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Profile

About us

Payment services differ from 'normal' services: everyone has to deal with them and they are the lifeblood of our economy. For that reason the payment system seems to have a utility function. But there is no such thing as a free lunch, as the saying goes. Just as most other things, payment services are not free either. High costs are involved and they have to be paid for. The payment system relies on a chain of infrastructure that is generated by a large number of different payment service providers. Security, efficiency, reliability and accessibility of the payment system as a whole are of critical importance to society. This requires more than the dedication of each individual party; the parties have to work together and harmonise their activities.

The role of the payment system in society therefore requires a platform where suppliers and end-users of payment services can meet and enter into dialogue about their expectations, possible problem areas, and other developments. The necessary collaboration in the Dutch payment system and the dialogue with society are the raisons d'être of the Payments Association. This collaboration has borne fruit and its results, as far as 2018 is concerned, are presented in this report. For the payment system to work properly, standards and technical and other agreements are highly important. They are largely determined at the European or indeed the global level. The Payments Association coordinates the sector's compliance with these agreements and represents the interests of the Dutch community during consultations on these standards and agreements.

Connecting the payment system

Because most payment services in the Netherlands are provided by our members, the Payments Association is the place to be for consultations between payment service providers (supply side) and users of payment services (demand side), and all of society's echelons who have to deal with the payment system, such as end-users, government bodies, and suppliers. The Payments Association organises contacts and consultations, initiates (both spontaneously or when requested to do so) collective activities for the sector, responds to questions on behalf of the sector, and makes its knowledge available to members and stakeholders. This concerns the infrastructural and societal aspects of the payment system – security, efficiency, reliability, accessibility.

Coordination between the parties on the supply side is also an essential role for the Payments Association. Where necessary, this coordination takes on a formal character in the form of



decisions taken by the Board of Directors. Coordination with stakeholders takes place in the various stakeholder forums and is also guaranteed through our input to the National Forum on the Payment System (known as MOB), organised by DNB at the request of the Minister of Finance. In the Payments Association, no consultations take place about sensitive competitive topics.

For more information about our field, our tasks, our products, our partners, and our history, please refer to <u>our website</u>.



Report from the Board of Directors

It is with great pleasure that I present the annual report of the Dutch Payments Association for the 2018 financial year.

Board of Directors

As specified in its statutes, the Dutch Payments Association's Board of Directors comprises nine members. The Board of Directors consists of three independent members, including the chairman, and six members affiliated to the members of the Dutch Payments Association. This reflects the fact that the Dutch Payments Association, as an association of payment service providers (supply side), attaches great value to the social role of the payment system, which includes the interests of payment service users (demand side). As a result, the Board meetings cover the perspectives of every party involved in the payment system.

The <u>Board and Management appendix</u> provides additional information on the composition of the Board.

The Board had five regular meetings during the reporting period. During its meetings, the Board focused not only on its regular activities, which you can read about in this report, but also on European developments in the payment system, such as the introduction of the revised Payment Services Directive (PSD2) in the Netherlands.

The Board of Directors has also followed up, in an off-site meeting, on the recommendations from its self-evaluation in 2017. At the time, consideration was given to whether the objective and the strategy of the Payments Association were still appropriate in the context of the dynamics of the payments market and the entry of new parties. The Board of Directors reaffirmed the current objective and strategy of the Payments Association and concluded that, among other things, the openness of the Payments Association offers many opportunities to new members, who are able to benefit from its work. Finally, the Board of Directors has agreed that the Payments Association should play an increasing role in societal matters such as cybersecurity, privacy, availability, and accessibility in the payment system. These matters regularly feature on the Board of Directors' agenda.

In 2018, Mijntje Lückerath resigned as an independent member of the Board. She had been a member of the Board of Directors since the Payments Association was founded. The Board would like to take this opportunity to thank Mijntje for her hard work and dedication during her time with the Dutch Payments Association. The General Members' Meeting has appointed Gerjoke Wilmink, director-manager at Alzheimer Nederland, on the advice of the Consumer



Association as her successor. The Board of Directors is pleased that Gerjoke has taken Mijntje's place.

The Board has multiple governing committees. The Selection and Appointments Committee assesses board member candidates according to the board member profile and, if the assessment is positive, proposes their appointment to the General Members' Meeting. The Audit Committee meets four times a year. Two meetings are specifically dedicated to the budget and the annual accounts. The Remuneration Committee has discussed the association's remuneration policies.

Activities

The Payments Association seeks to have a payment system that is secure, reliable, efficient, and accessible. It is essential to aim for these four goals on the basis of a clear vision of the payment system that enjoys broad-based support. Our website [link to: https://www.betaalvereniging.nl/over-ons/] includes a clear explanation of our role and how we view the payment system.

For a more detailed description of the Payments Association's activities in the recent past, please refer to the following chapters. Key facts and figures relating to the payment system in 2018 are summarised in an infographic; this is the first time it has been published. For more up-to-date information, please visit our website, www.betaalvereniging.nl, or follow us on social media (LinkedIn and Twitter).

The Payments Association's board and management continue to work to make it a more effective and efficient organisation. We are convinced that it is important to maintain the confidence of our members and stakeholders, and enjoy the support needed to play a key facilitating role in the Dutch payment system.

The implementation of PSD2 has significantly altered the payment system. The Payments Association is open to any party that provides payment services to the Dutch market and is pleased that a number of new players are now members of the association. We actively aim to welcome payment service providers who are involved on the Dutch market (or who have plans in that direction) as new members. This will enhance the diversity of our membership and help promote more discussion about payment applications, among other things. Our challenge is to continue to be able to provide added value to all our members in the ever-more complex payment chain.



The Payments Association welcomed two new members in 2018. Two members terminated their membership because of a merger or because they ended their payment activities in the Netherlands.

Finally

The Board looks back on this period with satisfaction. It is noted that the activities in the annual plan have been realised and that the association, never losing sight of the cost aspect, has operated within its budget. The Board would like to thank the management for the professional and pleasant working relationship they enjoy, and every employee for their commitment.

Amsterdam, 24 April 2019

On behalf of the Board, Lex Hoogduin, Chairman



Developments in the payment system

Infographic 2018



For many years now, the payment system in the Netherlands has been one of the most advanced in the world as far as security, efficiency, reliability, and accessibility are concerned. The aim of the Dutch Payments Association is to maintain this level of quality or to improve it. Evolving customer needs, new payment service providers, fast-changing technologies for payment solutions, and increasing regulation require active collaboration by all involved parties.

Nederland

In this chapter, we set out the most important developments to shape the payment system in the year under review, and we look at our playing field. For a more detailed description of developments, please refer to the Roadmap 2019-2021.



Developments

Unprecedented dynamics

Major social trends are increasing digitisation and the associated changes in customers' wishes. Digitisation offers more opportunities for consumers, causing them to readjust their expectations on services. For example, they want access to the internet wherever they are, at any time. They have also become more demanding about the ease-of-use of digital services. The same applies to digital payment services.

Of the more than 1.6 billion credit transfer payments in 2018, only a fraction (1.9 percent) were not electronic. The smartphone banking app is used for individual transfers as often as internet banking on a computer. For C2C payments, consumers use payment requests or electronic transfers with increasing frequency (31 percent compared to 22 percent in 2017), rather than cash. Six out of every ten point-of-sale payments are now conducted using a debit card. The payment system is becoming more and more digital and actual transfers are increasingly taking place with mobile apps.

For suppliers, opportunities arise from new technologies like artificial intelligence, big-data, application programming interfaces (APIs), blockchain, and biometrics. Many are exploring



these possibilities, which will lead to new concepts and applications in the payment system. Payments are expanded with dimensions like identity and data, sometimes in combination with artificial intelligence.

Non-traditional, often technology-driven and data-driven companies are entering the payment market with new applications. It has never been easier to create a large international customer base using new technology – without any physical presence – and to offer a smooth digital customer journey. PSD2 offers new opportunities. Competition between traditional and new payment service providers is growing, but there are also opportunities for collaboration. All providers of payment services try to meet changing customer needs as efficiently as possible. Competition is an incentive to innovate in order to retain and win customers.

A short time-to-market for new payment services is important. Established payment service providers, such as banks, must keep up with the rate of progress. To compete with new payment service providers, they have to become leaner, replace legacy systems, ditch traditional work processes and consultation structures for agile work methods, and innovate. At the same time, their existing payment services cannot be interrupted. PSD2 opens up the payment market and works as a catalyst and accelerator of digital transformation. This results in new play rules and new digital business models.



whole of the EU.

In the Netherlands Payconiq entered the market, amongst others. The number of foreign providers on the Dutch payment services market is still relatively limited. This is largely due to fiscal, legal, linguistic, and cultural barriers. However there are no fundamental barriers that prevent providers with a passport from one member-state from serving the

Relatively new payment service providers like Worldpay, Klarna, Adyen, and PPRO are growing fast. Meanwhile, large platforms in China and the United States appear on the horizon with ambitions – expressly stated or not – for the payment system in Europe, including the Netherlands. However, the payment system continues to be strictly regulated. This has benefits, especially for protecting consumers, but also disadvantages, because not everything that is technically possible and adds value for end-users, is permitted.





One of the most striking causes of increasing competition in the payment market is PSD2. This European Directive allows third parties to access payment data of bank account holders and to initiate payments on their behalf, for the benefit of their own services to customers.

In 2018, partly at the request of the MOB and the Dutch parliament, banks developed online

'dashboards' that offer account holders an overview of third parties they have given access to their account information. Various banks are investigating if they could offer the option of revoking such access. To help build consumer trust in new account information services regulated by PSD2, the Payments Association is investigating how to clarify to consumers what exactly they give their permission for and how the concerned service providers deal with this permission.

We provide our members with a fruitful collective base for innovation. For this, cybersecurity, personal data and privacy, a sound digital infrastructure, standardisation, and interoperability are important conditions.

Demanding regulators and society

The regulation of the payment system becomes more strict, particularly in the European Union. The main objectives are to encourage innovation, to open up the payment market to new parties, and to ensure security and consumer protection.

While European and national legislation was being created, we drew upon our expertise in 2018 to provide input to various parties involved in the legislative process. We did so for, and with, our members, for example by responding to legislation consultations. We also interpreted legislative proposals and engaged in consultations with law-making institutions. Our point of departure is that the regulations in question should help maintain or improve the security, efficiency, reliability, and accessibility of the Dutch payment system and its ability to innovate. In 2018, we focused on the collective (non-competitive) aspects of PSD2 implementation in Dutch law for our members, including the underlying technical regulatory standards and guidelines. Under PSD2, banks are obliged to make available digital interfaces to regulated third parties that offer payment initiation or account information services.

To this end, the Payments Association initiated a project in 2018 to support members and third parties. It is known as the National (Berlin Group NextGenPSD) Implementation Support



<u>Platform NL (NISP-NL)</u>. Basically, the project aims to assist the smooth implementation of digital interfaces (APIs) for payment account providers and providers of payment initiation and account information services, regulated under PSD2. Another aim is to facilitate exemptions to the fall-back interface obligation by DNB on payment account providers. These efforts by the Payments Association bring together participants in the new ecosystem of payment initiation and account information services.

Providers of payment services are facing increasingly stringent monitoring requirements, as one of the consequences of reporting obligations contained in new European legislation. It is also a consequence of Dutch legislation, including the 'Regeling Oversight goede werking betalingsverkeer', a regulation that imposes availability standards on providers of payment services for time-critical payment orders, such as iDEAL and debit card payments. The Payments Association has met with legislators and regulators, answered questions and provided input, with and on behalf of its members.



Privacy and the use of payment data, especially in relation to PSD2 and the new European General Data Protection Regulation (GDPR), which came into force on 25 May 2018, featured regularly in social debates in 2018. This was one reason why the implementation of PSD2 by the deadline of 13 January 2018, was not achieved in the Netherlands. The legislative process was completed on 19 February 2019. The Payments Association informs its members about current developments in these matters.



MOB, amongst others.

The availability and acceptance of cash — especially by public services in town and city halls — was a topic of social and political debate in the Netherlands in 2018. The Payments Association contributed to put matters in their proper perspective. It provided factual information to the media, members of parliament, ministries, regulators, and umbrella organisations, including the members of the



Partly on the basis of the successful MOB consultation model, a European counterpart of the MOB was set up in 2013, the Euro Retail Payments Board (ERPB). The ERPB influences the direction in which the European payment market evolves. European stakeholder umbrella organisations such as



consumer, retailer, and SME representatives take part in the ERPB, which is chaired by the European Central Bank (ECB). Topics addressed by the ERPB in 2018 included Instant Payments, payment initiation and account information services, contactless and mobile payments, P2P mobile payments, and the accessibility of payment services.

We contributed our expertise and made our vision and positions clear for the benefit of the ERPB and its working groups via the European Payments Council (EPC)¹, the Payment Systems Committee of the European Banking Federation (EBF), and the MOB's Working Groups on Efficiency and European Affairs and on Accessibility and Availability.

In 2018, we also discussed national and European developments in payment systems in our stakeholder forums, including the Card Payments Forum and the Giro Stakeholder Forum. We discuss the wishes and options for payment system-related subjects of interest to the supply and demand side alike. In the Card Payments Forum consumer and business organisations, payment terminal providers, banks, and payment processers meet several times a year. The Giro Stakeholder Forum consists of consumer and business organisations, banks, large payees including the Dutch Tax Authority, and payment processers. The participants value both forums as platforms without direct commercial interests for collective discussions on problems, needs, and future developments for giro-based and card-related topics.

Good stakeholder management is of major importance to the Dutch Payments Association. In 2018, as in previous years, we have given this much emphasis. Bringing together stakeholders on both the supply and demand side remains a significant challenge that we are happy to take on. Stakeholders regularly approach us with complex issues in the payment system.

¹ The EPC is the brand owner of the European payment products, European transfers (SCT) and the European system of SEPA direct debits (SDD). In addition to the Payments Association, ABN AMRO, ING, and Rabobank are also members of the EPC in their own right and contribute actively to the council's work.



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Activities - Point-of-sale payment system

The proportion of electronic payments at points of sale continues to rise, at the expense of cash payments. This development follows from the efforts by participants in the payment system to organise the processing of card payments as efficiently and as securely as possible. At the same time, the availability of cash and the option to pay with cash remains a point for attention.

The widespread use of electronic payments at points of sale in the Netherlands is the result of many years of constructive and successful collaboration between merchants and banks in the 'Stichting Bevorderen Efficiënt Betalingsverkeer' (Foundation to Encourage Efficient Payments, SBEB). After thirteen years of outstanding results, SBEB wound itself up at the end of 2018. Between 2005 and 2018, <u>SBEB issued various publications about these results</u>. Some of its activities, including the continued promotion of electronic point-of-sale payments and the facilitation of consultations between banks and businesses, have been transferred to the Payments Association.

As well as debit card and cash payments, there remains a range of other, albeit less frequently used, payment methods at tills. The most important are credit cards (0.6 percent of point-of-sale payments), the best-known brands being VISA and Mastercard. The other payment methods are gift vouchers, fuel passes, closed payment systems used by educational establishments and businesses, and new payment solutions like Payconiq and Tikkie. With almost seven billion point-of-sale transactions in total, these other payments are modest in number.

The 60 percent pin payment/40 percent cash payments milestone reached

The objectives of SBEB stated that by the end of 2018, 40 percent of point-of-sale payments would be in cash, and 60 percent electronic. That target was reached during the course of 2018, thanks in part to the joint information activities and promotional campaigns successfully organised by SBEB and the Payments Association. The greatest growth was in contactless payments involving small amounts. In 2018, the total number of electronic point-of-sale payments was 4.3 billion, an increase of nearly 13 percent compared to 2017, when the total was 3.8 billion. Such a rate of growth had not been seen since 2001. The volume of debit card and credit card payments in 2018 amounted to €112 billion.



Contactless payments continued to rise in 2018



With contactless payments, card holders in most cases do not have to enter their pin codes for amounts of up to €25. This makes the process quick and easy, for consumers and businesses alike. It means contactless payments are the most efficient payment method at points of sale.

At first, contactless payments replaced mostly cash transactions involving smaller amounts, but they are increasingly used for amounts of more than 25 euros (with PIN code). Almost 50 percent more contactless payments were made than in the previous year – there were nearly 2.3 billion such transactions in 2018 (2017: 1.5 billion). The proportion of contactless payments had reached 56

percent of all electronic point-of-sale payments by December 2018, while 20 percent of credit card payments were also contactless. More than 90 percent of payment terminals in the Netherlands now accept contactless payments. It is expected that contactless payments will be possible at virtually all payment terminals in the Netherlands by the end of 2019.

More than 15 billion mobile contactless transactions took place in 2018. As well as with contactless debit cards and credit cards, users can also pay with wearables and smartphones. In 2018 several banks offered their clients to pay contactless at points of sale with rings, wrist bands and watches. Furthermore, bank customers can make contactless payments with Android smartphones. Retailers are no longer startled when customers tap these devices against their payment terminals. Despite rising familiarity, their use is still limited. Most consumers stick to the convenience and speed of contactless debit cards and apparently see no added value. Slow adoption of smartphones for contactless payments is also due to the fact that Apple does not yet offer Apple Pay to consumers in the Netherlands.



Money back via debit card refunding continues to increase

When returning purchases to points of sale, consumers are increasingly refunded electronically through their debit cards. Three large Dutch banks offer debit card refunds to merchants at their points of sale. Debit card refunds offer major benefits for both consumers and retailers. For example, retailers no longer have to keep extra cash in the till for refunds and consumers quickly receive their money back in their bank account. Debit card refunding is particularly popular in non-food retail and when a deposit has to be returned. In 2018, the number of debit card refunds rose by more than 40 percent to over 4.2 million. The average refund was €52. Like electronic payments, electronic refunds are easy, secure, and reliable. Refunds are returned to the beneficiary's bank account the following business day because of the administrative processes involved. Possibilities to reduce this delay are being examined.

Campaigns and awareness



In 2018, a new debit card campaign was launched, using the slogan 'Contactloos betalen, 't is zo gepiep-piep-piept'. The campaign was aimed primarily at consumers who do not yet use contactless, and showed how easy and convenient it would be for them. After all, contactless payments are effortless and quick for everyone. The

campaign started in September and ran until late December. There was a key role in the TV commercial and on the online advertisements for the audible peeps ('piep' in the slogan) that customers hear after a successful debit card transaction. In addition to a debit card, the commercials also featured a mobile phone. On average 90 percent of consumers now regard contactless payments with their debit cards as simple, quick, and convenient. Moreover, in 2018 significantly more consumers think this payment method is secure than in 2017.

An online campaign about paying contactless with mobile phones aimed at young people ('Mobiel aftikken, altijd easy') started in 2017 and continued into the first half of 2018. The campaign was well received, and according to the respondents the video was eye-catching and an effective invitation to use smartphones for contactless payments.

Fewer and fewer people have any cash in their homes. That is why more than 20 national charities, working in collaboration with Easycollect Services, Stichting Collecteplan, CCV Nederland, and the Payments Association, launched a pilot in 2017 with debit card collection boxes. They can be used to collect donations door-to-door, through debit cards, contactless payment devices, or cash. The pilot has entered its second year, and the interim results suggest that donors increasingly use their debit cards. More than a quarter of door-to-door donations involving these new collection boxes are now made with debit cards or mobile



phones. The average amount collected with a normal collection box is 65 euros. With the new trial boxes the average amount collected was €141.50 in the first trial year, and €178.62 in the second year.

No more certification, but registration of payment terminals

In 2018, the Payments Association stopped certifying payment terminals. This was no longer necessary because international security requirements are much more stringent now. Domestic certification would overlap too much with these improved international requirements and would involve unnecessary additional costs for suppliers and users. However, the Payments Association will still register new types of payment terminals on its website in order to provide as much transparency as possible about the range on offer.

Accessibility to cash



Although the use of cash continues to decline and the use of debit cards surpasses cash since 2015, cash is still used to a significant degree. Three banks (ING, Rabobank, and ABN AMRO) have decided to put their ATMs under the stewardship of a new joint company, Geldmaat (also known as Geldservice Nederland until the

end of 2018). This company has taken over their ATMs and deposit facilities, using its own label and distinctive design. It carefully considers security and accessibility for vulnerable groups. Jointly operating ATMs and deposit facilities allows for more efficiency in the costly distribution of cash, while maintaining high levels of accessibility and availability.



Activities - Paying on the internet and online identification

The Payments Association is monitoring with great interest all innovations in the online world of payments, identification, signing, and authorisation. Online shopping has been undergoing tremendous changes for many years. Almost 13.5 million people in the Netherlands now make more than 240 million online purchases every year. Concomitantly, online payments have strongly increased. For example, the number of iDEAL payments for eCommerce purchases rose by more than 20 percent, to nearly 138 million payments. In addition, 26.6 million credit card payments and 12 million payments after delivery were made.

iDEAL and online credit card payments are not just used in eCommerce. By way of illustration, iDEAL had 386 million non-eCommerce transactions, with the total number of online credit card payments amounting to just under 100 million.

This chapter deals with the most prominent developments concerning online payments, logging in online, and identification. We have relied on various sources for this information².

Again strong growth online payments

There is a greater variety of payment solutions on the internet than there is at points-of-sale. In 2018, Dutch consumers made more than 242 million purchases on the internet, worth a total of 23.72 billion euros. This meant that the online purchases of goods and services grew by 10 percent³ compared to 2017. In 2018, some 26 percent of all purchases (goods and services) were made online. This is apparent from research by Thuiswinkel.org into online consumer spending.



By far the most online purchases from Dutch online shops were paid with iDEAL. The iDEAL market share in eCommerce has been stable at 57 percent for several years now. The iDEAL acceptance rate is high – in 2018, it was possible to pay using iDEAL at 74 percent of all online shops. Among the

³ Estimate based on extrapolated calculation for Q4; figures based on new Thuiswinkelmonitor measuring method.



² Sources: Currence, owners of iDEAL and iDIN, MasterCard, VISA, PayPal, American Express, and AfterPay, data from the eCommerce Payments Monitor, a GfK market survey, and Thuiswinkel.org.

large online stores, the figure is as high as 95 percent. Credit cards have a market share of 11 percent, while PayPal and providers of payments after delivery are also meeting part of the market demand⁴. The relative popularity of a payment product depends on the price of the payment product for merchants, the ease of use for customers, and the accessibility of the payment product.

Payment after delivery is particularly popular when consumers are not yet familiar with the online store, for example, or if they order more than they plan to keep. This relates to the fashion and shoe sectors in particular. Payments with Acceptgiro are increasingly replaced by payments with payments after delivery from providers such as AfterPay and Klarna. At 6 percent, these payment methods' share is relatively limited, but they were used much more frequently in 2018 than before. In addition to the aforementioned providers of payments after delivery, some online retailers offer their own payments after delivery, including Bol.com and Wehkamp.

PayPal too reported growth in the Dutch market. However, they did not provide specific figures. Its more widespread use in the media and entertainment sector is especially noteworthy. PayPal enjoys a reasonably high level of acceptance among online stores; it can be used to pay in 46 percent of all Dutch online stores.

Credit cards are accepted to a relatively modest degree on the internet, with slightly less than 20 percent of all Dutch online stores accepting either Mastercard, VISA, or American Express. As well as payments, these brands offer certainty for consumers (such as reimbursement for fraudulent merchants and insurance for purchases) and support for a variety of transaction types. Single and repeat payments, pre-authorisations, and refunds to card holders are all supported. Subscription services like Netflix and Spotify, and platforms with a strong mobile user experience, such as Uber and Deliveroo, frequently offer credit card payments.

PayPal and American Express enter into direct relationships with their end-users. Whereas American Express has its origins as a card solution, PayPal's roots lie in the internet. Both companies are now active on the internet and in the physical world.

As already mentioned, the iDEAL payment method is used more broadly than just for Dutch online purchases. Of the 524 million iDEAL payments in 2018, some 26 percent were for

⁴ Source: eCommerce Payment Monitor 2018, GfK, Thuiswinkel.org, and iDEAL.



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eCommerce in Dutch online shops. The remaining 386 million iDEAL payments went to foreign online shops, transport, public services, and charities. iDEAL is also used for settling other payment methods like AfterPay, Klarna, and the like. In 2018, the use of iDEAL for consumer-to-consumer (C2C) payments involving a *payment request* increased in particular. For example, the very popular Tikkie payments and many other types of payment requests from banks are supported by iDEAL. More information about iDEAL can be found in the Currence annual report.

Online identification

Online options are changing our society, including the ways in which businesses and organisations contact their customers. The better we can identify others in the digital world, the better we can offer relevant and significant digital applications. This often requires correctly identifying individual users. How can a person be identified easily, quickly, securely, and reliably, without affecting the interests of everyone involved? The solution to this issue is of great importance to many organisations, and is tied in with privacy, digital evidence, and legislation.



accordance with the Financial Supervision Act and the Anti-Money Laundering and Anti-Terrorist Financing Act. Dutch banks must meet requirements for identifying new and existing customers and offering a secure log-in option for their services on a daily basis. A person can only become a customer of a payment service provider or

other financial institution after a careful and reliable identification process. In 2018, this process was extensively in the spotlight, both in the Netherlands and internationally. Banks play a key role when it comes to reliable access to the online economy.

Effective log-in methods are necessary for a reliable payment system. Banks have also set up detection systems for preventing fraud and to boost security, including cybersecurity. Partly as a result of various collaborative partnerships, such as those organised in the MOB and the one between the Payments Association and the banks and the National Cyber Security Centre (NCSC), the Netherlands is at the forefront when it comes to the responsible digitisation of its payment system. In spite of the strong increase in the number of online payments, fraud levels have remained limited (see the Security in the Payment System chapter).



This knowledge concerning security and online identification, is used in the development of iDIN, where log-in methods already used by banks are made available to third parties. The banks have set up iDIN to be open to other entrants, thereby guaranteeing that the market can operate freely. The broad reach of banks, the available data, their effective log in methods and experience with security and high-volume and high-performance processes, mean that almost everyone in the Netherlands has access to an easy online identification and log-in solution.

iDIN is not the only identification or log-in solution in the Netherlands. However, iDIN is one of the few solutions that is rated at the e-iDAS⁵ 'substantial' reliability level. The public sector uses DigiD, of course, while private sector organisations mostly us proprietary log-in methods, often based on an e-mail address and a code sent by SMS to a mobile phone. There are all kinds of other solutions, depending on the desired level of reliability for the identification or log-in; examples include the log-in methods used by Facebook and Google, apps like ReadID, and the IRMA log-in facility developed by Radboud University Nijmegen. Many providers can offer such solutions. However, this fragmentation does not contribute towards the necessary strengthening of the digital infrastructure, for which a generic and secure online identification and log-in option is essential.

Among other market initiatives in the Netherlands in which banks are involved with the public sector and other stakeholders, the Dutch Blockchain Coalition for the Self-Sovereign Identity is of particular interest. This initiative, based on the principles of a self-sovereign identity, aims to ultimately provide residents in the Netherlands with complete control of their own identity and other personal data with distributed ledger technology (DLT, or blockchain). The coalition working group has concluded that, although the solutions are not yet fully developed, this is the way forward within the Dutch and European trend towards putting citizens first. It should enable citizens to gain and keep control of the personal data they make available to public institutions and private businesses.

The DigiD public log-in facility is based on *Citizen Service Numbers* (government issued fiscal numbers) that may not be used outside the public sector. The definition of 'public sector' is a broad one, in this context. It includes, for example, all healthcare services, healthcare insurance companies, schools and colleges, and pension funds. The Digital Government Act sets out the future policy framework for support from the digital government. It includes a so-called multi-resource policy, where the government selects by tender one or more private

⁵ e-iDAS stands for Electronic IDentification Authentication and trust Services.



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online identification and log-in facilities for the public domain, alongside DigiD. This tender takes place in 2019.

Activities - Giro-based payments

Giro-based payments are socially important

The giro-based payment system involves very many money transactions. More than 9 million payments between current accounts are carried out every day. The process is reliable and secure. According to figures from DNB about the retail payment system, some 3.1 billion giro-based payments were processed in 2018. These were credit transfers, direct debits, and Acceptgiro payments. A significant proportion of giro-based payments are batch payments from business parties, such as salaries, allowances, and social security payments. They are all done electronically. Single credit transfers numbered more than 1 billion. Of these, 98 percent were electronic. These payments will become Instant Payments during the course of 2019.



Worldwide, the Netherlands has one of the highest rates of internet penetration. In recent years, the use of mobile banking apps on smartphones and tablets has risen more and more; to an increasing degree, many consumers are now using them instead of 'traditional' internet banking on desktops and laptops. In 2018, 80 percent of customers used internet banking and 64 percent used mobile banking apps6. The banking app is now used for

individual transfers as often as internet banking on a computer. Use of the banking app increased by 28 percent. Only 1.9 percent of transfers are initiated in writing or by telephone.

The introduction of E-mandates is also helping towards the efficiency and reliability of the payment system with which the Netherlands is now so familiar. Using E-mandates, customers are able to give online authorisation to payees to carry out periodic or one-off direct debits from their current accounts. More information about e-mandates can be found in the Currence annual report.

Infrastructure for Instant Payments is almost ready



The banks put a great deal of effort in 2018 into getting the infrastructure for Instant Payments in place. The subject was covered extensively during our Annual Conference in November.

Following careful preparations under the leadership of the Payments Association, Dutch payment service providers will launch the large-scale introduction of Instant Payments in 2019. With Instant Payments, transfers are credited immediately to the payee's account. This is the case even if the latter has an

account with a different bank, regardless of whether the bank is in the Netherlands or anywhere else in the Single Euro Payments Area (SEPA). The deduction of the payment from the payer's

⁶ Vertrouwensmonitor banken 2018, Dutch Banking Association.

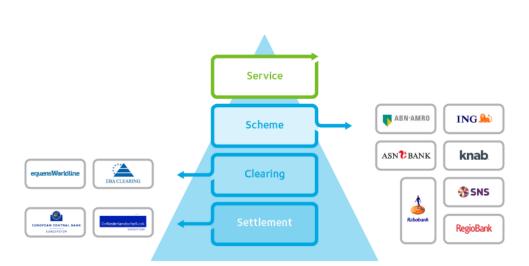


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account is also immediate, of course. This new infrastructure will be available continuously, 24 hours a day, 365 days a year. Even at weekends and on public holidays.

Instant Payments will be the standard for payments using a mobile banking app and internet banking. This means that, from the time of its broad-based market introduction in early 2019, large numbers of transactions will be processed. When all individual transfers are eventually processed as Instant Payments (and it is intended that this will be achieved in 2019), there will be around one billion a year.

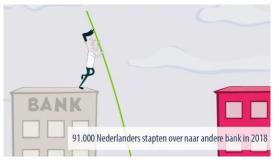
In the Netherlands, Instant Payments will be processed from payer to payee within five seconds and there will be no joint maximum amount for each payment. They therefore surpass the European EPC standard, which assumes a speed of ten seconds and an initial maximum amount of €15,000. The Payments Association expects market players to discover more and more new areas where Instant Payments can be applied, as a result of which Instant Payments will evolve into the new payments system norm.



Parties involved with Instant Payments in the Netherlands⁷

Switching Service meets a need

The Switching Service was set up to make it easier for customers to change from one bank to another. For thirteen months, the service transfers withdrawals and deposits from the old current account to the new one with another bank. Companies that operate direct debit payments are also automatically informed about the account changes. In 2018, some 91,000 consumers and businesses used the Switching



<u>Service</u>. ING, SNS, ASN Bank, bunq, and Knab have now completely digitised their application processes for clients wishing to switch (including digital signature). As a result, applications by consumers and businesses to use the Switching Service have become even easier. New general terms and conditions and application forms for the Switching Service were introduced in August 2018. This means the Switching Service is now ready for Instant Payments.

⁷ bung has introduced Instant Payments, separately to this project.



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Paper payment orders are now used only very rarely

Payment orders are now almost exclusively made online. For businesses, the figure is already 100 percent, while among consumers, less than 2 percent of all giro-related payment orders were on paper in 2018. The largest proportion of these paper payment orders consists of Acceptgiros; however, the number continued to decline in 2018, to 11 million. This is a decrease of almost 24 percent compared to 2017 (when there were 14.5 million paper Acceptgiros), and is similar to the falls in 2017 and 2016. The reduction is due mostly to the fact that payees and consumers are moving towards more efficient payment methods, such as the European direct debit and iDEAL (whether or not in combination with a QR code).





Nine out of ten recipients of printed Acceptgiros make the payment in question by entering the details of the payment into their own internet or mobile banking environment. This means that less than 10 percent of Acceptgiros are used as intended, and that the remainder end up in the waste paper basket. In 2010, the figure was 29 percent.

Businesses and organisations, even those without an Acceptgiro contract, can use the payment instruction templates that were introduced by the Payments Association in 2018. The payment reference and QR code can be entered into these payment instructions. This is an excellent alternative to sending the relatively costly Acceptgiro forms, and is also more user friendly. For more information about Acceptgiro, see the Currence annual report.

Only complete IBAN from 2020

From 2020, Dutch banks are going to determine the last ten figures of any new IBAN themselves. Until now, the last ten figures were allocated from a central stock of unique ten-figure numbers that had to meet what is known as the eleven test⁸. This will no longer be the case from 2020, as a



⁸ The eleven test (11-test) is a test that was carried out in the Dutch electronic payment system on nine and ten-figure Dutch bank account numbers, before the introduction of IBAN, to verify whether any particular account numbers was valid.



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result of which the last ten IBAN figures will no longer be guaranteed to be unique. However, every Dutch IBAN of eighteen figures and letters will remain unique. In addition, all valid IBANs already comply with the Modulo 97 check⁹.

From 2020, the abbreviation to the last ten figures could lead to errors. To prevent this, companies have to enter the complete Dutch IBAN of eighteen figures and letters in their systems and old Dutch account number of ten figures or less may no longer be automatically converted into complete IBANs.

The reason for this change lies in the international IBAN standard, which has so far not been fully applied in the Netherlands. However, the Dutch payment system will be fully compliant with the international IBAN standard from 2020. This change does not affect private-citizen account holders. There will be no changes to existing IBANs. Non-consumer parties who only partly adapted their systems following the introduction of IBAN in 2014 may be affected. The matter has been discussed and explained in detail on the Payments Association Girale Stakeholder forum. All parties should ensure their administrative systems have been fully adapted to deal with complete IBANs by the end of 2019.

Large-scale introduction of IBAN Name Check

Every year, many billions of payments are processed quickly by Dutch banks, without a hitch. Under European law, banks process payments on the basis of the 'self-checking' IBAN number. The remaining data in the payment order is present only for the information of the payer and/or the beneficiary.

At the initiative of the Rabobank, almost every bank had introduced the <u>IBAN Name Check</u> by 2018. It helps ensure that payers enter the correct details on a payment order. If the name stated does not correspond, or correspond closely enough, to the registered IBAN name, then a warning will appear, as will the opportunity to rectify the payment order.

This measure is a response by the sector to the demand among users to minimise the risk of payments being incorrectly addressed.

⁹ An algorithm (known as the Modulo 97 check) can be used to determine whether an IBAN is a valid account number [link to Wikipedia https://nl.wikipedia.org/wiki/International_Bank_Account_Number].



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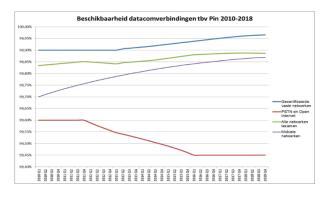
Activities - Stability in the payment chain

More complex payment chain

Due to the sharp rise in the number of electronic payments, the stability of the payment chain has been an important theme for the Dutch Payments Association and its members for many years. To ensure that the payment system functions effectively, all the systems that make up the payment chain need to be available at all times. However, because the number of participants has increased in recent years, the payment chain has become more complex. The Payments Association monitors the stability of the payment chain and takes action where necessary whenever certain parties may be causing any disruption in the chain.

Hardly any disruptions to point-of-sale payment systems

The MOB has expressed its confidence in the availability and the robustness of the debit card payment chain on multiple occasions. As in previous years, the availability of the debit card chain was high in 2018, at 99.89 percent. This met the availability requirement of DNB for late 2018, of 99.88 percent.



Although disruption in 2018 was minimal, disruption occasional can completely ruled out. Several years ago, the **Payments** Association developed CONNECT notification and information system order to minimise consequences of any disruptions. Parties in the payment chain can use the system to notify each other of any disruptions, as well as of any planned maintenance work. Thanks to these notifications, issues can be

located and resolved more quickly. Additionally, CONNECT makes it easy to inform the market of the nature and duration of any disruptions. Finally, it improves market parties' ability to schedule and coordinate maintenance activities. The Payments Association monitors the system and, in the event of any disruption, takes immediate action in relation to the party causing the disruption.

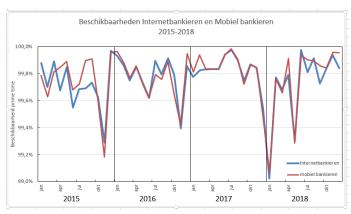
Most of the notifications sent through CONNECT in 2018 related to scheduled maintenance. This did not lead to any disruption. The number of disruptions has decreased significantly, from thirteen in 2011 to four in 2018. Two of these were notifications of major disruption. One of the two larger cases of disruption in 2018 concerned a problem with the routing of messages at an international transaction processor. The other problem took place at a Dutch transaction processor, which affected the fuel and parking sector for several hours at night and in the early hours of the morning. The two minor instances related to problems with the internet. The cases of disruption in 2018 had a limited impact, although any problem, no matter how minor, is one too many.





The Payments Association, in cooperation with all the parties involved, has conducted an impact analysis to determine whether further growth in the number of debit card transactions could be inhibited by any limitations in the processing capacity of one or more transaction-processing systems. It was concluded that there are no insurmountable barriers. The infrastructure is able to cope with the expected growth. This impact analysis is updated every year and shared with the members of the MOB.

Widespread availability of internet banking and mobile banking



There are no availability norms for internet and mobile banking, as is the case for debit card transactions, apart from the legal requirement that it must be possible to offer payment orders within two hours. A recovery time that applies to non-critical payment orders. Thanks to the efforts of banks, including the upscaling of their capacity, the availability of internet banking and mobile banking to the public was greater than 99.7 percent

throughout the year. This was more or less the same as the 2017 level, when it was more than 99.8 percent. The slight fall is the result of several persistent external (DDoS) disruptions that occurred at various banks in the first few months of 2018. From information from CONNECT, it also appears that of the 73 notifications by banks about cases of disruption and maintenance activities in the internet banking and mobile banking environment, 20 related to scheduled activities, with the remainder involving cases of total or partial disruption.

The Payments Association publishes figures on the availability of the internet and mobile banking on its website every quarter. Since 2015, bank-specific availability figures have also been included. The seven participating banks provide monthly information on the availability of their internet and mobile banking systems for this purpose.

Since 2016, the Payments Association has published up-to-date information about the <u>availability of internet and mobile banking</u>. This enables users to quickly check whether something is amiss across the country or whether the cause is closer to home (defective modem, for example) whenever they encounter problems with the internet or mobile banking.



Activities - Security in the payment system

Little change in fraud levels in the payment system

Security is essential for an effectively functioning electronic payment system. The sector is continuously investing in safeguarding security. This helps to retain the public trust in electronic payments and to prevent fraud. From a European perspective, the security of the payment system in the Netherlands is high.

In 2018, the overall level of fraud in the payment system was more or less the same as in 2017. After fraud levels had been significantly reduced in recent years (in 2013: €33.3 million), the extent of the losses in 2018, compared to 2017, was 2 percent down, to €12.6 million. Historically, this means that fraud levels are still low. However, there was a notable shift between fraud categories in 2018. Whereas fraud involving debit cards fell substantially, internet banking fraud increased relatively strong. This shows that criminals continuously look for the weakest links in the payment chain. Phishing still causes relatively high losses, as criminals us improved social engineering techniques. Against that background, information on secure banking for consumers through mass media campaigns is as important as ever. In 2018, as in previous years, there was an increase in non-banking financial fraud and internet fraud, such as scam emails and text messages, fake apps, fake invoices, identity fraud, and deception of financial employees of companies (known as CEO fraud). Consumers and businesses should constantly remain on quard.

Most losses still caused by debit card fraud

Losses caused by fraud involving debit cards fell by 33 percent from 2017 to 2018. Overall, losses amounted to 4.9 million euros. This is 39 percent of the total losses in 2018 (in 2017: 57 percent). In this category, the most prominent forms of fraud are those involving lost or stolen cards (3.3 million euros) and skimming (1.2 million euros). In 2017, bogus card applications accounted for losses of 2 million euros, but this figure decreased by 90 percent in 2018. Banks constantly look to improve the security of their card application processes.



Internet banking fraud increased



With losses totalling 3.9 million euros in 2018, internet banking fraud tripled from 2017 (1.2 million euros). Phishing caused almost all losses in this category, accounting for 3.8 million euros. There are various reasons for this marked increase. Criminals use readymade toolkits, which can be purchased online, for setting up phishing campaigns at little cost. In these e-mails and text messages, consumers are cunningly duped into using a phishing

website for applying for a new debit card or for reversing a direct debit. While this is going on, the criminals gather the log-in data and security codes they need.

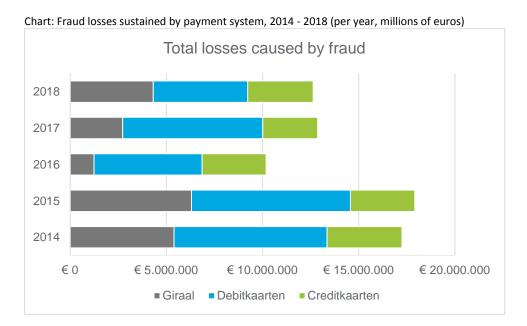
In the 'miscellaneous fraud' category (3.8 million euros), it is the Card Not Present fraud¹⁰ (CNP fraud) that stands out. With losses of 2 million euros, CNP fraud rose by 24 percent from 2017. At the same time, CNP fraud is related to the sharp growth in the eCommerce market. For example, people in the Netherlands buy more from foreign online shops, relatively often with credit cards. Losses resulting from fraud involving transfer forms fell considerably, from 0.8 million euros in 2017 to 0.2 euros in 2018. The measures taken in 2017, such as collaboration between the banks and the more rigorous monitoring of transactions, appear to be effective.

So far, no fraud involving banking apps

example, by someone other than the lawful cardholder.

Although internet banking fraud increased in 2018, losses have remained low in relation to the rise of internet banking itself. The aim of course is to continue driving down fraud. In the Netherlands, so far no cases of fraud occurred through mobile banking apps. Also, very few people fall prey to malware, but they criminals were more successful in 2018 than in 2017 because of more advanced phishing techniques.

Consumers who fell victim to online banking fraud, ware reimbursed for 96 percent of their losses by their banks. This proportion is a fraction below that of 2017 (96.7 percent).



¹⁰ CNP fraud involves orders for goods or services being placed by post, telephone or the internet, using a credit card number, for



Collaboration and knowledge sharing continue to be important

Good collaboration between stakeholders – including the sharing of knowledge and information with other financial institutions, cybersecurity firms, and government bodies – plays an important role in increasing digital resilience and curbing fraud. This collaboration is aimed primarily at preventing and detecting cybercrime. Nationally, the Payments Association is actively working with the National Cyber Security Centre (NCSC) and the Financial Institutions – Information Sharing and Analysis Center (FI-ISAC). The Payments Association and its members also share information and experiences at a strategic level through Chief Information Security Officer (CISOs) meetings, and at a tactical level through the Payments Association's Working Group on Security. We jointly carry out threat analyses.

Dutch and international collaboration

Additionally, the Payments Association is proactively following and influencing the development of cybersecurity, including related policy, digitisation and technology. With our members we respond to consultations from legislators and regulators.

The Payments Association takes part not just in national security partnerships, but internationally as well. For example, we are a member of the European FI-ISAC. This ISAC brings together banks and the Computer Emergency Response Teams (CERTs) of many European governments. The European Network and Information Security Agency (ENISA), the European Cybercrime Center (EC3; part of Europol) and the global FS-ISAC (Financial Services – ISAC) are also important sources of information. The knowledge and experiences exchanged within these organisations contribute to the resilience of our members against cybercrime and cyber threats.

New cybersecurity strategy

The Dutch Payments Association cybersecurity strategy was reassessed in 2018. This was prompted by a growing dependency on secure digital services, by private and business customers alike, increasingly complex payment chains and shorter transaction times. Security risks manifest themselves more frequently in the IT infrastructure of payment service providers. Consequently, cyber resilience becomes more important and merits further attention.

Communication and awareness

The Payments Association informs the general public on how to recognise specific types of fraud, what the banks do to prevent them, and what the public can do to avoid them.

Online videos were produced in 2018 about scam phone calls, false e-mails, and debit card fraud. Some believe that banking with a mobile app is less secure than internet banking. These misconceptions about banking apps are dispelled.







Tech Support Scam covenant – an example of a public-private partnership

The government and businesses such as service providers, Microsoft, and banks have joined forces in the battle against international tech support fraud. Together they take technical and financial measures to disrupt and prevent confidence fraud such as technical support scams. This partnership resulted in an online video in which Marc, the character from our Secure Banking campaign, warns consumers about suspect telephone calls. Also, counter measures are taken that make these attacks technically very difficult.



Secure E-mail Coalition – an example of a public-private partnership

Through the <u>Secure E-mail Coalition</u>, the business sector and the government launched a joint initiative for the broad application of up-to-date e-mail security standards. The standards that the Secure E-mail Coalition promotes, ensure that internet criminals cannot send phishing messages through someone else's e-mail address. They also help prevent undesired viewing of commercially sensitive and private information in e-mails. In practice, consumers with a provider



participating in the Secure E-mail Coalition and with a bank that implemented the standards, will no longer receive phishing e-mails from their bank's genuine e-mail addresses. In other words, 'spoofing' genuine e-mail addresses from these banks, is no longer possible.



Board of directors and management

Board of Directors

The three independent Board members are:

- Lex Hoogduin (1956), chairman, professor at the University of Groningen, chairman of the chairman of LCH Group, LCH Limited, LCH S.A., chairman CIR and former CEO of the De Nederlandsche Bank (DNB)
- Henk van den Broek (1952), vice-chairman, former Detailhandel Nederland board member
- Gerjoke Wilmink (1960), director-manager at Alzheimer Nederland (appointed on 14 November 2018)

Members of the Board of Directors on behalf of the members:

- Vincent van den Boogert (1969), CEO, ING Nederland
- Anne Marie Magis (1965), Managing Director Digitalisation Commercial & Corporate, ABN AMRO
- Alexander Baas (1966), treasurer, Customers, payments and Savings Director at De Volksbank, representing the medium-sized banks
- Edwin Hartog (1966), Head of Cash Management Corporates, Deutsche Bank Nederland, representing the smaller banks
- Enny van de Velden (1961), CCO CCV/Chair of the Board of Directors of the CCV Group, representing the payment organisations
- Rabobank director position vacant

Resigned:

Mijntje Lückerath (1968), professor of Corporate Governance at Tilburg University/TIAS (resigned on 14 November 2018)

Representatives of DNB and the NVB attend meetings of the board of the Payments Association as observers.

Directors

- Piet Mallekoote (1954), director
- Gijs Boudewijn (1958), Assistant Director
- Marco Demmink (1961), secretary to the board



Governance

The Dutch Payments Association is a small and efficient organisation, which works to ease the burden on its members. It was set up as an association. The Dutch Payments Association comprises several organs:

General Members Assembly (GMA)

Parties on the supply side of the Dutch market that focus on corporate or private end users can become members of the Dutch Payments Association. They fund the Dutch Payments Association and can take part in the GMA. The GMA's primary activities concern determining strategy and approving the annual accounts.

Board of Directors

The Board of Directors takes substantive decisions on important issues, establishes policy frameworks and advises the Executive Board. Its other important duties include appointing and dismissing members of the Executive Board, approving the annual plan and budget, and monitoring how well the Dutch Payments Association carries out its tasks.

Executive Board

The Board of Directors appoints the Executive Board, which is responsible for operational organisation and day-to-day business. The duties of the Executive Board include drafting policy proposals, taking decisions regarding the admission of new members, developing the certification policy and monitoring compliance with regulations.

Advisory Council

The Advisory Council advises the Executive Board – on request or otherwise – on the Payment Association's policies and activities.

Working groups

The working groups are responsible for preparing tactical and operational policy, in collaboration with specialists from the supply side. The working groups can advise the Executive Board, both upon request and of their own initiative. The main working groups are Giro-based Payments, Cards, Cash Payments and Security. Other working groups are active in legal affairs and in communications information campaigns.



Appeals Board

An independent Appeals Board makes it possible to appeal against decisions regarding acceptance and certification when parties are unable to reach agreement with the Executive Board, the Board of Directors or the Appeals Committee of the Board (in that order).



List of members

April 24th 2019, the Dutch Payments Association had 50 members that provided payment services.

ABN AMRO	China Construction Bank	Mizuho
	(Europe)	
Acapture	Citco Bank Nederland	MUFG Bank
Achmea Bank	Citibank	Nationale Nederlanden Bank
Aegon Bank	CM	Nederlandse
		Waterschapsbank
American Express	Commerzbank	NIBC Bank
Amsterdam Trade Bank	Credit Europe Bank	PaySquare
ASR Bank	De Volksbank (SNS, ASN	Rabobank
	and RegioBank)	
Bank Nederlandse	Demir Halk Bank	Société Générale Bank
Gemeenten		Nederland
Bank of America Merrill	Deutsche Bank	Svenska Handelsbanken AB
Lynch		
Bank of Chaabi du Maroc	GarantiBank International	Triodos Bank
Bank of China	GWK Travelex	Van Lanschot Bankiers
Bank of Scotland plc	HSBC Bank plc	Volkswagen Bank
BinckBank	Industrial Bank of China	
Bitsafe	ING	
BNP Paribas	INGENICO Financial	
	Solutions	
Brand New Day	InsingerGilissen Bankiers	
Buckaroo	KAS BANK	
bunq	KBC Bank Nederland	
CCV Group	LeasePlan Bank	



