



National Strategy for Cashless Payment
Instruments
2019-2024

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INTRODUCTION

France's national strategy for payment instruments, which was published in autumn 2015, tasked the National Cashless Payments Committee (CNPS) with steering efforts to modernise cashless payment instruments, in particular by facilitating card payments, preparing innovative payment solutions, such as instant payments, mobile payments and electronic invoicing, and identifying cheque alternatives. Now that many of the identified measures have been carried out, and with new trends emerging on the French and European payments market, the time has come to renew this national strategy.

Regulatory developments promoting competition between participants have combined with impetus from technological innovation to redraw the payments landscape. In a four-pronged shift, new participants are arriving on the scene, innovative technologies are spreading, the actual act of paying is becoming less clearly delineated, and payment services are becoming more available.

These broad trends have led to the emergence of a number of major challenges relating to (i) security, as innovative but not always mature technologies proliferate, (ii) independence vis-à-vis the bigtech players taking on a bigger role on the payments market, and (iii) convergence, given the risk that the European market could refragment as non-harmonised solutions take shape in the post-Single Euro Payments Area (SEPA) environment.

All these developments, however, continue to be centred around an unchanging core group of payment instruments: no matter which types of participants are involved or which innovative payment solutions are provided to users, these trends are based on payment cards, which are still preferred for the vast majority of mobile phone or electronic wallet payment solutions, and SEPA instruments, including credit transfers as well as direct debits.

To address the shared European challenges, the national strategy needs to be renewed. In addition to pursuing the current initiatives aimed at modernising payment solutions, the new strategy must affirm the need to get the entire French marketplace behind the goal of deepening the European cashless payment instruments market.

This new goal may be organised into three strategic action areas, broken down in their turn into operational measures:

1. **Continue efforts to promote secure electronic payments that benefit society.** The aim is to **build on the previous strategy**, which sought to modernise French payment instruments by facilitating their dematerialisation. However, this action area adjusts the original goal to reflect recent developments on the payments market, specifically including the trend towards convergence between instruments, in order to **capture payment solutions rather than merely the underlying technical instruments**. This area also seeks to do more to integrate the **question of protecting payments against new cyber-risks**. The role of payments in society is also stressed, and specifically the **need to ensure that the modernisation process benefits all users**.
2. **Support innovation with security and vice-versa.** To do this, the actions taken in this area involve **identifying themes and measures that will shape the future of the payments market and where the CNPS can play a role as a catalyst for initiatives on the French market**. Work in this area is intended to contribute to European solutions. It will be supported at the operational level **by increased synergy between the payment sector and major national initiatives**, which can act as a springboard to deploy innovative technologies that will advance French know-how.
3. **Contribute to the European goal of deepening the single payments market.** The aim here is to pursue and implement European payment solutions. This area comprises actions that cover, among other things, **identifying gaps in terms of solutions on the European payments market and promoting SEPA as a model for developing innovative solutions, particularly linked to instant payments**. It also includes **proposals to adjust France's institutional architecture** by overhauling the marketplace bodies that play a central role in the field of payments.

BACKGROUND

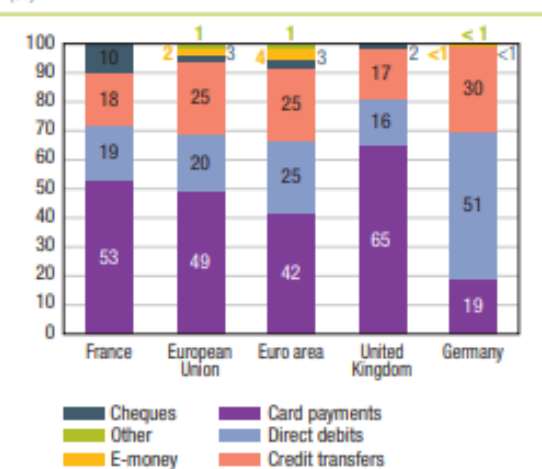
1. Stocktaking and developments in the cashless payments market

1.1 SEPA and the national strategy have shaped the landscape in cashless payment instruments

With a cashless payments market worth EUR 27.575 trillion on 24 billion transactions in 2017, France is the third-largest issuer of cashless payments in Europe after the United Kingdom (UK) and Germany. While the way the market is structured around four main types of instrument – card, credit transfer, direct debit and cheque – has been relatively unchanged for some years, the French market has several distinctive features:

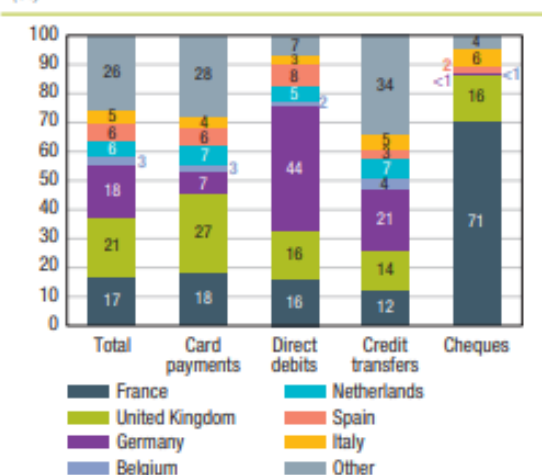
- **Cards dominate:** volume-wise, more than one-half (53%) of all cashless transactions carried out in France are done using cards, which therefore remain the preferred payment instrument of French people, a trend that is becoming more pronounced with the rise of contactless card payments. This is a higher proportion than the average for card payments (49%) in the European Union (EU). As a result, France generates 18% of the total number of card payments in the EU, behind the United Kingdom on 27%;
- **Relatively little use of direct debits and credit transfers:** although direct debits and credit transfers are the second- and third-most commonly used instruments among French people, accounting for 19% of total volumes in the case of the former and 18% for the latter, these payment instruments see relatively less use compared with the situation elsewhere in Europe. This is especially true for credit transfers, which account on average for 25% of the total volume of cashless payments carried out in the EU;
- **Continued use of cheques:** cheques still account for 10% of all French cashless transactions, putting France top of the European rankings for cheque usage. In comparison, cheque payments account on average for about 3% of all cashless transactions carried out in the EU.

Chart Breakdown of volume of transactions by payment instrument and geographical area (%)



Sources: Banque de France and European Central Bank.

Chart Breakdown of volume of transactions by payment instrument and country (%)



Sources: Banque de France and European Central Bank.

The national strategy for payment instruments published in October 2015 took an approach that was based on payment instruments and centred around the overall objective of dematerialisation. Accordingly, the strategy was structured around four main pillars:

- Provide more opportunities to pay by card;
- Facilitate contactless payments by card and mobile phone;
- Facilitate the use of credit transfers and speed up payment transactions;
- Review the conditions for using cheques.

Implementation of the strategy was thus intended to amplify the broad trends on the payments market by keeping step with the decline in cheques and supporting the use of credit transfers and cards, notably through the development of contactless payments. Recent fraud trends in these payment instruments offer support for this approach, with cheques seeing a material increase in fraud amounts, in contrast with the situation in cards and credit transfers¹. This core group of instruments, which remains relatively stable pending the introduction of instant credit transfers, is however featuring increasing variety in terms of how instruments are being used (cf. 1.2., Spreading technologies).

Finally, implementation of the strategy was based – and must continue to be based – on the principle of neutrality and freedom of choice in payment instruments. Security and effectiveness are the key parameters of the strategy, since they are needed to ensure confidence in the currency. A neutral stance makes it possible to reconcile two objectives:

- promote electronic payment instruments by removing the obstacles that stand in the way of increasing their use;
- maintain the universal role played by cash, which must continue to be an easily accessible payment instrument for anyone who needs to use it and especially the most vulnerable sections of society.

1.2. Major developments on the payments market

The four big trends below sum up the drastic changes over recent years in how the act of making payment is structured:

Spreading technologies: the arrival of internet technologies and multifunction devices has changed the ways that people pay. Whereas a few years ago the only payment options involved paper or plastic instruments, payers and payees alike can now choose from a wide array of tools to initiate and receive payment, including personal computers, smartphones, tablets and connected objects such as bracelets and rings. At the same time, a growing number of technical channels is being employed to make payments, including internet (through online banking and mobile apps) and contactless payments (NFC, QR codes² and more).

Arrival of new participants: the first European Payment Services Directive (PSD) and the two European Electronic Money Directives, which were adopted in the 2000s, put an end to the monopoly held by banks over the provision of payment services by creating the streamlined prudential categories of payment institution and electronic money institution. These regulatory developments sparked increased competition on the payments market, which began to feature not only more participants but also greater diversity in their backgrounds.

Accordingly, providers of internet-related services and technologies, such as GAFAM³ and fintech firms, mobile telephony companies, including manufacturers and operators, and major retailers have all entered the payments market. They compete and cooperate in equal measure with traditional players, i.e. banks and card payment schemes, whether in the development of new universal payment

¹ Cf. 2017 Annual Report of the Observatory for the Security of Payment Means, <https://www.banque-france.fr/rapport-annuel-de-observatoire-de-la-securite-des-moyens-de-paiement-2017>

² Quick Response Code: here, payment is initiated/conducted optically as encrypted graphical data are scanned and exchanged between the payment terminal and the holder's device.

³ Google, Amazon, Facebook, Apple and Microsoft.

solutions or private and closed-loop solutions based around platform economies (Amazon, Alibaba, Cdiscount, etc.⁴).

Dilution: payment, particularly in online commerce, is often considered by merchants as a fussy step can put shoppers off buying. For this reason, it is increasingly being integrated within the transaction process to minimise its impact from the payer's perspective. Developments in this regard include "one-click" payments based on settings that are predetermined online or using applications, and the introduction of cashierless stores in the bricks-and-mortar retail sector. Moreover, the emergence of the "Internet of Things"⁵ is creating new situations where the payment act vanishes within an automated process. However, this does not appear to be affecting the underlying payment solutions for the moment.

Instant, continuous and total availability: to respond to demand from some retailers and consumers looking to be able to use received funds promptly, the issue of managing these flows in real-time is being raised with some urgency. The emphasis being placed on immediacy often goes in hand and hand with demand for continuously available (24/7) payment services. As a result, more and more countries have developed instant interbank payment solutions to offer this type of availability to bank customers. The UK's Faster Payments service, for example, does this by enabling faster credit transfers. The SEPA instant credit transfer system introduced in November 2017 is designed to do the same for euro payments. Major card industry participants are also getting in on the trend, developing platforms that can be used to process payments in real time.

Furthermore, the rise of online retailers with a worldwide presence as well as of major retailers that operate internationally has spurred the emergence of payment services providers that promise to provide a constant level of service to their customers wherever they are, while complying with different domestic and regional regulatory frameworks.

2. Emerging global issues and specific features of the French market

New global issues are emerging in this overall context. In addition, the French market has specific features that need to be properly identified before appropriate domestic strategies and priorities can be proposed.

2.1. Emerging global issues

The broad developments affecting the payments market have set the scene for the emergence of three global issues, which the new payments strategy must address:

Security: the use of innovative but not always fully mature technologies raises security questions that are even harder to address given the current proliferation of new solutions. User confidence, however, is critical to the recognition and development of these solutions. Security concerns encompass the following points:

- *New technological risks*, namely operational risks that are directly linked to the new payment ecosystem, with cyber-attacks top of the list. Reductions in the time taken to bring new solutions to market, and the use of immature technologies, such as blockchain, new biometric identification techniques and artificial intelligence, are contributing to increase the risk of vulnerabilities and security gaps, whose scale is hard to judge.
- *Payment data protection:* with non-face-to-face payments on the rise and requiring increased circulation of payment data, the question of protecting sensitive payment data as defined by Europe regulations, namely the data used to initiate payments, which include bank details, card numbers but also online account identifiers, is becoming an ever more pressing issue. In this respect, the development of tokenisation techniques, which are used to turn sensitive data into

⁴ To take an example from the 2000s, eBay enabled the emergence of PayPal, an electronic wallet solution, whose integrated approach has been or is being adopted by many firms.

⁵ An example of this trend would be the new connected household appliances that can identify a household's shopping needs and place an order with a supplier, without the need for the owner to do anything.

digital tokens⁶ comprising sets of indecipherable characters, is an action area with central importance to improving security during the transmission of these data. These techniques, which for now are primarily being used in the field of card payments, are set to be expanded to SEPA payments.

The question of protecting payment data also raises the issue of defining the scope of these data, at a time when more and more data (biometrics in the broad sense, i.e. physical characteristics but also behavioural traits, such as shopping and browsing habits and geolocation, browsing devices used, etc.) are being used to analyse and make payments.

- *Compliance of new payment solutions with anti-laundering and fraud requirements:* implementation of SEPA instant credit transfers must be accompanied by technological upgrades for transaction screening tools, notably to allow them to operate in real time.
- *Make secure customer journeys more seamless:* the temptation for merchants to prioritise user-friendliness over security could be a source of new vulnerabilities further out if new practices and new systems are not simultaneously introduced to improve early fraud detection.

Independence: European participants are lagging behind, as most of the new products and services emerging in the value chain are coming from non-European firms. This is creating greater uncertainty about the capacity to deploy new solutions that meet users' needs within the framework of a single European market independently of the international development strategies of non-European players. This situation also presents a challenge for regulatory authorities in terms of overseeing and supervising the activities that they cover. This trend is already in evidence in the following areas:

- *Processing payment transactions:* to give an example, the majority of cross-border card transactions in Europe are processed by non-European firms. This heavy reliance on participants based outside Europe may create a risk for European economic activity and its independence, insofar as these participants may not share the priorities set by the European agenda, notably as regards protecting personal data and deepening the European payments market.
- *Providing payment solutions:* at a time when more and more non-European participants are acting directly or through partnerships to launch solutions in Europe that enjoy substantial network effects, the solutions proposed by participants based in Europe remain highly fragmented.
- *Providing the hardware needed for payment:* the soaring rise of mobile phone-based payments has turned some non-European manufacturers into key participants over which European authorities have little control. Looking ahead, this situation could potentially result in the initiation of payment transactions in Europe being dependent on decisions that are outside the jurisdiction of European authorities.
- *Managing payment data, i.e. the location where payment-related data are processed and stored:* Given that data (and more specifically payment data) represent a major issue for many participants, and protecting these data is a priority for European authorities, the geographical location of processing centres has become a crucial matter for European payment firms and regulators. Participants outside the jurisdiction of European authorities mostly handle the management of tokens, which are critical to protecting transactions, currently for cards, but soon for credit transfers as well. A related issue is the growing use of public clouds by many European payment firms, which creates the risk of loss of control over data hosted via these services.

Convergence across instruments: one of the main challenges facing the payments market, in the current setting of technological innovation and the arrival of new participants, is to avoid further fragmentation and keep up momentum that is supportive of continued convergence across payment instruments. This convergence is currently taking two forms in SEPA:

- Efforts to bring the operating procedures of different payment instruments (credit transfer, direct debit but also card payments⁷) closer together, whether in terms of their IT format (SEPA or Nexo standard), processing times (by increasingly targeting a real-time approach) or the management

⁶ Substitute digital aliases or identifiers with a limited life and/or function (internet vs. face-to-face), which are used to desensitise the identifiers that they replace and that are theft and fraud targets, including payment card numbers but also account identifiers such as IBANs.

⁷ In the area of cards, standardisation work of the type led by Nexo aims to use the ISO 20022 format, which is the format used for SEPA credit transfers and direct debits.

of related operations, such as interbank error management messages and transaction confirmations.

- The possibility of using Application Programming Interfaces (APIs), both by payment instrument issuers (example: under PSD2, non-banks get to access payment accounts to initiate secure credit transfers), as well as users, especially merchants. APIs make it possible both to facilitate the technical integration of a new payment instrument and optimise the choice of payment instrument at the point of acceptance based on customer habits and merchant preferences. As a result, it becomes possible, in a way that is transparent to the user, to activate payments by selecting underlying instruments based on the circumstances, i.e. according to the combined payer/payee profile, internet availability, etc., while adopting an identical initiation method, which touches on the broader question of the customer's journey. The development of these interfaces, not only at the banking level but also at the individual level of firms such as merchants, raises the question of an API ecosystem.

2.2. Specific issues on the French market

These global emerging issues are compounded by issues that are specific to the French cashless payments market and that must be addressed as well when establishing a national payments strategy.

A key market in Europe: because of its size⁸, but also because of its tourism appeal, the French payments market is a key market in Europe.

An extremely mature market, with limited growth potential, similar to many other European markets. The bank account penetration rate in France is close to 99%, and around 96% of French people have a payment card. This mature environment, the result of concerted interbank efforts in France since the 1970s to encourage the spread of payment cards, is now prompting fierce competition among participants to capture exogenous innovations, which is undermining the market's capacity to innovate within a cooperative framework.

Increasingly weak when it comes to developing large-scale community projects. This is a direct consequence of the French market's maturity. But maturity is not the only obstacle, since other European communities (Spain, Italy, Netherlands) have successfully overcome this problem to launch widely disseminated innovative marketwide solutions, such as Bizum, Jiffy and iDeal.

A powerful domestic card payment scheme. The CB Bank Card consortium makes the French market stand out in Europe. The power of this domestic scheme, which can be attributed to historical reasons linked to the driving role played by the French banking community in the development of card payments (stripe first, chip since 1992), has had four main consequences:

- **Banks enjoy a competitive edge on the European card acquisition market** beyond card issuance, since few other communities can boast such a domestic system.
- **France has a number of payment industry heavyweights.** After building up industrial expertise and know-how in France, these firms have gone on to become leaders in their fields both in Europe and worldwide⁹.
- **Very specific standards and protocols** have enabled France to hold onto technological know-how. However, these standards and protocols could also become an obstacle, for example to developing pan-European innovations (notably via large merchants) or repatriating foreign-card payment-flow processing centres to France.
- **Heavy reliance on cards:** the central role of cards in the French payments landscape could cause the national community to fall behind other communities in emerging forms of payment such as instant credit transfers.

⁸ Not counting the UK, France ranks first with 18% of card-related volume flows. The value of transactions was almost twice higher than in the second-placed country, Germany. Cf. https://www.banque-france.fr/sites/default/files/media/2017/02/16/cmp_2016_gb.pdf

⁹ This list includes companies such as Ingenico and Gemalto.

PROPOSED ACTIONS FOR INCLUSION IN A NATIONAL STRATEGY 2019-2024

I. Continue work on secure electronic payments that benefit society

The 2019-2024 strategy will build on steps already taken to modernise the range of payment instruments offered in France. At the same time, it will adjust to reflect new challenges by proposing a more comprehensive approach that no longer centres solely on payment instruments as such, but also on solutions in the broad sense, adopting the perspective of different payment segments (person-to-person, business-to-business, client-to-merchant, etc.) and customer journeys. By taking this approach, it should be possible to organise the French community more effectively to cope with challenges in the area of retail payments. The renewed strategy will also address the need to protect new electronic payment instruments, especially against the increased risk of cyber-attacks. Last but not least, efforts to modernise payment instruments must not take place at the expense of the most vulnerable users: the CNPS must therefore ensure that the French community adopts an inclusive approach that puts the new payment instruments at the service of society.

1/ Pursue efforts to digitalise payments

The new strategy must build on efforts already undertaken to develop the use of electronic payment instruments, and particularly SEPA payment instruments. On this basis, the new strategy could concentrate its efforts around four main segments: payments between consumers and merchants, payments issued and received by companies, payments issued and received by the government, and person-to-person payments.

1.1. First, complete the deployment of SEPA payment instruments

The introduction of the SEPA instant credit transfer (SCT inst), which is being taken forward at the political level by the Euro Retail Payments Board (ERPB) and the CNPS, will strengthen the foundation of the European payments market, with technical harmonisation driven by shared IT standards and low utilisation costs (possibility of higher volume flows). These various elements that make up SCT inst will contribute to Europe's independence in the area of payments. Successful implementation of the full range of SEPA payment instruments shall thus act as the basis for the medium-term development of effective European payment instruments that are suited to different payment situations.

Action

- **Continue following work aimed at implementing SEPA instant credit transfers at the level of the banking industry**

1.2. Step up use of electronic payments in consumer/merchant relations

Stepping up the use of electronic payment instruments in merchant/consumer dealings will be based primarily on pursuing actions taken in recent years in this area, including steps to facilitate the use of payment cards in point-of-sale payments. The deployment of card-based contactless payments has been truly successful, with the number of transactions doubling between 2016 and 2017. In fact, over 2017 as a whole, more than 1.2 billion contactless payments were recorded¹⁰. This development must be continued, notably by promoting the acceptance of this payment approach by all merchants. Furthermore, the emergence of neobanks and overdraft-free product ranges provided by traditional banking networks is fuelling strong growth in zero-floor limit cards for a wider public that extends beyond more vulnerable client segments¹¹. The acceptance of these solutions, including in contactless mode, needs to be facilitated.

¹⁰ Statistics provided by the 2017 Annual Report of the Observatory for the Security of Payment Means.

¹¹ These cards are widely used by customers who prefer 100% online banks or products without overdraft facilities, which are often less costly.

However, the actions contained in the 2015 strategy need to be accompanied by work aimed at developing other electronic payment methods, especially based on SEPA payment instruments, which will make it possible to expand the range of available instruments.

Accordingly, the goal of the work done by the CNPS will be to prioritise a cross-cutting approach that unlocks synergies across different payment instruments by putting the emphasis on harmonising customer journeys to make them simpler, faster (trend towards real-time processing) and more automated (more effective integration of related transactions such as refunds and returns).

Actions

Payment cards:

- **Adapt all electronic payment terminals to handle zero-floor limit cards and enable these to be accepted by merchants**
- **Promote the acceptance by merchants of contactless payments and card payments starting at €1**
 - Fit all electronic payment terminals with a contactless function by 2020 (continuation of the first national strategy)
- **Widen the scope of professions that accept card payments and other electronic payment instruments**
- **Explore the options for tax incentives to promote the acceptance of payment cards for members of chartered management centres**

Electronic payment instruments:

- **Study possible synergies between electronic payment and SEPA circuits, especially at the level of acceptance, but also for authorisation and/or authentication**
- **Support the development of multi-instrument community payment solutions that can offer harmonised customer journeys irrespective of the underlying instrument (card or instant credit transfer for example)**
- **Encourage the interoperability (based on standards) or interconnection of existing payment solutions and electronic wallets; include these two objectives in future initiatives**

1.3. Foster electronic approaches in business payments

Businesses still use cheques in many situations, as shown by work done by the CNPS under the first strategy. To reduce cheque use, the new strategy must seek to support businesses in adopting electronic alternatives, especially those based on SEPA instruments.

Increased business use of electronic payments will also be achieved by deploying electronic solutions for the processes associated with payment, both upstream, through electronic invoicing, and downstream, through electronic receipts. In other words, the aim of reducing paper needs to cover the entire cashless payments chain, i.e. not only the instruments themselves but also associated processes.

All of these actions – and especially improved integration of payment and electronic invoicing – should allow businesses, by upgrading their payment-related processes, to drastically reduce payment times, with a view to eradicating this issue, which is a source of financial fragility, especially for small and mid-sized enterprises (SMEs).

Actions

- **Foster the adoption of SEPA instant credit transfers in business to consumer (B2C) dealings (fee refunds, settlement of insurance claims, etc.) and in business to business (B2B) dealings (invoice payment, etc.)**

- **Promote wider use of the European electronic invoicing standard¹²**
- **Study the conditions for gradually introducing, through legal measures, electronic invoicing in B2B relations**
- **Continue work on referenced credit transfers and the use of harmonised fields where applicable**
- **Promote an electronic approach to the entire payment chain, including electronic invoicing; conduct research into other areas that could be dematerialised, such as receipts**

1.4. Continue to encourage electronic payments in dealings with government

The rules established by the government on the payment instruments that it accepts or uses play an important role in promoting innovation within society as a whole. In this setting, the new strategy must seek to support actions by public entities to modernise their payments, and help to create, alongside central government, new trends that will provide the momentum needed to firmly establish the use of electronic payment instruments.

Actions

- **Support the deployment of Payfip¹³**
- **Assess the possibility of reducing cheque acceptance ceilings for payments to public entities**
- **Study the development and adoption of Request to Pay messages¹⁴ to create new uses for SEPA instruments (especially to replace B2B cheques, cf. part I.1.3, or in electronic invoicing) and study the driving role that public entities could play in their dissemination**
- **Encourage public entities to adopt the use of modern electronic payment instruments, including SEPA instant credit transfers when dealing with users (adjustments, government assistance payments, etc.) and referenced credit transfers (cf. previous point on Request to Pay messages)**

1.5. Promote the use of electronic payments between individuals

Paper payments remain the preferred route for users in the person to person (P2P) segment. This is partly due to the underdevelopment of electronic payment solutions in this segment, which in turn reflects the considerable fragmentation of the existing solutions. The new strategy must therefore seek to encourage market participants to offer individuals new alternatives to paper payments for their P2P transactions, providing the most universal solutions possible (e.g. community electronic wallet solutions such as France's Paylib system). This work could also be accompanied by specific legislative measures aimed at fostering the development and usage of electronic P2P payment solutions.

Actions

- **Support the development of community P2P payment solutions that work within a European perspective**
- **Explore potential measures aimed at fostering the development of electronic P2P payment solutions**

¹² Standard EN 16931-1 on electronic invoicing and the list of compliant syntaxes CEN/TS 16931-2.

¹³ Multi-instrument (card, direct debit) online payment solution offered by France's DG Public Finances (DGFIP) to all public entities, including local government, cf. <https://www.collectivites-locales.gouv.fr/payfip>.

¹⁴ Message sent by a beneficiary to a payer containing a set of payment information (reference information, amount, target account identifiers) and designed to facilitate the issuance of a credit transfer type payment order by the payer. Can be automated.

2/ Increase security for cashless payment instruments and associated data

Moving to electronic payments must not be at the expense of security, which is a basic requirement. In this respect, support for electronic payments must be accompanied by work aimed at maintaining a high level of security to preserve confidence amid the emergence of new technologies. The renewed strategy must address the goal of enhancing security through three main action areas: development of new authentication technologies, data protection, and improvement of fraud prevention techniques.

2.1. Support the development of new authentication technologies

With the implementation of PSD2, which steps up payment authentication requirements, work needs to be done on authentication procedures to guide market participants towards secure solutions. This work could be conducted through the OSPM.

These efforts would seek to promote the emergence of new strong authentication technologies using biometric data. In this regard, it would be worth doing work to clarify the legal framework applicable to the use of biometric techniques, in order to promote the deployment of this technology while making sure that data used are securely protected.

Actions

- **Establish security standards for biometric authentication systems (OSPM)**
- **Help market participants to adjust their strong authentication procedures to meet PSD2 requirements (OSPM)**
- **Begin work to clarify the legal framework applicable to the use of biometric techniques**

2.2. Strengthen the security of payment data

Payment data have become prime targets for hackers, who want to capture them in order to sell them on or use them for fraudulent purposes. While security initiatives have long focused solely on payment services providers, all participants in the payments chain, and especially merchants, now appear to be exposed to this risk. Accordingly, the CNPS must play a part in bolstering the security of all participants to reduce the risk of data theft.

Actions

- **Organise harmonised use of proxies¹⁵ for IBANs, especially within the framework of mobile payments (credit transfers), in connection with current European projects (SPL¹⁶)**
- **Establish recommendations on the protection of payment data by merchants, in connection with GDPR implementation¹⁷ (OSPM)**
- **Encourage the adoption by merchants of security-approved payment solutions (OSPM)**
- **Ensure the consistency of French and European legislative frameworks covering security of payment data (including PSD2, GDPR and NIS Directive) (OSPM)**
- **Study avenues for discussion aimed at improving the security of mobile payment solutions (OSPM)**

2.3. Improve fraud prevention and detection

¹⁵ Proxies are used to establish a link between, for example, an IBAN and a mobile phone number or email address. Requires a database to be managed or correspondence flows to be routed to databases managed by parties operating a specific solution.

¹⁶ Standardised Proxy Lookup, a European service connecting regional and national databases and allowing a mobile phone number to be associated with an IBAN. This service, which the ERPB wants to see in place, will actually be delivered by equensworldline, a private company, while European governance arrangements are still being worked out.

¹⁷ Taking account of the measures and systems already in place in the card sector, but expanding to include other payment instruments and multi-instrument solutions.

With payment dematerialisation and automation leading to increased flows and speed, participants need to improve their fraud prevention and detection systems to adjust to these developments¹⁸. These systems can draw on new technologies, such as big data and artificial intelligence, which are better able to process large volumes of data and improve data sharing between participants. For this reason, the CNPS will support projects that seek to use these technologies, which have the capacity to enhance the effectiveness of the entire ecosystem. Furthermore, the goal of creating a European payments market must be accompanied with the development of tools to prevent and detect fraud at European level. The CNPS therefore needs to partner the OSPM in supporting approaches that work towards this end.

Actions

- **Support initiatives seeking to improve European coordination of fraud prevention for SEPA payments**
- **Study options for new real-time fraud prevention instruments, based especially on innovative technologies such as AI and big data**

3/ Maintain and develop a range of payment instruments that suits the needs of all users

The development of electronic payment instruments must not end up hindering access to payment processes for users who are unable to use them for various reasons (e.g. disability, price, hardware). Dematerialisation efforts must therefore be accompanied by work aimed at doing a better job of including all sections of society. Furthermore, this strategy is grounded in a **principle of neutrality and freedom of choice in payment instruments**. This neutrality is in turn based on a systematic effort to ensure that instruments and practices are both secure and effective. A neutral stance makes it possible to reconcile two objectives:

- maintain the universal role played by cash, which must continue to be an easily accessible payment instrument for anyone who needs to use it and especially the most vulnerable sections of society;
- promote electronic payment instruments by removing the obstacles that stand in the way of increasing their use and ensuring that these instruments have the requisite protection.

3.1. Make payments more accessible to people with disabilities

While dematerialisation may create new obstacles to the use of payment instruments by people with disabilities, it may also provide new accessibility solutions. Accordingly, the CNPS must organise initiatives already undertaken by participants in the sector to make sure that specific needs are more effectively addressed when creating new payment instruments.

Actions

- **Design a charter to more effectively include the needs of people with disabilities in the development of new payment solutions**
- **Ensure that associations of people with disabilities are better represented in national bodies (cf. point III.2.2)**

3.2. Improve financial inclusion through cashless payment instruments

The development of electronic payment instruments must not lead people to be excluded from their use because of hardware or connectivity requirements (in particular, the question of areas with little or no mobile coverage needs to be addressed), or costs.

¹⁸ Such as the new risks created by changes in trade such as shopping using connected devices.

Actions

- **Conduct a study on access to electronic payment instruments to identify potential gaps in terms of social inclusion**

II. Accelerate the deployment of innovation

France's experience in card payment security, evidenced by the development and early adoption of cutting-edge transaction protection techniques, such as EMV¹⁹ smartcards, strong authentication and scoring, is now recognised at European and international level. This allowed France to exert significant influence during the process of establishing the most recent European requirements (especially PSD2). The new strategy must help to organise the French community around issues of future innovation and security to enable it to keep playing a driving role in Europe.

1/ Promote innovation in Europe

1.1. Promote widespread use of APIs

The architecture proposed under the PSD2 framework to access payment accounts data will rely on the development of multiple layers of interfaces whose role is to enable secure access to a set of core services while also responding to the complexity generated by the proliferation of technologies and participants. All ecosystem participants must uphold GDPR principles of minimisation and individual control over data that may be accessed by third parties. With this in mind, development of these interfaces must be considered from at least two angles:

- First, European banks must, in compliance with PSD2, implement APIs that enable authorised third party providers to have secure access to their customers' payment accounts. In this regard, having a proper command of the associated technologies and promoting standards developed at national level will be important drivers in (1) promoting a European approach coordinated with ERPB's works on this topic and (2) moving as early as possible to organise the establishment of a European ecosystem of participants who are familiar with the technology and likely to develop innovative services using this base.
- Second, merchants are also working to develop APIs to resolve the growing complexity linked to the coexistence of multiple payment instruments. The idea is to facilitate centralised management of different payment instruments within universal payment acceptance solutions. The interfaces therefore have the job of maintaining simple and harmonised customer journeys no matter what payment instrument is being used.

Promoting widespread use of APIs must be accompanied by a strategic discussion on the conditions governing their deployment, especially in terms of technological independence (cf. part III.1.1). These talks should include a section on the protection of personal data, in connection with obligations under the GDPR.

Actions

- **Continue work on bank APIs in connection with PSD2 implementation with a view to promoting widespread use of APIs in payments**
- **Support merchant-led API initiatives, especially those aimed at building universal payment acceptance solutions, to harmonise customer journeys and facilitate the acceptance of different electronic payment solutions**

1.2. Contribute to the development of a digital authentication solution

The issue of user authentication has become a pivotal question in the context of the digital economy. Payments market participants have built up considerable experience in identifying and authenticating customers (bank KYC arrangements, strong authentication for in-store and non-face-to-face settings), which could be harnessed to develop a French digital authentication solution. Meanwhile, the government has set up its own identification and authentication system called FranceConnect. The

¹⁹ Europay MasterCard Visa, an international security standard for payment cards.

National Cashless Payments Committee will support the development of this platform – in the context of European regulation n°910/2014 (“eIDAS”) – and will assess potential synergies with solutions from the payment industry.

Payment industry know-how could also be used to promote the development of solutions to authenticate documents providing evidence of domiciliation, which could be used to fight effectively against identity theft. Wider use of these “visible electronic seal” type systems could help to enhance security across the entire chain.

Actions

- **Study ways to harness the payment sector’s expertise in identification and digital authentication, in conjunction with existing initiatives (especially FranceConnect)**
- **Examine drivers to foster wider use of document authentication systems by businesses, such as visible electronic seals, in order to combat identity theft more effectively**

1.3. Promote multi-instrument open payments

Payment is increasingly integrated in the transaction process in order to minimise its impact from the payer’s perspective. Initiatives in this regard include one-click online payment solutions and the rise of cashierless physical stores. The payment ecosystem is looking to unlock synergies – beyond e-commerce – to facilitate the implementation of open payment projects. The idea here is not to enhance existing payment networks but rather to adapt other networks to enable them to include payment instruments as means of identification and authentication, replacing other media such as travel passes and entry tickets to make payment transactions more seamless. For example, the use of payment cards as travel tickets (through modified ticket-reading terminals that can handle contactless payments) is a well-established practice in Europe. It is important to be able to deploy this type of solution quickly in France, and at least with a view to the 2024 Olympics. Other sectors, such as health, could also be looked at. Personal data protection aspects must of course be taken into consideration. The CNPS could ensure that the requisite dialogue takes place between local authorities and private participants to take these subjects forward and address them at the political level.

Actions

- **Encourage and support multi-party dialogue between local authorities and private participants aimed at implementing an open payments approach to public transport**
- **Identify priority areas of application other than transport to trial open payment solutions**

1.4. Stimulate the development of French expertise in artificial intelligence and big data with a focus on payments

Developing artificial intelligence (AI) and big data technologies is now a government priority, following publication of a report on the question by MP Cédric Villani²⁰. At the same time, European rules now offer a harmonised framework for data management and protection (GDPR), especially as regards data retention restrictions but also the conditions that must be satisfied when taking decisions that impact clients through the use of AI-type technologies.

This overall environment therefore offers both political impetus and a regulatory framework to enable the development of European participants in these new technologies. The payment sector, meanwhile, is one of those offering the largest number of immediate potential applications for big data technologies, insofar as it offers huge volumes of data, much of which is standardised and therefore easily processed. Coupled with AI technologies, applications are therefore covering a wide range of fields, including fraudulent or suspicious transaction detection, credit assessment, and more

²⁰ https://www.aiforhumanity.fr/pdfs/9782111457089_Rapport_Villani_accessible.pdf

sophisticated management of customer marketing. This further demonstrates the need for sector-specific action in the payments field. Accordingly, support could be provided within the framework of the new payments strategy for development of an AI and big data industry focused on payments and more specifically on payment protection. Furthermore, the CNPS could work with the CNIL, France's data protection agency, to clarify the legal framework in this area and offer greater legal certainty, in order to facilitate the development of participants in the industry.

Actions

- **Work with the competent authorities to clarify the legal framework for AI and big data applied to payment data**
- **Support the emergence of secure AI and big data applications to prevent fraud (cf. point I.2.3)**

1.5. With the Internet of Things set to bring increased automation, clarify the implications for payments

The Internet of Things is set to spur the development of connected objects of all kinds, from household electronics to health devices and transport equipment. This in turn will lead to increased automation of payments, which may take place according to an approach that is pre-agreed by the user, who is then unaware when payment takes place. This trend, in which payment is "diluted" within the overall way that objects function, has multiple consequences for issues such as obtaining the user's consent, managing authentication procedures across different participants in the chain, and sharing responsibility in disputes. To enable the secure development of these technologies, the CNPS should begin discussions to address these questions.

Actions

- **Hold discussions to look ahead to payment procedures within the framework of the Internet of Things (define flows, share responsibilities, etc.)**

2/ Integrate the question of digital payments more effectively in large-scale national initiatives

Beyond the innovative projects backed by the expertise acquired by payment firms, the CNPS must also help these payment participants to integrate their core business more effectively in large-scale national initiatives.

2.1. Continue to support the migration of payment chain participants to internet protocol (IP) solutions

The first national strategy for payment instruments set the goal of lowering telecommunication costs for merchants by developing public switched telephone network (PSTN) solutions equivalent to IP solutions. Telecoms operators then decided to go a step further and draw up a proposed timetable to phase out PSTN. The goal was to gradually stop marketing these solutions from the end of 2018, while migrating to IP over several years. This process is still underway.

Actions

- **Continue to support the migration of payment chain participants to IP solutions**

2.2. Include measures to modernise payments in the *Action Cœur de Ville* initiative

Launched in December 2017, the *Action Cœur de Ville* initiative is designed to revitalise the downtown cores of mid-sized cities, with nationwide agencies such as the national housing agency, the low-income housing loan scheme and the Caisse des dépôts backing grassroots projects initiated by the

222 eligible local authorities. The aim of these projects is to revitalise the business and economic communities of these downtown areas, for example by “supporting the digital transformation of micro, small and mid-sized businesses, the development of new consumer services, and unique customer experiences”²¹.

Given the central importance of payments to the customer experience and their potential role in efforts to revitalise local business communities, including a section on modernising payments in these grassroots projects could be a way to usefully enhance these initiatives while also supporting the goals of the national strategy, i.e. to promote electronic payments, modernise facilities, protect data and improve inclusion.

Actions

- **Raise awareness and encourage participants in the *Action Cœur de Ville* initiative, particularly merchants, to deploy innovative payment instruments**
- **Include a section on modernising payments in the objectives of the *Action Cœur de Ville* initiative**

2.3. Do more to harness fintech/paytech innovation

Within the framework of the government's innovation strategy and the Innovation Council set up on 18 July 2018, specific attention could be paid to supporting the development of French fintechs. Around 300 such firms were recorded in 2017.

Actions

- **Get the industry organised to propose a key challenge for consideration as part of the third wave of investments that will be examined by the Innovation Council in 2019**
- **Establish a FrenchTech community to provide a unifying point for payment start-ups**
- **Encourage payment fintechs to submit applications in response to calls for collaborative projects funded by the French government's *Programmes d'investissements d'avenir* (Investments for the Future programmes)**
- **Help payments start-ups respond to European calls for projects, especially in connection with the European Innovation Council's pilot scheme**

²¹ http://circulaires.legifrance.gouv.fr/pdf/2018/04/cir_43273.pdf

III. Support the European goal of deepening the single payments market

European participants are lagging behind, as most of the new products and services emerging in the value chain are being put forward by non-European firms. This is creating greater uncertainty about the capacity to deploy new solutions that meet users' needs within the framework of a single European market without depending on the international development strategies of non-European players. This situation also creates a risk for European authorities of losing visibility and control over this market. The development of SEPA payment instruments – especially instant credit transfers – represents an opportunity to strengthen the European payments market. This approach would consist in deepening the single cashless payments market by promoting solutions and initiatives proposed by European participants, while avoiding critical dependence on non-European participants.

1/ Identify and promote the conditions for European independence in payments

1.1. Analyse interdependencies in the European payments market

The payment sector is a vital component of economic life, at both domestic and European level, but its orderly operation depends to a large extent on a number of critical participants and infrastructures. Proper application of the European regulatory framework across the entire payment sector – including critical service providers – may be complicated if these critical providers are non-European and operate outside the jurisdiction of European public authorities. This situation may arise in a number of areas, including the processing of payment transactions, the development of payment solutions, the security of hardware used for mobile payments, and the location of data processing centres.

Studies could be carried out to more precisely identify existing dependencies in the way that the French payment sector functions. This exercise could also identify potential action areas to ensure the consistency and effectiveness of Europe's regulatory framework.

Actions

- **Continue to analyse interdependencies in the European payments market, especially vis-à-vis non-European participants.**

1.2. Study a payment data location policy

To maintain the independence of the European market and participants in the area of payments, priority must be given to ensuring that data relating to transactions denominated in Union currencies are processed in the EU. One of the objectives of a strategy aimed at ensuring European independence could be to identify critical payment data that are processed outside Europe (see point III.1.1), and then look at ways to enable these operations to be (re)located in the EU.

At the present time, for example, tokens, which are vital elements in the security and operation of mobile phone-based card payments, are mostly managed and generated outside the EU. This means that all European participants in the payment chain are potentially dependent on decisions taken by participants subject to legal frameworks whose requirements are very different from those established by the EU. The question of the location of facilities that process and store payment data, such as data centres and public clouds, also needs to be part of the discussion.

Actions

- **Identify critical payment data then examine implementation of a policy to locate them in Europe**
- **In particular, look more closely at security questions raised by the management of tokens and other similar data, especially in connection with data privacy issues and application of Europe's data protection regulation**

1.3. Promote better cooperation between national card schemes at European level (SEPA for cards)

France is by far the largest market for card payments in the EU27. Moreover, in the CB Bank Card consortium, France boasts a leading participant in terms of volumes and amounts processed at European level. These achievements must be leveraged to pursue the goal of deepening the European card market. To this end, several options can be explored at European level, such as the connection of national schemes, or even the inception of a pan-European scheme, taking account of the obstacles encountered by the Monnet initiative that was abandoned in 2012. This approach is closely linked to the continuation of standardisation and harmonisation efforts in this area (e.g. Nexso), as part of the drive to produce a European solution.

Actions

- **Support European initiatives aimed at building SEPA for cards**
- **Contribute to harmonisation and standardisation work in the area of cards**

2/ Adjust France's institutional architecture to reflect the new objectives and market challenges

2.1. Merge the OSPM and CNPS

With the national strategy for payment instruments expanding the powers of the National SEPA Committee (CNPS) and the Observatory for the Security of Payment Means (OSPM) to all payment instruments, the traditional distinction between the two bodies seems less and less justified. Given that security is a key point in strategic discussions on payments, separating the treatment of these security aspects now seems inappropriate and might in fact slow the work done by each institution.

Merging the two could be the right solution, helping to streamline the work being done on payments in France. A merger could easily be justified from an organisational perspective, insofar as participants in the two bodies work closely together and their secretariats are provided by the Banque de France (in conjunction with the Treasury in the case of the CNPS). The main obstacle to a merger might be linked to the fact that the bodies do not have the same status, since the OSPM has a legal foundation (Article L141-4 of the Monetary and Financial Code), while the CNPS was established on a more flexible basis.

Actions

- **Examine the legal and organisational procedures for a merger of the CNPS and OSPM and propose an operational framework covering aspects such as presidency, composition and working groups**

2.2. Make sure that new participants are better represented

The make-up of marketplace bodies such as the OSPM and CNPS, as established in recent years, could benefit from adjustments, especially to ensure that providers of payment solutions are better represented. Specifically, it would be beneficial to include:

- representatives from the industrial side of the payment sector, which are not currently represented directly in the CNPS or OSPM;
- representatives of new participants, i.e. fintechs, which are represented today only through the AFEPAME²²;
- a representative from an association that speaks for people with disabilities (cf. I.3.1).

Equally, it is vital to ensure that consumers are represented by their associations in the various bodies and working groups.

These adjustments would make it possible not only to ensure that market forces are better represented in these bodies, but also to gain new operational viewpoints that might be useful when determining the new national strategy.

Actions

- **Adjust the make-up of the CNPS and OSPM to make them more representative of the market and users**

2.3. Improve collaboration with other national payment committees

Strengthening Europe's cashless payments market will necessarily entail better cooperation between Europe's various communities. At present, national payment committees dialogue only within the narrow framework provided by the European Forum for Innovation in Payments (EFIP), which was created in November 2017. To add to the activities of the forum, the CNPS could establish more regular ties to the committees in other large European communities, particularly in Germany, Spain and Italy, in order to (i) keep abreast of initiatives in these communities and talk about shared issues, (ii) adopt a shared approach to promoting pan-European issues and initiatives (especially the points identified in the national strategy). This cooperation should conform to all the strategic orientations defined by the ERPB, which remains the central European body for payments issues.

Actions

- **Establish more regular ties to committees in other large European communities, including Germany, Spain and Italy, and organise regular talks with them about issues identified in the national strategy**

²² Association Française des établissements de paiement et de monnaie électronique (French association for payment and electronic money institutions).