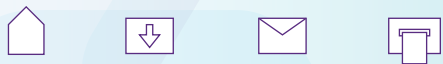


Annual Report 2015





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Profile

Our mission

Our vision relating to the payment system



Profile

The Dutch Payments Association (Betaalvereniging Nederland) organises the collective tasks in the national payment system for its members. These members are providers of payment services on the Dutch market, such as banks, payment institutions and electronic money institutions. The Dutch Payments Association coordinates the collective tasks of its members in relation to infrastructure, standards and common product features, aimed at achieving an optimally effective, secure, reliable and efficient payment system.

The payment system is of great social importance. Hence, transparency, openness and accessibility are important principles.

Active cooperation with representatives of end users is essential for an efficient and secure payment system. Consequently, the Dutch Payments Association devotes considerable attention to stakeholder management.

Our mission

The Dutch Payments Association aims to achieve an optimally effective, secure, reliable and socially efficient payment system. To this end, it provides services (collective tasks) that serve the common interest of its members and supervises these tasks.

The Dutch Payments Association has established the following core values as essential prerequisites for fulfilling its tasks successfully:

- Interconnecting
- Driven
- Relevant

The Dutch Payments Association considers it extremely important to actively involve the representatives of end users – i.e. entrepreneurs and consumers – in its activities. In doing so, it gives substance to the social nature of the payment system.



Our vision relating to the payment system

The payment system is an indispensable component of the economy; it has many stakeholders and is of great social significance. In that sense, it has a utility function. The large number of parties involved, the high quality requirements and the large volume of transactions make the payment system an extremely complex market. Consequently, all relevant parties have to be involved and their interests taken into consideration to achieve an effective, secure, reliable and socially efficient payment system.

With the creation of the Single Euro Payments Area (SEPA) in the Eurozone, standards and payment products are in principle established at European level rather than national level. Moreover, European legislation gives new players (payment institutions in particular) more opportunities to enter the payment market. Even though the payment market is becoming international, national collaboration with regard to collective and non-competitive matters remains extremely important. This is particularly important in terms of further improving the high quality level of the payment system and retaining the social advantages achieved thus far, as well as expanding these further where possible.



The Dutch Payments Association's tasks include:

- **Product management**

In its capacity as product manager, the Dutch Payments Association focuses on establishing, managing and adjusting common product characteristics, standards and rules. Its tasks also include (further) developing and implementing new collective services, national and international products and standards initiated by the members or based on foreign best practices.

- **Change management**

The Dutch Payments Association ensures that national and international requirements and developments with regard to the payment infrastructure, standards and product characteristics are translated to the national payment system and is responsible for their implementation.

- **Quality assurance**

The Dutch Payments Association formulates security requirements for the payment system and certifies, among other things, market parties within the payments chain. It also supervises compliance with rules and regulations in order to guarantee and, where possible, improve the security and reliability of the payment system. In addition, it monitors the quality of the payment chain and coordinates the resolution of any disruptions in the chain.

- **Security and fraud prevention**

The Dutch Payments Association manages the collective aspects of cyber security policy in relation to the payment system, and works closely with other institutions, including the National Cyber Security Centre (NCSC), to implement this policy. It also coordinates fraud prevention within the entire payment chain, compiles and analyses statistics on fraud, and drafts prevention policy. In addition, it coordinates the implementation of measures designed to prevent fraud.



- **Payment system expertise**

The Dutch Payments Association keeps track of external developments that are of interest to its members and other stakeholders. To this end, it consults (potential) players in the payments market, external standardisation institutions and researchers. Where useful and desired, it collaborates with external parties and conducts research that contributes to increasing the effectiveness, security, reliability and social efficiency of the payment system.

- **Information**

The Dutch Payments Association conveys various viewpoints and reports to the public, coordinates collective information campaigns regarding its activities and handles media relations.



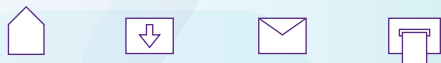
Report from the Board of Directors

Background

Board of Directors

Activities

In conclusion



Report from the Board of Directors

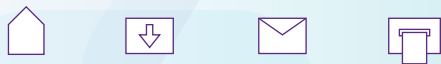
It is with great pleasure that I present the annual report of the Dutch Payments Association for the 2015 financial year.

Background

In 2010, the Payment System Committee of the **Dutch Banking Association** (Nederlandse Vereniging van Banken, NVB) and **Currence** concluded that a reassessment of the structure of the Dutch payment system was inevitable, given the developments taking place within the payment system. These developments include the internationalisation of the payment system – with national products being replaced by European standards (SEPA), the more open and dynamic market structure created by the arrival of non-bank payment institutions (and similar entities) and the increasing need for stakeholder management and supply chain management. In addition, with the advent of payment institutions, it is no longer considered desirable for the NVB, as the organisation representing the interests of the banks, to fulfil collective tasks for the payment system.

The creation of a new payment organisation was investigated in 2010 and 2011, under the direction of a steering committee composed of representatives from banks, the NVB and Currence, and with **De Nederlandsche Bank (DNB)** participating as an observer. This investigation considered job responsibilities, governance and funding, as well as the structure of the organisation. Since the demand side of the payment system is also important, the results of the study were discussed with the members of the **National Forum on the Payment System** (Maatschappelijk Overleg Betalingsverkeer, MOB). Their suggestions were incorporated into the final report.

The **Dutch Payments Association** was founded on 29 November 2011, in the knowledge that central investment and direction of national collective tasks – combined with clear and unambiguous governance – would contribute to the effectiveness, efficiency, security and reliability of the national payment system.



Board of Directors

As specified in the statutes, the **Dutch Payments Association's** Board of Directors comprises nine members: three independent members, including the chairman, and six members who are affiliated with members of the Dutch Payments Association. The **section on Board and Management** provides additional information on the composition of the board.

The board met five times during the reporting period. During its meetings, the board focused not only on its regular activities (see below), but also on the Dutch Payments Association's project-based activities that are of importance for society, such as the **Payment 2.0 programme** (Betalen 2.0) and **Instant Payments**.

The Dutch Payments Association's Auditing Committee also met with the Supervisory Board of **Currence** to discuss the restructuring of the financial administration records shared by the two organisations.

Activities

The Dutch Payments Association has three objectives: to promote an efficient and effective payment system, to ensure the system's security and reliability and to promote a clear, common vision regarding the system. In the **Profile section**, we provide a detailed explanation of our mission and vision for the payment system.

For a more detailed description of the Dutch Payments Association's activities in the past period, please refer to the **Activities section**.

The Dutch Payments Association's board and management continue to work to make it a more effective and efficient organisation that enjoys the confidence of its members and stakeholders, and can thus benefit from the support necessary to play a central facilitating role in the Dutch payment system.

The Dutch Payments Association welcomed ten new **members** in 2015, including five payment institutions.



In conclusion

The board looks back on this period with a measure of satisfaction, particularly with regard to the **introduction of E-Mandates**, a digital payment mandate for direct debit payments and the development of **iDIN**. The board awaits with interest the results of the pilot scheme with the **Tax and Customs Administration** (Belastingdienst) that is currently underway. The Dutch Payments Association has also clarified its public image, and is achieving ever better results in enhancing the payment system's efficiency through various measures including new product applications.

Amsterdam, 11 May 2016

On behalf of the Board of Directors,

Henk Brouwer, Chairman

Our field of activity

General developments in the payment system

Smartphones out in front, including for payments

A seamless shopping and payment experience

Increasing demands on payment infrastructure, including for 'Instant Payments'

SEPA 2.0

Emergence of new payment providers

New technologies and the importance of standardisation

Stakeholders

Legislation and regulations in 2015

Our field of activity

General developments in the payment system

A number of the Dutch Payments Association's activities in 2015 were determined by significant general developments in the payment system.

Smartphones out in front, including for payments

The use of smartphones continues to grow strongly all over the world. This also applies to the number of payments being made using smartphones (**mobile payments**) and in particular to customised **payment solutions based on smartphone apps**. In the Netherlands, mobile banking has now overtaken internet banking in terms of the number of transactions completed.

A seamless shopping and payment experience

Technological innovations have led to a tremendous growth in online shopping over the past decade. Due to the increasing use of mobile devices, the popularity of online sales continues to rise. Consumers are becoming accustomed to the online shopping experience and combine online and in-store shopping to achieve their ideal retail experience. For example, consumers have easy access to product information via their smartphones while in a physical store, but feel just as comfortable in online stores. The line between offline and online will very likely be blurred even further ('omni-channel retail'). Retailers are striving for maximum 'conversion', i.e. customers moving from browsing and familiarising themselves with products to an actual purchase. A seamless shopping experience also necessitates a seamless payment process. **Confirming customers' identity** online plays an important role in this regard.



'Seamless'

Mobile banking has overtaken
internet banking

Consumers want ideal retail experience

Instant Payments is
a new norm in society

Increasing demands on payment infrastructure, including for 'Instant Payments'

The increasing digitisation of the payment system is placing greater demands on the availability of the underlying payment infrastructure.

Instant Payments (a 24/7/365 payment system based on immediate completion of transactions) is becoming a new norm in society. Some countries are opting for partial solutions, such as 'peer-to-peer payments' for limited amounts using a smartphone. Other countries, including the Netherlands, are adapting their entire payment infrastructure (clearing and settlement) to accommodate **Instant Payments**, which enable in principle all forms of payment to be completed 'instantly'.



'The new standard'.

SEPA 2.0

Following the successful introduction of SEPA, it is now time to make it complete by, for example, implementing pan-European **E-Mandates** for direct debits and 'SEPA for Cards'. But the ambitions for 'SEPA 2.0' stretch even further. Under the management of the **Euro Retail Payments Board** (ERPB), a pan-European **Instant Payments** system is being realised. The ERPB is also exploring the possibilities for associating **aliases**, such as mobile phone numbers or e-mail addresses, with IBAN account numbers. This will make payments even more convenient for consumers.



'SEPA 2.0'.

FinTech companies joined the Dutch Payments Association

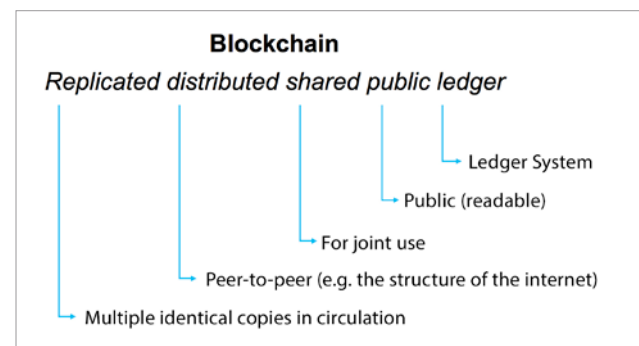
Emergence of new payment providers

Increasing numbers of non-bank –organisations – often driven by the development of new technologies – are entering the payments market with new applications. Competition between traditional and new payment service providers is growing, but there are also opportunities for cooperation. Traditional players (banks) and new players such as FinTech companies are trying to optimally meet customer demands, which enables customers to make easier choices. A short ‘time to market’ is becoming ever more important. The arrival of these new players means that payment chains are becoming longer and more complex, increasing the need for effective **coordination within the chain**.

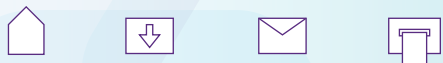
The Dutch Payments Association is pleased that a number of new payment service providers, including FinTech companies, have **joined** the association. Among other things, this is driving the discussion about new payment applications and membership is becoming more diverse.

New technologies and the importance of standardisation

New technologies, including biometrics and **blockchain** technology, may lead to new applications in the payment system. Many parties are currently exploring these possibilities. Innovation often initially leads to fragmentation in the European payments market. The use of open standards is a prerequisite for achieving subsequent interoperability with other solutions and thereby pan-European compatibility.



The blockchain, a replicated shared public ledger.



The Dutch Payments Association is
socially and politically involved

Stakeholders

The ERPB is the primary stakeholder organisation in Europe. It has considerable influence on the direction in which the European payment market develops. It can be seen as a European equivalent of the **MOB**¹. European umbrella organisations representing users and providers of national payments systems participate in the ERPB under the chairmanship of the **European Central Bank** (ECB). Some of the subjects addressed by the ERPB in 2015 were: **Instant Payments** (in euros), **contactless** and **mobile payments**, and peer-to-peer (P2P) mobile payments.

Our expertise is used for the benefit of the ERPB and its working groups via the European Payments Council (EPC)², the Payment Systems Committee of the European Banking Federation (EBF), the European Card Payments Association (ECPA)³ and the MOB's Working Group on Efficiency and European Affairs (WEE).

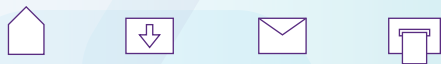


Logo MOB.

¹ The MOB, which is chaired by De Nederlandsche Bank (DNB), focuses on promoting the societal efficiency of the Netherlands' payment system. It is composed of representatives of the providers and users of the payment system. These include, for example, representatives from umbrella organisations in retail and banking, organisations for people living with disabilities and the **Dutch Consumers Organisation** (Consumentenbond). The **Dutch Payments Association** is also a member of the MOB.

² The **EPC** is the brand owner of the European payment products, European transfers (SEPA Credit Transfer, SCT) and the European system of SEPA direct debits (SDD). The SCT and SDD schemes have replaced similar Dutch payment products. In addition to the Dutch Payments Association, which represents all its members, ABN AMRO, ING and Rabobank are also members of the EPC in their own right and contribute actively to the council's work.

³ The ECPA was established in 2014 and participants include several European card organisations. The Dutch Payments Association is one of its members. The ECPA seeks to represent the interests of its members and to serve as the European partner for the parties that are working on the design of the European card payments landscape. It provides the Dutch Payments Association with a voice in global organisations such as **EMVCo** and **PCI SSC**.



Open payments market by increasing regulation

In recent years, there has been increasing public involvement in the payment system in the Netherlands. This applies to our social partners in the MOB, and to the Dutch House of Representatives. Themes such as **account number portability**, **Instant Payments**, **name-number verification** and **compensation policy** for online banking fraud were all the subject of public and political attention in 2015.

The **Dutch Payments Association** actively contributes to the public debate on the basis of our commitment to a socially efficient, secure, reliable and innovative payment system. For example, in 2015 we responded to a number of market consultations with our **members**; we presented our vision and provided information to various parties in the Dutch and European field.

Legislation and regulations in 2015

The payment system is subject to increasing regulation, in particular by the European Union. The purpose of this regulation is to further open up the payments market. In 2015, a number of important developments in European legislation reached completion. In particular, the **revised Payment Services Directive (PSD2)**⁴, as well as the Interchange Fee Regulation (IFR)⁵ and the European Payment Account Directive (PAD)⁶ have all had a significant impact on European retail payments. In addition, the advent of the General Data Protection Regulation (GDPR) is relevant here, partly because of the opportunities afforded by analysing 'big data'⁷, which is the subject of a great deal of public debate.

⁴ Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010 and repealing Directive 2007/64/EC.

⁵ Compulsory monthly reporting to the Tax and Customs Administration by banks with G accounts The Tax and Customs Administration uses these reports to gain insight into transactions made using G accounts. The law stipulates that transfers from G accounts may only be made to other G accounts (by credit transfer) or to the indemnification account of the Tax and Customs Administration.

⁶ Directive 2014/92 / EU of the European Parliament and of the Council of 23 July 2014 on the comparability of fees related to payment accounts, payment account switching and access to payment accounts with basic features.

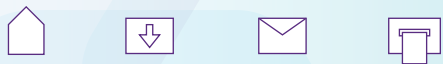
⁷ 'Big data' means, in essence, collecting data on large groups of people and analysing their behavioural patterns. The emergence of new technologies has created more and more opportunities in this regard.

The Dutch Payments Association
interpret legislative proposals
and provide input on behalf of
our members



Increasing regulation from Brussels.

On behalf of the **members** of the **Dutch Payments Association**, we use our expertise during European and national legislative processes to provide input for the various parties involved in the legislative process regarding collective, non-competitive issues. We also interpret legislative proposals together with and on behalf of our members, and engage in consultation with law-making institutions on behalf of our members. The point of departure is always that regulation should maintain or improve the security, reliability and efficiency of the Dutch payment system and its ability to innovate.



Access to the payments accounts
of account holders (PSD2) by
third party providers requires
uniform security standards

Revised Payment Services Directive

The PSD2 came into force in mid-January 2016. All EU member states must incorporate the PSD2 into their national legislation by 13 January 2018. They must also comply with the terms of this Directive, with the exception of certain security procedures and measures. In relation to the latter, the European Banking Authority (EBA) is still in the process of developing Regulatory Technical Standards (RTS). These standards will apply from late 2018 or early 2019. They will be applicable to remote electronic payments in general and, more specifically, the interaction between banks and third party providers (TPPs), which can access payment accounts on behalf of account holders via payment initiation services and account information services.⁸

The **Dutch Payments Association** contributed to the development of these RTSs by drafting a response to the Discussion Paper published by the EBA on this subject in late 2015. The Dutch Payments Association stressed that although banks benefit from uniform security standards, the market is also demanding the freedom to implement innovative solutions, in particular for use with mobile telephones. One example of this is the successful use of **IDEAL on mobile telephones**, and the level of security that has been incorporated. In 2016, the EBA will present the draft RTSs to the market for consultation.

⁸ A payment initiation service is the initiation of payment orders by an account holder via the account holder's online payment account. Account information services can, at the account holder's request, be used to compile information from several bank accounts. For both services, the TPP logs into the internet banking environment on behalf of the account holder, using personal login codes supplied by the account holder issued to the account holder by the bank. The TPP can then gain access to the account holder's account.



Activities - Point-of-sale payment system

Promoting the efficiency of the payment system

Debit card payments pushing out cash payments

Contactless payments take off in 2015

Mobile contactless payments are increasing

Card refund service (Retourpinnen) gains ground in retail outlets

Accessibility is a priority for cash policy

Activities

Point-of-sale payment system

Promoting the efficiency of the payment system

For many years, the system for point-of-sale payments in the Netherlands has been characterised by its high degree of efficiency. Consumers are increasingly using their debit cards or smartphones to pay for purchases in shops, while cash is being used less and less frequently. The Dutch Payments Association is committed to an efficient, stable and secure system for point-of-sale payments in the Netherlands, while also allowing scope for innovation.

The fact that point-of-sale payments in the Netherlands are processed efficiently is partly due to the partnership between banks and collective point-of-sale institutions, which was established in the Payment System Covenant. The covenant was signed in 2005, and additional agreements were subsequently concluded in 2009 and 2014 when the new system for electronic payments was introduced. These are set out in the Additional Agreements I and II.

Debit card payments are more secure for retailers and, research shows, cheaper than handling cash payments. As a result, the cost of point-of-sale payments in the Netherlands is among the lowest in Europe. Innovations in the electronic point-of-sale system are implemented regularly, enhancing convenience and efficiency. The Dutch Payments Association coordinates and oversees collective agreements on behalf of its members relating to these new applications and the infrastructure for debit card payments. It is also responsible for coordinating general public communications concerning debit card payments.

The main innovative developments in point-of-sale payments are **contactless payments** using debit cards or mobile phones, and **debit card refund services**. The use of these services is increasing. Developments in relation to debit card payments are discussed, inter alia, in the Card Payments Forum, which is run by the Dutch Payments Association. This forum brings together all the relevant stakeholders from the Dutch point-of-sale payment system.

More point-of-sale payments were made by debit card than by cash

Dutch ambition is 40% cash and 60% debit card transactions

Debit card payments pushing out cash payments

In 2014, Additional Agreement II (Nadere Overeenkomst II, NO II) was concluded between the banks and the point-of-sale institutions' umbrella organisations. NO II provides for the expansion of the number of debit card payments, with the goal of reversing the 2013 figures of 60% cash transactions and 40% debit card transactions to 40% cash and 60% debit cards by 2018. The agreements set down in the NO II remain valid until 1 January 2019. The Dutch Payments Association is playing an important supporting role in this by continuing to encourage debit card and **contactless payments**.

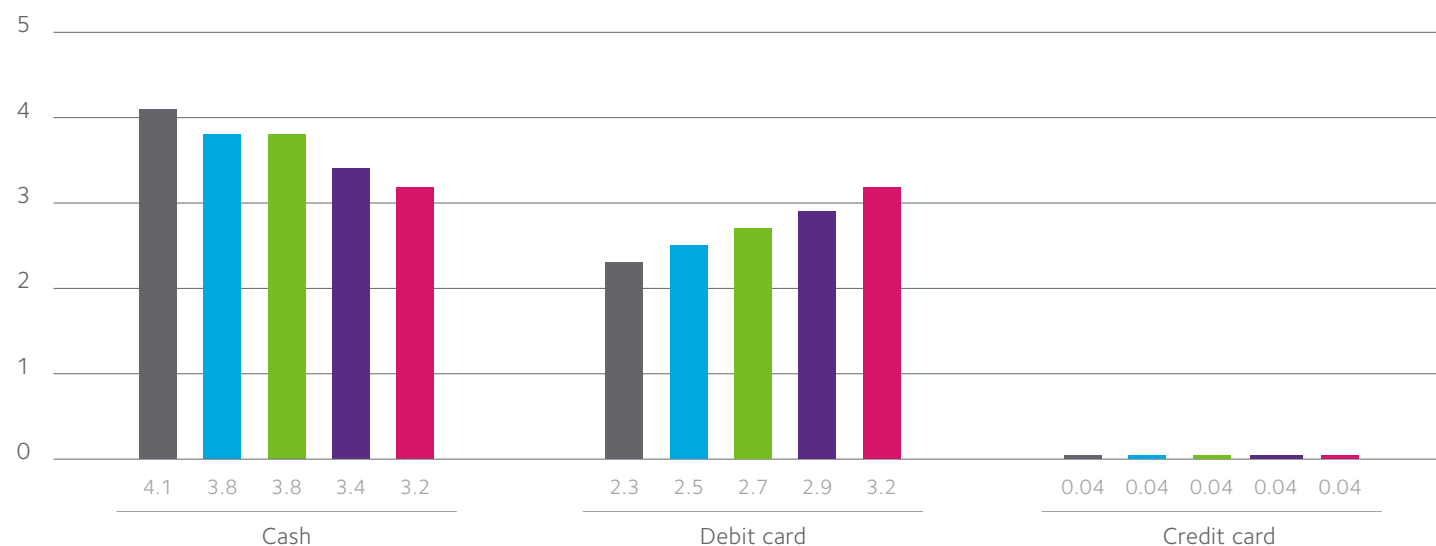
Figure 1 shows the various payment methods used at point-of-sale in the Netherlands, and how this changed over the period from 2011 to 2015. In 2015, for the first time ever, more point-of-sale payments in the Netherlands were made by debit card (50%) than by cash (49.5%). The remainder of payments were made using credit cards (0.5%). Four years ago, around 64% of payments were made in cash and 36% by debit card. This shows that the substitution from cash payments to debit card payments has been significantly over recent years.

Differences between sectors remain, however. Particularly in the hospitality industry and in private services, cash continues to dominate, although even in these sectors we are seeing a marked increase in the proportion of debit card payments.

Over the past year, consumers have made more debit card payments than ever. This demonstrates that the population of the Netherlands has confidence in electronic payments. Debit cards were used to make 3.2 billion payments. This was an increase of 10.7% compared to 2014 (2013: 9.5%) (**Figure 1**). The relatively high growth in the number of debit card payments represents a continuation of the multi-year trend towards paying by debit card instead of cash. Provided that the growth in debit card payments holds steady around 10%, the proportion of 40% cash payments and 60% debit card payments will be reached in 2018.

Figure 1: Payments in retail outlets

Annual number of transactions for each transaction type, in billions of transactions



Contactless payments account for increased share debit card payments in hospitality sector

In particular the increase of the number of debit card payments in cafés, restaurants, bars and hotels, and at parking facilities, accounted for the growth, with increases of 32.4% and 60.8% respectively. In the hospitality sector, this has mainly resulted from the introduction of **contactless payments**. For parking facilities, phasing out Chipknip has led to many parking meters being made compatible for debit card payments, sometimes exclusively, and 'dip & go'⁹. In 2015, 38% of all debit card payments occurred in supermarkets. In this sector, too, the number of debit card payments increased significantly (9.1% growth in 2015).

⁹ 'Dip & go' is a form of contact payment, whereby the debit card is inserted into the payment terminal but no PIN code needs to be entered.

40% of debit card payments
is under 10 euros

The number of cash payments fell again in 2015 to 3.2 billion (2011: 4.1 billion; **Figure 1**). This continues the decline in the use of cash. This reflects the rise in debit card payments.

Cash is still often used to pay small amounts, however. The average amount per cash payment in 2015 was approximately 12 euros. The number of debit card payments for amounts under 10 euros increased substantially to a total of 1.3 billion, an increase of 19.4% (**Figure 2**). This represents four out of ten debit card payments. Within this segment, payments between 0 and 2.50 euros increased by 35% compared to 2014. The average amount of debit card payments also declined further from 30.38 euros in 2014 to 28.67 euros in 2015.

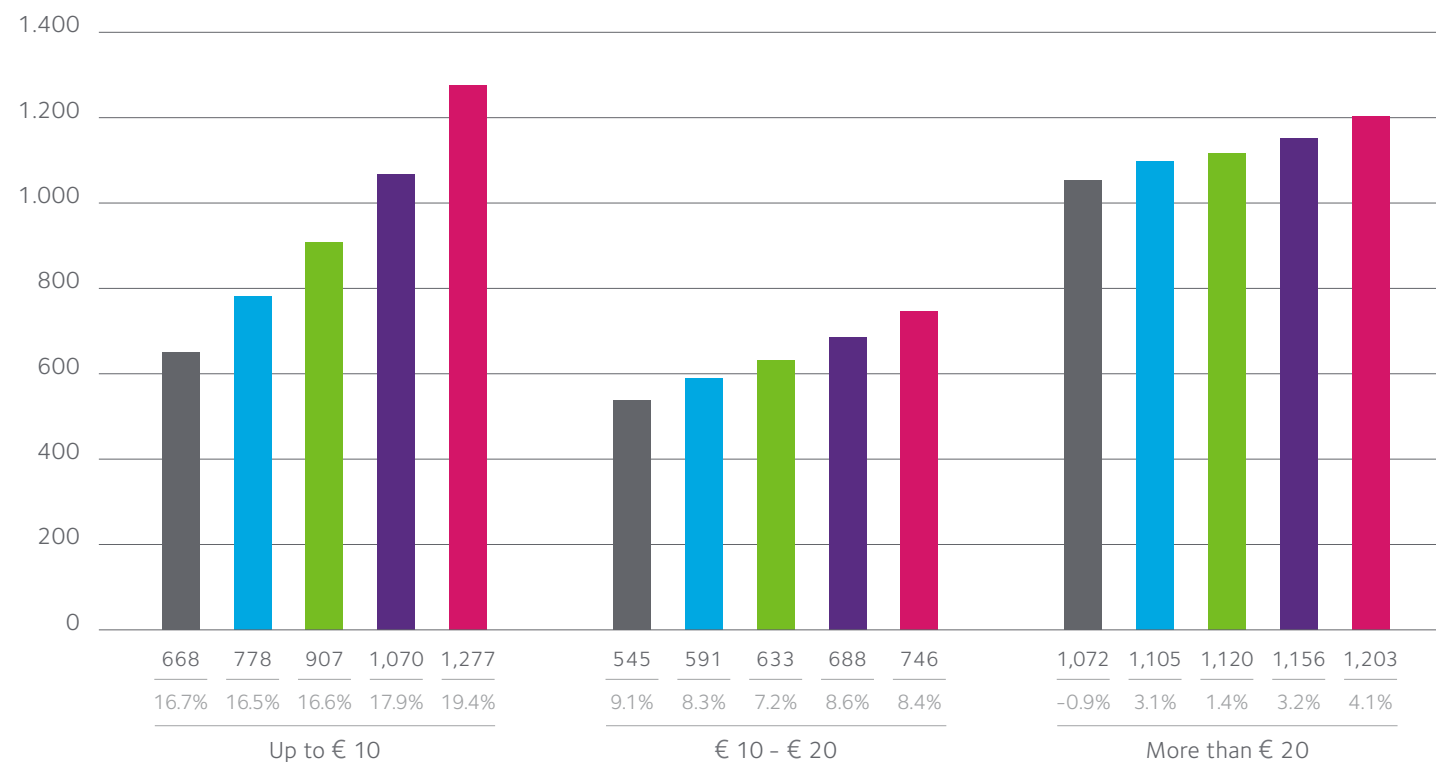
Just as in previous years, a number of promotional activities for debit card payments were organised by the **Foundation to Encourage Efficient Payments** (Stichting Bevorderen Efficiënt Betalen, SBEB).¹⁰ Recent research by **DNB** shows that this collective stimulus remains necessary to ensure the continued growth in the number of debit card payments.

The Dutch Payments Association provides promotional material concerning debit card payments to businesses. This material can be ordered free of charge from www.pin.nl. More orders were placed in 2015 than ever before. Not only the regular 'Pay using your debit card? Yes, please' (Pinnen ja graag) materials, but especially those promoting **contactless payments** and **debit card refund services**.

¹⁰ The **Foundation to Encourage Efficient Payments** was established following the signing of the Payment System Covenant in 2005. It manages a fund that supports projects designed to increase the security and efficiency of the payment system.

Figure 2: Number of debit card payments

Per various amount ranges, in millions of transactions per year and in percentages



Increase in debit card payments is greatest at the lower amount

Contactless payments take off in 2015

Contactless payments were first introduced in 2014. In order to pay in this way, customers simply hold their debit card or mobile phone close to the payment terminal. For payments of up to 25 euros, no PIN code needs to be entered. For larger amounts, customers need to enter their PIN code into the payment terminal or their mobile device. If the total amount of consecutive contactless payments made without entering the PIN code reaches 50 euros, the customer is required to enter it anew.



Explanation of limit on payments without PIN code.

The advantage of contactless payment is that transactions at point-of-sale are much quicker to complete than with contact debit card payment methods, because no PIN code is required for smaller amounts. This is a particular advantage for vending machines because they no longer required a numeric keypad. There is also a security benefit because, since the card holder does not key in a PIN code, there is a reduced risk from pickpockets or skimmers. Moreover, nothing can be done with this information as long as the debit card remains in the possession of cardholder.

At the end of 2015, there were over 15 million debit cards in circulation that were compatible with contactless payments. This number is expected to increase rapidly as debit cards are replaced. In 2015, some banks began to offer a contactless payment functionality using mobile telephones.

Most consumers can pay with contactless debit card or mobile phone

135 million contactless payments in 2015

The growth in contactless debit card payments has been very rapid and has exceeded expectations (**Figure 3**). In the first year that the new method was introduced, the number of contactless payments remained modest (8.3 million). In 2015, there was significant growth to 135 million contactless payments. This increase is estimated to have led to approximately 50 million fewer cash transactions. Taken over the whole year, 4.2% of the total number of debit card payments were contactless; by December 2015 this figure had reached 13%.

In 2015, the focus of the national 'Pay using your debit card? Yes, please' campaign shifted to promoting contactless payments. The campaign is a joint initiative by the Dutch Payments Association, the **SBEB**, banks, umbrella organisations of retailers and consumers and international card organisations. The campaign is promoted on television, on the internet, in advertisements, by promotional teams across the country and free publicity. The campaign is also visible in stores.



On 16 November 2015, the 100 millionth contactless payment was made. 'We had not expected to reach this milestone so quickly', said Piet Mallekoote, Director of the Dutch Payments Association.

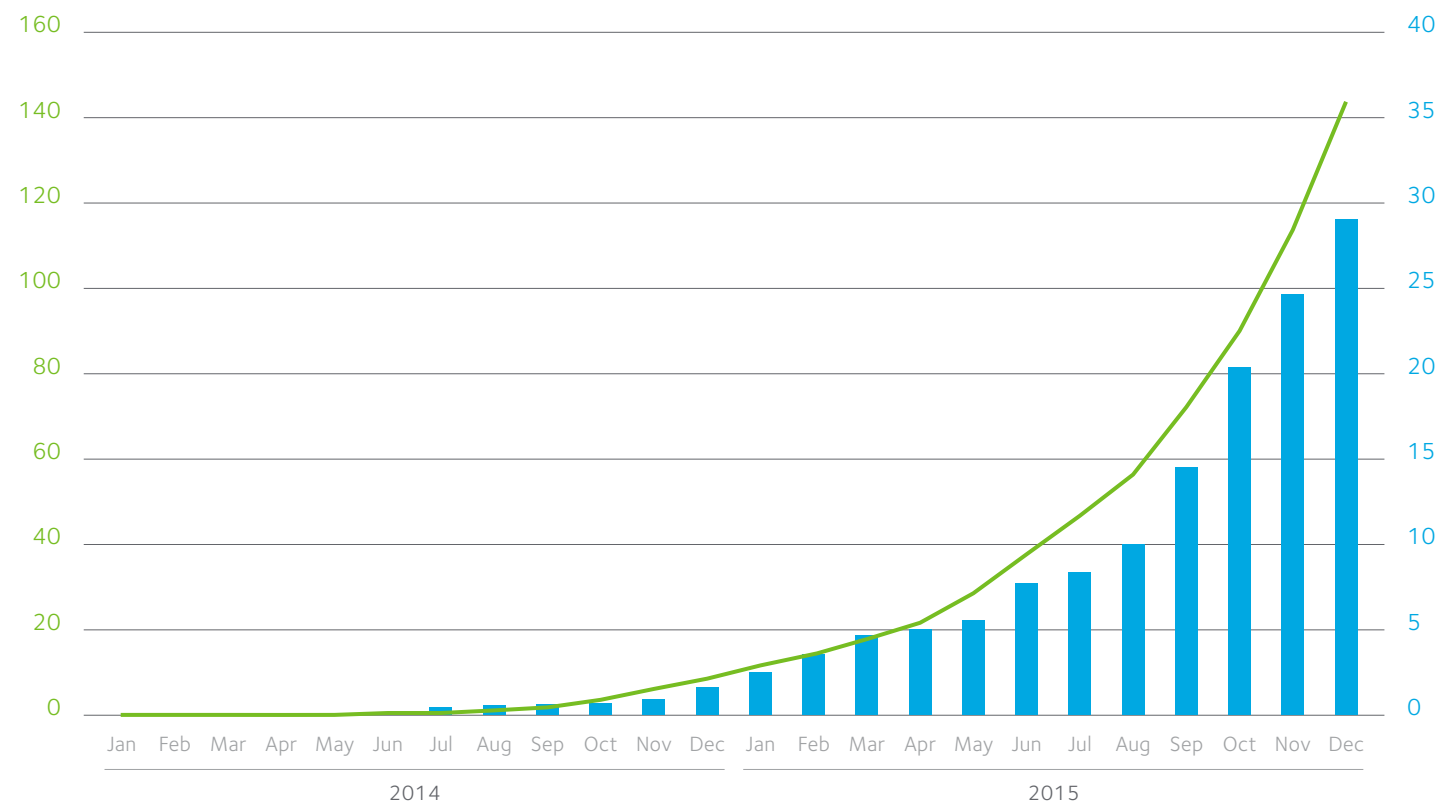
Animated information clip 'How contactless payment works'

Consumers are interested to be informed about how to make a contactless payment. They often perceive the benefits of rapid payments for small amounts without the need to enter a PIN code, but they still have questions. How should I hold my debit card at the payment terminal? When do I have to enter my PIN code? What about theft or fraud? The Dutch Payments Association, in cooperation with SBEB, therefore produced an **animated information clip entitled 'How contactless payment works'** (Contactloos betalen, zo werkt het). The clip is used for public information purposes, but can also be used for meetings, to enable cashiers to better explain the new method to their customers.

Figure 3: Number of contactless payments

Number of transactions, in millions

Per month ■
 Cumulative —



Transaction costs for merchants with contactless payments lower than costs of both contact payments and cash payments



'How contactless payment works' animated clip.

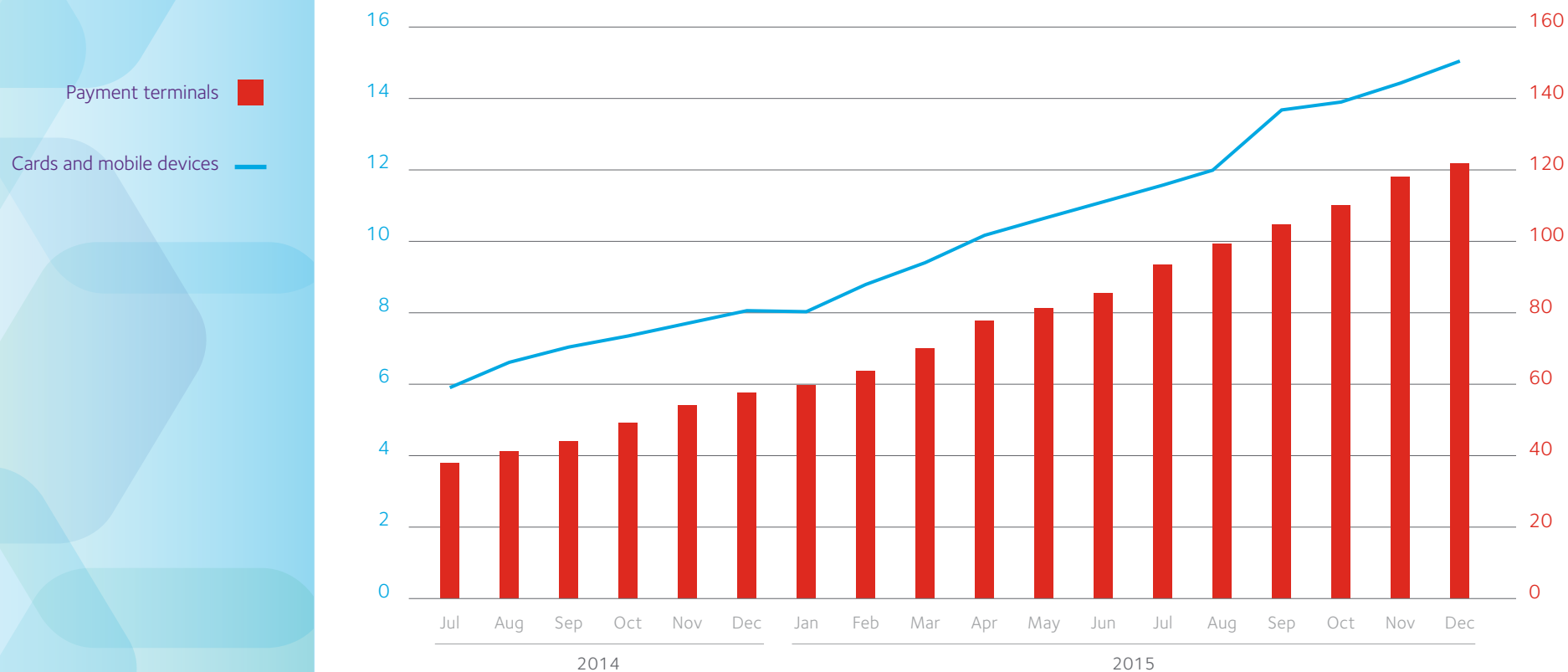
At the end of 2015, it was possible to make contactless payments at 123,000 payment terminals in the Netherlands (compared to 56,000 at the end of 2014). That is more than one in three payment terminals. This proportion will increase further in the next few years.

The average amount paid using contactless payments in 2015 was 8.90 euros. Research, such as that carried out by Panteia for 2014, shows that the average transaction costs for merchants with contactless payment are lower than both contact payments requiring a PIN code and cash payments: contactless payment 0.15 euros; contact payments 0.19 euros; cash 0.25 euros. Retailers are therefore able to achieve substantial savings by enabling contactless payments.

At present, supermarkets have the largest share of all contactless debit card payments (33%). In the hospitality and catering sectors, the proportion is 17% and 14% respectively. Continued growth in the number of contactless payment terminals, debit cards and mobile telephones that support this form of payment will lead to an increase in the use of contactless payment in future.

Figure 4: Contactless payments

Number of payment terminals, cards and mobile devices that can be used for contactless payments



Dutch Payments Association contributes to the specifications for mobile contactless payments

Mobile contactless payments are increasing

The specifications for the collective aspects of mobile contactless payments were submitted to the Dutch Payments Association by the three big banks in 2015. The collective aspects are: seamless operation, security and a uniform payment experience for consumers and merchants. These aspects will contribute to the ease and speed of mobile contactless payments and are considered key factors for its successful future growth. The Dutch Payments Association will maintain these specifications, develop them further if desired, and also make them accessible for third parties. It has set up a Working Group on Mobile Contactless Payments for this purpose.

Besides maintaining and developing these specifications, the Dutch Payments Association will also assess whether appearances of mobile contactless payment in the Netherlands meet these specifications. Under the direction of the Dutch Payments Association, the banks and other parties in the payment chain (such as terminal suppliers, processors, mobile telephone suppliers and telecommunications providers) have agreed to jointly test the proper functioning of mobile payments ('end-to-end') prior to market launch. A third party has developed a test environment for this purpose on behalf of the Dutch Payments Association, in which banks and other parties can test their 'apps' and other components in the payment chain. Testing will commence in early 2016. Where testing reveals any problems, these will be followed up under the direction of the Dutch Payments Association and being discussed with the parties involved and resolved. This will require stakeholder meetings to be arranged in which all relevant parties participate. **MasterCard** and **VISA** (as the owners of the payment brands) will also participate in these consultations. This collaboration will minimise as far as possible the risk of unforeseen issues or disruptions in the payment chain following launch. Conducting these tests in advance it will enable mobile contactless payments to remain fast and convenient. At the end of 2016, the joint testing will be evaluated. This initiative, which has been organised by the Dutch Payments Association, is greatly valued by the parties involved.

45 billion refunded in cash in 2015...

... the card refund service limits the amount of cash of consumers and in the cash desk of the shop

Card refund service gains ground in retail outlets

When consumers return goods to a retail outlet and require a refund, they are generally refunded in cash. Since late 2013, however, it has also been possible to refund their debit card. With debit card refunds, consumers who return a purchase to the store are refunded directly to their bank account the next working day. Three large Dutch banks facilitate debit card refunds to their business customers.

Debit card refunds are possible when the original purchase was made with a debit card or credit card. It does not matter which bank consumers do their banking with. The consumer presents the debit card, and the retailer initiates the debit card refund transaction. A receipt for the debit card refund is issued and signed by the retailer to guarantee that the refund is being processed.



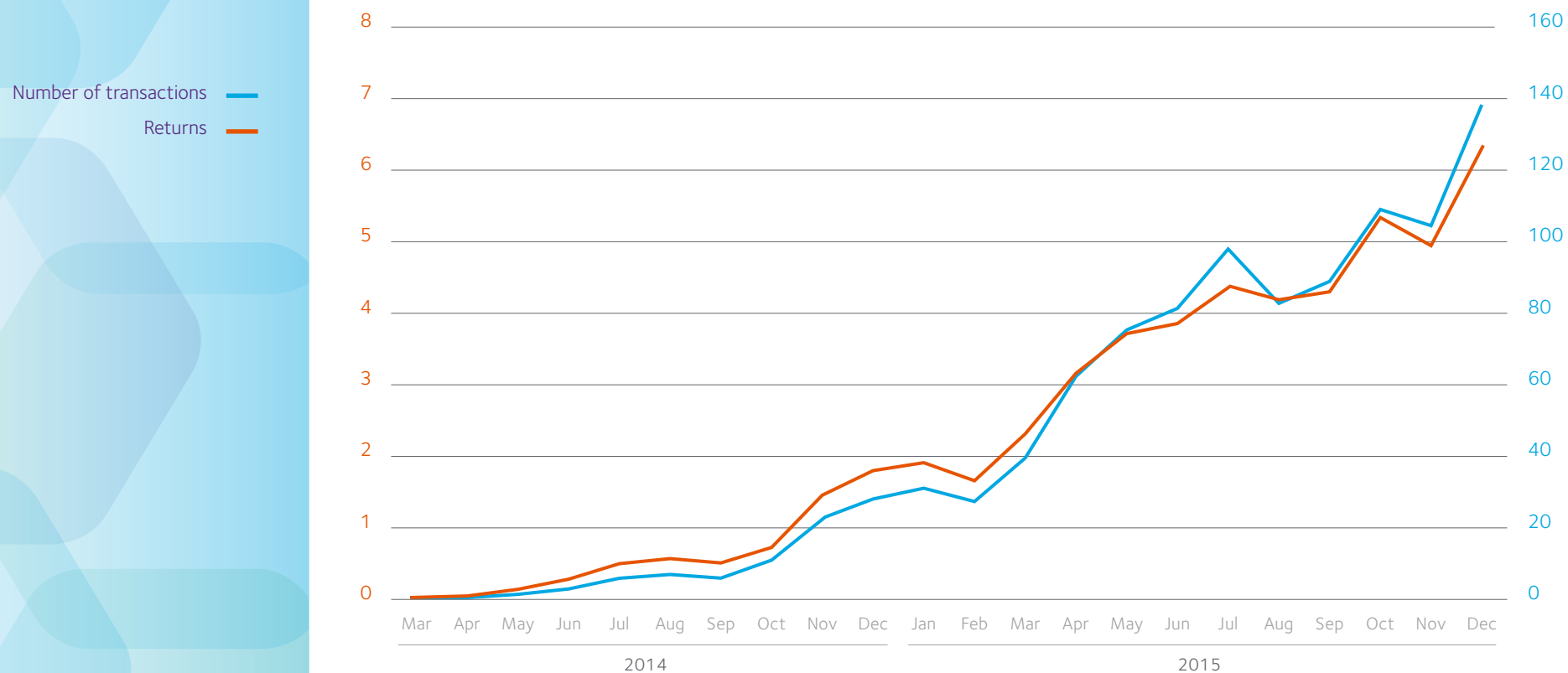
Receipt for a debit card refund.

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 receive the money back in their bank account quickly.

The number of debit card refund transactions has increased significantly since the introduction of this facility at the end of 2013. In 2014, 85,000 debit card refund transactions took place and some 936,000 in 2015. It is expected that this number will increase, in part because banks are now offering this facility to all their corporate clients. The average amount of debit card refund transactions in 2015 was 49.04 euros.

Figure 5: Transactions and volume of debit card refunds

Number of transactions in thousands, returns in millions. Per month



Users benefit from the improved recognisability of communication materials. Promotional materials for debit card refunds has been developed by the Dutch Payments Association in the already familiar style of the 'Pay using your debit card? Yes, please' and 'Contactless payment here' campaigns. The material is available from www.pin.nl.



Illustration: Stickers advertising debit card refund services at a till.

Accessibility is a priority for cash policy

In line with the decline in cash payments, the number of cash withdrawals from ATMs and the amounts withdrawn also decreased in 2015. Compared to 2014, these numbers fell by 7.6% and 2.4%, respectively.

The number of bank ATMs has also been falling gradually since 2008. This reduction is associated with the decreasing demand for cash. This can be seen both in the decrease in the number of cash withdrawals made and the lower total value of cash withdrawals. Due to the scaling back of the facilities associated with cash payments, the network of bank ATMs and other facilities – such as the number of bank branches with tellers – are also declining. The accessibility of cash-based facilities in rural areas has therefore become a subject of social and political debate. At the end of 2014, the **Authority for Consumers and Markets** (Autoriteit Consument en Markt, ACM) outlined its vision for how the Dutch Payments Association and its members can tackle these issues together.¹¹

¹¹ ACM outlook; ACM news report 18 Dec 2014: 'Banks may cooperate to maintain ATMs in rural areas'.

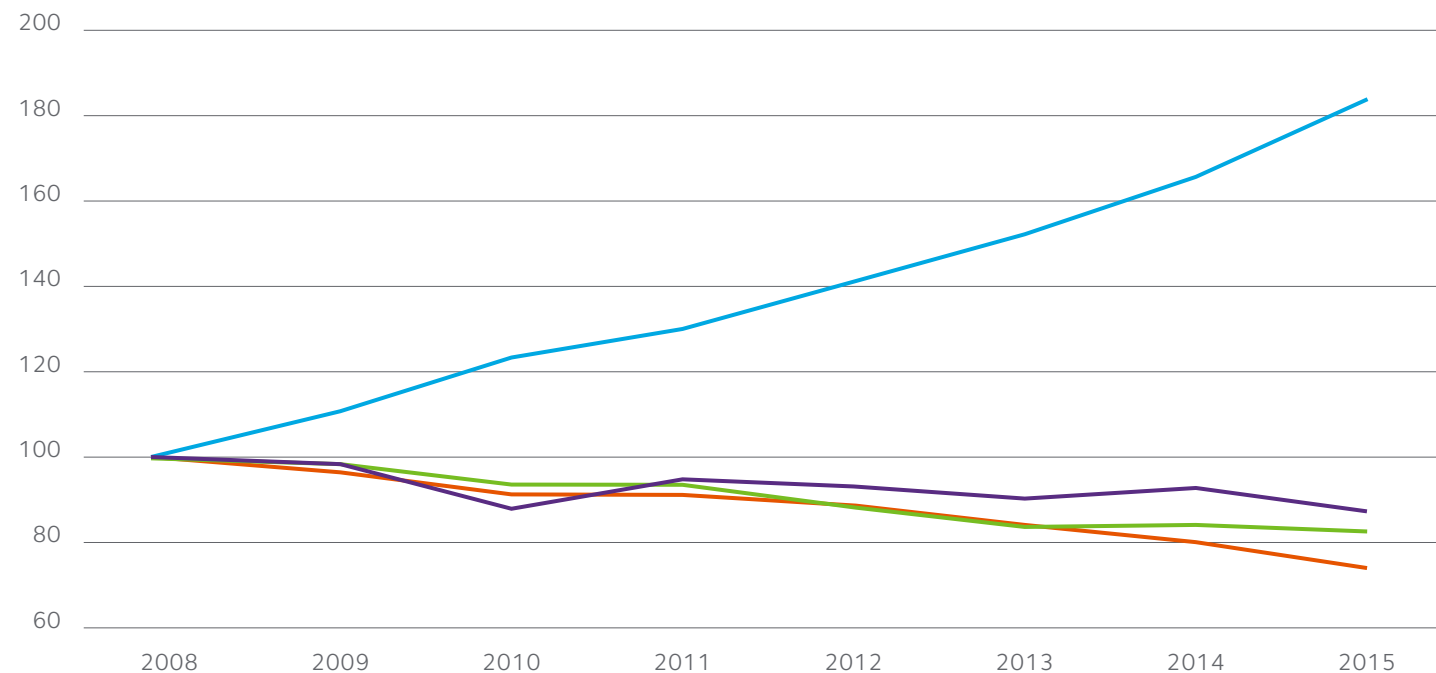
Need for cash decreases...

... banks continue to feel responsible
for good accessibility

Figure 6: Number of cash withdrawals from ATMs and debit card payments

Indexed figures: 2008 = 100

- Number of debit card payments
- Number of ATMs
- Number of cash withdrawals from ATMs
- Total value of cash withdrawals





Dutch Payments Association national
contact point for issues relating to the
accessibility of cash

The Dutch Payments Association is committed to working with its members to keep ATMs in more sparsely populated areas accessible and efficient. To that end, the distribution of ATMs is analysed regularly. Bottlenecks in the cash supply are also identified and the Dutch Payments Association serves as the **national contact point for issues relating to the accessibility of cash**. In consultation with its members, customised solutions are being implemented based on an analysis of the local situation. When it is necessary to install an ATM in order to resolve an accessibility issue in a particular area, the partnership between the Dutch Payments Association and its members enables banks to take turns installing ATMs. This means that cash remains available for groups that need it.

To prevent new issues emerging, the Dutch Payments Association uses a specially developed information system for individual members that enables them to see which ATMs are essential to maintaining the current high level of accessibility. This is based on the socially accepted accessibility standard of an ATM being available within a five kilometre radius of a given location. Finally, members notify the Dutch Payments Association of any proposed changes to their ATM network, in order to assess in advance the combined effect of the different members' plans and whether these plans could lead to any issues.

Cash available by custom solution

Market solution to the accessibility of cash

The residents of three villages in Zeeuws-Vlaanderen (Graauw, Biervliet and Vogelwaarde) were experiencing issues with regard to the accessibility of cash. An interbank pilot scheme was therefore established to identify tailored solutions. In Biervliet and Vogelwaarde, access to cash was improved by installing an ING money service point in a local store that can be used by account holders of all banks. In Graauw, an ATM was installed by ABN AMRO.



The Mayor Mulder of the municipality of Hulst kicked off the pilot scheme on 10 July 2015 by officially opening a new ATM in Graauw.

The pilot scheme in Zeeuws-Vlaanderen came to a successful conclusion in early 2016. The results were discussed at the **MOB's** Spring Meeting in May 2016. The processes trialled in the pilot scheme aimed at eliminating bottlenecks and providing customised solutions, which can now also be implemented elsewhere. Partly due to the publicity surrounding the pilot scheme in Zeeuws-Vlaanderen, a consultation was launched in the Province of Overijssel during 2015 to prevent and, where necessary, resolve accessibility problems in the cash supply.



Activities - Online payments

Developments in the online payments market

iDEAL internet payments continue to increase in 2015

Mobile payments using iDEAL appeal to users

Increasing international focus on iDEAL

iDEAL QR: a new application with added value

Market-wide initiative for valid E-mandates

iDIN: digital identification for logging in securely online

Online consumer spendings
growth rate over 16%

1 billion iDEAL payments
since introduction

Online payments

Developments in the online payments market

Figures show that 77% of people aged 12 and above shopped online in 2015. That equates to more than 11 million people, according to market research carried out by **Statistics Netherlands** (CBS). Dutch consumers made more than 142 million online purchases in 2015 for a total of 16.07 billion euros. Online purchases for goods and services therefore show a growth of 16.1% compared with 2014, according to market research carried out by **Thuiswinkel.org** into online consumer spending in the Netherlands.

35% of Dutch bricks-and-mortar companies follow an omni-channel strategy, enabling consumers to order, book or reserve products or services online. The number of online retailers is also continuing to rise. According to Thuiswinkel.org, there are almost 45,000 active online retailers. Besides e-commerce outlets, other branches are increasingly developing their online presence, such as the government and charity organisations.

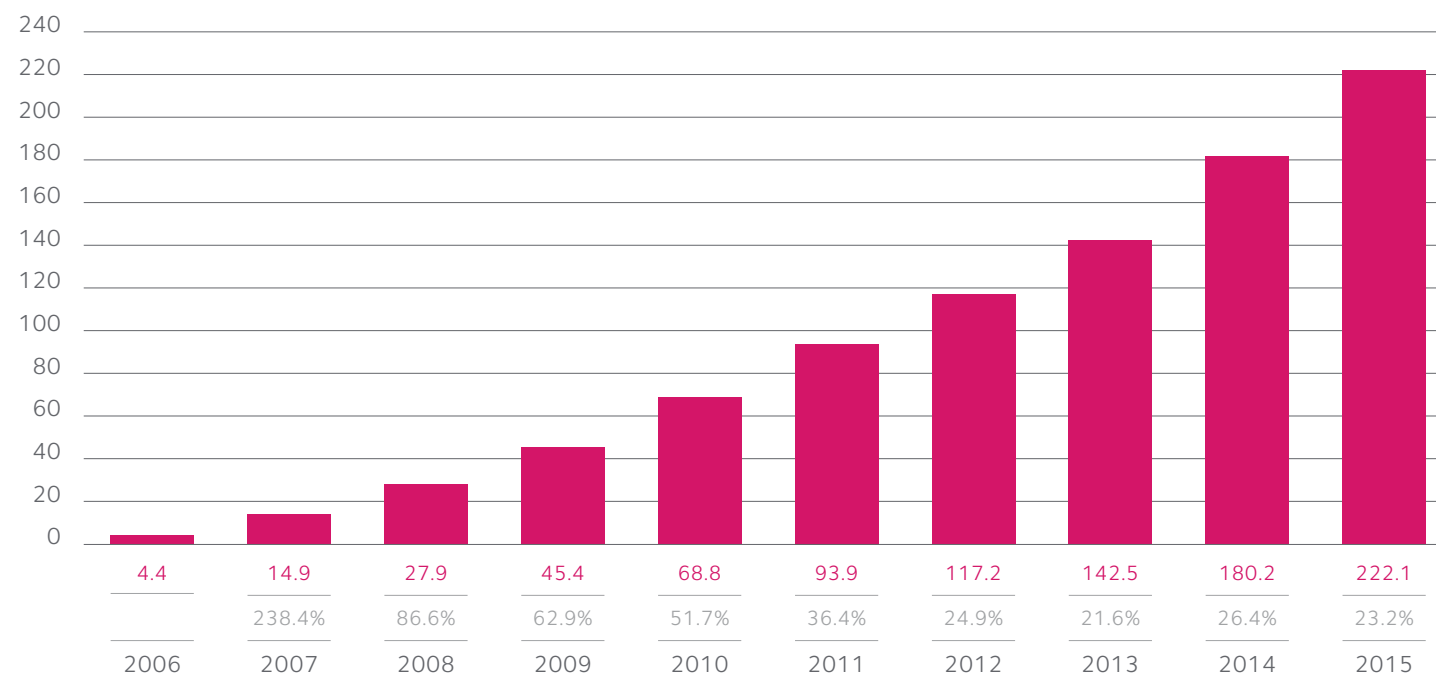
iDEAL internet payments continue to increase in 2015

In 2015, payments using iDEAL increased sharply once again. With a growth higher than 23.2% (2014: 26.4%), a record level of 222.1 million iDEAL payments was reached (**figure 7**). iDEAL celebrated its tenth anniversary in 2015. From the introduction of iDEAL to the end of 2015, close to 917.5 million iDEAL payments were processed. The billionth payment is expected in May 2016.

Of the 222 million payments made in 2015, 80 million (36%) were at Dutch online shops and 44% outside of the traditional e-commerce sector. Payment with iDEAL is growing relatively strongly in this sector of the economy, with iDEAL being increasingly used for the payment of invoices, top-up payments, the payment of government services and public transport, and donations to charity. Purchases on foreign websites account for around 20% of all iDEAL payments. Almost one in three parties offering iDEAL to online shops is located in a foreign country. This represents a marked increase (46%) compared to 2014.

Figure 7: Number of iDEAL payments

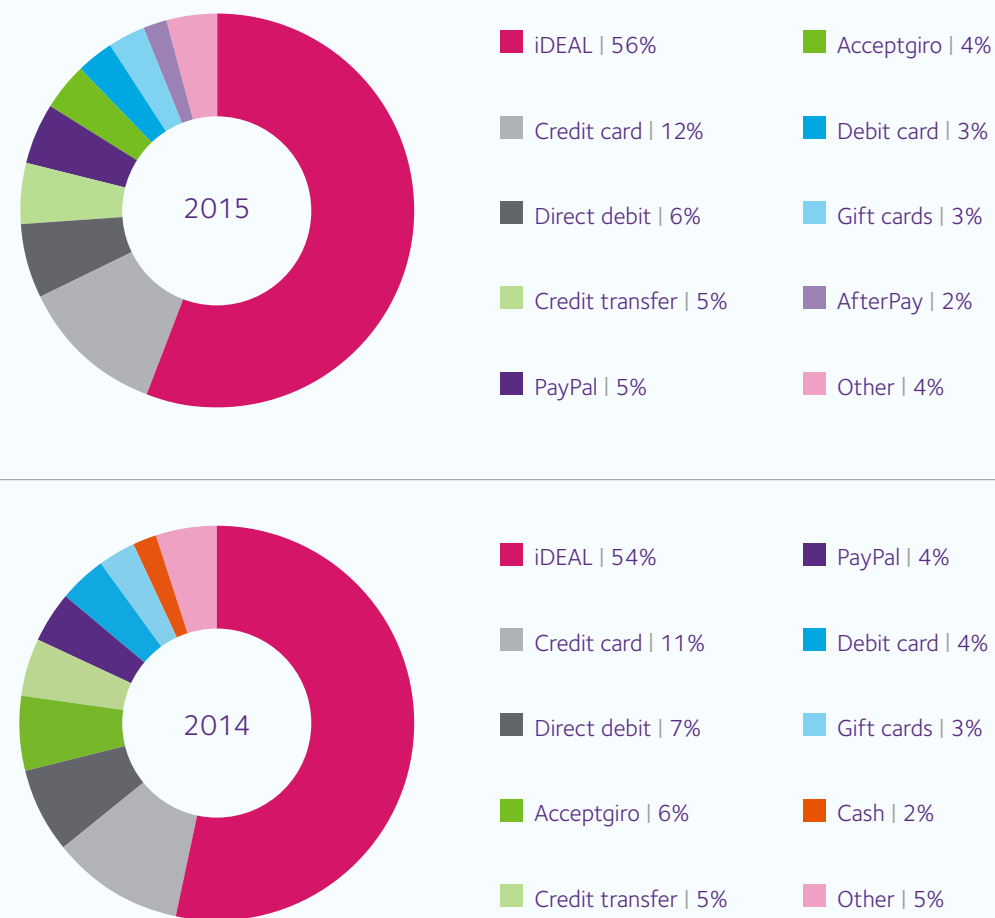
Millions of transactions, percentage growth relative to the previous year



iDEAL most used online payment method in 2015

Figure 8: Proportion of payments made by various methods

Percentage of online purchases in 2014 and 2015



Proportion of iDEAL payments in the e-commerce sector has increased again

According to the eCommerce Payment Monitor 2016, more than 142 million online payments were made in the e-commerce sector in 2015. Of these, iDEAL accounted for more than half (56%). This represents an increase of two percentage points compared with 2014, when iDEAL accounted for 54%. After iDEAL, the next most frequently-used form of payment is the credit card, whose share has increased from 11% to 12%. AfterPay and PayPal are fast increasing their market share in relative terms: the share of AfterPay has doubled from 1% to 2% and the share of PayPal has increased from 4% to 5%. The use of Acceptgiro on the other hand is falling rapidly. **(Figure 8).**

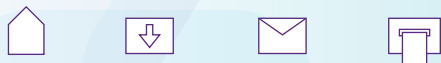
iDEAL payments made in 2015 amount to a total of 18.1 billion euros, which is an increase of 28.4% compared with the previous year (2014: 14.1 billion euros). An average sum of € 81.39 was paid per transaction. This amount increased from € 75.78 in 2013 and € 78.40 in 2014. As 44% of iDEAL transactions take place outside the e-commerce sector, where lower amounts are usually paid, this average amount is considerably lower than the average amount per purchase in the e-commerce sector: € 107.00 (source: eCommerce Payment Monitor, 2016).

An essential financial brand in the Netherlands

In the brand research carried out by EURIB (European Institute of Brand Management) into essential brands in the Netherlands, iDEAL has maintained a top 5 position of all brands for a number of years, achieving an essential score of 63% in 2015. The figures also reveal some interesting information about iDEAL devotees, who appear to be male and younger than 25. Score differences are small, but among men iDEAL ranks fourth, whereas women put the brand at ninth. Young people place iDEAL second, just behind Bol.com. Among financial brands in 2015, iDEAL was once again the most essential brand, ranking number one.

A comprehensive analysis of iDEAL during 2015 is included in the **Annual Report of Currence** (the owner of the iDEAL brand).

iDEAL most essential financial brand



Mobile payments using iDEAL
is growing rapidly...

... 23% of iDEAL payments are
completed using mobile banking apps

CPSPs aggregate payments
for companies

Mobile payments using iDEAL appeal to users

The shifting of the online market to the mobile channel has been a trend for years. For the entire e-commerce sector, 20% of transactions are completed with a mobile device, 6% using a smartphone and 14% on a tablet. Consumers use their smartphone or tablet also for online purchases using iDEAL. Currently, nearly a quarter (23%) of all iDEAL payments are completed using mobile banking apps. These payments largely accounted for the growth of iDEAL in 2015.

ABN AMRO and SNS Bank added iDEAL to their mobile banking apps in 2015, after the other banks had already done so earlier. Most consumers can now make iDEAL payments via their mobile banking app using a PIN code, without the need for a separate security check (for example, using a token and debit card, or a TAN code). This makes iDEAL perfect for widespread general use with new mobile applications.

Increasing international focus on iDEAL

In the past, research was conducted into the mutual interoperability of the SCT-based online payment methods. This revealed that technical differences are relatively limited, but that there are major differences in the areas of functionality, business rules and governance. This problem can be difficult to solve in practice.

In order to achieve interoperability of payment methods, differences need to be bridged, while there should also be sufficient market urgency. However, most companies have been showing little interest. Companies have indicated that they experience more important problems in cross-border e-commerce that have a greater priority, such as complex VAT regulations, differences in consumer laws or the nature of local customer service. The conversion process at these companies will also benefit from consumers being able to pay with the (local) payment method that they trust the most and also regard as the easiest method to use. These preferences differ considerably within Europe.

20% of all iDEAL payments at
retailers based abroad

The technical and commercial differences between the (national) payment solutions are, in practice, addressed by CPSPs, which offer online shops the opportunity to accept nearly every type of payment method. The same applies to iDEAL. CPSPs active abroad offer iDEAL users a great deal of added value. This makes cross-border e-commerce a fact. In 2015, 20% of all iDEAL payments were made for purchases from retailers based abroad.

iDEAL QR: a new application with added value

In 2015, iDEAL was made ready for payments with a QR code. This code makes paying with iDEAL even easier, especially at locations where traditional forms of digital payment cannot be used. By scanning an iDEAL QR code with a smartphone or tablet, consumers can make an iDEAL payment. The use of a QR code is a logical choice; it can be used by a wide audience.

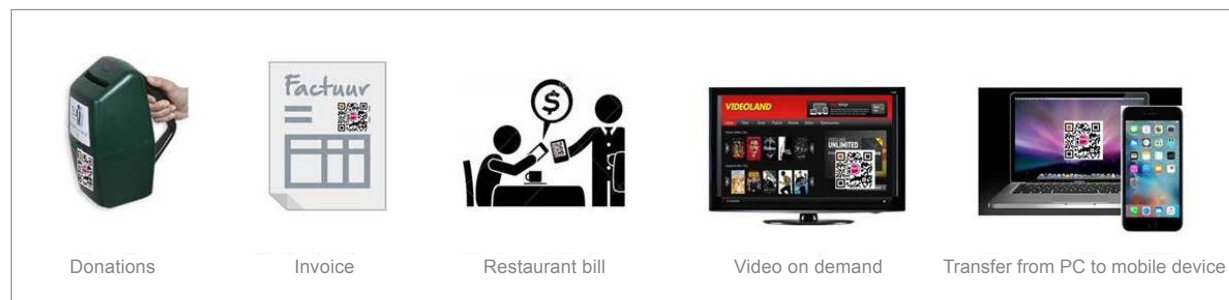


Image: Intended usage situations for iDEAL QR.

iDEAL QR will be introduced through a pilot during the Hartstichting collection in mid-April 2016. In addition, the use of iDEAL QR will be tested in an extended pilot with a number of entrepreneurs. On the basis of an evaluation, it will be decided whether or not a national introduction will take place and, if so, in what form. More information on the functioning of iDEAL QR can be found on the **website of iDEAL**.

Legally valid online E-Mandate

Market-wide initiative for valid E-Mandates

In 2014 and 2015, preparations were made for the (digital) E-Mandates product in cooperation with the banks. This product will be launched onto the market nationwide in 2016. The E-Mandates product is available in two variants: standard E-Mandates, which focus on the private market, and business E-Mandates for use in the business-to-business market.



Logo E-Mandates (Incassomachtigen).

With the E-Mandate product, for the first time customers can provide payees with a legally valid online mandate for recurring or single direct debits from their payment account. A signature on paper is no longer required. Similar to an iDEAL payment, an E-Mandate is provided by the consumer or business customer through the familiar internet banking application of his bank. This approach is safe, quick and easy for customers. Furthermore, if the customer keeps an approval list for direct debits, this list will be automatically updated with the newly issued digital E-Mandate.

In addition to their ease of use for customers E-Mandates offer companies the opportunity to make their online direct debit process more efficient. This allows them to cut down on the time and costs associated with receiving a paper mandate, while it avoids the uncertainty of the current unregulated online mandates. With the E-Mandate product, the company can be certain that the mandate has been granted by an authorised person, that the mandate is considered legally valid by the bank and that the account number for the direct debit, as provided by the customer, is correct. Moreover, companies do not have to worry that customers can reverse a payment up to 13 months after the direct debit. With a legally valid mandate, this risk is limited to eight weeks in accordance with the product conditions, as prescribed by the European Payment Services Directive (PSD).

Customers provide an online E-Mandate through the familiar internet banking application of their bank

When the business version of the (digital) E-Mandate product is used, the authorisation can be given and processed in a fully digital manner, while the registration of the E-Mandate will be automatically managed by the bank of the payer. The payer and the payee do not need to do anything else to complete the registration process. This saves an enormous amount of time and reduces the risk of input errors, leading to more successful business direct debits.

Brand owner **Currence** set up a separate product company for E-Mandates with effect from 1 January 2016. More detailed information is available on the **E-Mandate website**.

iDIN: digital identification for logging in securely online



Logo iDIN.

iDIN; new identification and authentication service

In the autumn of 2015, the Dutch Payments Association and the banks introduced iDIN – a service that enables bank customers to identify themselves to other organisations online using their bank's secure and trusted login facilities. Customers therefore do not need to set up and remember separate access codes for, for example, insurance companies, government agencies or online retailers.

A great deal of work was done on this project in 2015. This included running numerous workshops over the course of the year with lawyers, privacy specialists, IT architects, security experts and product managers in order to ensure that the product would meet the relevant requirements in relation to privacy, security and reliability. Consultation has also taken place with consumers and merchants.

Global exploration use of blockchain in the payment system

At the start of March 2016, a pilot project was launched with the **Dutch Tax and Customs Administration**, which will be expanded to include online retailers, insurance companies and other government bodies. An evaluation will be conducted in 2016, based on the experience of consumers and organisations involved in the pilot scheme, and the experience of the banks. On this basis, a decision will be made as to whether iDIN will be made more widely available in 2017.

More information and a demonstration of how iDIN works are available on www.idin.nl.

Blockchain remains in its infancy, but appears to offer many opportunities

Blockchain is a technology that could revolutionise our thinking on (shared) transaction administration. The technique first came to prominence for its role in the virtual currency Bitcoin. However, the global exploration of the potential applications of this technology has just begun. Blockchain's security and robustness lie in the way it is structured, and it has significant potential for use in the payment system. Its successful use could well result in a significant shift in the ideas and business models used in the processing of transactions. Above all, it offers the prospect of unnecessary involvement of intermediary parties for processing, recording and verifying transactions. Payment chains could therefore become shorter, which in turn reduces costs.

The Dutch Payments Association will continue to inform its members about the possible applications of blockchain technology in the payment system. Globally, the exploration of blockchain technology and its possible application within and beyond the financial services sector remains in the research stage. A few small-scale preliminary pilot projects have been set up. The Dutch tradition of interbank cooperation within the payment system infrastructure means that blockchain technology could be deployed relatively quickly and effectively here.

An inter-bank blockchain research project was set up in 2015. The Dutch Payments Association is facilitating the collaboration in this area, with the aim of increasing our collective knowledge of blockchain technology and identifying applications within the payment system. Other aspects of the technology, such as the ability for anonymous parties to make transactions, appear to be less relevant for payment system.



The blockchain – a single indestructible ledger for shared use, with no data integrity issues or concerns over the continuity and quality of the processor.



Activities - Giro-based payments

Giro-based payments are socially important

Successful completion of SEPA

Introduction of simple IBAN conversion tool

Developments in Instant Payments, 24 hours a day, 365 days a year

Improved reversal information to direct debit collectors

Public focus on ‘incorrect credit transfers’

Switching Service versus account number portability

Research into alias conversion for IBANs

Phase-out of national direct debits now complete

Acceptgiro and the market

FiNBOX

G accounts continue in SEPA

Developments in giro-based payments continue in SEPA

Giro-based payments

Giro-based payments are socially important

An efficient and effective giro-based payment system contributes to public confidence and represents a crucial aspect of our economic activity. Both corporate and private users can rely on the system to make payments quickly and accurately to the specified recipient. Payments made between banks within SEPA are completed by the following working day at the latest; however, the majority of transactions in the Netherlands are completed on the same working day and payments between accounts at the same bank are completed almost immediately.

But developments in giro-based payments will not stop following the transition to SEPA. A thorough overhaul of the underlying infrastructure is the next step, which will enable the payment system to operate significantly faster. The Netherlands will be one of the first euro countries to take a sizeable step towards achieving **Instant Payments**. This innovation will lead to transactions being processed in real time. 24 hours a day, 365 days a year (24/7/365). In the Netherlands and eventually across Europe.

Many banks already enable their customers to scan an Acceptgiro on paper using a mobile app, which is then converted directly into a digital payment order. Another development is the introduction of (digital) **e-mandates**, which make it possible to legally authorise payments without the need for a signature on paper.

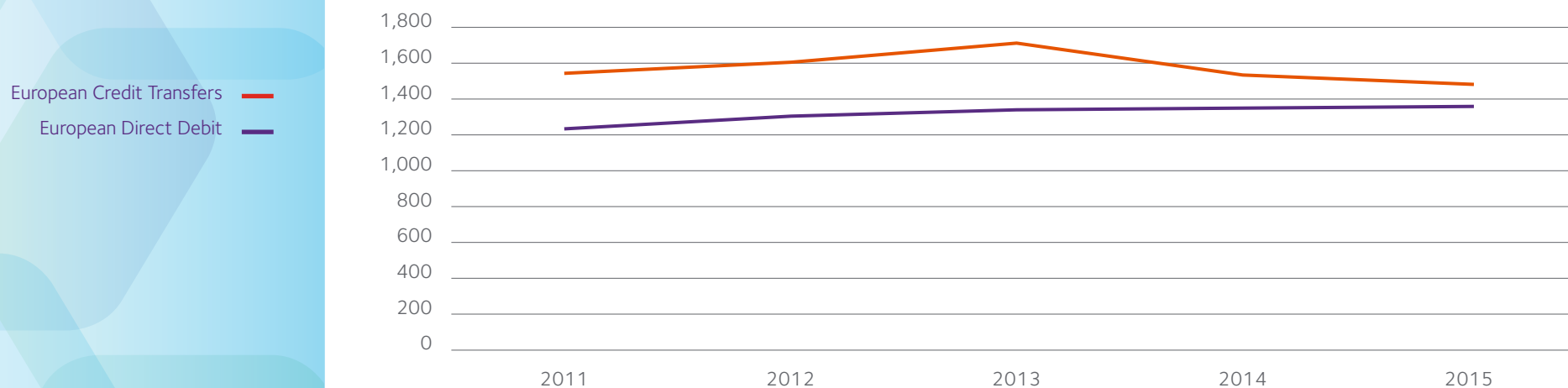
The Giro Stakeholder Forum (GSF) facilitates the exchange of information between providers and users on developments in giro-based transactions. The GSF met several times in 2015. The participants indicated that, in their view, the GSF forms a valuable platform, with no direct commercial interests, for discussions of the needs and capabilities of giro-based payments and collective issues.

Successful completion of SEPA

Dutch credit transfers and direct debit payments were replaced by their European counterparts on 1 August 2014, when SEPA was introduced. Given the huge impact that this has had on payment service providers (banks) and users, it is worth noting that there were virtually no knock-on effects in 2015. Banks in the Netherlands have proven individually and collectively able to continue to deliver a high level of stability and reliability in the Dutch giro-based payment system.

Figure 9: Number of European Credit Transfers and Direct Debit transactions*

Numbers in millions



*) Source: De Nederlandsche Bank.

The discontinuation or conversion of exceptions to SEPA regulations (such as **Chipknip**, the **Lottery Direct Debit** and the **Government Order**) went smoothly. Therefore, the previous national payment infrastructure from **Equens** was discontinued on 31 January 2015, with no impact on customers.

Introduction of simple IBAN conversion tool



Structure of the IBAN.

During the migration to SEPA, the IBAN became the default account number within the domestic payment system. To facilitate the transition from Dutch account numbers to IBANs, banks in the Netherlands provided the IBAN BIC Service. The service could be used to convert domestic account numbers individually or in batches. In accordance with a recommendation of the National Forum on the SEPA migration (NFS), this service was discontinued at the end of March 2015. Account holders can find their own IBAN printed on bank statements, via internet and mobile banking services, and usually on their debit card.

Subsequently, it became evident that some individuals may still need to convert old domestic account numbers to IBANs. At the request of the **MOB**, the information provided by the Dutch Payments Association on the **OveropIBAN.nl** website from **DNB**, was adapted accordingly. For example, a basic conversion tool was made available, that can be used to determine a correct IBAN using the old domestic account number and the name of the bank. However, it is more advisable to personally ask a beneficiaries for their IBANs.

IBAN conversion tool
available once again

Development Instant Payments (24/7/365)

Developments in Instant Payments, 24 hours a day, 365 days a year

The current processing system for interbank giro-based payments, including the completion of payments via the central bank systems (Target2), is based on a Monday to Friday working week.¹² On working days, domestic interbank payments can generally be completed within a few hours. After the close of day and on weekends, transactions are processed by the beneficiary bank on the following working day.

In many cases, this is adequate. This legacy approach was developed over many decades and assures that our payment system is reliable and secure. However, it no longer fits this age with a seven-day, 24-hour economy and virtually no restrictions on the availability of goods and services. Purchases through popular websites such as eBay, and home delivery of goods by private individuals or corporate players, are now possible at all hours, even on weekends. Revenues from card and online payments are expected to be available immediately. This requires payment methods that immediately confirm to the beneficiary that payment has been made. Immediate credit to the beneficiary's account meets this requirement and makes the money immediately available. As such, immediate payment and receipt (also known as Instant Payments) is a form of 'cashless cash'. Instant Payments aim to replicate the convenience of cash, but without the associated costs of physical distribution and the risks of keeping and carrying cash.

¹² Target2, stands for Trans-European Automated Real-Time Gross Settlement Express Transfer and is the payment system used by the European System of Central Banks (ESCB) for euro payments within Europe.
It is open daily, except at weekends and on certain public holidays: New Year's Day (1 January), Good Friday, Easter Monday, Labour Day (1 May), Christmas Day and Boxing Day (December 25 and 26).

Netherlands adapt banking, clearing and settlement infrastructure

Various successful foreign Instant Payments applications and announcements have further fuelled demand within the Eurozone.¹³ In November 2014, the **MOB** invited the Dutch Payments Association and the banks to present their long-term vision for the 24/7/365 availability of the payment system by 2015. In the same month, under the chairmanship of the **ECB**, the ERPB called on service providers in the European payment system to present at least one pan-European Instant Payments solution by June 2015. In 2015, under guidance from the Dutch Payments Association, work was begun on the interbank 'Instant Payments' programme. The Instant Payments infrastructure is designed to enable consumers, companies and government institutions to pay and receive euros instantly. The Dutch ambition for faster payments is consistent with future pan-European standards that the EPC is developing on behalf of the ERPB.

In order to accelerate progress on giro-based payments, the Dutch banks have formulated the following ambition: 'Giro-based transactions, payments and receipts, processed within five seconds, available 24/7/365, appropriate in the European context. This applies to single payments and bulk payments, regardless of the channel by which they are delivered (e.g. mobile telephone, internet, retail outlet).'

Unlike some other countries, the Netherlands has chosen to adapt its banking and clearing and settlement infrastructure. This requires extensive effort and will take at least five years to complete, based on experiences in other countries. The Netherlands hopes to achieve this more quickly, but less than four years is unrealistic. The focus will remain on market introduction in the first half of 2019.



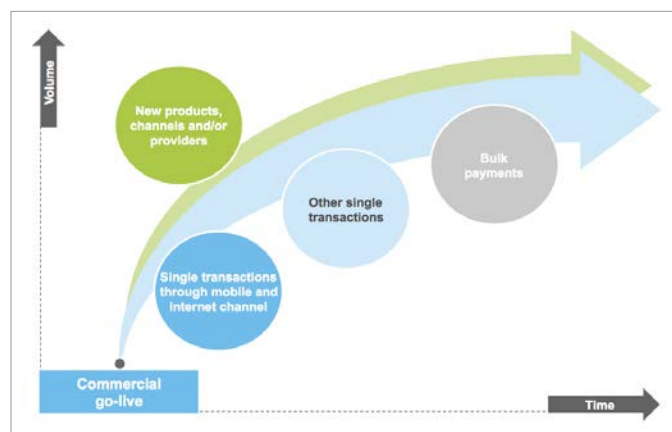
'Consumers and businesses should be able to send and receive Instant Payments, both online and face-to-face, 24 hours a day, every day of the year.'

¹³ Countries such as Australia, Brazil, Denmark, the United Kingdom, Mexico, Poland, the USA and Sweden.

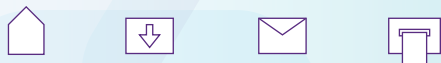
Stakeholders directly involved in Instant Payments programme

The **MOB** has welcomed this goal for the Instant Payments programme. The commitment of the Dutch banks to Instant Payments will become 'the new normal'. The banking infrastructure must be able to complete all payments immediately and money should be available in the beneficiary's account within a few seconds. This should be possible on any day, at any time. It will start with payments made via mobile telephones and internet, and will eventually include bulk payments.

The Dutch ambition for a quicker form of payment is consistent with the EPC standards still under development. The Dutch Payments Association has worked together with the banks on substantive aspects of the Instant Payments programme. The programme is jointly staffed by the banks and the Dutch Payments Association. Terms and conditions have been drawn up and synchronised with the EPC's European standards, which are being developed in parallel. It is important that stakeholders are directly involved in the project from the outset; all phases were discussed with and input was provided by business representatives, consumer representatives, parties that may provide services based on Instant Payments and suppliers. The views of all these parties were taken into account.



General rollout scenario for Instant Payments.



More direct debits succeed after adjustment procedure

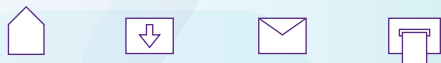
The point of departure for the Dutch banks is that interbank settlements of Instant Payments must also be possible outside current Target2 opening hours. Until and unless Target2 extends its opening hours, **DNB** will support liquidity with additional procedures, guaranteed by – and for – the participating Dutch payment service providers. This is necessary because payments are credited to beneficiaries' accounts before they are settled between the payment service providers.

Improved reversal information to direct debit collectors

The transition to the European direct debit (SDD) in 2014 also implied changes to the information issued to payees about reversed transactions. Some of these changes were taken to be deteriorations. In consultation with the members of the Giro Stakeholder Forum, the Dutch Payments Association has improved the information provided to payees on failed and reversed direct debits.

For example, the majority of the Dutch banks now use a single feedback code if a direct debit fails due to 'insufficient funds'. They also space repeated attempts more evenly. A direct debit can still be completed if the payer rectifies the lack of funds within five working days of the first attempt. As a result, the failure rate for direct debits caused by 'insufficient funds' fell for the four largest consumer banks, from 3.1% at the end of 2014 to 2.1% at the end of 2015.

Additional feedback codes for the SDD Rulebooks have been proposed by the Dutch Payments Association at the European level, for direct debits that cannot be completed due to settings by the account holder. Starting November 2017, European banks will receive more specific information when a direct debit transaction fails.



Mistake entering IBAN does not lead to incorrect credit transfer

Public focus on ‘incorrect credit transfers’

Under European law, banks process payment orders on the basis of the IBAN number provided by the customer. The IBAN serves as a unique identifier for routing purposes. The amount also plays a decisive role during processing. The remaining data in the payment order is just for information purposes, to the payer and the beneficiary.

Incorrect credit transfers, also known as undue payments, are payments made to an unintended IBAN, where the payer only realises this after completing the transfer. There are three possible causes for an undue payment. Firstly, the payer makes a mistake when entering the IBAN in the payment order. The probability of this leading to an incorrect credit transfer is virtually nil, because IBANs are ‘self-monitoring’. For online orders, verification occurs immediately; for paper-based payment orders, the error will be noticed during processing by the bank. A second cause is that the payer accidentally uses the IBAN of an account holder other than the intended recipient. The final cause is fraud or abuse. For example, criminals succeed in substituting their IBAN for the IBAN of the intended beneficiary on an invoice.

Account holders who accidentally choose the wrong IBAN can ask their bank to apply the Undue Payments Procedure (POB).¹⁴ At the payer’s request, the bank will request the unintended recipient in writing to transfer the money back to the payer. If the unintended recipient fails to do this within 21 days, the bank will provide the payer with the recipient’s details. Payers can use this information themselves to recover the money, taking legal action if necessary.

¹⁴ Further information on incorrect credit transfers and the **Undue Payments Procedure** can be found on the **Dutch Payments Association website**.

Dutch Payments Association examines Undue Payments Procedure

Incorrect credit transfers have been the subject of media attention several times over the past year. According to the **Dutch Consumers Organisation**, an increasing number of complaints have been received. As yet, there is no reason to believe that the number of incorrect credit transfers has risen as a result of the introduction of the IBAN. It is possible that this increase has been caused in part by an increase in private payments to strangers in return for goods that are not delivered or that fail to meet the purchaser's expectations, through websites such as eBay. To the payer these payments are unsatisfactory in retrospect, even though the credit transfer itself was completed without problems. The Dutch Payments Association has made a commitment to the Dutch Consumers Organisation that it will examine undue payments over the course of 2016 and make its findings known. This will make it possible to assess whether changes to the POB are possible and desirable and, if so, which changes should be made.

Switching Service versus account number portability

Because of the high cost of introducing account number portability, in 2004 it was decided in consultation with the Dutch Government to establish a **Switching Service**.¹⁵ The PAD stipulates that member states must set up a national switching service by 19 September 2016. The Dutch Switching Service already meets almost all the PAD's requirements and has thus served as a model.

The European Commission will report on compliance with the PAD among member states in September 2019. This report will include a cost-benefit analysis of EU-wide payment account number portability.

Although the Switching Service works well, account number portability returned to the public and political agenda in the Netherlands in 2015. IBANs would make account number portability complex and costly, because they include country and bank-specific components. From a conceptual and analytical perspective, the Dutch Payments Association is not opposed to payment account number portability since it could enhance competition and customer mobility. However, this would need to be implemented at the European level and not only in the Netherlands.

¹⁵ The **Switching Service** has existed since 2004 and is a joint initiative undertaken by banks in the Netherlands. It makes changing your payment account from one bank to another easier and ensures that transactions can continue to be carried out smoothly.

Number portability of added value implemented at European level

Per year 80,000 people
use Switching Service

A common misconception is that account number portability would be a silver bullet for all problems related to switching banks. However, the new bank would still need to issue switching customers with new debit cards, credit cards, internet and mobile banking products and possibly other new products. A switching service helps customers to switch more easily and is therefore, in the view of the Dutch Payments Association, the best option at present.



Logo Switching Service (Overstapservice).

In the Netherlands, the Switching Service means that for 13 months, credit transfers and payments from the old payment account are automatically redirected to a new or existing account with another bank. Companies that attempt to collect direct debits are also automatically informed. On average, 80,000 consumers and businesses use the Switching Service every year (www.overstapservice.nl).

In the autumn of 2015, the Dutch Payments Association launched a new periodic review of the experiences of customers who have switched to a different bank and used the Switching Service. Just like the last survey in 2011, the results of the most recent evaluation were positive. Satisfaction with the Switching Service was rated at 7.8, which is a high score. Satisfaction with comparable services in the energy and telecommunications sectors was around 7.0. Switchers rated the service as quick, convenient and user friendly, and generally found the service genuinely helpful. The Dutch Payments Association presented its latest survey to the **MOB** in May 2016.

Use of aliases not yet
rolled out nation wide

Research into alias conversion for IBANs

The use of aliases for IBAN account numbers could partly eliminate the assumed need to introduce account number portability. Linking an alias, such as a mobile phone number or email address, to an IBAN would increase convenience for consumers. Such aliases would make it easier for account holders to 'remember' their account number. When people switch accounts, the chosen alias could remain unchanged and only the associated IBAN would change. In some neighbouring countries, the use of aliases for IBANs has been a success, even if only used for person-to-person payments. In the Netherlands, some banks also provide this type of payment application. However, the use of aliases has not yet been rolled out nation wide.

At the European level, the ERPB is investigating aliases with the banks. The Dutch Payments Association will participate in the steering committee involved. At the end of 2015, the Dutch banks asked the Dutch Payments Association to investigate the possibility of using aliases in the Netherlands by setting up a joint task force. The task force has now begun its investigation.

Phase-out of national direct debits now complete

The introduction of SEPA signified the end of the local Dutch Direct Debit product. Since 1 August 2014, SEPA regulations have stipulated that direct debit payments may only be processed on the basis of the **European direct debit** (SEPA Direct Debit; SDD). **DNB** has granted dispensation to the (Dutch) Lottery Direct Debit¹⁶, extending the period of this type of direct debit to 1 February 2016.

Unlike the European direct debit, the Lottery Direct Debit could not be reversed by the payer. With the postponement of the final date, the Dutch lottery payees were given more time to adjust to the new situation.

¹⁶ (Dutch) Lottery Direct Debit; Lottery direct debit authorisation.

No equivalent (Dutch) Lottery Direct Debit after the dispensation period

Acceptgiro continues to decrease in 2015

For the duration of the exemption, the Dutch Payments Association has made an effort to introduce the so-called SDD No-Refund in Europe, partly at the request of and in cooperation with banks and lottery payees. This would be a European direct debit variant without the right of reversal. With the use of the SDD No-Refund, the Dutch situation could be maintained after the dispensation period. For this purpose, discussions were held with and requests submitted to the European Retail Payments Board (ERPB) and the European Payments Council (EPC). An attempt was also made to introduce the SDD No-Refund variant in Europe with the help of a number of sympathetic countries (including Spain, Italy, Ireland, Austria and Belgium). Unfortunately, this did not yield any results due to the fact that other countries did not see the need for this variant or did not see an opportunity to implement it.

Since the dispensation period could not be extended, and since no equivalent had been found, the option of a non-reversible direct debit for lottery companies was terminated on 1 February 2016. With the discontinuation of the local Dutch Direct Debit product, counting Lottery Direct Debit transactions has also ceased. As a result, no Lottery Direct Debit statistics are available for 2015. An overall estimate indicates that the number was around 85 million in 2015.

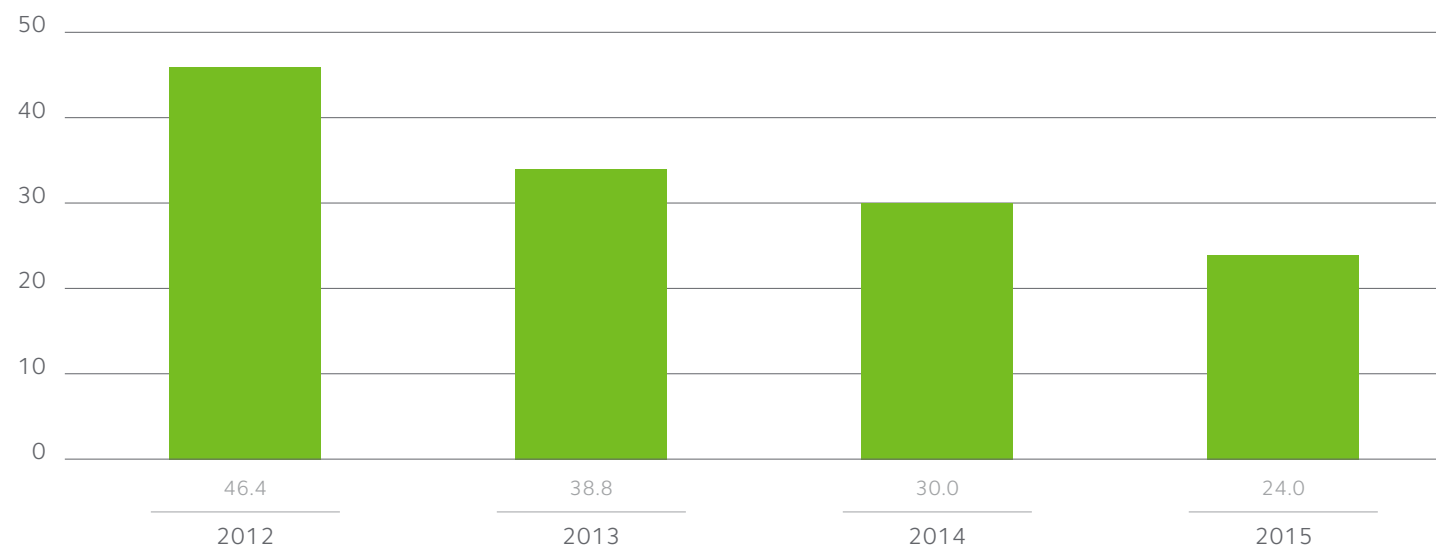
Acceptgiro and the market

The decrease in the number of processed Acceptgiro transactions, a trend that has been visible for years, continued in 2015. In 2015, 24 million paper Acceptgiros¹⁷ were submitted to the bank for processing, 20% less compared to 2014 (**figure 10**). As in previous years, the decrease was influenced by payees and consumers preferring more efficient electronic payment methods. Examples include the **European direct debit** and **iDEAL**.

¹⁷ The number of Acceptgiro payments is based on the number of processed paper Acceptgiros. This is related to the transition to SEPA and the accompanying replacement of the 'old' euro Acceptgiro with the IBAN Acceptgiro. An IBAN Acceptgiro is processed by banks as a normal European transfer (SEPA Credit Transfer). This means that an Acceptgiro that is paid via internet banking can no longer be distinguished from a regular giro payment, which is also processed as SEPA Credit Transfer. For this reason, the exact total numbers of Acceptgiro payments have not been available since 2014, only the total numbers of those processed on paper.

Figure 10: Number of paper Acceptgiro forms processed

Millions of transactions



Acceptgiros increasingly paid via internet or mobile banking

An estimate by the three largest Dutch banks reveals that around 85% of the Acceptgiros issued in 2015 were paid by the receivers using internet or mobile banking (2014: 83%). This trend has been visible for many years and is expected to continue. The decrease is especially due to the growing popularity of mobile banking, which allows customers to scan the Acceptgiro form (depending on the bank) and pay without entering any further information.

Stakeholders involved in
phase-out scenario Acceptgiro
and inquiry alternatives

FiNBOX number of providers decreases

The decrease in the use of (paper) Acceptgiros has contributed to the agreement to discontinue Acceptgiro payment options as of 1 January 2019, which was reached in the National Forum for the SEPA Migration (NFS) in 2012. In order to properly phase out this form of payment, **Currence**, as the brand owner, has initiated a realistic phase-out scenario. Top priority is considering the interests of all parties involved – distributors, consumers and banks. Existing and new alternatives – mainly digital – will be identified for the various functionalities¹⁸ historically combined in the paper Acceptgiro.

The manner in which the current paper payment orders – limited in comparison, yet still substantial – can be processed in the future is an important aspect that still needs to be worked out. The main focus is on making good alternatives available to people who do not have access or have limited access to the internet, and do not possess other digital means of communication either, such as a smartphone for mobile banking. The phase-out scenario will continue to be developed in 2016 with the involvement of stakeholders, who will also look at alternatives.

FiNBOX

FiNBOX enables organisations to send invoices and other financial documents digitally to users of internet banking services. It was developed by banks and document handling service providers. FiNBOX is more convenient for consumers and gives them a better overview of their finances. In 2015, the use of FiNBOX remained limited, while the use of alternatives increased. For example, more and more organisations are offering the ability to receive financial notifications in digital form via 'my custom web site' or via e-mail. Additionally, it is increasingly easy to pay bills using **iDEAL** or by **direct debit**.

The limited use of FiNBOX prompted ING to withdraw the service in 2016. At present, ABN AMRO and Rabobank continue to provide the FiNBOX service. The banks are currently investigating how certain features of FiNBOX can continue to be offered in the future.

¹⁸ Reconciliation based on standardised payment reference, consolidated reports, recognisability and attention value, payment request support, etc.

G accounts continue in the SEPA

After consulting with the Dutch Payments Association and the banks, the **Tax and Customs Administration** and the **Ministry of Finance** have asked the banks to continue to provide G accounts in their current form in SEPA.¹⁹ This request marked an end to the planned introduction of an alternative proposed by the Tax and Customs Administration: the Mandatory Deposit Scheme.²⁰ The banks made some adjustments in 2015 in order to enable current users of G accounts to continue using them in SEPA. Improvements were made to WKA reporting, for example, including the transition to the ISO 20022 file format.²¹

Under the supervision of the Ministry of Finance, a working group developed a vision for the future of G accounts now that the Mandatory Deposit Scheme will no longer be implemented. This working group included representatives of the users and providers of G accounts. They recommended continuing G accounts in their current form, since they are perceived to be functioning effectively. Continuation implies that the user groups will expand and the number of self-employed people who use G accounts, for example, will grow. The banks have indicated that the continuation of G accounts and an increase in the number of G accounts can only be achieved if additional efficiency measures are put in place. The modifications that were carried out in 2015, for example, do not provide for the expansion of the use of G accounts for new and/or larger groups of users. The recommendations of the working group will be presented to the Minister of Finance in the first quarter of 2016.

¹⁹ Contractors and hirers can limit their liability by paying part of the invoice into a blocked account (G account) in the name of the subcontractor. G accounts mean that subcontractors are exempted from certain taxes and social contributions. G accounts are provided by banks.

²⁰ Under the Mandatory Deposit Scheme, contractors and hirers must transfer part of the total payable directly into the indemnification account of the Tax and Customs Administration; this amount is used to pay the taxes due. The amounts are then transferred to the deposit account of the relevant subcontractor for administrative purposes; subcontractors can then use this amount to cover their tax liability or pay their own subcontractors. The Tax and Customs Administration provides the deposit account.

²¹ The WKA Report is a mandatory monthly report to the Tax and Customs Administration provided by banks with G accounts. The Tax and Customs Administration uses these reports to analyse transactions made using G accounts. The law stipulates that transfers from G accounts may only be made to other G accounts (by credit transfer) or to the indemnification account of the Tax and Customs Administration.

Necessary modifications implemented;
 additional efficiency measures
 G account desired



Activities - Stability in the payment chain

Disruptions to retail payments continue to be reduced

Increasing availability of internet and mobile banking, and iDEAL

High availability debit card
payment chain (99.8%)

Stability in the payment chain

Due to the sharp rise in the number of electronic payments, the stability of the payment chain has become an important theme for the Dutch Payments Association and its members. 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 (**demo**), the payment chain has become more complex. The Dutch Payments Association monitors the stability of the payment chain and takes action where necessary in case of disruptions.

Disruptions to retail payments continue to be reduced

Demand-side representatives, who come together in the **MOB**, have expressed their confidence in the availability and stability of the debit card payment chain on several occasions. At over 99.8%, the actual availability of the debit card payment chain was once again high in 2015, according to market participants. For every thousand payment attempts, 998 were immediately successful. In 2015, no major disruptions occurred in the debit card payment chain. This was due to a continuous focus on preventing outages by all parties involved.

Although disruption in 2015 was minimal, occasional disruption can never be fully ruled out. Several years ago, the Dutch Payments Association developed the **CONNECT** notification and information system in order to minimise the consequences of disruptions. Parties in the payment chain can use CONNECT to notify each other of disruptions, as well as planned maintenance work. The notifications sent via CONNECT enable issues to be located and resolved rapidly. Additionally, CONNECT makes it easy to inform the market of the nature and duration of a disruption. Finally, it improves the ability of market parties to schedule and coordinate maintenance activities.

Figure 11: CONNECT notifications

Disruption type. Per year

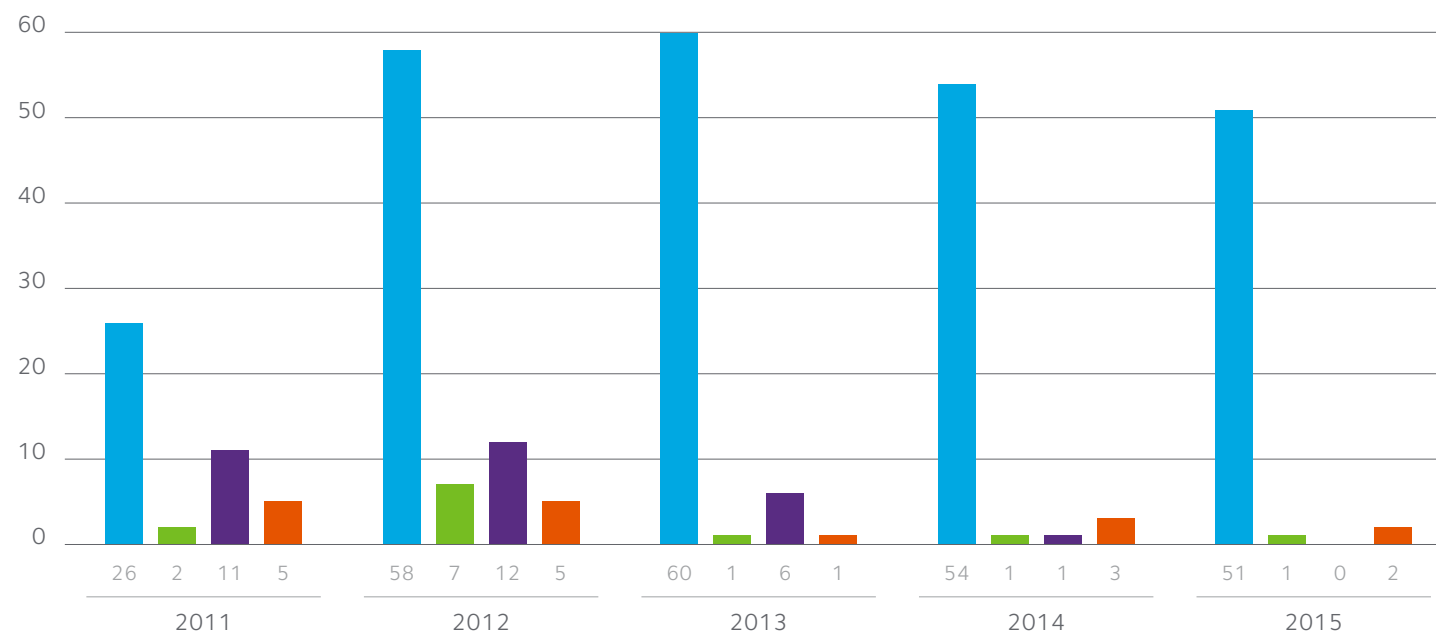
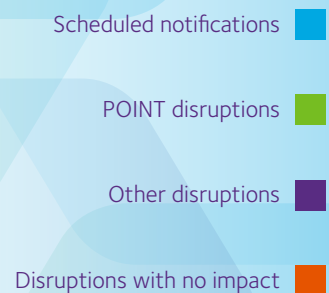


Figure 11 shows the number of notifications sent in CONNECT in the period 2011–2015, broken down by type of notification. Most of the notifications sent through CONNECT related to scheduled maintenance. The number of disruptions (POINT disruptions – debit card transactions over the internet – and other disruptions²²) fell clearly, from 13 instances in 2011 to one in 2015. Approximately 10% of all **debit card transactions** are completed using POINT, especially in small businesses. A POINT solution is cheaper than a certified connection, but also more prone to disruptions. The single disruption that occurred in 2015 was due to a brief POINT outage. In 2015, nearly 90% of all telecommunications lines were certified. The risk of an outage on these lines is limited. In two other disruptions, there was a minor issue in the payment chain for debit card payments, but this did not affect consumers because there are two parallel data centres in operation. In the event of an outage in one centre, the other takes over.

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

²² Shopkeepers or merchants can connect their payment terminal to a transaction processor using a telecommunications line certified by the Dutch Payments Association, or via the 'open internet'. The latter is known as a POINT connection.

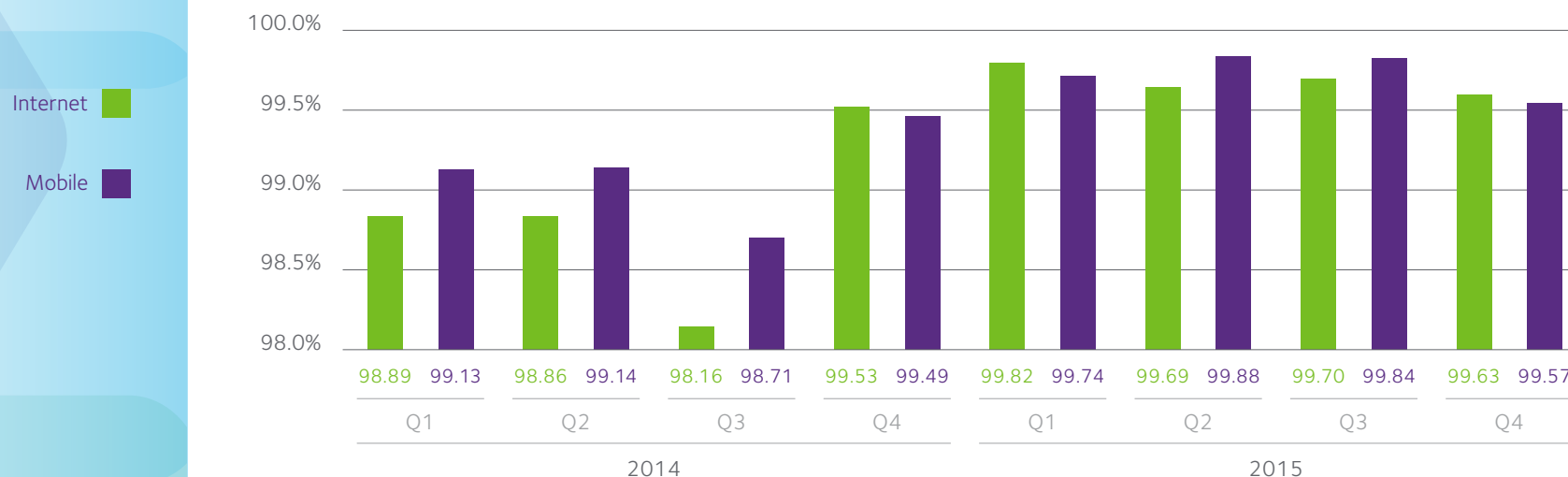
High availability internet and mobile banking and iDEAL socially important

Increasing availability of internet and mobile banking, and iDEAL

The use of internet banking (online banking via personal computers or laptops) and mobile banking (online banking via mobile banking apps on smartphones or tablets) continues to grow, as well as checking bank accounts via mobile banking and **iDEAL payments**. The social importance of the availability of these systems has increased accordingly.

Figure 12: Availability of internet and mobile banking

In percentages. Per quarter*



*) Weighted national average.

Availability of internet and mobile banking increased by measures taken by banks

Figure 12 shows that public availability of internet and mobile banking was highest in the last quarter of 2015, when it was over 99.5%. On the whole, 2015 was a considerably better year than 2014. This was primarily a result of the measures taken by the banks to prevent service disruptions. One example was increasing the capacity of the processing systems and untangling various IT infrastructures, so that a fault in the internet banking systems does not directly affect the availability of mobile banking, for example. In 2014 and 2015, the banks also took major steps to separate their internet banking systems from those used for iDEAL payments. This has resulted in demonstrably higher availability for both banking services.

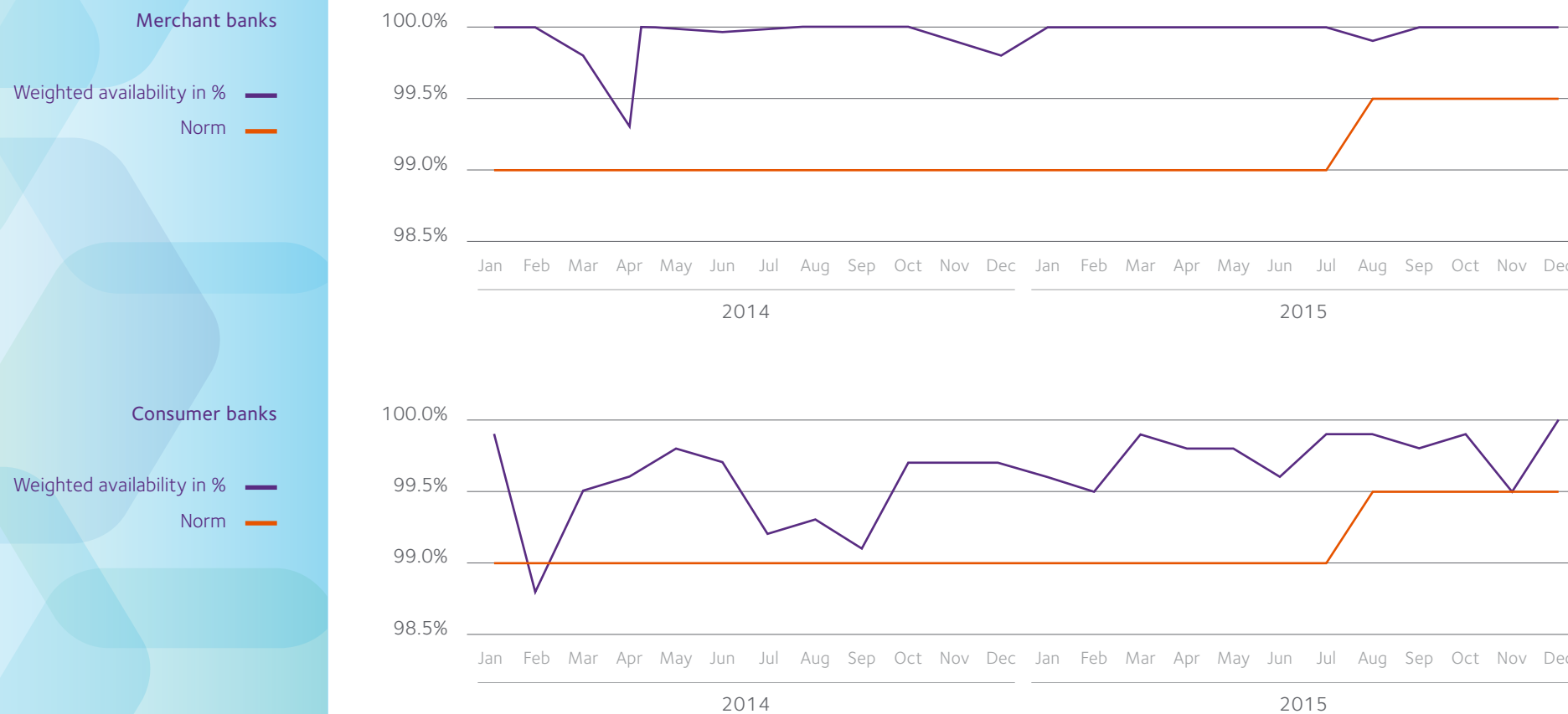
The Dutch Payments Association publishes **figures on the availability of the internet and mobile banking** on its website every quarter. Since the first quarter of 2015, **bank-specific availability figures** have also been included. The banks provide the Dutch Payments Association with regular information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

Further improvement availability iDEAL

In order to further improve the availability of iDEAL, **Currence**, in collaboration with the iDEAL licensees, decided in 2015 to raise the availability standard of iDEAL from 99.0% to 99.5% during prime time (the high-demand time period between 07.00 and 01.00) as of 1 August 2015. The old and new standards were consistently achieved in 2015, both by the consumers and the merchant banks (**Figure 13**).

Figure 13: Availability of iDEAL 2014 - 2015

In percentages, per month



Explanation: Relates to the availability of the iDEAL merchant banks (acquirers) and the iDEAL consumer banks (issuers) weighted according to the number of transactions during prime time (07h00 - 01h00).

iDEAL availability page displays
real-time availability per bank

In 2015, it was decided to expand the availability of iDEAL data by providing real-time availability information for each participating bank. To this end, the Dutch Payments Association worked with the banks to create the **iDEAL availability page**, which has been online since April 2015.

The screenshot shows the iDEAL Availability page. At the top, there's a header with the iDEAL logo and the word 'AVAILABILITY' in large letters. Below this, there are tabs for 'DASHBOARD', 'HISTORY', and 'GENERAL INFORMATION'. A message states 'All Banks are available. You can pay with iDEAL.' Below this, there are two tables under the heading 'Consumer Banks'. Each table has columns for 'BANK' and 'STATUS'. The first table lists ABN AMRO, bunq, Knab, RegioBank, and Triodos Bank. The second table lists ASN Bank, ING, Rabobank, SNS Bank, and Van Lanschot. All banks have a green checkmark in the status column. At the bottom, there is a copyright notice and links for 'Glossary', 'Links', 'Disclaimer', and 'Privacy'.

| BANK | STATUS |
|--------------|--------|
| ABN AMRO | ✓ |
| bunq | ✓ |
| Knab | ✓ |
| RegioBank | ✓ |
| Triodos Bank | ✓ |

| BANK | STATUS |
|--------------|--------|
| ASN Bank | ✓ |
| ING | ✓ |
| Rabobank | ✓ |
| SNS Bank | ✓ |
| Van Lanschot | ✓ |

iDEAL availability page.

An additional service has been developed for online retailers and other online merchants. They can subscribe to the availability page to receive notifications from each bank in the event of changes to iDEAL availability. This enables those web retailers to inform their customers of any issues, so that customers can still complete their purchase using an alternative method of payment.



Activities - Security in the payment system

Unique Dutch partnership limits cybercrime and fraud

Combatting fraud through international cooperation

Fraud in the payment system remains at a historically low level

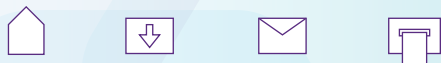
Phishing: the most common form of internet banking fraud

Internet banking security is a high priority

Debit card dispatch fraud: A new phenomenon

Public information campaigns on secure banking limit fraud

Transparency over compensation from banks



Unique national cooperation
increases the speed of action

Security in the payment system

Unique Dutch partnership limits cybercrime and fraud

Cybersecurity refers to preventing losses caused by disruptions, outages or abuse, using information and communications technology and, where such losses have already occurred, recovering them as quickly as possible. The objective of the Dutch Payments Association is to advance the security of the electronic payment system, for payment service providers and their customers. The large number of involved parties, increasing internationalisation, the strict quality requirements and the large volume of transactions make the payment system extremely complex. Any payment chain is only as strong as its weakest link; therefore cooperation between the various parties involved is vital to ensure and enhance security in the payment chain.

The Dutch Payments Association works closely together with its members and relevant government organisations to promote cybersecurity, as is in their collective interest. Knowledge and experience in the field of cybersecurity are shared and exchanged. More research and threat analyses are conducted where appropriate. Fraud mitigation measures are coordinated and implemented jointly. This domestic partnership is unique in Europe.

The cybersecurity strategy for the payment system, which was first adopted in 2014, was made more concrete in 2015. Members are involved at the strategic level through Chief Information Security Officer (CISO) meetings, and at the tactical level through a Working Group on Security. Finally, this year the Dutch Payments Association launched a regular operational incidents meeting with representatives from the banks' Security Operations Centres (SOCs).

The Dutch Payments Association considers knowledge sharing in the Financial Institutions – Information Sharing and Analysis Centre (FI-ISAC) to be very important. The members of the FI-ISAC are financial institutions and government agencies, including the NCSC, the national police and the AIVD.

Sharing knowledge and experience contributes to higher cybersecurity

The ISAC – and therefore also the FI-ISAC – strengthens the sector’s cyber-resilience by actively sharing information on threats and vulnerabilities. Where appropriate, the parties involved in the FI-ISAC agree on a joint approach. Intensive sharing of information relating to incidents, vulnerabilities, threats, trends and best practice helps financial institutions take adequate measures to increase their digital resilience still further.

Some of the members also participate in the National Detection Network (NDN). This is a public-private partnership that seeks to identify potentially significant digital risks and dangers across the sector more rapidly and effectively. By sharing information on potential threats, participants can take timely and appropriate measures to reduce or preferably prevent losses.

In 2013, the NCSC and the banks decided to further consolidate their partnership. One important aspect of this was the appointment of a bank liaison officer. The liaison officer has now been active for over two years. In addition to the close partnership with the NCSC, the bank liaison officer also works closely with other vital sectors, such as the telecommunications sector. The liaison officer consults with the telecommunications sector, government agencies and other private parties on how to combat large-scale Distributed Denial of Service (DDoS) attacks, among other things. Advances are also being made in combatting botnets. Working with the Abuse Information Exchange, the Dutch Payments Association has drawn up a protocol for banks to share information about infected PCs with the Abuse Information Exchange and, subsequently, with the affected customers’ internet service providers.

In 2015, the Dutch Payments Association made new improved arrangements with two external parties that provide information on cyber threats. They monitor for criminal apps and, where possible, issue warnings about potential threats. The members that participate in this service receive information that they use to keep their own payment traffic secure.

Dutch Payments Association signs letter of intent for cooperation with FS-ISAC

Combatting fraud through international cooperation

Not only domestic cooperation, but also international cooperation is high on the Dutch Payments Association's agenda. To this end, the Dutch Payments Association participates in the European FI-ISAC. The Dutch Payments Association chaired this organisation in the first half of 2015. The European FI-ISAC brings together banks and the Computer Emergency Response Teams (CERTs) of the governments of many European countries. The European Network and Information Security Agency (ENISA), the European Cybercrime Center (EC3; part of Europol) and the FS-ISAC (Financial Services – ISAC) are also members. The FS-ISAC is the American counterpart to the Dutch and European FI-ISACs.

In October 2015, the Dutch Payments Association and the chairman of the Dutch FI-ISAC signed a letter of intent with the FS-ISAC in the presence of the Dutch Prime Minister, to achieve closer cooperation in the field of cybersecurity. By entering into this partnership, the Dutch Payments Association and its members will establish links with hundreds of international financial institutions from 2016 onwards. This will strengthen and extend our information sources on fraud in other parts of the world, which will improve our members' resilience in relation to cybercrime.



Signing of letter of intent for cooperation with the FS-ISAC.


Fraud in the payment system remains at a historically low level


In 2015, the total amount of fraud in the payment system barely changed in comparison with 2014, continuing the historically low level of that year. The total amount of direct losses in the payment system in 2015 was 17.9 million euros (2014: 17.3 million; 2012: 81.8 million) (**Figure 14**). One major incident in 2015 led to the loss of 1.7 million euros. Excluding this amount, there was a fall in total losses of 6%.


Fraud remains at historically low level

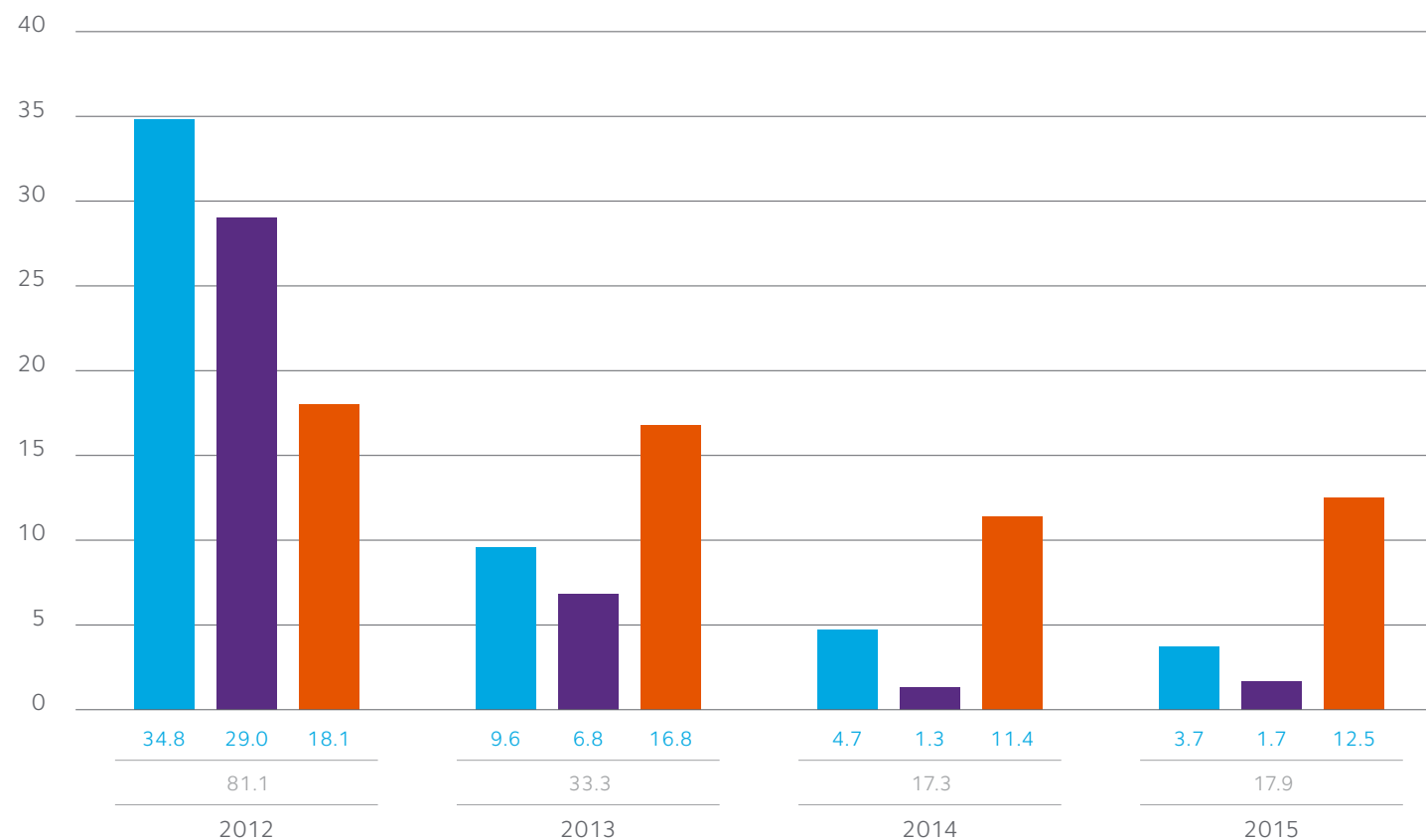
Figure 14: Losses due to fraud in the payment system 2012 - 2015

In millions of euros per year

Internet banking 

Skimming (debit card) 

Other types of fraud 



Debit card dispatch fraud: A new phenomenon

phishing fraud fell by 21%...

The largest loss occurred in internet banking (3.7 million euros) and with fraud involving lost or stolen debit cards (4.7 million). The latter category of fraud increased by 40% compared with 2014. This sharp increase was caused by a **scam that convinced consumers to mail their debit cards** that emerged in 2015 (1.8 million euros). The category of 'other fraud' also includes credit card fraud (3.3 million euros). Losses resulting from credit card fraud fell by 14% in 2015 compared with 2014, thus continuing the downward trend. The fall was caused by a decline in 'card not present' (CNP) fraud. The total losses due to 'other' fraud stood at 12.5 million (**Figure 14**).

Until mid-2013, skimming was consistently one of the two largest causes of loss; however, this form of fraud is now relatively limited (1.7 million euros). Since Dutch banks added a chip to debit cards and block the magnetic stripe for payments and cash withdrawals outside Europe (geoblocking), losses due to fraud by skimming have plummeted. Abuse of magnetic stripe skimming is still possible in countries outside Europe where the EMV chip is not widely used. Dutch debit cards also have a magnetic stripe. Thanks to geoblocking, the probability of this leading to losses is limited.

Phishing: the most common form of internet banking fraud

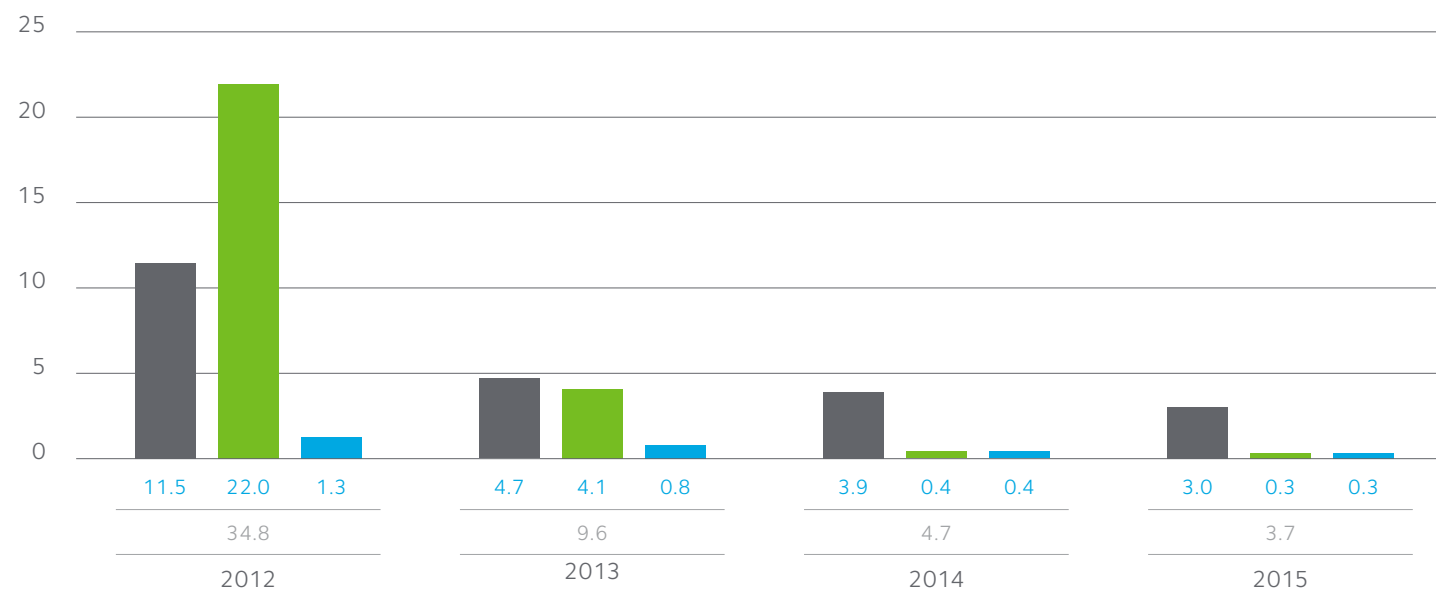
Losses resulting from internet banking fraud fell by 21% in relation to 2014 to a total of 3.7 million euros (from 4.7 million euros in 2014) (**Figure 15**). Losses fell in all categories of online banking. The internet banking category is subdivided into: malware, phishing and other fraud.

The main type of fraud in internet banking is 'phishing' – soliciting confidential personal information such as login codes. In 2015, losses due to phishing amounted to 3 million euros. That was 21% less than in 2014 (3.9 million euros) and constitutes a continuation of the downward trend that was already evident in previous years. Total losses in 2012 amounted to 11.5 million euros. Successful fraud monitoring and detection measures taken by banks meant that losses resulting from other forms of cybercrime, such as malware, were limited to below 350,000 euros.

Figure 15: Losses due to fraud in internet banking 2012 - 2015

In millions of euros per year

Phishing ■
 Malware ■
 Other ■



... despite more deceptive phishing emails

Criminals focus more on phishing, often through 'social engineering' or psychological manipulation. A common method is to send an e-mail to multiple participants in which the criminals impersonate a trusted organisation or bank. Because phishing e-mails are becoming more and more professional in appearance and now contain fewer mistakes, they are less easy to spot. Criminals often exploit current events, such as the introduction of contactless cards or new means of authentication.

Banks detect and prevent attempted fraud

Criminals also send phishing emails that appear to come from telecom providers, credit card companies or collection agencies, for example, in order to entice consumers to provide login information and other details that they can use to access to payment accounts or savings accounts. It is vital that recipients of such e-mails never provide any confidential details or enter these details into fake websites.

Public information campaigns about Safe Banking was a major focus for the Dutch Payments Association and the banks in 2015. Under the banner of Secure Banking, television commercials repeated the message 'Hang up! Click away! Call your bank!'

Internet banking security is a high priority

Banks are continuing to invest in the security of the electronic payment system by improving fraud monitoring and detection measures for both internet and mobile banking services, but also by providing information to consumers. Approximately 95% of credit transfers are now carried out over the internet and 5% by means of paper-based orders. Around 90% of the Dutch population uses internet banking. Older people in particular have now caught up with the new technology. In Europe, internet banking is most prevalent in the Netherlands and Finland.

In 2015, approximately 1.5 billion transactions were completed via internet banking in the Netherlands, with a total value of some 4,900 billion euros. The loss of 3.7 million euros represents 0.0001% of the total annual volume of transactions. From a long-term perspective, the fall in the total number of successful frauds and losses incurred is due to banks becoming better at detecting fraud and attempted fraud early and preventing it. Online banking fraud remains a significant threat, however. Banks will therefore continue to invest in the security of internet and mobile banking, while avoiding any reduction in the availability of these services. It is interesting to note that, so far, no fraud has occurred through the banks' mobile banking apps.

650 debit cards sent to criminals

Debit card dispatch fraud: A new phenomenon

At present, a number of types of fraud cannot be viewed separately from one another. Combined fraud techniques are used across different channels, including social engineering, identity theft and malware, or combinations thereof. One example of such a combination is that criminals have on occasion managed to acquire debit cards via phishing e-mails asking consumers to send their card by post. The cards are then used to withdraw money fraudulently and to pay for luxury goods. In such cases, the victim has often disclosed the PIN code via a phishing website set up by the criminals. In 2015, criminals were able to acquire approximately 650 debit cards in this manner, which they used to steal 1.8 million euros. Public information campaigns on secure banking in 2016 will therefore concentrate on this new method.



The new message of Secure Banking campaign: 'Never send your debit card anywhere!'

Public information campaigns on secure banking limit fraud

Knowing more about fraud involving online banking and the use of PIN codes makes consumers smarter. Consumers become more aware of these types of fraud as a result of public information campaigns, which makes them less likely to fall victim, in turn reducing losses due to fraud. Such campaigns can also contribute to more positive perceptions of the payment system. In 2015, the Dutch Payments Association cooperated closely with its members to provide information via television, the internet and newspapers. The members also made a contribution here by focusing on this task themselves.

Sequel to safe banking commercial in 2016

The 'Hang up! Click away! Call your bank!' commercial from 2013, in which a sports instructor shows viewers how to protect themselves against internet fraudsters raised public awareness of this anti-phishing slogan. In 2015, the commercial was shown on television over a four-week period. To publicise the message in a new way in 2016, in partnership with the banks, the Dutch Payments Association produced a **sequel to the successful commercial**. This time there was a new message: **'Never send your debit card anywhere!'** In January 2016, the campaign was launched on the television programme **'Opgelicht?!'** (Ripped Off?!).



We cannot repeat it enough: 'Hang up! Click away! Call your bank!'.

Young people: 'Use a banking app!'

In 2015, the Dutch Payments Association and the banks also worked on an online campaign. Research conducted by various banks indicated that some young people (18–25 years) believe that banking apps are not secure. Ensuring that younger people are better informed encourages the use of mobile banking apps. On YouTube and through bloggers and vloggers, more information was disseminated to young people about using banking apps on their smartphone or tablet, emphasising how secure they are. Although young people rarely watch commercials and advertisements for safe banking via apps could be clicked away quickly and easily, 78% of the **four different advertisements** were viewed in their entirety, which is a relatively high percentage.



Online campaign: 'Use a banking app!'.

Prevent shouldering:
enter PIN code discreetly

Since 1990, over 30 billion PIN codes have been entered at payment terminals, alongside regular use of ATMs. Entering PIN codes has become a matter of habit for everyone. However, criminals can often easily look over people's shoulders while they enter PIN codes ('shouldering') and then steal their debit card. Since the losses associated with fraud due to shouldering in 2014 still ran into several millions, it is important to continue to draw attention to the need to enter PIN codes discreetly. This is confirmed by the findings of research conducted by the Dutch Payments Association, which reveal that almost half of all consumers indicated that they are easily distracted when entering their PIN code. In 2015, the Dutch Payments Association created an advertisement that was published several times in various newspapers: 'December is the festive season for thieves too. Keep your PIN code private!'



Advertisement showing how to prevent shouldering.

In October 2015, the new **Secure Banking website** went live. This site will be used by the Dutch Payments Association as a platform to communicate about the latest forms of fraud. It has been made easier to navigate, making the written information easier to read. In addition, the site is now suitable for any screen size and can therefore easily be viewed on smartphones or tablets.



www.veiligbankieren.nl

Transparency over compensation from banks due to uniform security regulations

'Uniform security regulations for electronic banking and payment for private individuals' have been drawn up in consultation with the **Dutch Consumers Organisation**. Complying with these security rules will ensure that consumers can use electronic banking and payments confidently and securely. If consumers still fall victim to fraud, they can rest assured that they will be refunded by their bank for any losses. These security regulations entered into force on 1 January 2014. The five rules received both positive and negative publicity in the media. Inaccurate suggestions were (and are still) occasionally made to the effect that by drawing up these regulations, the banks were seeking to shift responsibility for fraud onto their customers. However, since their publication, there have been no signs that banks have evaluated cases of fraud any more critically or less often than previously, or that they have been any less willing to reimburse those affected for any losses incurred. In 2015, consumers were compensated for 98.9% of losses due to fraud via online banking.

98.9% of losses due to fraud compensated



Board and management

Board and management

As specified in its statutes, the Dutch Payments Association's Board of Directors comprises nine members: three independent members, including the chairman, and six members who are affiliated with members of the Dutch Payments Association. Banks with a market share of more than 10% may each nominate a Board member. Members with a market share of less than 10% are together entitled to nominate a maximum of three members. Upon the establishment of the Dutch Payments Association, it was agreed that the three remaining seats would be allocated to medium-sized banks, smaller banks and payment institutions and electronic money institutions (EMIs).

On 11 May 2016, the board was composed of the following members:

The three independent board members:

- Henk Brouwer (1946), former Director of De Nederlandsche Bank, Chairman
- Henk van den Broek (1952), former Board Member of the Dutch Retail Council, Vice-Chairman
- Mijntje Lückcrath (1968), Professor of Corporate Governance at Tilburg University

Board members representing the banks:

- Bart Schlattmann (1969), COO of ING Netherlands, Treasurer
- Rob Kemna (1960), Senior Executive Vice President of Operations at Rabobank
- Position vacant, representing ABN AMRO Bank
- Alexander Baas (1966), COO of SNS Bank, representing the medium-sized banks
- Edwin Hartog (1966), Head of Cash Management Corporates & MT member at Deutsche Bank Netherlands, representing the smaller banks
- Position vacant, representing payment institutions and EMI's

The three independent members have a unique position within the Board of Directors. The governance of the Dutch Payments Association concentrates on open, objective and clear rules that are no more stringent than necessary. This governance guarantees free market access and affords the possibility of independent appeals. This means that the independent board members have a collective power of veto in adopting and amending rules with regard to standards, and policy and procedures relating to certification and supervision. They also have a majority in the Appeals Committee charged with the arbitration of disputes with the Dutch Payments Association.

They are appointed on the grounds of a binding nomination by the Selection and Appointments Committee. The other members are appointed on the grounds of a binding nomination by one or more members.

Nominations and appointments are made in accordance with the profile of the board directors.

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

The management team consists of:

- Piet Mallekoote (1954), General Director
- Gijs Boudewijn (1958), Assistant Director
- Marco Demmink (1961), Secretary



Governance

The Dutch Payments Association comprises several organs

The Dutch Payments Association focuses on cooperation



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).

Betalingsverkeer Services B.V.

The employees of the Dutch Payments Association are officially employed by Betalingsverkeer Services B.V. This company was taken over by the Dutch Payments Association from Currence Holding B.V. on 1 July 2014.

Agreements have been made with **Currence** concerning relevant employees continuing Currence's former activities.

At the end of 2015, Betalingsverkeer Services B.V. employed 44 people (41.8 FTEs). The Dutch Payments Association also employed several temporary, specialist staff for specific projects.



The Dutch Payments Association focuses on cooperation

In order to carry out its tasks, the **Dutch Payments Association** has set up an Advisory Council and member working groups to discuss matters such as policy preparation. In addition, it actively consults with representatives of end users and other stakeholders on behalf of its members. It also cooperates closely with a number of Dutch organisations whose activities relate to the payment system. For example, the Dutch Payments Association participates in the MOB, which works to improve the efficiency of the Dutch payment system. It also engages in periodic consultation with the **Dutch Banking Association (NVB)**, which represents the interests of its members in the sector. Finally, it maintains a close relationship with **Currence**, the owner of the remaining national payment products.



List of members

List of members

11 May 2016, the Dutch Payments Association had 57 members that provided payment services.

| | | |
|------------------------------|---------------------------|-----------------------------|
| ABN AMRO Bank | CCV | KBC Bank |
| Acapture | China Construction Bank | Van Lanschot Bankiers |
| Achmea Bank | Citco Bank | LeasePlan Bank |
| Aegon Bank | Citibank | Lombard Odier |
| American Express | Commerzbank | Mizuho Bank |
| Amsterdam Trade Bank | Credit Europe Bank | MUFG Bank |
| ASN Bank | Delta Lloyd Bank | Nationale-Nederlanden Bank |
| ASR Bank | Deutsche Bank | Nederlandse Waterschapsbank |
| Bank Insinger de Beaufort | DHB Bank | NIBC Bank |
| Bank of America | Docdata Payments | PaySquare |
| Bank of China | GarantiBank International | Rabobank |
| Bank of Scotland | GWK Travelex | RegioBank |
| Banque Chaabi du Maroc | Handelsbanken | Royal Bank of Scotland |
| Bank of Tokyo-Mitsubishi UFJ | HSBC Bank | SNS Bank |
| Binck | ICBC | Société Générale |
| BNG Bank | ING Bank | Staalbankiers |
| BNP Paribas Fortis | Ingenico Payment Services | Triodos Bank |
| Buckaroo | InterEGI | UBS Bank |
| bunq | KAS BANK | Volkswagen Bank |