

## OPEN BANKING

# Changing the Way Businesses Pay and Get Paid

## Introduction

The way businesses and banks pay and get paid is changing. There has never been a period of such radical shift in the payments landscape. Many of these changes are driven by regulation, so businesses and banks will need to ensure they are compliant with the new rules and payment schemes. But these transformations will also bring many exciting opportunities to make payments easier, faster and more secure.

In this white paper, [Bottomline Technologies](#) aims to provide practical advice on the scope of this evolving landscape and draw on a rich heritage of delivering cloud-based solutions that insulate customers from the effects of continuing change, whilst helping them optimise the way their payments are processed.

*The world is watching the UK payments market with interest. Whilst there are many exciting innovations taking place globally, the UK's pioneering experience in real time payments, Open Banking and Overlay Services is having a major impact in other countries too.*


The proposed regulatory, technological and operational changes will transform the UK payments landscape between now and 2023. The principal milestones are Open Banking, the revised Payments Services Directive (PSD2) and the creation of the UK New Payments Architecture (NPA). These pivotal initiatives will drive the introduction of new payment processes and instruments, known as Overlay Services, such as Request to Pay, Enhanced Data and Confirmation of Payee. A new Simplified Payments Platform (SPP) will be launched as a central infrastructure which will replace legacy systems, in particular, Bacs Direct Credits, Direct Debits, Faster Payments and cheque clearing.

The world is watching the UK payments market with interest. Whilst there are many exciting innovations taking place globally, the UK's pioneering experience in real time payments, Open Banking and Overlay Services is having a major impact in other countries too. Regardless of the outcome of Brexit, London remains a leading centre for Fintech innovation. London successfully combines the 'fin' of Wall Street and the 'tech' of San Francisco's Silicon Valley, which are located thousands of miles apart. By contrast, and to London's great advantage, both the 'fin' and the 'tech' are easily accessible within a few stops on the London Underground!

## Timeline 2018 - 2023

In January 2018 Open Banking launched very quietly. Press interest focused on the impact on consumer payments and potential security issues relating to the sharing of data with Fintech firms. However, we should not underestimate its ultimate impact on the way consumers, businesses and banks will pay and get paid and how they manage their data.

To date there has been a fairly limited understanding of Open Banking across the board. Whilst some new solutions entering the market – mainly consumer money management apps and consumer lending – have grasped the underlying aggregation concept, it is expected that more comprehensive solutions, aimed at consumers and businesses, will be brought to market as the adoption of Open Banking increases. These cloud-based solutions will make it easier and faster to make and manage payments, while increasing visibility across multiple banks and accounts.



Likewise, an upsurge in activity within the UK and European Union (EU) relating to PSD2 is anticipated. Like Open Banking, this pan-European initiative was introduced in January 2018. However, PSD2 has a longer lead time because some of the Directive's requirements, as described in the next section, do not become effective until September 2019.

New Payments Architecture (NPA), a new infrastructure driven by the Payments Services Regulator, is set to improve the UK payments ecosystem. It will be rolled out over the next 5 years and is expected to have a dramatic impact on the way we all pay and get paid. We will start to see its influence as early as the first half of 2019, when we anticipate the launch of a number of market delivered solutions using Overlay Services such as Request to Pay and Confirmation of Payee. This new initiative will likely see the phasing out of some familiar payments schemes such as Bacs by 2023.

With a strong track record of helping organisations through periods of change, Bottomline ensures its customers comply with the new requirements and maximise the benefits that these new systems and innovations offer.

## Open Banking and PSD2

Open Banking and PSD2 are closely related but separate regulatory requirements in the payments industry. They have a number of shared objectives and many common features, but also some significant differences. Open Banking is driven in the UK by the Competition & Markets Authority, working with the [Financial Conduct Authority](#) (FCA). Meanwhile, PSD2 is driven by the European Commission which is collaborating with the European Banking Authority.



*Both initiatives seek to increase competition and encourage innovation in order to make payments easier and more secure, while ensuring an enhanced customer experience.*

Both initiatives seek to increase competition and encourage innovation in order to make payments easier and more secure, while ensuring an enhanced customer experience. One of the main goals of Open Banking and PSD2 is to limit the risk of fraud in payments. Strong Customer Authentication (SCA) requires the use of Multi-Factor Authentication (MFA), with limited exemptions. In addition to enforcing security techniques, such as password plus token or SMS/text confirmation codes, SCA is likely to drive wider adoption of biometrics and other sophisticated methods of identification. There will also be increased focus on security incident reporting to regulators and customers, as well as mandatory security assessment reporting to regulators which address the security measures applied and their effectiveness.

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A common feature of both Open Banking and PSD2 is that they introduce a number of important new regulated roles to be performed by service providers. These new functional roles bring with them some acronyms which can serve to confuse people unfamiliar with the subject. The overarching new regulatory status is a Third Party Provider (TPP). Banks, Fintech firms or even regular corporates, such as large retailers or online merchants, can become TPPs. A Third Party Provider can perform two possible functions:

- Account Information Service Provider (AISP)
- Payment Initiation Service Provider (PISP)

The underlying purpose of these new terms is to establish a clear operating framework of roles and responsibilities for regulatory purposes. A TPP can opt to act both as an AISP and a PISP simultaneously. In any event, the Third Party Provider needs to become regulated by its local financial services regulator, either as an AISP or a PISP, or as both.

In the UK an aspiring TPP needs to become accredited by the Financial Conduct Authority, while in the European Union the TPP would apply to the financial services regulator of the member state in which it is based, for example, BaFin is the local regulator in Germany.

Under EU law, a TPP regulated in one member state has “passporting” rights to offer its services throughout the European Union. With fast-approaching Brexit, the situation of UK-based AISPs and PISPs remains uncertain, with “passporting” already ruled out and proposals for “equivalence” encountering political and practical barriers. If a hard Brexit were to materialise, it is likely that an AISP or PISP regulated in the UK would need to have a separately capitalised subsidiary operating and accredited inside the EU before it could offer its services across the EU.

The way in which Open Banking and PSD2 will operate is similar. By law, banks / Payment Service Providers (PSPs) are now required to share data with these regulated AISPs and accept payment instructions received via PISPs, provided that the bank / PSP has been duly instructed by its customer. The way in which banks or Payment Service Providers exchange customer data with AISPs and receive payment instructions from PISPs is via Application Programming Interfaces (APIs).<sup>1</sup> APIs are already well established as a secure means of communicating between systems and are widely used in many day to day business activities, such as aggregating information on hotel and travel booking websites.

1. An API is a set of programming instructions and standards for accessing a web-based software application. A business can release its API to the public so that external software developers can design products that are powered by its service.



*As it is the first country to introduce Open Banking, the UK has a fabulous opportunity to pioneer and influence the way in which other countries adopt the open banking model in the future.*

Although there has been a concerted effort to align Open Banking and PSD2<sup>2</sup>, there are a number of fundamental differences between the two initiatives. At this early stage, Open Banking is only mandatory in the UK and only relates to the top nine banks in the country. Technically these banks are known as the CMA9<sup>3</sup>. However, a growing number of other UK banks are volunteering to open their APIs to AISP and PISP, as they consider this open approach will enable them to be more competitive and drive new business. PSD2 is arguably a more ambitious project than the UK's Open Banking since it not only spans all member states of the European Union but is also affects all banks / PSPs in the community.

In implementing Open Banking, the Competition and Markets Authority required the UK's nine top banks to collaborate and develop a common API, recognising the importance of standardisation and interoperability. This makes it easier for Third Party Providers to connect to bank account data, always with the customers' permission, in order to deliver new services. The European Commission (EC) has taken a different stance, considering that imposing a single common API standard would be anti-competitive. The European Commission has therefore left the technical details of PSD2's APIs open to the market to define. Unfortunately, this position is creating some fragmentation as EU banks or Payment Service Providers and Fintech firms prepare themselves for PSD2. A number of different consortia have been formed to develop their own APIs at national and / or regional level. A good example of this approach is the Berlin Group, consisting of 40 banks, payments associations and PSPs, which has been formed to define a common API standard called NextGenPSD2. This is only one of several other initiatives that have also been set up in Poland, Slovenia and France. It remains to be seen how such standards will evolve across the EU, and if the UK's Open Banking model might even become the API standard of choice in Europe.

It is important to note that PSD2 has a longer lead time than Open Banking, even though they both came into force in January 2018. The EU's Regulatory Technical Standards (RTS) for PSD2 were published early this year. But fortunately for many banks / PSPs in the European Union they now have a transition period until September 2019, at which time their RTS will come into force. In terms of timetables, it is noteworthy that EU-based banks / PSPs must be ready to test their APIs by March 2019, which will be an important indication of PSD2 readiness. In view of the relatively long implementation period, European banks have been quite slow to move forward on PSD2 since its introduction. In contrast, most of the UK CMA9 banks were compliant by the same January 2018 Open Banking deadline, with the exception of a few banks that were granted short grace periods to catch-up. As a result, businesses with multi-banking relationships in the UK and Europe are likely to see new services being made available in the UK sooner than in Europe.

In a way, this transition period for PSD2 gives the UK market a timing advantage. As it is the first country to introduce Open Banking, the UK has a fabulous opportunity to pioneer and influence the way in which other countries adopt the open banking model in the future. Although Open Banking and PSD2 are currently focused on UK and Europe, the world is watching the UK's success as many other countries and banks begin making plans to introduce similar initiatives.

2. <https://www.openbanking.org.uk/wp-content/uploads/Proposed-Amendments-to-Agreed-Arrangements.pdf>

3. The CMA9 banks are: HSBC, Royal Bank of Scotland, Lloyds, Barclays, Santander, The Co-operative Bank, Nationwide, Bank of Ireland, TSB.





## Streamlining Payments and Cash Management

Before the introduction of Open Banking and PSD2, if an individual or a business had accounts at several different banks, they would need to log onto each bank to view their balance and transaction information. In the new world of Open Banking and PSD2, an AISP can extract all that bank account data and deliver it to the customer in a single app, with a consolidated view. Under Open Banking, payment service users, whether they are individuals or businesses, are able to instruct their banks / PSPs to share their balance and transaction information with regulated AISPs. In addition to displaying this information on a user-friendly dashboard, the AISP can convert all this transaction data into the required format and send it to the customer's Enterprise Resource Planning or Treasury Management System. This makes cash visibility so much easier than historically for businesses of all sizes.

Similarly, before the introduction of Open Banking and PSD2, payment service users would have to log onto each bank separately in order to initiate payments, using different workflows and security protocols. With the advent of Open Banking and PSD2, individuals or businesses are able to mandate their multiple banks / PSPs to accept payment instructions received via the app of their PISP. This makes managing payments across multiple banks easier, faster and more secure.

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In many instances, the optimal approach for service providers is to combine Account Information Services and Payment Initiation Services, in order to offer customers a bundled, more convenient solution. It is striking that the initial focus of Open Banking and PSD2, especially in the media, has been almost entirely on ways for consumers to benefit from these new requirements. However, there is a compelling opportunity to make it easier for businesses to manage their payments and cash management across multiple bank relationships and accounts. These solutions are likely to come to market in the first half of 2019.

Historically, only large corporates have been able to gain a consolidated view of all their cash across multiple banks and to manage their payments in a secure and consistent way. Typically this has been achieved by becoming a member of [SWIFT](#) and using this secure payment messaging network to streamline their payments and cash management globally. But becoming a member of SWIFT does require a budget that is often beyond the reach of many businesses, even if using a SWIFT service bureau to achieve cost effective connectivity and value add services. But the arrival of Open Banking and PSD2 will bring multi-bank payments and cash management capability to a wider range of businesses in terms of size and sophistication.

For large organisations, such as multi-national corporations with a requirement for global payments and cash management, SWIFT membership is set to remain the premium choice of access for the foreseeable future. But for more modest businesses, Open Banking and PSD2 open up new opportunities for much improved payments and cash management. Furthermore, forward thinking TPPs are already developing a range of value-add applications to bolt onto their Account Information Services and Payment Initiation Services. This feature-rich functionality will span important activities such as cash flow forecasting, bank fee analysis, cash allocation and reconciliation, sweeping and pooling and working capital optimisation.

*The introduction of Open Banking and PSD2 presents corporates with an exciting opportunity to integrate their UK and European payments and cash management more efficiently.*

The introduction of Open Banking and PSD2 presents corporates with an exciting opportunity to integrate their UK and European payments and cash management more efficiently. Under the new regulations, Fintech firms with expertise in cloud services and existing multi-banking and multi-protocol capabilities will be well placed to develop new services. Once these Fintech providers have the necessary accreditations to act as AISPs and PISPs, they will be able use banks' open APIs to enable corporate customers to initiate payments and aggregate statement information from multiple banks across UK and Europe. At present, automated balance and transaction capture services and multi-bank payments solutions are usually only available to larger corporates and banks, typically using SWIFT Service Bureaux in order to access multiple banks. But these new API-enabled payments and account information capture services are a natural extension of existing SWIFT offerings.

## Cash Forecast

Select Hierarchy: DEMO Organisation - GBP run refresh help

Group		Cleared	23/08/2018	24/08/2018	28/08/2018	29/08/2018	30/08/2018
DEMO Organisation							
Belgium	GBP	181,068.72	178,956.12	178,956.12	171,914.12	171,914.12	171,914.12
BEACC2 - RBOS123456	22/08/2018 ●●● GBP	(667.00)	(667.00)	(667.00)	(667.00)	(667.00)	(667.00)
BEACC1 - BE123456	22/08/2018 ●●● EUR	251,417.00	248,417.00	248,417.00	238,417.00	238,417.00	238,417.00
BEACC3 - 64681466	22/08/2018 ●●● USD	7,321.00	7,321.00	7,321.00	7,321.00	7,321.00	7,321.00
	EUR	257,126.85	254,126.85	254,126.85	244,126.85	244,126.85	244,126.85
Switzerland	GBP	631,687.54	631,687.54	631,687.54	631,687.54	631,687.54	631,687.54
	CHF	896,010.69	896,010.69	896,010.69	896,010.69	896,010.69	896,010.69
UK	GBP	1,496,623.58	1,496,623.58	1,496,623.58	1,496,623.58	1,496,623.58	1,496,623.58
Canada	GBP	318,830.76	318,830.76	318,830.76	318,830.76	318,830.76	318,830.76
	CAD	600,774.00	600,774.00	600,774.00	600,774.00	600,774.00	600,774.00
USA	GBP	228,164.04	228,164.04	228,164.04	228,164.04	228,164.04	228,164.04
	USD	324,327.00	324,327.00	324,327.00	324,327.00	324,327.00	324,327.00
Australia	GBP	1,062,710.84	1,062,710.84	1,062,710.84	1,062,710.84	1,062,710.84	1,062,710.84

## Possible Reduction in Card Usage by Online Merchants

An interesting consequence of the introduction of PISPs is that it is expected to enable large online merchants to reduce the high fees they pay for receiving payment by credit and debit cards online. In view of their ubiquity, convenience and ease of use, card payments represent the main way in which online merchants are paid for goods and services. But the fees which merchants pay to acquirers, processors and card networks are very high compared to other payment types, often amounting to 2% or more of the value of the goods or services being purchased. This so-called “ad valorem” pricing means that millions of dollars of card fees are being paid by online giants which rely on cards as an easy way of getting paid. As consumers using cards, it is very easy to forget these fees, since cards are generally free to use and in some cases offer incentives, such as cash back rewards.

In order to reduce these high card fees, it is expected that large online merchants will opt to become PISPs, or partner with PISPs, in order to capture the benefits of this new capability under Open Banking and PSD2. Such an arrangement will enable an online merchant to obtain payment direct from their customer's bank / PSP account. This real-time settlement process will be quicker and less expensive than card payments, thanks to the SEPA Inst Credit Transfer scheme across the EU and Faster Payments in the UK. It is expected that online merchants will use loyalty schemes to incentivise their customer base to give the necessary authorisation to take payment in this manner. It is intended that, by becoming a PISP or using the white-labelled PISP of a partner, the online merchant will be able to make its customers' paying activity a more seamless part of the buying experience.

In planning to migrate their customers to this new payment method, one of the challenges which merchants might face is that payments initiated as a PISP do not benefit from chargebacks. This chargeback mechanism provides some protection to credit or debit card users, in the event there is a problem with the goods or services purchased. Chargeback is not a legal right, as card companies offer this at their discretion. But essentially chargeback enables a card issuer to reclaim money from the retailer's bank. Whilst many consumers are not aware of this advantage, other more discerning consumers may be reluctant to forego this benefit, making it harder to persuade them to switch payment instruments unless a strong incentive is offered.

## Impact of Brexit

With Brexit just around the corner and enormous uncertainties remaining, Open Banking and PSD2 could well provide a timely and accessible solution for those businesses which need to manage payments and ensure full visibility of cash balance across multiple banks in UK and the European Union. UK businesses will need to work with trusted advisers and solution providers who are creative in structuring solutions to access payment systems without needing to establish and operate a separately capitalised subsidiary in the EU.





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With so much uncertainty surrounding the terms of Brexit, it is crucial for UK businesses operating across the European Union to have clear visibility of their cash and to be able to manage their payments from a single platform. It is not clear whether UK-based businesses will be able to continue benefiting from the low-cost and standardisation of SEPA Credit Transfers and Direct Debits from UK-situated bank accounts. In a worst case scenario, they may need to consider opening accounts in the EU, with local banks or indeed with UK banks that have EU-based subsidiaries.

After Brexit, as businesses look to establish new trading relationships more widely across the entire world, it will be even more important to have full visibility of their cash position at their banks, the number of which is likely to grow as businesses expand internationally. Similarly, they will need solution providers who can deliver a range of different payment types to comply with banking requirements and regulations across a wider range of countries.

## Increasing Co-opetition

In addition to financial institutions, banks and Fintech firms opting to become TPPs, major retailers and technology giants (such as Amazon, Apple, Facebook, Google) with large customer bases will develop innovative payment services to reduce their own card processing costs and improve the customer experience of paying for goods and services.

This new era of open APIs for payments and cash management was never going to be a single “big bang” in January 2018. Instead, TPPs are phasing the launch of their new offerings as the market gains a clearer understanding of the operating processes and business opportunities. Over the coming months and years, the market will become increasingly sophisticated and competitive, offering exciting new business models, innovative solutions and value-add functionality to many different customer segments. Examples would include apps to help consumers find the best investment or borrowing offers in the market, or apps for businesses to manage their cash more efficiently and forecast their working capital requirements by using data analytics.

Open Banking is also driving unprecedented levels of collaboration between banks and Fintech providers. Both parties recognise the mutual benefits of partnering to capitalise on the combined advantages of a bank’s scale, large customer bases and economic muscle which complement the fast-moving and innovative skills of smaller Fintech firms.

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*Open Banking gives the UK a fantastic opportunity to lead the charge and change the way people and businesses pay and get paid, making it easier, faster and more secure.*

## New Payments Architecture

*This ambitious initiative, which will be rolled out over the next five years, will bring further radical change to the way businesses, banks and consumers pay and get paid.*

Open Banking is just the starting point for further important changes which will drive new efficiencies in payments. Coming hard on the heels of Open Banking, there is another major regulatory change in the UK payments landscape: New Payments Architecture (NPA). This ambitious initiative, which will be rolled out over the next five years, will bring further radical change to the way businesses, banks and consumers pay and get paid. NPA is a natural extension of Open Banking and is driven by the UK's [Payment Systems Regulator](#) (PSR), which is part of the FCA. The objective of the PSR is to modernise UK payments and make them more secure, by replacing our complicated legacy systems and ensuring that the UK has a more stable and resilient payments infrastructure. Like Open Banking and PSD2, the PSR wants to encourage more competition and innovation by attracting new entrants and making it easier to access new payment systems.

The New Payments Architecture is the result of a major consultation across the UK payments industry which involved the creation of [The Payments Strategy Forum](#) (PSF). This group was made up of experts from banks, payment systems, Fintech firms and consultants who were tasked with designing a more modern and secure payments system. The forum has developed a NPA Implementation Plan Blueprint, which was published in December 2017. This document sets out the vision for how the new payment system will operate and will result in the creation of a new Simplified Payments Platform (SPP). This new central infrastructure will replace legacy systems, such as Bacs, Faster Payments Services (FPS) and cheque clearing. As a result, all users of these payment instruments will need to migrate to the new payments platform between 2021 and 2023.

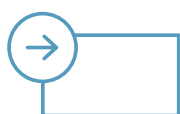
As part of the NPA change program, the [New Payment System Operator](#) (NPSO) has been formed to run the Simplified Payments Platform. As a first step in this direction, the NPSO has taken control of the UK's existing retail payment systems, namely [Bacs](#), [Faster Payments](#) and [The Cheque and Credit Clearing Company](#). Bringing these organisations under the umbrella of the NPSO will make co-ordination easier and simplify migration to the new payments platform.

*The New Payments Architecture will introduce important new features to UK payments, the most significant of which is the end of the Bacs three day clearing cycle, which is considered out-dated for modern payment systems.*

The New Payments Architecture will introduce important new features to UK payments, the most significant of which is the end of the Bacs three day clearing cycle, which is considered out-dated for modern payment systems. Bacs Direct Credits and Direct Debits as well as current Faster Payments will all be replaced by a new credit transfer which will clear in real time, 24/7. The new credit transfer instrument will adopt the ISO 20022 file format. This is set to replace the Bacs Standard 18 format and the ISO 8583 format currently used by Faster Payments, which is based on the debit and credit card format. Whilst Direct Debits will continue to be widely used, the way they are processed and cleared will undergo significant changes to make them easier, faster and more secure. This change will be described in the next section.

Consistent with Open Banking which introduces the AISP and PISP, NPA brings with it another new accredited role in the payments landscape: The Third Party Service Provider (TPSP). This term describes a new type of service provider which will enable access to the Simplified Payments Platform. In addition, TPSPs will deliver an exciting range of Overlay Services and enhancements which have been designed by the Payment Strategy Forum and are aimed at making payments more secure and easier to use. It is anticipated that some banks and Fintech firms will opt to become TPSPs. Any party wanting to become a TPSP will need to be accredited by the NPSO.

Here follows a brief description of the new Overlay Services:



## REQUEST TO PAY

Probably the most exciting of the new Overlay Services is the Request to Pay which makes it easier to get paid. This is a hybrid instrument that effectively combines an electronic invoice with flexible payment options. Accordingly, the payee (i.e. the party wanting to get paid) issues a Request to Pay which is sent to the payer (i.e. the debtor or party who owes money) with a description of what the payment request relates to, for example enclosing details of the invoice in the message. On receipt of the Request to Pay, the payer is offered a series of choices: for example, to make a payment for the total amount requested, to make a partial payment or to request an extension before paying. Other options include the ability to send a message to the payee, to decline to pay or even to instruct that any Requests to Pay from a particular payee are blocked. Naturally, all these choices are communicated back to the payee who will take appropriate action. A big advantage for the party getting paid, especially for a business handling high volumes of inbound payments, is that they will be able to achieve automatic reconciliation of inbound funds by using Request to Pay, since full details of the payment and parties involved are included.

This flexible Request to Pay tool has compelling use cases in the person-to-person, business-to-consumer and business-to-business spaces. For example, an individual can use Request to Pay to ask a friend to reimburse him for his share of a dinner which he or she has paid in full. Alternatively, a utility can send a Request to Pay to a customer who prefers not to use Direct Debits because this particular customer wants more flexibility. Similarly, in a business-to-business scenario, an organisation can use Request to Pay to present an invoice for payment. The Request to Pay has been designed in such a way that more than one level of approval can be required before the Request to Pay is issued.

As Request to Pay becomes more sophisticated over time, it is anticipated that the payment options will incorporate aspects of supply chain finance, to the effect that if a supplier wants to get paid early it can offer a discount and if a customer seeks deferred payment terms then an interest calculation will be added to the amount due, reflecting the time value of paying at a later date. This has tremendous potential for streamlining the whole order to cash and purchase to pay cycles. With the introduction of Request to Pay, at last payments and invoicing will be fully integrated within the payment system. This, in turn, creates an ideal environment for improving visibility, mitigating risk and making it easier for a business to access finance at a more competitive cost.

*A big advantage for the party getting paid, especially for a business handling high volumes of inbound payments, is that they will be able to achieve automatic reconciliation of inbound funds by using Request to Pay*

It is expected that early examples of the Request to Pay service will be launched in the first half of 2019, as part of the NPA's proposal to encourage early introduction of market delivered solutions, before the Simplified Payments Platform is live. Hence these initial market delivered solutions will run on the existing rails of Faster Payments.



#### ENHANCED DATA

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Another valuable Overlay Service is Enhanced Data which will make it easier for the payee to reconcile inbound payments. Enhanced Data means the payment message will carry additional structured remittance advice information which will enable the payee to identify what the payment relates to. Accordingly, Enhanced Data should prove useful for businesses receiving large volumes of payments from multiple customers. Enhanced Data is expected to help businesses to save time, mitigate operational risks and reduce processing costs related to cash allocation / reconciliation.



#### CONFIRMATION OF PAYEE

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An Overlay Service known as Confirmation of Payee will give the payer greater assurance that payments go where they are intended. The service will verify whether the bank sort code and account number belong to the person or business named in the payment instruction. In the case of payments to businesses, the system will also provide the payer with the address and Companies House Registration Number for the beneficiary of the payment. Hence Confirmation of Payee will provide a higher level of confidence that payments will reach the correct destination. This, in turn, should reduce the frequency of funds being lost or delayed after being sent to the wrong beneficiary.



#### PAYMENT STATUS

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Another valuable payment assurance Overlay Service is Payment Status. This service will provide all parties with the latest status of a payment and will provide confirmation that a payment has been received by the beneficiary. This, together with Confirmation of Payee will provide greater speed, accuracy and confidence by verifying the payee in advance of the payment, and in gaining rapid confirmation that a payment has been received by the party intended.

*All these new Overlay Services will improve visibility and security in the way businesses and consumers pay and get paid.*



## Changes to the Way Payments and Direct Debits Are Processed

Many readers will be familiar with the current processes to prepare and submit Bacs Direct Credits and Direct Debits, as well as Faster Payment files using Direct Corporate Access (DCA). These processes will undergo important changes as businesses migrate to the Simplified Payment Platform between 2021 and 2023.

At present, a business will typically use Bacs-approved software or bureau to submit files to the Bacs central infrastructure or to the Faster Payments Service. Once the Simplified Payments Platform is launched, businesses will need to adopt a new process and use the services of a Third Party Service Provider. The role of the TPSP will be more comprehensive than the functions currently performed by a typical Bacs Bureau. For example, the TPSP will provide the Confirmation of Payee service, verifying that payments are correctly routed. The TPSP will also perform a check for Current Account Switching Service (CASS) and will redirect payments to the new account of any parties changing bank accounts. In a significant change to existing Bacs or Faster Payments processing, the TPSP will disaggregate payments into a separate file for each Payment Service Provider whose customers are due to get paid. In this way, the TPSP may need to create a separate payment file for NatWest, HSBC and Barclays etc. This is different to the way Bacs files are processed today. Under the new system, these disaggregated files, separated by payee bank, will be submitted to the Simplified Payments Platform. This disaggregation process by the TPSP will make it easier for the SPP to manage clearing in real time.

Recognising that many businesses are not familiar with the ISO 20022 file format, the new payment message format being adopted by NPA, it is envisaged that TPSPs will provide data transformation services into and out of ISO 20022, and mapping with more familiar formats, such as Standard 18, SAP iDocs etc. It is also recognised that many businesses will submit their remittance data separately from the payment messages. TPSPs will therefore provide a service to incorporate remittance advice information data into the ISO 20022, so that the payment message and the remittance data, known as Enhanced Data under NPA, will travel together in a single message through the Simplified Payments Platform and onto the receiving bank and beneficiary.

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*Under the new system, these disaggregated files, separated by payee bank, will be submitted to the Simplified Payments Platform. This disaggregation process by the TPSP will make it easier for the SPP to manage clearing in real time.*

In the case of Direct Debits (DD), Third Party Service Providers will perform similar tasks to those described above for credit transfers, with a couple of significant differences. In particular, instead of sending DD files to the Simplified Payments Platform, the TPSP will disaggregate DD files from their customers and create a new DD file for each paying bank where debtors hold their accounts. These DDs, which are split into files by paying bank, will be sent direct to each of these banks. This is instead of the current process of sending to Bacs a single bulk file for all paying banks combined. It will then be the debtor's bank or TPSP that will push the payment files into the SPP for clearing. In this way, all DDs under NPA will be "push payments", as opposed to "pull payments", as they currently are today. An additional service expected to be provided by TPSPs will be reconciliation services to confirm that DDs have been paid by their debtors. Once payment service users become more familiar with this new process for DDs, it is expected to be significantly more efficient and faster than existing practices.

An important change to the way DDs are processed today is that under NPA only cleared funds will be sent to the clearing layer of the SPP. Any DDs which cannot be debited to the customer's account are returned to the payments service user as an Advice of Non-Payment. In this way, the originator / payment service user will only receive cleared funds into their account on the payment due date. This means that any unpaid DDs will no longer be reversed from the payment service user's account post-settlement, which is the way in which DDs are processed today. The payment service user will be notified of any rejected payments and will therefore have an accurate view of cash flow at the end of the day on the payment due date. This is a significant improvement compared to the current situation where failed DDs are debited at a later date.

Looking back over this summary of the enlarged roles and responsibilities to be performed by the new Third Party Service Providers and comparing it with current Bacs bureaux, this step change could prove challenging for many existing players that lack the scale or broader range of skills required in the competitive new world of the New Payments Architecture. This situation is likely to result in consolidation of the Bacs bureau market. Similarly, banks generally do not provide Bacs DD services to their customers, so this may look like unfamiliar territory for them. It is therefore likely that the current large providers of cloud-based Bacs and Faster Payments solutions will have a major role to play in migrating customers across to the new systems for credit transfers and Direct Debits under NPA.

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## Adoption of ISO 20022 Format

The [Bank of England](#) and the New Payment System Operator have proposed that all UK payment systems should adopt ISO 20022 in a single, standard Common UK Credit Message, to be introduced gradually from 2021. This will be a standardised message for all push payments in the UK, including the new Real Time Gross Settlement (RTGS), which will be an important milestone in the UK payments landscape. One of the major benefits of the ISO 20022 file format, which is far richer in content than say Bacs Standard 18, is that it will be easier to prevent financial crime by clearly identifying all the parties in the payment chain. This will make it easier to detect potential criminal transactions which are in breach of Anti-money Laundering (AML) requirements. ISO 20022 will be a simpler way to capture the information required to comply with a number of requirements such as the European Union's Wire Transfer Regulations.

*The adoption of ISO 20022 across all payment types will make payment systems more resilient, thanks to the improved interoperability domestically as well as with a growing number of payment systems in other countries.*

The adoption of ISO 20022 across all payment types will make payment systems more resilient, thanks to the improved interoperability domestically as well as with a growing number of payment systems in other countries. ISO 20022 will also make it easier for businesses to reconcile inbound payments, as these messages can carry more information to ascertain what the payment relates to. ISO 20022 will carry a richer character set, for example, non-Latin languages like Arabic or Mandarin.

The adoption of ISO 20022 globally is making strong progress. It has already been adopted in over 70 countries for payment schemes, such as real time payments and SEPA. By 2023 a further 10 countries aim to have introduced ISO 20022, including major US payment systems, CHIPS and FedWire. A significant attraction of ISO 20022 is its compatibility with APIs, which are being widely embraced by the payments industry, for example under Open Banking and PSD2, as a flexible way of connecting systems securely.

## Cheque Image Clearing System



*Not only will the recipient receive the money in their account more quickly but the money will also leave the account of the party that wrote the cheque in a faster timescale.*

A new image-based cheque clearing system is being rolled out in the UK. One of the main benefits of the new system is that cheque processing will be speeded up. It means that if a customer pays in a cheque on a Monday to Friday and it is cleared via the new system, then they will be able to withdraw the funds by 23h59 at the latest on the next weekday (excluding bank holidays). Some banks and building societies will offer their personal customers the option of paying-in an image of their cheques, by using a secure mobile banking app on their smartphone or tablet. This is instead of having to go to a bank to pay it in. For business and charity customers, banks will provide desktop scanners linked to their online bank account, allowing them to pay in, as digital images, any cheques that they receive. The introduction of this new process means that when a cheque is cleared via the image-based system, not only will the recipient receive the money in their account more quickly but the money will also leave the account of the party that wrote the cheque in a faster timescale. It is intended that by 2025 The New Payments Architecture will support the Cheque Image Clearing System.

*It is impressive to note there are currently about twenty new initiatives to launch real time payment systems around the world over the next few years.*

## Influence of Open Banking on Other Markets

Following its quiet and understated beginnings in January 2018 when Open Banking became effective in the UK, it is already widely expected that this initiative will become a global phenomenon. In addition to the EU's launch of PSD2, there is a growing number of national regulators around the world announcing plans for the introduction of open banking initiatives or exploring the viability of such an innovative system for their country.

Australia will introduce Open Banking in June 2019 for the country's big four banks, although they are focusing on Account Information Services (i.e. bank account statement data) initially, without opening up payment initiation in this first phase. The [Hong Kong Monetary Authority](#) has announced an Open API Framework which introduces changes in the way in which banks will share data with Third Party Providers. Similarly, Canadian authorities are exploring the introduction of Open Banking, soon after the launching of its Real Time Rails program. Meanwhile, The [Monetary Authority of Singapore](#) has opted not to impose APIs via regulation. Instead, it is encouraging banks to adopt a voluntary transition to open banking. In the USA a number of the large banks already voluntarily offering open APIs to third parties. In this way, they have pre-empted the regulators and are using APIs as a competitive advantage, rather than mere compliance with a mandatory change.

The number of countries with real time payments schemes is also growing exponentially. Both the USA and European Union launched their own real time payment schemes in November 2017, while Australia went live with its New Payment Platform in February 2018. It is impressive to note there are currently about twenty new initiatives to launch real time payment systems around the world over the next few years. To maximise the opportunity relating to open banking, it is essential to have a real time payments scheme. We can therefore anticipate that many of the countries implementing real time payments schemes will soon be candidates to introduce open banking on their real time payment rails.







## CLOSING REMARKS

### Well Positioned for Open Banking and Beyond

With a strong track record of providing practical advice on change in the payments industry, [Bottomline Technologies](#) prides itself on delivering value and innovative cloud-based solutions to its customers, whether they are businesses, banks or non-bank financial institutions. In particular, Bottomline has a deep experience of insulating its customers from the challenges and complexity of change, while enabling them to maximise the benefits of innovation.

As the UK is the first country to embark on Open Banking, Bottomline's early experience in this exciting journey will be invaluable in both the UK and in other geographies as open banking becomes more widely adopted in the coming years. Through Bottomline's FCA-regulated subsidiary, which is a Payment Institution, **we are now fully accredited to act as a Payment Initiation Service Provider and an Account Information Service Provider.**

This enables us to deliver an exciting range of Open Banking related solutions to our corporate and banking customers.

With three SWIFT service bureaux around the world, Bottomline Technologies already has deep expertise in helping large corporates and financial institutions use the SWIFT payments and financial messaging network to manage their multi-bank payments and cash management globally. These skills are now being leveraged to help a broader range of businesses of all sizes, as Open Banking and PSD2 create new opportunities to streamline payments and cash management in UK and Europe.

Similarly, Bottomline has extensive expertise in providing data translation services for a wide range of formats, including ISO 20022, which is already used in a number of international payment and financial messaging systems, such as SEPA and Target2 Securities. These data mapping skills and experience mean we are ideally placed to help customers adapt to ISO 20022 when this format is adopted in UK payment systems over the next few years, as part of the NPA program.

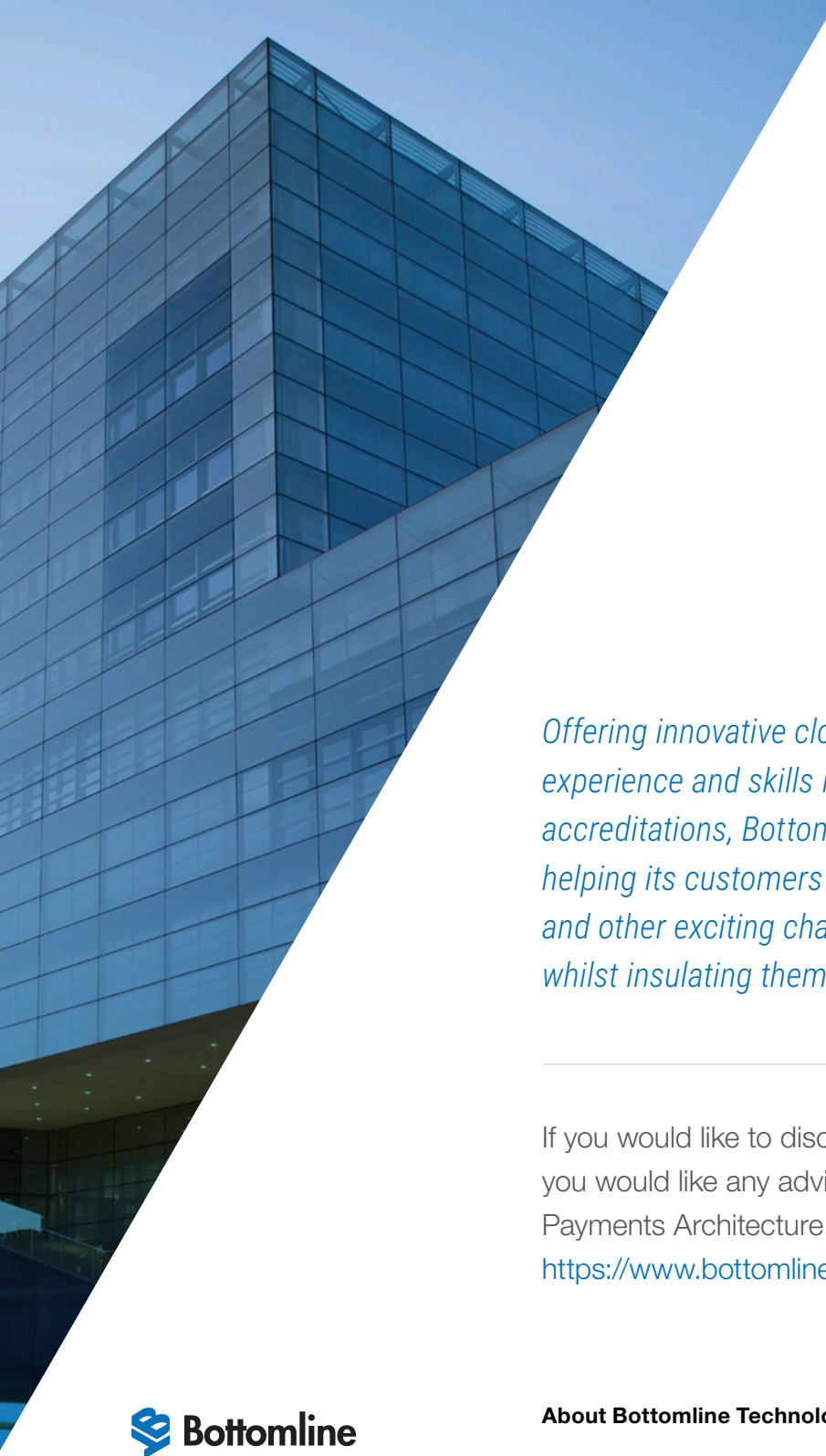
Bottomline has developed a solution to provide customers with global account visibility, which therefore extends the benefits of open banking to almost every country in the world. Our SWIFT expertise and AISP / PISP accreditations, mean we can enable businesses to achieve efficient control and visibility of their payments and cash position not only across UK and Europe but also globally. As a result, businesses of all sizes can leverage our global reach to achieve streamlined cash management across almost any bank in the world, without needing to become members of SWIFT.

*Bottomline has developed a solution to provide customers with global account visibility, which therefore extends the benefits of open banking to almost every country in the world.*

Bottomline is already a trusted expert in the way Bacs and Faster Payments are processed today. As the UK payments industry migrates onto the New Payments Architecture over the next five years, Bottomline Technologies is fully committed to becoming a Third Party Service Provider and being accredited by the New Payment System Operator. Building on our SWIFT and Open Banking accreditations and capabilities, this new regulatory status will enable us to deliver access to the Simplified Payments Platform and offer value-add Overlay Services to our growing customer base. Supporting customers in the migration to the Simplified Payments Platform (2021 – 2023) and helping them gain maximum value from the new payment instruments, formats and processes is a key focus for Bottomline.

We are excited to accompany our customers on this important journey which will make payments faster, easier and more secure, and are already making plans to help insulate our customers from the complexity of change to the payment processing systems.

Open Banking, in whichever country it is adopted, goes hand in hand with real time payments, in order to maximise the opportunity and improve user experience. As experts in UK Faster Payments processing, Bottomline Technologies has enabled many of its customers to attain the efficiency and cost benefits of Direct Corporate Access to Faster Payments. In 2016, in order to drive greater competition, the Payment Systems Regulator introduced new rules to make it easier and less costly for banks to gain direct access to the Faster Payments Service (FPS). Under these new arrangements, Bottomline was one of the first companies to become accredited as an Aggregator Service Provider, providing cloud-based [direct access to FPS](#). This new capability was developed as an alternative to the traditional route for smaller banks to gain access via the large UK clearing banks, which remains more costly and less efficient than this innovative New Access Model. Using our award-winning cloud-based Universal Aggregator solution, Bottomline Technologies has enabled banks and non-bank financial institutions to obtain Direct Technical Access to the Faster Payments central infrastructure. This knowledge and experience ensures that Bottomline Technologies is able to deliver value in other geographies as real time payments and open banking capabilities are introduced around the world.



*Offering innovative cloud-based technology, deep experience and skills in payments and regulatory accreditations, Bottomline Technologies is dedicated to helping its customers gain the benefits of Open Banking and other exciting changes in the payments landscape, whilst insulating them from complexity.*

If you would like to discuss any aspects of this whitepaper or you would like any advice on Open Banking, PSD2 and New Payments Architecture in general please contact us:  
<https://www.bottomline.com/uk/about/contact/>



Connect with us



#### About Bottomline Technologies

Bottomline Technologies (NASDAQ: EPAY) helps make complex business payments simple, smart and secure. Corporations and banks rely on Bottomline for domestic and international payments, efficient cash management, automated workflows for payment processing and bill review and state of the art fraud detection, behavioral analytics and regulatory compliance. More than 10,000 corporations, financial institutions, and banks benefit from Bottomline solutions.

For more information, visit [www.bottomline.com/uk](http://www.bottomline.com/uk).

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