clearing and settlement infrastructures. After receiving the funds from the payers' banks, payment service providers credit the funds to the payees' accounts. In this non-instant payments mode, payment service providers incur no credit risk when processing payments. They also have sufficient time to comply with checks under Anti-Money Laundering regulations and regulations combating the financing of terrorism.

As for the third layer – the settlement layer – in instant payments mode, unless instant settlement occurs, payment service providers may have to provide funds to payees before they receive the money from the payer, thus incurring credit risk. This credit risk would need to be covered – for instance by prefunding or collateralisation arrangements. In any case, it may be necessary to enhance the methods for screening transactions as required by the applicable law on anti-money laundering and on combating the financing of terrorism.

In Europe, a fundamental question that has to be tackled is what kind of clearing and settlement infrastructure provides a viable solution for pan-European instant payments throughout the Single Euro Payments Area. Do we need one or more central infrastructures for instant payments in euro? Who will build, manage and operate them? Are links between infrastructures a possible way forward? Could interoperability work, i.e. the establishment of technical and business procedures that enable the clearing and/or settlement of instant payments between scheme participants from different infrastructures across SEPA? These are some of the issues that will have to be addressed.

What is encouraging is that there are several initiatives underway addressing the clearing of instant payments. What I think is important from the central bank catalyst perspective is that there will be euro area wide reachability and a fair level of harmonisation. Non-interoperable island solutions are not the way forward.

The development of pan-European instant payment services is also an integral part of what we call the Eurosystem's "vision 2020". Overall, our vision 2020 encompasses three central areas: first, it aims to explore the synergies between TARGET2 and TARGET2-Securities, with the ultimate goal of achieving a consolidated Eurosystem market infrastructure for large-value payments and securities settlement. Second, it aims to increase the level of harmonisation of the Eurosystem's collateralisation techniques and procedures, and to consider whether a common Eurosystem collateral management system would be useful. Third, it will assess new service opportunities arising from bringing TARGET2 and TARGET2-Securities closer together. In particular, it will consider the benefits of enhancing TARGET2 services in the field of instant payments, at least in the settlement layer. Furthermore, it will review how the Eurosystem could foster the emergence of a competitive and open clearing solution for instant payments.

In the discussion on innovation in retail payments, instant payments are what everyone is talking about. Payment service providers will build their service offers around instant payments, for example when you use their services to shop online or to pay a friend via your mobile phone. This will foster competition between providers, benefitting the end user.

Of course, when instant payments become a reality, this does not mean that other non-instant payments will die out. We have seen that, besides e-mails, online news services and Instagram, there are still letters sent via postal services, people reading newspapers, and photos put into albums. However, instant payments will be the “new normal”.

As a result of digitalisation, payments – and in particular card-not-present payments – are becoming part of increasingly long and complex value chains. Users expect these value chains to seamlessly integrate e-commerce, social media and retail payments. The downside of the gain in convenience may be that users forget about the risks. People often complain about tedious authentication procedures, about having to memorise passwords and PINs, about having to generate transaction-specific codes, etc. They would rather payments were quicker and easier. But there is a trade-off between convenience and risk. And of course, people also complain if, as a result of this risk, they are subject to fraud or breaches of data confidentiality.

In order to maintain confidence in payments and trust in the currency, the Eurosystem has to make sure that the right balance is struck between convenience and security. The digitalisation of retail payments services means that security requirements need to be adapted and enhanced. However, innovation brought by digitalisation should not be seen as the enemy of security. On the contrary, it can actually enhance security, as has been demonstrated by the introduction of the technical standard EMV[4] for cards. In the design of security features, authorities and payment service providers are well-advised to bear in mind the users’ need for convenience and the proportionality of the security requirements. If the security features related to a payment service are perceived as being too cumbersome, users will seek ways to circumvent them – or reject the service.

Conclusion

To conclude, allow me to summarise the three main messages that I would like you to take home from my speech today.

First, I hope that I managed to explain that for the Eurosystem, the main focus as regards retail payments innovation is on pan-European retail payment solutions in euro. We should take advantage of the harmonisation and integration already achieved with the SEPA project in working towards innovative payment solutions, be they instant payments, mobile payments or other payment-related services. This does not mean that we should ignore global developments or prevent local or regional initiatives from emerging. I would like to emphasise, however, that we should avoid the development of non-interoperable silo solutions. Rather, the harmonisation of standards and business rules, pan-European reachability, interoperability and a harmonised legal framework are the foundations on which innovative payment solutions should be based.

Second, I would like to underline that the market for innovative retail payment services needs to be based on a level playing field. Hurdles preventing new service providers from entering the market must be avoided. The Eurosystem welcomes innovation and new market faces. At the same time, all entities providing payment services to end users should be licensed and supervised. As for banks, e-money institutions and payment institutions, licensing of new payment service providers should be proportionate and risk based.

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[4] A technical standard for cards and for payment terminals and automated teller machines (ATMs) that can accept them.

Third, while it is clear that users will go for innovative payment services that are convenient and inexpensive, they also take it for granted that the regulatory authorities ensure the safety and efficiency of the products and services. In the end, what is true in other walks of life is true for retail payments innovation, too – i.e. we have to get the balance right.

Last but not least, as instant payments will be the basis for many innovative services offered by payment service providers, I expect that, by the end of this year, the course for the development and adoption of instant payments in Europe will be set. I thank you for your time.