

World Bank Fast Payments Toolkit

Case Study: United Kingdom

FPS | 2008

Payment Instruments



Credit
Transfer

Use Cases/Services



Bulk
Payment



Standing
order



Forward
Dated
Payments



Bill
Payment



Single
Immediate
Payments



Select country parameters



GDP
USD 2.83 trillion



Income Category
High



Population
66.83 million



Access to mobile phone*
94.53%



Access to internet*
88.82%



Bank account*
96.36%



Branches per 100,000 individuals#
15.56



Made or received digital payment in the last 1 year*
95.60%



Received government wages or transfer in accounts*
75.51%

Source : World Bank – 2019, Income Category: World Bank – June 2019
Currency Exchange Rate USD 1 = GBP 0.75 <2018 Average, World Bank>
Others – World Bank 2017

* For age >15 years || # Source : Statista and World Bank

How to read this report

- This **deep dive report** relates to **FPS** in **UK**
- It has been developed based on **primary interviews** with key stakeholders such as **regulators, operators** and **participants** in the system as well as by leveraging **secondary sources**
- Key secondary sources include the Pay.UK, Bank of England and Payment Systems Regulator websites
- The table below presents a legend to assist readers as they navigate through different sections of the report

Legend



The first slide of every section includes a chapter summary to provide readers with an overview of the section contents



The green box with the adjacent icon indicates the **section/sub-section summary across** the report. Reader may choose to read through this for a **high-level overview on the selected topic**

Glossary of terms

S. No.	Term	Definition
1	GDP	Gross Domestic Product at current price
2	Income Category	Classification as per World Bank based on Gross National Income (GNI) per capita
3	CPMI	Committee on Payments and Market Infrastructure
4	Oversight	Regulating or governing body supervising the payments system
5	Operator	Institutions responsible for the operation of the payment system
6	Alias	Alternative to bank account numbers for increased convenience of the customer. For e.g., mobile number, national identification number
7	Access Channels	Modes used by customers to initiate transaction on FPS. For e.g., branch, internet, mobile
8	Individual Payment Type	Person to person (P2P) – Payment between individuals for non-business purposes
9	Business Payment Type	Person to Business (P2B) – Payment from an individual to a business entity Business to Person (B2P) – Payment from a business entity to an individual Business to Business (B2B) – Payment between two business entities
10	Government Payment Type	Person/Business to Government (P/B2G) – Payment from person/Business to a government institution Government to Person/Business (G2P/B) – Payment from government institution to a person or business entity
11	Credit transfers	Credit transfers are payment instruments based on payment orders or possibly sequences of payment orders made for the purpose of placing funds at the disposal of the payee
12	Direct Debits	Direct debits are payment instruments in which the transaction is pre-authorized for a debit to be initiated at a future date. In direct debits, payer's account is debited on execution of mandate by merchant or payee
13	E-money	E-money is a prepaid value stored electronically, which represents a liability of the e-money issuer (a bank, an e-money institution or any other entity authorized or allowed to issue e-money in the local jurisdiction), and which is denominated in a currency backed by an authority

Abbreviations

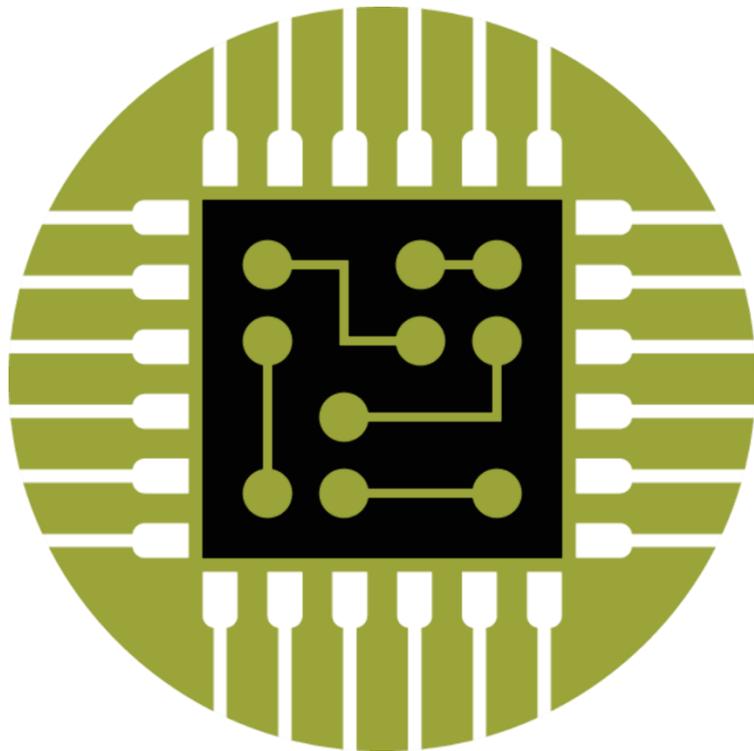
S.No.	Term	Expanded form
1	APP	Authorized Push Payments
2	BoE	Bank of England
3	CI	Central Infrastructure
4	DCNSP	Directly Connected Non-Settling Participant
5	DCSP	Directly Connected Settling Participant
6	FPS	Faster Payments Service
7	GBP	General Banking Platform
8	MoU	Memorandum of Understanding
9	NPA	New Payment Architecture
10	NSC	Net Sender Cap
11	PSR	Payment Systems Regulator
12	PSRs	Payment Services Regulations
13	RCA	Reserve Collateralisation Account

Table of Contents

		Slide number
A.	Executive Summary	7-8
B.	Detailed Report	
1	Overview	
1.1.	Background	11
1.2.	Objective	12
1.3	Key Milestones	13
1.4	NPA Objectives	14
2	Business and Operating Model	
2.1.	FPS Structure	16
2.2.	Participants	17-18
2.3.	Payment Instruments, Transaction Types	19
2.4.	Aliases, access channel and overlay service	20
2.5.	Use Cases	21
3	User Adoption	22-23
4	Technical Details and Payment Process	
4.1.	Technical Details (Messaging Format, APIs, Customer Authentication)	25
4.2.	Payment Process (Customer Registration, Transaction Fulfilment, Liquidity Management and Settlement)	26-27
5	Governance Framework	
5.1.	Legal and Regulatory Aspects	29-31
5.2.	Risk Management	32-33
5.3.	Dispute Resolution and Customer Complaints	34
6	Annexure	
6.1.	Key Features	36

A. Executive Summary

Faster Payments Service | UK FPS



- **Faster Payments Service (FPS)** is a real-time 24*7 payment system launched in 2008 enabling individuals, businesses and government agencies to make real-time payments
- FPS was formed as a result of **government intervention** to reduce payment processing time to a single day. The Payment Systems Task Force set-up by the OFT wanted 'Same Day Bacs'. The industry initially offered ELLE (Early for Late and Late for Early) where a payment submitted by midday would be delivered by COB that day and one submitted after midday would be delivered by midday the next day. The industry subsequently improved its offer to Near Real Time payments (NRT)
- The implementation of FPS took approximately **3 years**, in which the first 6 months were used to develop the design while the remaining period were used for **procuring, building and testing** the capabilities of the central infrastructure
- The successful joint bid by Voca and LINK resulted in them establishing a joint venture company called 'Immediate Payments Limited' (IPL)
- FPS allows non-banks to participate as direct participants and had rolled out a new access model in 2018 which enables small PSPs to connect to the central infrastructure of the FPS without the need to have an in-house payment gateway

Key features of FPS are

- Real-time payments
- Operates 24x7
- Deferred Net Settlement
- ISO8583 messaging standard

- Users can transfer funds via **branch, internet banking, mobile banking and telephone banking**
- Currently FPS supports **standing order payment, forward dated payment, bill payment, bulk payment and single immediate payments i.e.**, spontaneous payments on the part of the payer as use cases. Request to Pay and Confirmation of Payee have been launched in 2020.

B. Detailed Report

1. Overview

Chapter sections:

- 1.1. Background
- 1.2. Objectives
- 1.3. System Development
- 1.4. Key Timelines
- 1.5 NPA Objectives



Chapter Summary:

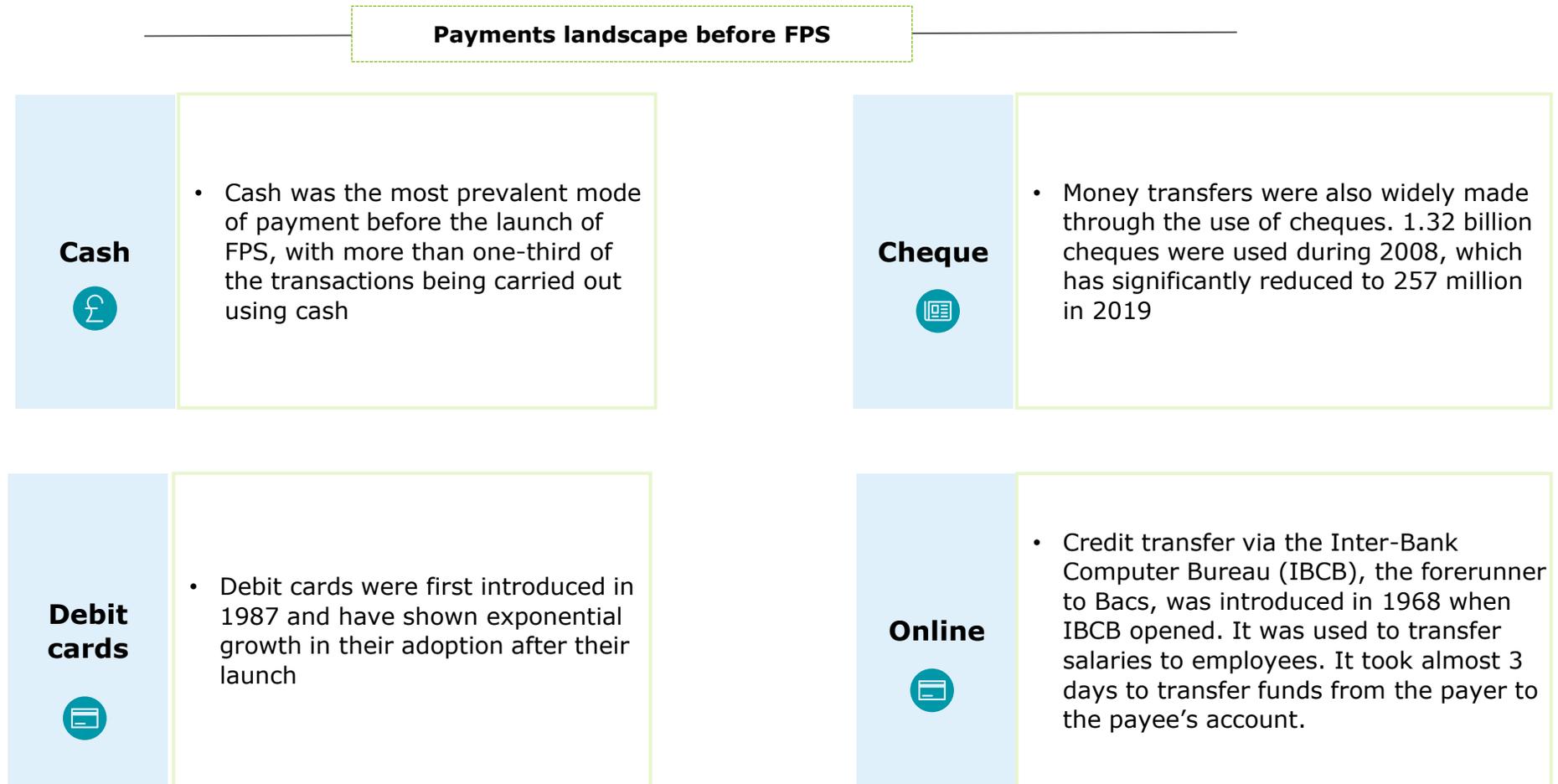
- **Faster Payments Service (FPS)** is a **real-time** funds transfer system launched in 2008. It is available 24*7
- The main impetus for the system was to process transactions quickly. Prior to that, **transactions through Bankers Automated Clearing Service (Bacs) took 3 days** to be processed in the payee bank account, **while CHAPS payments happened on the same day but not instantly**. The aim was to develop a payment system capable of transferring the money on the same day
- After consulting with major banks in the country, an Invitation To Tender (ITT) was circulated to develop FPS. Joint bid of Voca and Link was awarded the contract
- Since FPS was one of the first **faster payments service** to be launched, there was limited knowledge of the technological and infrastructural requirement to build the system. This led to delays in obtaining buy-in from all the participants
- In 2015, Paym, an overlay service, which enables customers to make transactions through their **mobile number**, was launched. The application has around **4 million customers** and has shown steady growth over the last few years
- With the motive to innovate the payment system in the country, **Payments Strategy Forum** was established in **2015 by Payment Systems Regulator (PSR)**. It was a representative industry body consisting of banks and end users
- The outcome of the Payments Strategy Forum was a **blueprint for New Payment Architecture (NPA)** to integrate various payments systems like **Bacs, and FPS** into a single payment platform. It is currently in development and will support **ISO 20022** messaging standard and additional **use cases**

1.1. Background | FPS



- Before Faster Payments Service was introduced, online transactions was through Bacs which took 3 days, while CHAPS processes transaction same day, but not instantly
- The government mandated the **office of fair trade** to provide recommendations to innovate the payment landscape in the country
- With the initiative to provide same day transactions, FPS was conceptualized and **rolled out in 2008**

Faster Payments Service (FPS) is a **24*7 real-time** funds transfer system launched in 2008. Currently, there are 33 direct participants in the system



1.2. Objectives



- A **key objective** for the fast payment platform system was to **reduce the overall transaction time, to create competitive advantage in market and to promote innovation**
- The platform also intends to **drive the long term needs and aspirations of consumers, businesses and the government** along with the various PSPs participating in the system

In the early 2000s, the **Cruikshank** report was published, which was the foundation for the development of FPS in the country. The report pointed out the lack of innovation and the need to upgrade the existing retail payment system, which led to the **government mandating the Office of Fair Trade** to provide recommendations for the innovation of the payments landscape in UK. A report was drafted by the Office of Fair Trade which was taken to the **Payment Task Force** to develop a faster payments service, to reduce the payment cycle from 3 days to a single day. This led to the development of the Faster Payments Service in May 2005. During the same period, while other payments such as Bacs were available, cash was the most dominant mode of transaction.



Objectives (During Launch)

-  Allow Payment service provider to deliver financially safe and secure payments
-  Stimulate and grow the UK payment by catalyzing payment related innovation
-  Attract global PSPs and FinTech to innovate and develop payment service in UK
-  Drive the long term need and aspiration of consumer, businesses and government, and all type of PSPs



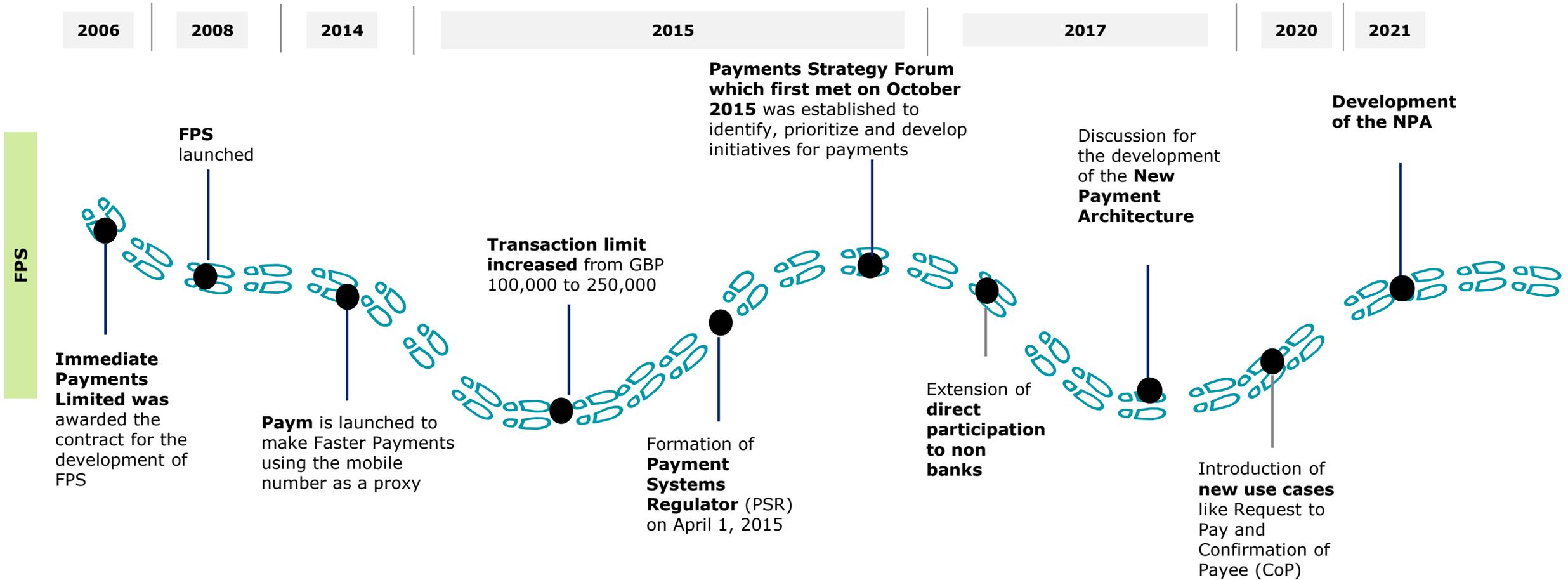
Operator's objective

-  Maintaining trust in the certainty, integrity and security of payments services as operators of systemically important financial market infrastructures
-  Ensuring the continued relevance, competitiveness and usefulness of the services provided as part of the UK payments ecosystem
-  Acting as a catalyst for change in the payments industry – realising opportunities; addressing threats, and supporting industry-wide initiatives
-  Promoting competition by supporting new entrants through comprehensive and consistent application and on-boarding processes
-  Ensuring that payments services remain economically efficient and sustainable, while facilitating competition in both upstream and downstream services
-  Attracting and retaining talented leaders and people who can deliver on the organisations culture, principles and values

The proposed recommendation by the Payment Task Force was shared with the leading banks in the country. The Office of Fair Trading (OFT) set up the Payment Systems Task Force (PSTF), chaired by them, to implement the Cruikshank Report recommendations on payment innovation

1.3. Key Milestones

There has been a series of **improvements and innovations** in FPS in order to enhance customer experience



Note: Above list is not exhaustive

1.5. NPA Objectives



- A key consideration for NPA was the **mandate from the Payment Systems Regulator** for an innovative payment system in the country
- The platform will be capable of **processing large volume of payments** and will allow markets to **develop overlay services** as per end user's requirement
- The main concept of NPA is to **integrate and converge over time all the payment platforms** into one

Payment Systems Regulator established the **Payment Strategy Forum (PSF)** to initiate discussions with banks and end-users about the long-term initiative for the retail payments in UK. The outcome of the PSF was the **blueprint** of the **New Payment Architecture (NPA)**. NPA will consolidate **Bacs and FPS**, and will have a thin core clearing system, capable of processing **large volumes of payments**.

New Payment Architecture

Objectives

Develop a long term strategy for the UK payments industry and meet existing and-emerging user needs

Enable competition wherever possible

Lower barriers to entry and flexible access options

Key Features of NPA

ISO 20022

Enhanced security and resilience

Support new use cases

2. Business and Operating model

Chapter sections:

- 2.1. FPS structure
- 2.2. Participants
- 2.3. Payment instrument and transaction type
- 2.4. Alias and channel
- 2.5 Use cases



Chapter Summary:

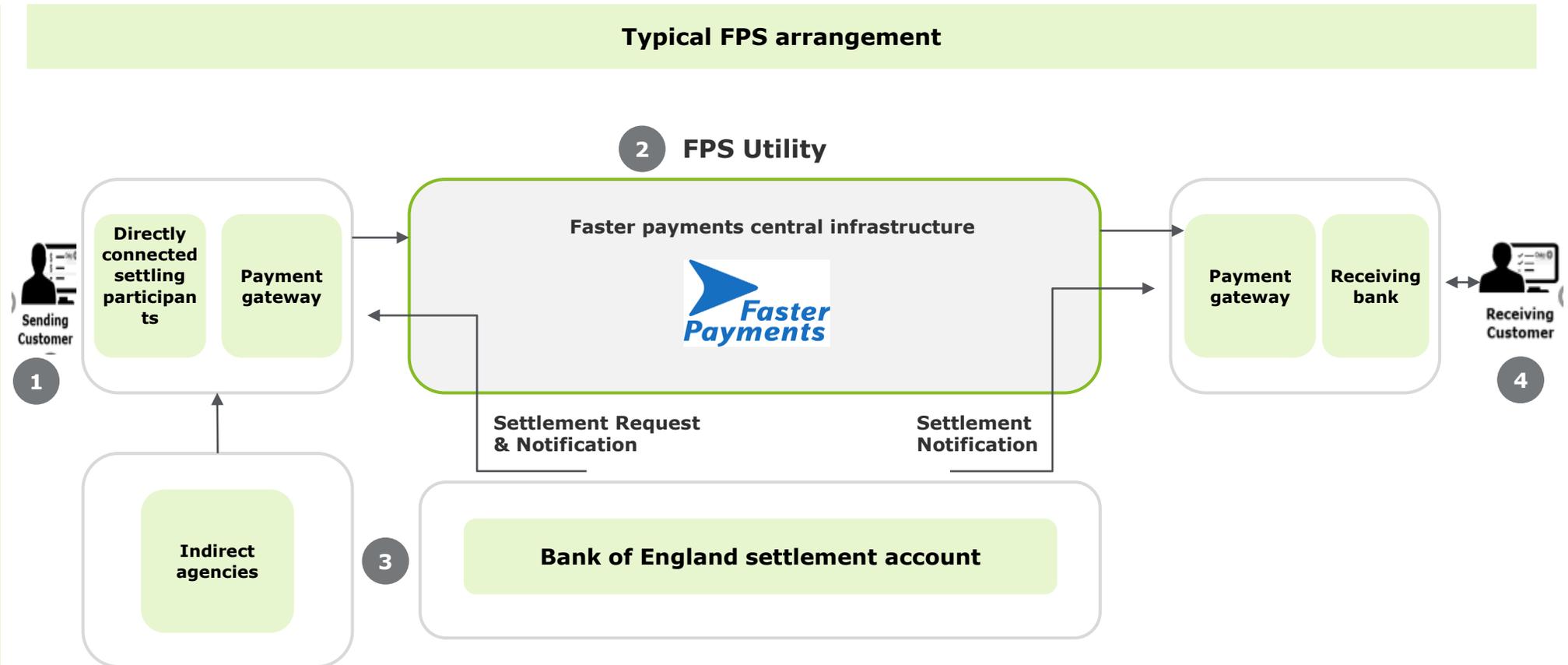
- During the launch of the **FPS, 13 banks** joined the system
- The participation can be classified in to 3 categories
 - Directly connected settling participants
 - Directly connected non settling participants
 - Indirect agencies
- **Indirect agencies** rely on direct participants to connect to FPS, as well as for settlement
- FPS supports **credit transfer connected to bank accounts** as an underlying payment instrument and payments can be made to and from **individuals, businesses and government** entities
- **Apart from standard banking credentials, mobile number** can be used as an alias for Paym (an overlay service launched in 2014), while the various channels supported for transactions are **branches, internet, mobile banking** and telephone banking
- FPS supports use cases such as **single immediate payment, standing order payment and forward dated payment**; Confirmation of Payee was launched in early 2020, while Request to Pay was launched in mid-2020
- Initially, Single Immediate Payments (SIPs) were set to GBP 10,000 while Standing Orders (SOs) and Future Dated Payments (FDPs) were GBP 100,000; the limit has been increased to GBP 250,000

2.1. FPS Structure



FPS participation can be through the following:

- a) **Connected via Payment aggregator** - PSPs are connected through an external payment aggregator reducing the cost of transaction
- b) **Direct Connection via in-house payment gateway** - large banks are connected to the central infrastructure and use their own payment gateway
- c) **Indirect agencies** - PSPs depend on direct participants to connect to the central FPS infrastructure

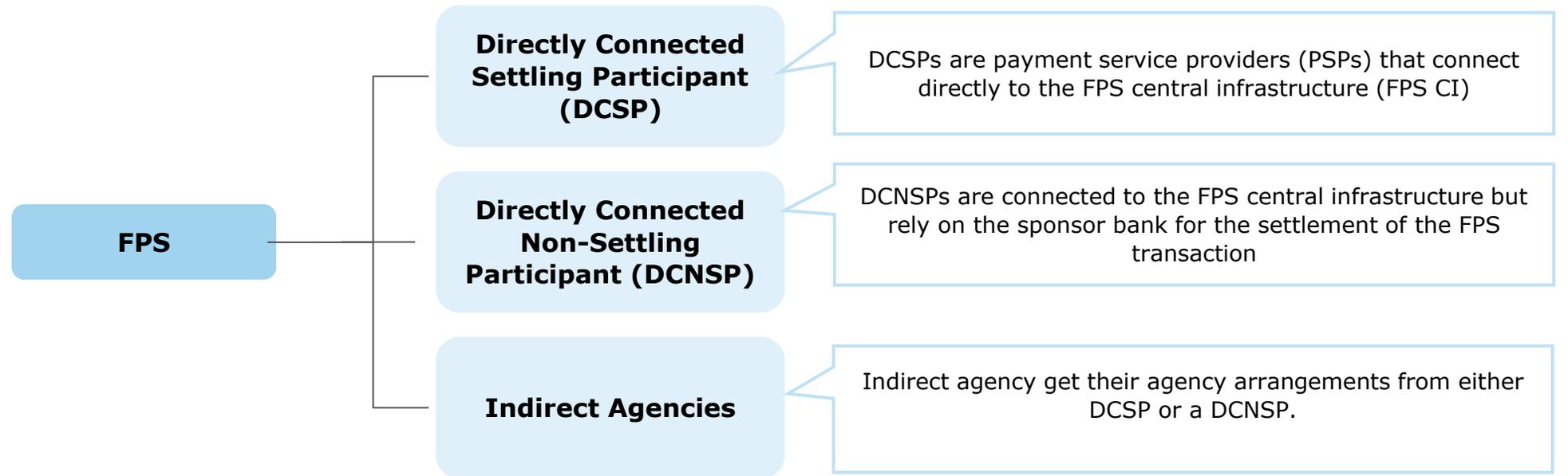


- **Voca and Link** provide a central infrastructure arrangement to the participants
- Pay.UK is the system operator and the settlement occurs at the **Bank of England's settlement account**
- All Participants of FPS are connected to an external, centralized system called **central infrastructure**. A payment gateway refers to a software which sits between **participants' payment processors and the FPS central infrastructure**. It is responsible for connecting participants to the hub and processing messages

2.2. Participants (1/2)



- FPS allows participation through **3 categories**
- Directly connected settling participants
- Directly connected non settling participants
- Indirect agencies
- Pay.UK has provided detailed guidelines for participation under each of the categories
- Currently, there are **33 direct** participants in the system



Requirements for DCSP

- Hold a **sterling settlement** account at the Bank of England
- Be able to **comply with the technical and operational requirements** of FPS
- Commit to pay any legal costs incurred by Pay.UK with regard to participation

Requirements for DCNSP

- A directly connected non settling participant must be **sponsored** by one or more directly connected settling participants
- A DCNSP must comply **with FPS rules, assurance and attestation requirements**

Requirement for Indirect agencies

- Faster Payments can be sent and or received via a **DCSP that offers Indirect Agency services**

2.2. Participants (2/2)



- Direct participants are responsible for **clearing and settlement** of the indirect agencies
- FPS **supports interoperability** of payments between banks and non-banks

Access Considerations

Additional regulatory considerations from FPS Rules V13.2

- The FPS rules are governed by and constructed in accordance with the **law of England and Wales**
- Each participant **agrees to treat as confidential** any information which comes into its possession as a result of the participation in FPS, where such information is by its nature confidential or where the participant knows or should reasonably know it to be confidential
- Pay.UK provides guidelines for **technical requirements for connecting** to the central FPS infrastructure
- Each party agrees and acknowledges that for administering the FPS, the operator may discuss the **performance and operation** by the participants with respect to the Faster Payments Service
- Pay.UK **may suspend a direct participant** if it has failed to comply with FPS Rules or any material breach of provisions

Cost of deployment (Participants)

The costs vary across broad parameters covering the following:

- Onboarding cost
- Registration cost
- Transaction fee
- Service management cost
- Migration cost
- Support and maintenance cost
- Telecommunication cost

Onboarding Process

Pay.UK undertakes **risk assurance** to consider the risks relating to the intended operation of a New Participant Applicant (Applicant) for entry to the Faster Payments Service (FPS).

Self-certification document: Participants need to provide self certification for assurance. It covers the following aspects:

- **Sufficient controls** will be in place and working for all risks that could impact Faster Payment processing, operations or service from the point of Go-Live
- **Their compliance** to the FPS Scheme Rules from the point of **Go-Live**
- The continued availability of their FPS gateway from the point of Go-Live

Post Go-live: Annual Assurance Activity

Pay.UK requires all the existing participants of FPS to annually provide **assurance that controls** to mitigate risks identified by the company relating to their FPS clearing operations are in place and operating effectively across the participation, together with their compliance to FPS Scheme Rules and their availability arrangements in those situations where contingency is involved.

Interoperability

- Enables transfers between **accounts at different participating** Financial Institutions including between banks and non-banks

2.3. Payment Instruments, Transaction Types, and Scheme pricing



FPS supports credit transfer as a payment instrument. FPS allows transfers between banks and non-banks. The transaction limit has been set to GBP 250,000

Payment Instruments Supported

	Interoperability
 Credit Transfer ✓	<ul style="list-style-type: none"> Transfers between banks and non-banks allowed Customer can initiate transfer between current account and saving account within its own account type
 Direct Debit	
 Mobile Wallets	

Payment Type, Limit and Currency

Transaction Type	Transaction Limit	Transaction Currency
 Individual	<ul style="list-style-type: none"> Initially the transaction limit was set to GBP 10,000 for Single Immediate Payments (SIPs), i.e., the spontaneous attended payments, and GBP 100,000 for the others, i.e., same day and forward dated 'unattended' payments However, each participating bank sets its own limit depending upon the type of customer, channel of transaction and type of transaction subject to a maximum of GBP 250,000 Participants are in discussion with the operator to raise the limit to GBP 1 million 	
 Business		
 Government		

Fee charged for end users

- Banks are free to decide the end user charges. Generally, it is free for retail customers, While for corporate customers there are transaction charges

Fee charged for participants

- Various charges levied on the banks include:
 - Transaction fee
 - Registration cost
 - Onboarding cost, etc.

2.4. Aliases, Access Channels and Overlay Services



Presently, **Paym the overlay service**, supports mobile number as an alias. Multiple channels such as branch, mobile banking, internet banking and telephone banking are supported. With the introduction of NPA new aliases like email ID will also be supported

Aliases



- **Description:** Paym, the overlay service uses **the mobile number** as an alias for the bank account details. Customer enters the receiver's mobile number and authenticates to complete the transaction
- **Registration:** Customer needs to register only to receive funds. Once the customer registers for Paym in their mobile banking app, they can open the application, enter details of the individual and **confirm the payment**. Banks can decide to register corporate customers and enable payments for them through an alias (mobile number)
- **Usage:** Customers can directly transfer money to their contact by choosing it from the drop-down menu. If the receiver does not have Paym, an SMS is sent to the number to contact the bank and register themselves to the application. Once the payment is completed, both the payee and the payer receive the **confirmation message**. Currently 15 banks accept transactions through Paym

Access Channels



Branch



Internet Banking



Mobile Banking/Apps



Telephone banking

Presently, FPS supports transactions through branches, mobile banking, telephone banking and internet banking applications. Customers need to login to their internet or mobile banking application, enter the bank account and the sort code of the receiver and complete the transaction.

For payments through Paym, customers can enter the mobile number of the receiving customer; they do not need to enter bank account or sort code details

While processing transactions from a branch, the payment is credited to the beneficiary's account soon after it is received by the beneficiary's bank through FPS

2.5. Use Cases | FPS


Forward Dated Payment*

- Forward dated payments are one off payments sent and received at pre-arranged dates

Payment Instruments

Bank account

Access Channels






Mobile Branch Internet Telephone banking


Standing Order*

- A customer can instruct the bank to pay a fixed amount at regular intervals to another bank account
- Payments are made during the weekdays and if the pre-arranged date falls on a holiday, then payment is processed on the next working day

Payment Instruments

Bank account

Access Channels






Mobile Branch Internet Telephone banking


Bill Payments

- FPS supports bill payments
- Bill payments can be made through single immediate payments or forward dated payments

Payment Instruments

Bank account

Access Channels






Mobile Branch Internet Telephone banking


Bulk/Batch Payments

- Bulk payments are made through Direct Corporate Access Payments (a model where DCSPs and DCNSPs sponsor corporates to connect directly to FPS using secure- IP and DCA module at Voca and Link)
- Not all participants offer bulk payments through direct corporate access

Payment Instruments

Bank account

Access Channels



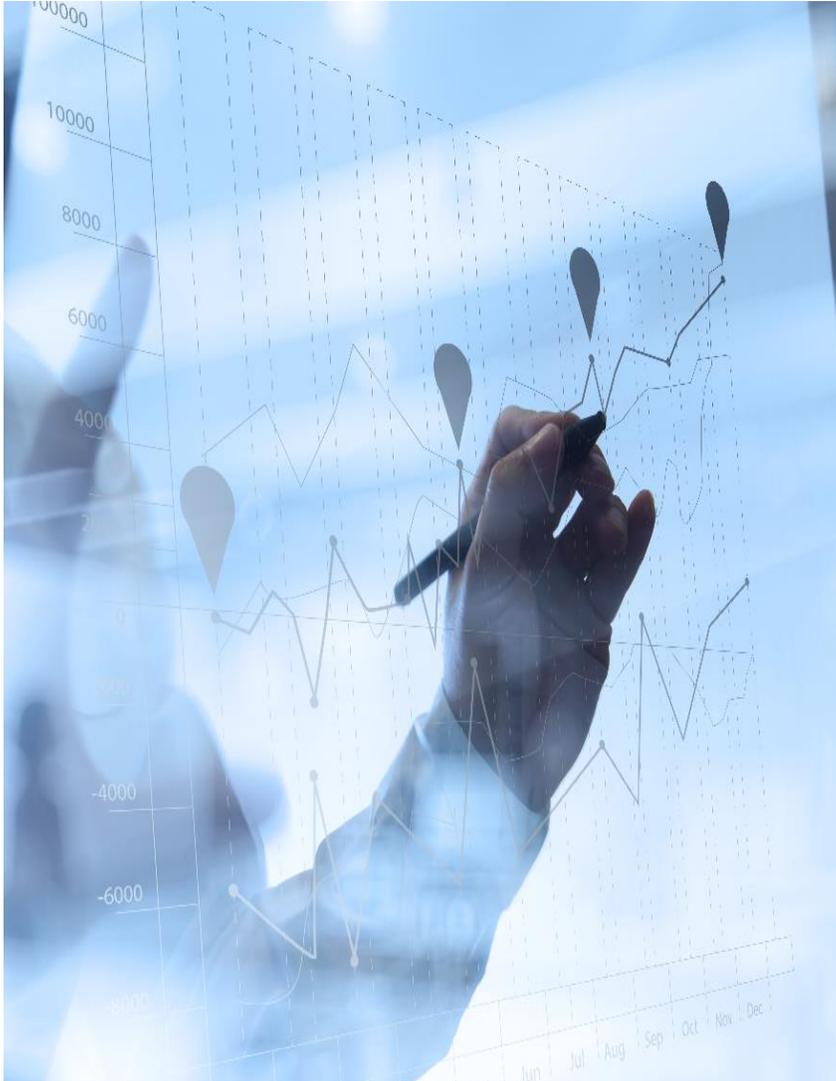



Mobile Branch Internet Telephone banking

• Additionally, Request to Pay and Confirmation of Payee were launched in 2020. With Confirmation of Payee, when a sender transfers money, the beneficiary bank checks the detail of the recipient, and in case of any discrepancy, the customer is notified of the mismatch details before the transaction is completed

* Part of the FPS central infrastructure

3. Adoption Statistics



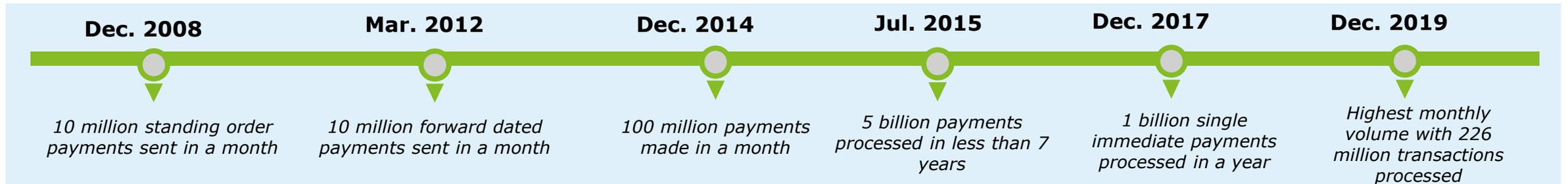
Chapter Summary:

- FPS has shown **steady growth since it went live**, with the CAGR growth of volume and value being **16.6%** and **16.7%** respectively between 2013 and 2019
- One of the challenges faced during the initial years was that large banks would hold the money for some hours before transferring it to bank accounts of smaller banks
- Some of the steps taken by the stakeholders to increase the adoptions of FPS were:
 - Extending **direct participation to non-banks**, leading to an increase in customers connected and a reduction in the transaction time
 - Introduction of **new use cases** to enhance customer experience

3. User Adoption| FPS



FPS has shown steady growth majorly due to the initiatives taken by the operator such as extending participation to non-banks and introduction of new use cases to enhance customer experience. Over the last 7 years it has shown CAGR growth of value and volume as 16.6% and 16.7% respectively. Timelines for volume of transactions has been depicted below:



- FPS value and volume growth over the last 7 years has been CAGR 16.6% and 16.7% respectively. The factors that has contributed to this growth is the extension of direct participation of non-banks, thereby leading to increased in transaction volume

Source: FPS

4. Technical Details and Payment Process

Chapter sections:

4.1. Technical Details | Messaging Format, API, Customer Authentication

4.2. Payment Process (Transaction Fulfilment)



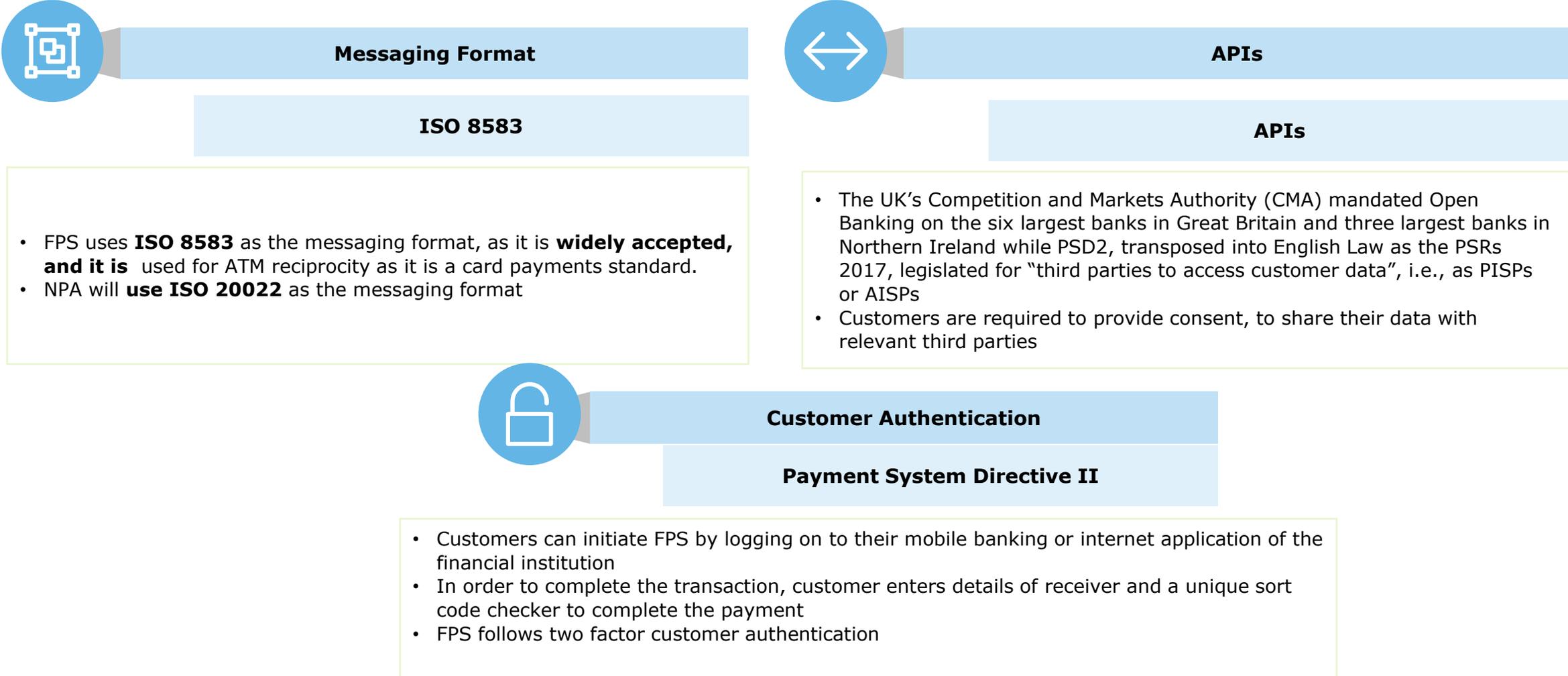
Chapter Summary:

- FPS provides simple technical infrastructure to **ensure convenience** to all the stakeholders of the system
- FPS uses ISO 8583 messaging standard
- The UK's Competition and Markets Authority (CMA) mandated Open Banking on the six largest banks in Great Britain and three largest banks in Northern Ireland while PSD2, transposed into English Law as the PSRs 2017, legislated for "third parties to access customer data", i.e., as PISPs or AISPs. Customers are required to provide consent to the banks to share data with third parties
- Settlement of the transaction is done through **deferred net settlement model 3 times a day**. Transactions during the weekend are settled in the first cycle of the next working day
- Direct participants are responsible for transaction connectivity and the settlement of indirect agencies. **Intra-bank transfers** are carried out at the **General banking** platform of the banks

4.1. Technical Details | Messaging format, API & Customer Authentication



Given below are the messaging format, APIs and the customer authentication process for the FPS. While FPS adopted to ISO 8583, NPA would use ISO 20022 as a global standard messaging format

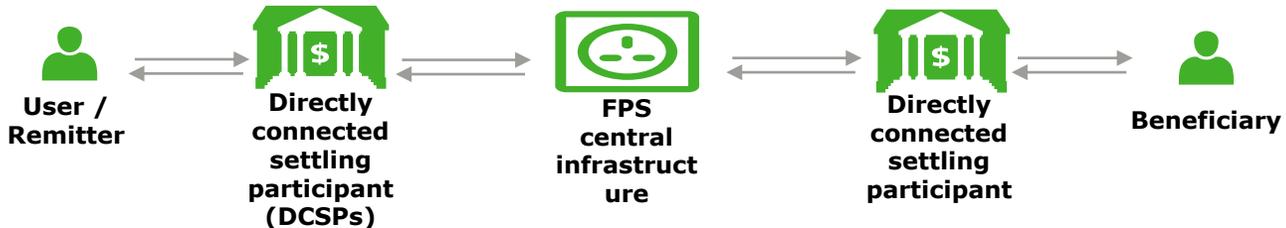


4.2. Payment Process | Transaction Fulfilment | FPS



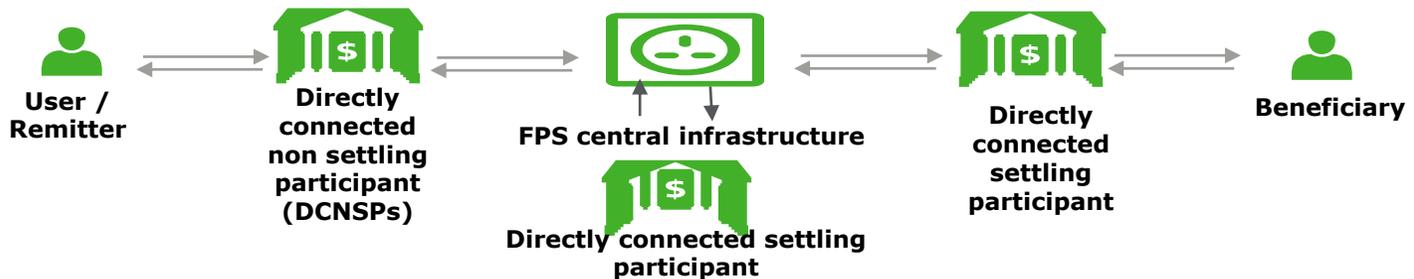
Participants can fulfil customer transactions in either of 3 category modes. For directly connected settling participant and directly connected non-settling participant, participants can either connect directly to FPS or can use a third-party API to connect to FPS. Indirect agency can connect through either a DCSP or a DCNSP.

Directly connected settling participants



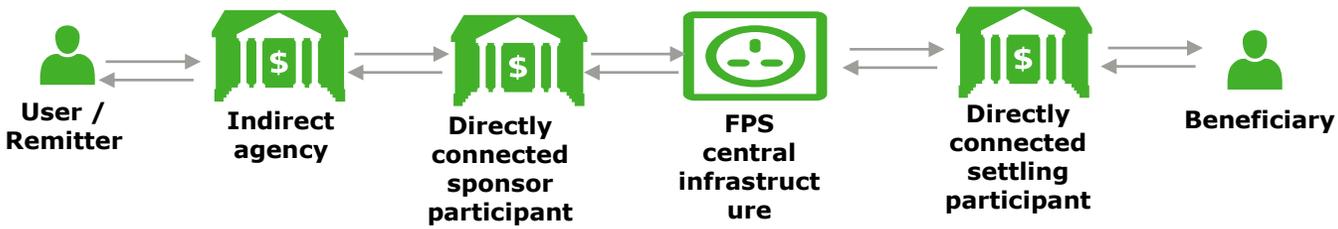
- DCSPs are payment service providers directly connected to the FPS central infrastructure
- They hold a settlement accounts with the Bank of England

Directly connected non-settling participants



- DCNSPs are connected directly with the FPS central infrastructure but are sponsored by a DCSP for managing settlement

Indirect agencies



- Indirect agencies are not connected to the FPS central infrastructure
- They send or receive money via DCSP or DCNSP on their behalf or on behalf of their customers

Source: FPS

4.2. Payment Process | Liquidity Management and Settlement | FPS



FPS follows **deferred net settlement** mechanism across **3 daily cycles** and has a **net sender cap** to maintain intraday liquidity in the system

Directly connected settling participants

Approach



Hub

Type | Time

Deferred Net Settlement

3 Cycles Per Day

- Settlement of payments is carried out by deferred net settlement.
- The Net Sender Cap (NSC) is a measure to control settlement risk. It is the maximum amount that participants are allowed to send having netted off the value received from the value sent at that time.
- NSC is the reflection of collateral held by the participants at the central bank to meet their settlement obligation
- Whenever a participant encounters difficulty in meeting settlement obligations, the FPS instructs Bank of England to use cash held in the participant's RCA to meet the settlement obligations. In that circumstance FPS would reduce the bank's NSC before the Bank of England debits the RCA
- The advantages of choosing deferred net settlement are:
 - Convenient for systems which handle substantial volumes and **lowers liquidity requirements**
 - Joint bid of Voca and Link had proposed a back office based on Bacs (Deferred Net Settlement)
- For transactions that take place during the weekend, the settlement occurs during the **first cycle of the next working day**

Indirect Agencies Settlement

- Direct participants are responsible for providing infrastructure and **settlement facilities** to the indirect agencies
- The process of settlement is deferred net settlement, similar to that of direct participants
- A new model for payment also exists where participants need not set up their **own in-house payment gateway but** can connect to the central infrastructure of the FPS. This is for the DCSPs and DCNSPs who connect to the Central Infrastructure via a shared gateway provided by an Aggregator.

Intra bank settlement

- The intra bank settlement process is known as "on-us" settlement. For such transactions banks use their **General Banking Platform (GBP)**

5. Governance Framework

Chapter sections:

- 5.1. Legal and Regulatory Aspects
- 5.2. Risk Management
- 5.3. Dispute Resolution
- 5.4. Customer Complaints



Chapter Summary:

- Different legal texts that set out PSR's power and objectives includes the following
 - The Financial Service (Banking Reform) Act 2013
 - Banking Act 2009
 - UK legislation for competition law is the Competition Act 1998 and the Enterprise Act 2002
 - Payment Services Regulations (PSRs) 2017
- Bank of England oversees the payments system. In 2015, Payment Systems Regulator (PSR) was formed as an **independent regulator** to promote competition and enhance innovation of the payments landscape in the country
- A **Memorandum of Understanding (MoU)** was signed between Bank of England, Financial Conduct Authority and Payment Systems Regulator, providing the roles and responsibilities of individual entities for payments regulation in the country
- FPS follows a **Net Sender Cap** which limits all the participants to an estimated amount that a participant can transfer within a day. It also follows the prefunded mechanism to keep reserve as collateral to avoid credit default

5.1. Legal, Regulatory and Governance Aspects | FPS (1 of 3)



Different legal texts that set out PSR's objective, power and duties, the main legislation is the Financial Services (Banking Reform) Act 2013. The key UK legislation for competition law are the Competition Act 1998 and the Enterprise Act 2002.

Institutional and Governance Framework

Legal Framework:

Financial Service Banking Reform Act 2013, Banking Act 2009 Payment Service Regulations 2017

Regulator and Overseer

Bank of England and the Payment Systems Regulator

Owner and Operator:

Pay.UK

As per PSR website

- The legislation that is applied to Payment Systems Regulator (PSR) is the Financial Services (Banking Reform) Act 2013, which created the PSR. It sets out statutory objectives and duties, regulatory principles to follow, regulatory and enforcement powers.
- The EU Payment Services Directive ('PSD2') contains Article 28 which applies to the PSR. This is translated into UK legislation in Part 8 of the Payment Services Regulations 2017.
- The constitution of Bank of England and its subsidiaries are contained in various documents which include the Bank of England Act 1964, the Financial Services and Markets Act 2000, etc.

Other acts that govern the UK landscape are:

- UK legislation for the competition law in the **Enterprise Act 2002**, **The Banking Act 2009** and **Competition Act 1998**

5.1. Legal, Regulatory and Governance Aspects | FPS (2 of 3)



Bank of England is the regulator and the oversight body for FPS, while Payment Systems Regulator was formed in 2015 to act as an independent regulator with the objective to enhance the payments landscape of the country.

Institutional and Governance Framework

Legal Framework:

Financial Service Banking Reform Act 2013, Banking Act 2009 Payment Service Regulations 2017

Regulator and Overseer

Bank of England and the Payment Systems Regulator

Owner and Operator:

Pay.UK

As per details on PSR website and the MoU between Bank of England, PSR and FCA

- The main legislation that governs the central bank is the **Bank of England Act 1998 and the Charters**. The mission of the bank is to promote the good of the people of the United Kingdom by maintaining **financial and monetary stability**

Payment Systems Regulator:

The main objectives of PSR are:

- Ensure that payment systems are operated and developed in a way that considers and promotes the interests of all the businesses and consumers that use them
- **Promote effective competition in the market** for payment system and service- between operator, PSPs and the infrastructure provider
- Promote the **development** of and **innovation in payment system**, in particular **the infrastructure** used to operate those systems

The PSR has a range of **strong regulatory and competition powers**:

- Give directions to act and set standards
- Impose requirements regarding system rules
- Require operators to provide direct access to payment systems
- Require PSPs to provide indirect access to smaller PSPs
- Amend agreements relating to payment systems, including fees and charges
- Investigate behaviour which isn't consistent with its directions
- Act where PSR sees anti-competitive behaviour, alongside the Competition & Markets Authority

In 2019, a **Memorandum of Understanding (MoU)** was signed between the **Bank of England, Financial Conduct Authority and the Payment Systems Regulator** to set out the roles and responsibilities of the bodies with respect to the payment landscape

5.1. Legal, Regulatory and Governance Aspects | FPS (3 of 3)



Pay.UK operates the FPS. Pay.UK is regulated by both Bank of England and Payment Systems Regulator (PSR). Pay.UK is the payment authority looking after retail payments systems namely FPS, Bacs and Cheque and Credit clearing

Institutional and Governance Framework

Legal Framework:

Financial Service Banking Reform Act 2013, Banking Act 2009 Payment Service Regulations 2017

Regulator and Overseer

Bank of England and the Payment Systems Regulator

Owner and Operator:

Pay.UK

As per details from FPS website

Faster Payments is recognised by HM Treasury under Part 5 of the Banking Act (2009) as a systemically important FMI, and as such is overseen by the Bank of England. From May 1, 2018, Pay.UK is regulated as the Payment System Operator (PSO) of the Faster Payments Service, by the Payment Systems Regulator (PSR). Payment Strategy Forum (PSF) was created in 2015 to lead on a process to identify, prioritize and help to deliver initiatives where it is necessary for industry to work together and promote collaborative innovation

Faster Payments' Service User engagement Principles

- Principle One- Inclusion
- Principle Two – Collaboration
- Principle Three – Responsiveness
- Principle Four – Integration

Risk and Compliance

- **Faster Payments has an enterprise-wide risk management framework**, to manage risk across all time horizons, from emergence to point of impact. The framework is set up to identify, measure, manage, monitor and report all risks facing the Faster Payments Service
- Through a formal governance structure, which includes a **Board Risk Committee**, chaired by an **Independent Non-Executive Director**, the risk framework ensures that Faster Payments remains a reliable secure and efficient part of the financial market infrastructure

5.2. Risk Management (1/2)



FPS payments has an enterprise-wide risk management framework, to manage risk at different points of contact. It follows a prefunded settlement mechanism to minimize settlement risk

Legal and Regulatory Basis	<ul style="list-style-type: none">• The adoption of the PFMIs as a code by the Bank of England under the Banking Act 2009 provides the credit and risk management requirements for Faster Payments.• The Payment Service Regulation (PSRs) 2017 provide the guidelines for the credit and the risk management system for the payment system in the country• The other regulation that provides the framework are UK legislation for the competition law is the Enterprise Act 2002 and Competition Act 1998
Net Sender Cap (NSC)	<ul style="list-style-type: none">• Net Sender Cap is a reflection of the collateral a participant holds at the central bank to ensure they meet their settlement obligations• The NSC should be set at a level that more than covers the anticipated maximum intra-cycle debit position for that Participant, recognising that the flow of funds in and out of each Participant may vary during each settlement cycle
Pre funded settlement account	<ul style="list-style-type: none">• In order to eliminate settlement risk, each Participant is also required to hold a cash sum equal to the value of the NSC in a separate account Reserve Collateralisation Account (RCA)• In normal operation, the RCA will remain untouched, as after each Settlement Cycle, the Participant should settle any obligations by using General Settlement Account held at the BoE• This Pre-Funded Settlement Model ensures that, should any Participant encounter difficulties meeting its settlement obligations, then FPS can instruct the Bank of England to use the cash held on that Participant's RCA to complete settlement, while ensuring no other Participant is impacted
Directly connected settlement for other participants	<ul style="list-style-type: none">• The Directly connected settlement participants are responsible for their own settlement obligation while protecting all other participants as well as for ensuring faster and associated settlement of those payments can be met

5.2. Risk Management (2/2)



FPS payments has an enterprise-wide risk management framework, to manage risk at different points of contact. It follows a prefunded settlement mechanism to minimize settlement risk

Real-Time Fraud Risk Monitoring and Management Solution

- **Confirmation of Payee (CoP)** is a name-checking service that has been identified by the Payment Systems Regulator (PSR) and payments industry as an important tool to help **prevent authorised push payment (APP) scams and accidentally misdirected payments**. The service checks whether the name of the account that a payer is sending money to, matches the name they have entered.
- Banks monitor any **unusual activities** for the incoming and the outgoing payments. Financial institutions hold the payments in case of any suspicions.

KYC / AML

- Participants need to comply with **KYC, AML, Combating of Financing of Terrorism (CFT), Politically Exposed Person (PEP) check**, Terrorist List checks as stipulated by the regulator for activities of participants before registering a customer. It is the responsibility of the PSPs to follow the prevailing legislative requirements for the KYC guidelines
- The regulation for the money laundering is given in the '**The Money Laundering, Terrorist Financing and Transfer of Funds (Information on the Payer) Regulations 2017 (MLR 2017)**'

Cyber security guidelines

- **FPS operating model** has a **cyber security framework**, which helps in identifying and protecting from cyber attacks
- Continuous assessment of the capability through **cyber assessment and improvement** measures taken by Pay.UK, to check for system effectiveness

Operational risk

- Pay.UK has established SLA within its contract with its supplier which sets the required level of availability and reliability. In an event that any of the SLAs are not met, it gets highlighted in the Key Risk Indicator report, with remedial action stated and tracked
- Policies and procedures are in place to confirm incidents can be resolved on a timely basis. Incidents are subject to a post incident review, incorporating measures to prevent repeat occurrence
- Pay.UK has introduced an integrated Business Continuity Management Framework document set. The framework sets out the incident management processes and covers four main scenarios which are an Operational Incident, Settlement incident, loss of building and loss of key service
- Pay.UK's key suppliers are certified to ISO22301 Business Continuity Management and ISO27003 Information Security Management; these certificates are provided as part of the agreed assurance process which also includes regular meeting to discuss the services provided.

5.3. Dispute Resolution and Customer Complaints



Dispute may arise between different participants of the FPS, while a customer complaint may arise between the participating FIs and end-users

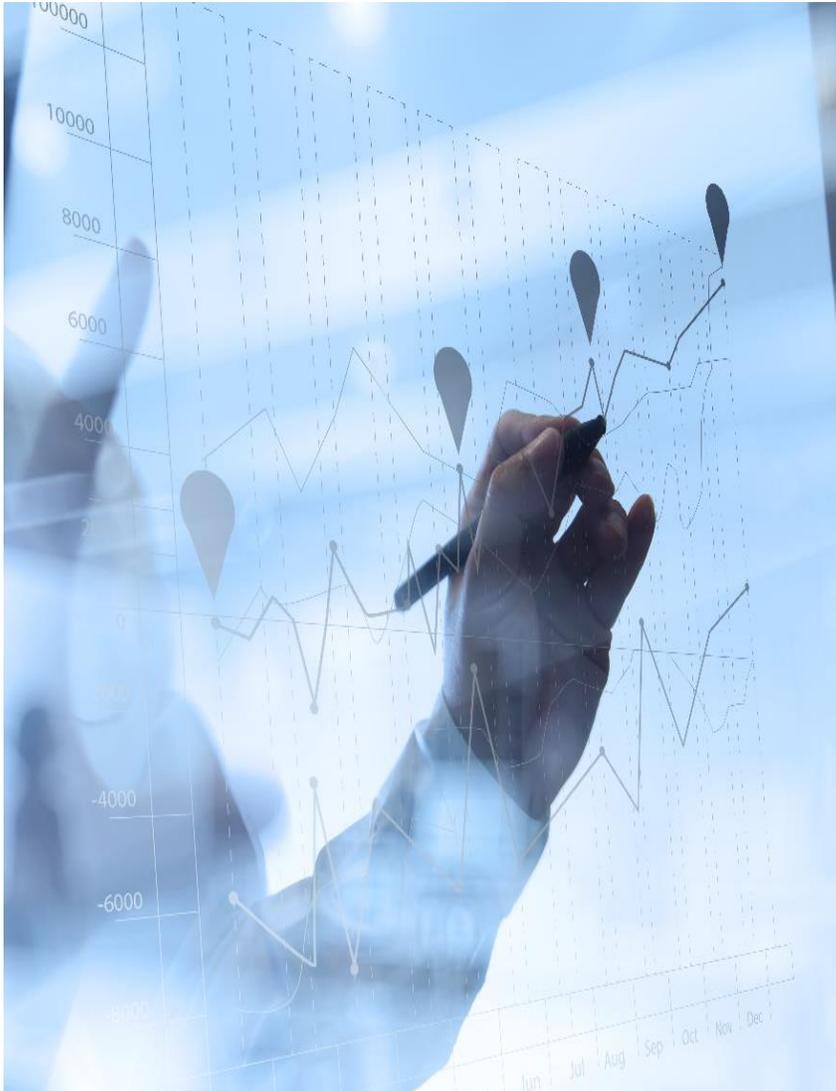
Dispute Resolution

- The central infrastructure of UK's FPS is **robust and maintains a ~99%** uptime. There are **checks for duplicates**, with a faster payment identifier that enables tracking of payments easily.
- This leads **to very few disputes**. However, in the case of errors such as when a beneficiary has been credited but is unable to **reconcile the funds** to an originator, the beneficiary may decide to initiate a fresh payment back to the originator to refund the funds. In such cases, the sender's and receiver's banks can advise their customers based on the details available in the payment identifier.
- Another example is when a customer sends a duplicate file that may not have the same transaction details but has **different IDs**, which might miss the duplicate check for files. In order to resolve this issue, certain measures have been identified, such as the bank error recovery process. In this case, there are **specific guidelines** that can be followed by bank if the bank has duplicated a file and sent a payment erroneously.
- There are also guidelines for how customer-initiated transactions can be recovered. These can be followed when files get duplicated. There are timelines provided for all FPS participants to fulfill to ensure that the funds are refunded to the originating bank.
- Also, with the introduction of Confirmation of Payee (CoP), a lot of disputes can be avoided before the transaction.

Customer complaints

- In the case of an unauthorized transaction, the customer needs to report to the financial institution
- As the next step the financial institution starts the investigation within 2 days of the complaint
- When the financial institution finds clear evidence of a genuine mistake then a request is initiated to the receiving financial institution
- If the recipient does not dispute the claim, the amount is transferred within 20 days of the complaint
- Action Fraud, an industry initiative run out of UK Finance. It passes on all fraud cases to the National Fraud Intelligence Bureau (NFIB), which is overseen by the police force that leads on fraud for the UK
- In case the banks are unable to provide solution for the disputes, the customer can report to Financial Ombudsman Service to resolve the dispute

6. Annexure



Chapter sections:

6.1. Key Features

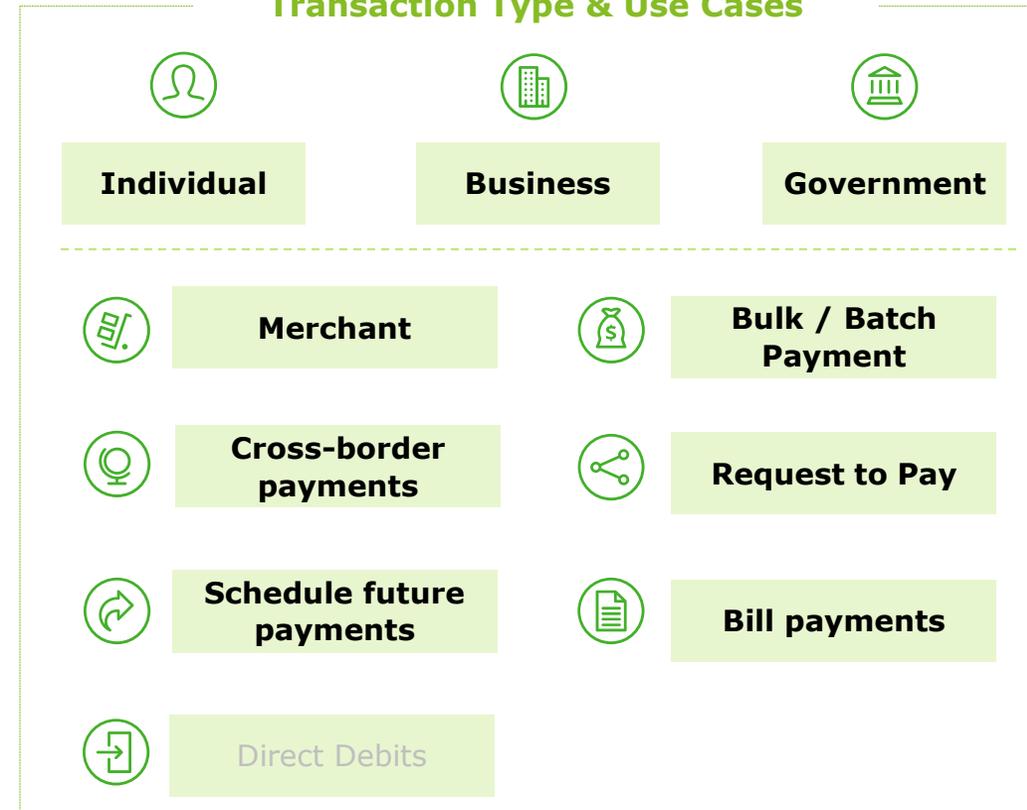
6.1. Key Features

Features

Key Highlights

	Operating hours	<ul style="list-style-type: none"> • 24*7 including weekends and bank holidays
	Payment Speed	<ul style="list-style-type: none"> • Real time (sometimes it might take 2 hours)
	Transaction limit	<ul style="list-style-type: none"> • Maximum of £ 250,000
	Alias	<ul style="list-style-type: none"> • Mobile Number (Paym)
	Channel	<ul style="list-style-type: none"> • Branch, Internet, Mobile channels and telephone banking
	User Charges	<ul style="list-style-type: none"> • Banks can decide end user charges • For corporate customers banks decide the charge
	Infrastructure setup	<ul style="list-style-type: none"> • New System
	Messaging format	<ul style="list-style-type: none"> • ISO 8583 currently • NPA will use ISO 20022
	Use of Open APIs	<ul style="list-style-type: none"> • Open APIs is available
	Authentication	<ul style="list-style-type: none"> • Multi factor authentication

Transaction Type & Use Cases



Settlement

