Pay.UK 2023 PFMI self-assessment

(as at end-August 2023)

Classification: Public

Contents

1 Introduction to the PFMI self-assessment

The CPMI-IOSCO Principles for Financial Market Infrastructures (PFMIs) are the international standards for systemically important financial market infrastructures (FMIs), such as payment systems, central securities depositories, and central counterparties. The PFMIs are issued by the Bank of International Settlements' Committee on Payments and Market Infrastructures (CPMI) and the International Organisation of Securities Commissions (IOSCO). They were first issued in 2012 to update and harmonise the previous sets of standards.[1] If adhered to, the PFMIs help to ensure that FMIs (including payment systems) are robust, resilient, and positioned to withstand financial shocks.

As a recognised payment system operator (RPSO), Pay.UK is currently required by its macroprudential regulator, the Bank of England (BoE), and specifically the Financial Market Infrastructure Directorate (FMID) within the BoE, to complete a PFMI self-assessment every two years, with an interim report to FMID every other year

This document is Pay.UK's fourth annual self-assessment against the PFMIs and provides details of how Pay.UK is performing against the PFMIs as at end-August 2023. This document was provided to FMID in September 2023. A public version will be published on the Pay.UK website shortly thereafter.

As well as providing transparency to FMID and broader stakeholders, the self-assessment offers Pay.UK a useful opportunity to assess its operations, risk frameworks, and performance.

This self-assessment report is comprised of three sections:

- ***Section A: What is Pay.UK?*** – This provides a summary of Pay.UK, its legal and regulatory framework, the three payment systems it operates, its customers/participants,[2] and the New Payments Architecture (NPA) Programme.
- ***Section B: Summary of ratings and changes since the 2021 self-assessment*** – This provides an overview of the PFMI rating criteria, the ratings Pay.UK has assessed as applicable this year, and a summary of changes in those ratings compared to the 2021 self-assessment.
- ***Section C: Principle by principle analysis*** – This provides a detailed summary of the ratings and explanations for all the principles that are applicable to Pay.UK. The responses have been provided in accordance with the key considerations detailed against the relevant principles.

[1] For details, please see: https://www.bis.org/cpmi/info_pfmi.htm.

[2] To maintain consistency with the language used in the PFMIs, we refer to Pay.UK's customers as 'participants' throughout this document.

2 Section A: What is Pay.UK?

Pay.UK Limited (Pay.UK) runs the UK's three interbank retail payment systems: (i) the Bacs Payment System (Bacs); (ii) the Faster Payment System (FPS); and (iii) the Image Clearing System (ICS).

Pay.UK's vision is *'to be the smartest way to move money, now and in the future.'* and its core purpose is *'to power payments, champion innovation and give the UK choice in how it pays'*.

Pay.UK was incorporated in July 2017 as a not-for-profit company limited by guarantee. Pay.UK is governed by a Board of Directors and run on a day-to-day basis by a Chief Executive Officer (CEO) and an executive management team.

Prior to the creation of Pay.UK, the three payment systems were operated by three independent companies. In May 2018, Pay.UK acquired Bacs Payments System Limited (BPSL) and Faster Payments Service Limited (FPSL). In July 2018, this was followed by Pay.UK's acquisition of UK Payments Administration (a services company) and the Cheque and Credit Clearing Company Limited (C&CCC), operator of the paper cheque system, which was replaced by the Image Clearing System (ICS). The operation of the central infrastructure (CI) for Bacs, FPS, and ICS is outsourced to Vocalink (since 2003 for Bacs, 2008 for FPS, and 2016 for ICS).

2.1 Pay.UK's legal and regulatory framework

Bacs and FPS are payment systems *recognised* by HM Treasury in accordance with Section 184 of the *Banking Act 2009.* As a result, Pay.UK's operation of both payment systems is subject to macroprudential regulation by FMID.

Bacs, FPS, and ICS are all *designated* by HM Treasury in accordance with Section 44 of the *Financial Services (Banking Reform) Act 2013*. Consequently, Pay.UK's operation of these systems is subject to economic regulation by the Payment Systems Regulator (PSR).

Pay.UK is also subject to competition laws, specifically the *Competition Act 1998* and *Enterprise Act 2002*. The PSR has concurrent competition powers along with the Competition and Markets Authority (CMA). The Financial Conduct Authority (FCA), which also has concurrent competition powers, may also intervene in some circumstances.

Bacs, FPS, and ICS have all been designated for settlement finality purposes under the *Financial Markets and Insolvency (Settlement Finality) Regulations 1999.*

2.2 Overview of the Bacs Payment System, Faster Payment System, and Image Clearing System

Bacs, FPS, and ICS are all deferred net settlement (DNS) payment systems. In DNS systems, payments are accumulated and netted either throughout the day or once per day and then settlement of the net amount takes place. This means that the clearing and settlement of payments are conducted separately. While clearing will happen in the CI for each payment system, the values owed to or by each Direct Participant (DP) are netted together by Vocalink with final settlement occurring at the BoE over the Real-Time Gross Settlement (RTGS) infrastructure in central bank money. Settlement occurs between one and three times a day depending on the payment system. Pay.UK maintains contracts with Vocalink for each payment system and with the BoE as the settlement service provider (SSP).

All three systems work on a pre-funded basis. This is where all DPs hold a cash deposit sufficient to cover their own net debit position in a segregated account at the BoE. DPs which are banks and building societies, hold Prefunding Accounts, whereas non-bank payment service providers (NBPSPs), depending on their set-up, hold Settlement Collateralisation Accounts[3], or Client Fund Accounts. These deposits underpin the net flows of payments between each DP and will only ever be used to settle the obligations of the DPs in the event of operational or financial difficulties. The existence of pre-funding removes credit risk (between DPs) from the settlement process.

The Bacs Payment System

Bacs processes automated bulk retail payments via Direct Credits and Direct Debits. Through Direct Credits, Bacs is used for processing payments, notably salaries and welfare payments. Through Direct Debits, Bacs is used to process scheduled consumer payments for services such as utilities, insurance, mortgages, and subscriptions.

Bacs operates on a three-day processing cycle. On the first day the originating organisation (e.g. the payer or biller) inputs the payment items it wants to submit (payments can be submitted up to 70 days in advance if required). A Direct Credit or Debit payment item is a transaction, containing the payment amount, credit and debit account details, as well as the originator and submitter details (the submitter may be a bureau acting on behalf of one or more third-party originators) together with recipient details. Files are submitted under encryption into the CI and are then authenticated.

On the second day the CI routes the payments to receiving DPs for application to destination accounts by 07:00 on day three. Where a paying PSP is not a Bacs DP they will receive their output files via their sponsoring DP (some receive output directly). On day two, transactions between all DPs are totalled, and the final net position for each Bacs participant is settled in RTGS at 09:30 on day three.

There are 31 DPs in Bacs. Pay.UK has numerous contractual arrangements, rules and agreements with each of the Bacs participants, which are listed in the table below. For simplicity we refer to these throughout this document as ‘Bacs contractual arrangements and rules’.

Bacs Settlement Agreement	Defines the procedures whereby settlement of payments is executed between participants’ RTGS accounts.
Deed of Charge	A deed between participants and the BoE, which creates a charge over any balance in a participant’s pre-funding account, to ensure that settlement can complete in the event of a failure by any participant.
Bacs Payment System Participation Agreement	Enables an applicant to become a DP and defines the rights and obligations of participation, including compliance with the Bacs Rules.

[3] For more details, please visit https://www.bankofengland.co.uk/payment-and-settlement.

Liability Pooling Agreement	Specifies the liability caps and priorities between the parties for services provided under the agreements collectively known as the 'Transaction Documents'.
Participant Services Agreement	An agreement between each participant and Vocalink (as CI provider) for the provisions of services as detailed in the Framework, Development, and Marketing Agreements.
Participant Trade Mark Licence	Defines the conditions under which participants may use the Trade Marks of the System Operator.
Direct Debit Recall Agreement	Enables Pay.UK (as Bacs PSO), and its participants in exceptional circumstances, to restrict a Paying PSP's right to use the Direct Debit Unpaid Process and to amend the Direct Debit Scheme Rules accordingly.
Single Settlement Trust Deed	Used by non-bank PSPs utilising the 'own fund' participation model, which sign a trust deed, instead of a deed of charge.
Bacs Rules	Sets out rules and obligations expected of our Bacs service participants ensuring service and systemic risks are managed, and also incorporates by reference supporting Bacs operational documents.

Over circa 300 indirect PSPs access Bacs via agency arrangements through one or more DPs. There are also approximately 600 Commercial Bureaux and approximately 60 Accredited Facilities Management Providers that provide Bacs access to organisations using Bacs Direct Credit and Direct Debit. The Commercial Bureau and Facilities Management Providers facilitate more than 30,000 organisations to collect Direct Debit and around 36,000 organisations have direct payment submission access to the Bacs Payment System.

In 2022, 6.5 billion Bacs transactions were processed at a total value of £4.9 trillion.[4] Almost 90 per cent of UK adults have at least one Direct Debit commitment with 73 per cent of household bills paid this way.[5]

The Faster Payment System

FPS is a near real-time payment system that enables mobile, internet, and telephone payments (up to a system limit of £1 million)[6] to move quickly and securely, 24 hours a day. It takes typically just a few seconds for a Faster Payment to move between different banks' customer accounts. FPS supports the following payment types, which are all credit (push payments): Single Immediate Payments; Forward Dated Payments; Standing Order Payments. FPS also supports Direct Corporate Access allowing corporates to submit bulk Faster Payments; and Returns. While Faster Payments clear almost instantly, net settlement between DPs occurs over RTGS three times each working day at 07:00, 13:00 and 17:00.

There are two types of participants specific to FPS: (i) Directly Connected Settling Participants (DCSPs); and (ii) Directly Connected Non-Settling Participants (DCNSPs). DCSPs connect directly into

---

[4] Source: https://newseventsinsights.wearepay.uk/media/e1mdcljg/annual-payment-statistics-2022.pdf.
[5] Source: https://www.wearepay.uk/wp-content/uploads/Pay.UK-Bacs-Service-Principles.pdf.
[6] In February 2022, FPS transaction limit was increased from £250,000 to £1mn.

the CI to send and receive payments in real-time, 24 hours a day. DCSPs set their own transaction limits and hold their own settlement and Prefunding accounts in RTGS. DCNSPs also connect directly into the CI to send and receive payments, but use a sponsoring participant (i.e. a DCSP) for settlement, using that DCSP's settlement account in RTGS.

FPS has 44 DPs (inclusive of both DCSPs and DCNSPs). Pay.UK has numerous contractual arrangements, rules, and agreements with each of the FPS participants, which are listed in the table below. For simplicity we refer to these throughout this document as 'FPS contractual arrangements and rules'.

DCS Participation Agreement	Enables an applicant to become a DP in FPS and defines the rights and obligations of participation (there is also an equivalent DCNSP Participation Agreement).
FPS Accounts Agreement	Defines the procedures whereby settlement of payments made via FPS is executed between participants' RTGS accounts.
Deed of Charge	A deed between participants and the BoE, which creates a charge over any balance in a participant's pre-funding account, to ensure that settlement can complete in the event of a failure by any participant.
Single Settlement Trust Deed	For non-bank PSPs utilising the 'own fund' participation model, which sign a trust deed, instead of a deed of charge.
FPS Rules	Sets out rules and obligations expected of our FPS service customers / participants ensuring service and systemic risks are managed, and also incorporates by reference, supporting FPS operational documents including examples such as the FPS Procedures, Security Code of Conduct, and other operational documents.

In addition to the DPs, some 300 institutions access FPS via agency arrangements through one or more DPs.
In 2022, FPS processed 3.9 billion payments, an increase of 15 per cent from 2021, at a total value of £3.2 trillion.[7]

The Image Clearing System

ICS enables images of cheques (and credits) to be exchanged between UK banks and building societies for clearing and settlement. The system was launched in October 2017 and the previous paper clearing system for cheques was decommissioned in October 2019. The introduction of ICS has significantly expedited cheque processing. As well as clearing sterling cheques, ICS processes bill payments and other credit items, accompanied by cash or cheques.

ICS operates a two-day processing cycle. On the first day, the collecting DP (e.g. the bank of the cheque's payee) will receive the cheque or cheque image from the payee, and will create or use this image to make a submission to the paying DP (e.g. the bank of the cheque's payer). This submission

[7] Source: https://newseventsinsights.wearepay.uk/media/e1mdcljg/annual-payment-statistics-2022.pdf.

will contain important information in the message (such as request to pay and instruction to pay data), which will enable the paying DP to make a payment decision.

On the second day, the paying DP will decide on whether or not to pay and will submit the decision, which the collecting DP uses to apply credit to the cheque payee's account (if the decision is to pay).

Running settlement positions are applied on a continuous basis via the CI during the two-day process. Net settlement between DPs occurs in RTGS on the second day at 16:30.

There are 20 DPs in ICS. Pay.UK has numerous contractual arrangements, rules and agreements with each of the ICS participants, which are listed in the table below. For simplicity we refer to these throughout this document as 'ICS contractual arrangements and rules'.

ICS Admission Agreement	An agreement to comply with the ICS terms and conditions and offer to become an ICS participant.
ICS Settlement Framework Adherence Agreement	Defines the procedures whereby settlement of payments made via ICS is executed between participants' RTGS accounts.
ICS Settlement Interbank Settlement Adherence Agreement	Deals with inter-bank settlement matters not dealt with through the ICS Settlement Framework Agreement.
ICS Deed of Charge	A deed between participants and the BoE, which creates a charge over any balance in a participant's pre-funding account, to ensure that settlement can complete in the event of a failure by any participant.
ICS Manual	Sets out rules and obligations expected of our ICS service customers / participants ensuring service and systemic risks are managed, and also incorporates by reference the other ICS operational documents.

ICS processed 135 million cheques in 2022, a decrease of 14 per cent from 2021, at a total value of £209 billion, a decrease of 8 per cent from 2021.[8]

[8] Source: https://newseventsinsights.wearepay.uk/media/e1mdcljg/annual-payment-statistics-2022.pdf.

2.3 Current direct participants in Bacs, FPS, and ICS

At end-August 2023, there were 31 DPs in Bacs, 44 DPs in FPS, and 20 DPs in ICS.

Participant Name	Bacs	FPS	ICS
Allied Irish Bank	✓		✓
Atom bank	✓	✓	
Bank of England	✓		
Bank of Ireland (UK) plc			✓
Bank of Scotland plc	✓		
Banking Circle		✓	
Barclays Bank plc	✓	✓	✓
Barclays Bank UK plc	✓	✓	✓
Cashplus Bank		✓	
Citibank NA	✓	✓	
ClearBank	✓	✓	✓
Clydesdale Bank plc	✓	✓	✓
Coutts & Co	✓		
CreDec		✓	
Deutsche Bank		✓	
Ebury		✓	
Elavon		✓	
Equals Money		✓	
Goldman Sachs	✓	✓	
Habib Bank Zurich plc			✓
HSBC Bank plc	✓	✓	
HSBC UK Bank plc	✓	✓	✓
iFast Global Bank Limited		✓	
JPMorgan Chase & Co		✓	
LHV	✓	✓	
Lloyds Bank plc	✓	✓	✓

Participant name	Bacs	FPS	ICS
Metro Bank	✓	✓	
Mettle		✓	
Modulr	✓	✓	
Monzo Bank Limited	✓	✓	
Nationwide Building Society	✓	✓	✓
NatWest	✓	✓	✓
Northern Bank Limited t/a Danske Bank	✓	✓	✓
PayPal		✓	
PayrNet	✓	✓	
PPS		✓	
Prepaid Financial Services		✓	
Revolut Limited		✓	
Santander	✓	✓	✓
Square		✓	
Starling Bank	✓	✓	✓
Sumup		✓	
Tesco Bank		✓	
The Access Bank UK	✓	✓	✓
The Bank of London	✓	✓	
The Co-operative Bank	✓	✓	✓
The Royal Bank of Scotland	✓		✓
TSB	✓	✓	✓
Turkish Bank UK	✓	✓	✓
Virgin Money	✓	✓	✓
Wise		✓	

2.4 Pay.UK's other services

Pay.UK also delivers a range of 'managed services' including the Current Account Switch Service (which enables bank customers to automatically transfer all their payment arrangements from an existing current account to a new current account with a different PSP) and the Cash ISA Transfer Service (which automates the communication between an acquiring Cash ISA provider and a ceding Cash ISA provider to transfer the balance to the acquiring Cash ISA provider).

In March 2023 Pay.UK decommissioned Paym, the mobile payments service. The collective decision between Pay.UK and fifteen of the UK's banks and building societies that used the service reflected the rapid evolution in payments technology and services since Paym's launch in 2014. The decision to decommission Paym was made in response to falling numbers of transactions and the lack of customers signing up to become new users.

Pay.UK also provides the Bank Reference Data (BRD) service. The BRD service holds key information required to transfer funds in the Bacs, FPS, and ICS systems, and CHAPS (operated by the BoE). BRD holds details of the systems each PSP participates in, whether as a DP or an Indirect Participant, including each PSP's unique bank code identifier, sort code(s), and the system each sort code is used in. This information is used to determine which PSP settles a sort code with each system, helps validate payment instructions, and creates extracts including the sort code directory.

PSPs must be registered by Pay.UK on the BRD as participants in one or more systems. If a PSP participates in more than one system, their participation type does not need to be the same for each system. A DP can register its own bank offices, or the bank offices of an Indirect Participant, to use one or more of the services offered under that system. DPs are responsible for ensuring the accuracy of their records in the BRD and can apply amendments to the system directly, or via Pay.UK, depending on the activity.

The BRD service is part of the Bacs infrastructure, and benefits from the same control environment, including resilience, continuity, security, integrity, and risk and audit, both at Pay.UK and Vocalink. BRD is discussed in our response to Principle 17 in this self-assessment.

2.5 New Payments Architecture

Alongside operating the existing three payment systems, Pay.UK is working to deliver the New Payments Architecture (NPA). The NPA is a next generation payments platform that is planned to launch in 2026 and deliver more choice, speed and security to people and businesses making payments in the UK, and also generate new market opportunities for the financial services sector.

The NPA will deliver new real-time payment products and services, which on Day One will allow for migration to the NPA and the safe decommissioning of FPS. The NPA will also provide the technology to launch later propositions which will support future potential products and services. The NPA will utilise enhanced rules, monitoring capabilities, and controls to strengthen Pay.UK's role in managing and mitigating systemic risk. The NPA will also enable competition through a core platform that creates space for market innovation. The NPA will utilise the global ISO 20022 standard and messages from the outset, and as such, a 'new' standard has been published to our participants based on this, aligning us with other market infrastructures to target interoperability.

Pay.UK has conducted a rigorous procurement process to select a partner to build and operate the NPA. This process evaluated prospective partners against a range of criteria including technical solution, delivery capability, commercial offer, and risk profile. Our selection is subject to regulatory reviews by the BoE and the PSR. At time of writing, the PSR has completed its review, and confirmed that Pay.UK has provided it with sufficient assurance to continue with the NPA Programme. The BoE are still completing their non-objection process. Pay.UK will announce the outcome of the vendor selection following the completion of all regulatory processes.

Further details on the NPA can be found at www.wearepay.uk.

2.6 Bacs Strategy

We're working on a Bacs Strategy including robust risk assessment of any potential CI migration, and this will be the subject of consultation with interested stakeholders and regulatory engagement with PSR and FMID.

2.7 Publicly available documents

All the contractual arrangements and rules listed above for each payment system are made available to Pay.UK DPs and prospective DPs. Pay.UK also publishes an annual report outlining its activities. The Pay.UK Industry Advisory Council and End User Advisory Council also publish annual reports.

3 Section B: Summary of ratings

Of the 24 PFMIs, 17 apply to Pay.UK (as a PSO). Pay.UK has assessed itself against each of these principles and assigned a rating according to the definition guide set out below.

The assessment ratings

Ratings	Rating definitions
Observed *(Green)*	The FMI observes the principle. Any identified gaps and shortcomings are not issues of concern and are minor, manageable and of a nature that the FMI could consider taking them up in the normal course of its business.
Broadly observed *(Yellow)*	The FMI broadly observes the principle. The assessment has identified one or more issues of concern that the FMI should address and follow up on in a defined timeline.
Partly observed *(Amber)*	The FMI partly observes the principle. The assessment has identified one or more issues of concern that could become serious if not addressed promptly. The FMI should accord a high priority to addressing these issues.
Not observed *(Red)*	The FMI does not observe the principle. The assessment has identified one or more serious issues of concern that warrant immediate action. The FMI should therefore accord the highest priority to addressing these issues.

As both Bacs and FPS are 'recognised' payment systems under the *Banking Act 2009*, Pay.UK is required to self-assess for the two systems. Although ICS is not 'recognised', Pay.UK has nonetheless included ICS in the self-assessment given: (i) it is an opportunity for Pay.UK to undertake a useful review of how it operates all three payment systems; and (ii) it provides stakeholders with an holistic view of how Pay.UK operates its business.

For 10 principles, we have provided separate ratings for each system because Pay.UK adopts system-specific approaches. For the remaining seven principles, a single rating has been provided, given that Pay.UK operates a combined approach across the business in these areas (for example, governance). This approach will allow Pay.UK's stakeholders to clearly delineate differences in ratings across the payment systems.

The self-assessment has been completed by the Pay.UK executive (as a cross-organisation initiative), followed by discussion, challenge, and approval by the Pay.UK Risk Committee (RiskCo) and Board. The table below provides a summary of Pay.UK's self-assessment ratings.

3.1 Pay.UK's self-assessed ratings against the PFMIs

Principles	Bacs	FPS	ICS
1 – Legal basis*	**Observed**	**Observed**	**Observed**
2 – Governance	**Observed (previously broadly observed)**		
3 – Framework for management of risks	**Broadly observed**		
4 – Credit risk	**Observed**		
5 – Collateral*	**Observed**	**Observed**	**Observed**
7 – Liquidity risk*	**Observed**	**Observed**	**Observed**
8 – Settlement finality*	**Observed**	**Observed**	**Observed**
9 – Money settlements*	**Observed**	**Observed**	**Observed**
13 – Participant-default rules and procedures*	**Observed**	**Observed**	**Observed**
15 – General business risk	**Observed**		
16 – Custody and investment risks	**Observed**		
17 – Operational risk*	**Broadly observed**		
18 – Access and participation requirements*	**Observed**	**Observed (previously broadly observed)**	**Observed**
19 – Tiered participation arrangements*	**Broadly observed**	**Broadly observed**	**N/A**
21 – Efficiency and effectiveness	**Observed (previously broadly observed)**		
22 – Communication procedures and standards*	**Observed**	**Observed**	**Observed**
23 – Disclosure of rules and key procedures*	**Observed**	**Observed**	**Observed**

*These principles have been assessed for each system separately rather than at Pay.UK level.

Where Pay.UK has sufficiently improved performance against the PFMI criteria, we reflect this in assigning ratings that may be higher than previous years' self-assessment. We are also not averse to assigning lower ratings than in previous years should we conclude that, as at the reference point for a particular year's self-assessment, we should make improvements against the criteria. While previous self-assessments are useful references, we strive to ensure our ratings are accurate reflections for our performance, and provide guidance on areas we should focus on in the forthcoming year.

3.1 Summary of rating changes since the 2021 self-assessment and principles rated less than fully observed

Principle 2 – Governance: Observed, previously broadly observed

Pay.UK has assessed itself as being observed against Principle 2, which is a change from 2021 when we rated ourselves as being broadly observed.

Pay.UK has the documented and disclosed governance arrangements as required by the principle. In early 2021, Pay.UK commissioned a third-party review of corporate governance which confirmed the Board's view of the need to move to a 'new phase' of corporate governance and identified several areas in which governance could be enhanced to make it more effective. Pay.UK has implemented the areas identified for enhancement.

Pay.UK commissioned a further Board effectiveness report which was completed in November 2022. The report recognised that there has been a significant uplift in the quality of information presented to Board to support effective discussion and decision making, and in general the overall governance arrangements of the business. In January 2023 the Board approved the Board Effectiveness Maturity Framework and Success Factors matrix to measure and continuously assess Board effectiveness and progress against the report's recommendations.

Principle 3 – Framework for the comprehensive management of risks: Remains broadly observed

Note: We recognise there is overlap between principle 3 and principle 17. Within Principle 3, we have focussed on the risk management framework and activities which are covered by second line risk. Within Principle 17, we have focussed on the application of the framework to operational risk management and activities of the first line.

Pay.UK has assessed itself as being broadly observed against Principle 3, unchanged from 2021.

Pay.UK has undergone a broad programme of remediation work to move the organisation towards full observation of Principle 3 and to improve our management of risks in our ecosystem, including our work to develop a cloud risk policy. We refreshed the Enterprise Risk Management Framework (ERMF) in November 2022, and a risk maturity model has been developed which was approved by the RiskCo in March 2023. Risk management training has been rolled out across the organisation and the Risk Directorate has undergone an organisational design (OD) process to enhance second line capability and capacity.

Pay.UK has taken a cautious approach and continues to rate itself as broadly observed to reflect the requirement to continue our risk maturity journey from a maturity level of "Developing" (2), to an "Advanced" level (4) and to fully embed all aspects of the ERMF.

Pay.UK will consider itself fully observed against this principle when the ERMF has been fully embedded across all directorates and all risk levels

Principle 17 – Operational risk: Remains broadly observed

Pay.UK has assessed itself as being broadly observed against Principle 17, which is unchanged from 2021.

Pay.UK's operational risk management processes enable the organisation to identify and mitigate the operational risks that could impact its operation of the three payments systems. Pay.UK has resilient processes in place to ensure operational reliability and business continuity. Pay.UK is continuing its programme to enhance and improve our overall ERMF workplan and risk maturity (see Principle 3). The Risk and Control Self Assessment (RCSA) enhancement work has been completed and key business functions have developed control testing schedules, with ongoing periodic RCSA reviews as agreed with the ERSC. We have mitigated identified vulnerabilities as part of our operational resilience self-assessment, and continue to monitor our progress at mitigating these.

We have assessed performance as broadly observed to reflect the scope for improvement in our systemic risk management capability. This includes enhancements to incident management which will allow us to better prepare for incidents and to oversee and work with Vocalink and participants to ensure a swift and smooth response and recovery, completion of the Critical Third Party (CTP) Aggregator Risk project.

Principle 18 – Access and participation requirements: Observed, previously broadly observed

Pay.UK has assessed itself as being observed against Principle 18 for its operation of FPS, Bacs and ICS. This is changed from 2021 when FPS was rated as broadly observed to reflect outstanding policy work relating to the FPS aggregator model.

While this did not impact any participant's ability to join FPS, it was an area of uncertainty that Pay.UK wanted to resolve before considering the FPS rating as being fully observed. One outcome of this policy work was the decision not to restrict concentration of an aggregator, as this could undermine open access. Whilst work continues to improve our understanding and management of risks posed by the aggregators that present material concentration in the ecosystem through our CTP Aggregator Risk project (see Principle 17), our work on aggregators will not impact on access, and therefore will no longer impact on the observance of this principle.

In 2022 we received regulatory attention to participant use of the public cloud (including with aggregators) which saw a restriction placed upon onboarding and migration until a cloud policy was developed. In August 2022, we delivered the Pay.UK Cloud Risk Policy and the Cloud Code of Conduct, which provides rules for participants on cloud service use, allowing the restriction to be lifted.

Following completion of the cloud policy work, we consider that FPS now permits fair and open access and the principle is observed.

Principle 19 – Tiered participation arrangements: Remains broadly observed

Pay.UK has assessed Bacs and FPS as being broadly observed against Principle 19, which is unchanged from 2021. ICS does not have tiered participation and so we have assigned an N/A rating.

While Pay.UK can identify and monitor the risks arising from tiered participation in each payment system, Pay.UK does not have clearly defined thresholds to identify the point at which concentration risk from tiering requires intervention, or levers for managing risks from tiering should the need arise.

Further work is planned to review the broader operational risks presented by tiered participation in FPS and Bacs and develop proposals to strengthen the control frameworks. Completion of this work should enable a fully observed rating.

Principle 21 – Efficiency and effectiveness: Observed, previously broadly observed

Pay.UK has assessed itself as being observed against Principle 21, which is changed from 2021 where we rated the principle as broadly observed, in recognition of the need to evolve the KPI set under the new strategy that was being developed at the time.

In March 2022, Pay.UK published its corporate strategy followed by baselining a Strategic Roadmap in May 2023. A KPI dashboard has been created, with new KPIs, data sources, and thresholds set which is presented to the Executive Committee (ExCo) periodically. We have continued to iterate and evolve our KPI targets and reporting and aligned these metrics to our company strategy and strategic roadmap. We consider Pay.UK observes this principle due to the development of these KPIs.

4 Section C: Principle by Principle Analysis

The following section provides a detailed summary of Pay.UK's ratings against the PFMIs that are applicable to Pay.UK. The responses have been provided in accordance with the key considerations detailed against the relevant principles.

Principle 1 – Legal basis

Bacs rating:	FPS rating:	ICS rating:
Observed	**Observed**	**Observed**

Summary	
An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.	***Applicability:*** As the three payment systems operated by Pay.UK utilise separate contractual rules and agreements, individual ratings have been provided. ***Rating:*** This principle is observed for each payment system. Pay.UK is a private not-for-profit company limited by guarantee and is registered in England and Wales. Its legal basis is achieved by Pay.UK being properly established in accordance with relevant laws and regulations for the jurisdiction in which it operates and having enforceable, appropriate and robust contractual arrangements and rules with Direct Participants (DPs) of the three Pay.UK payment systems. Pay.UK's contractual arrangements and rules are clear, understandable, and consistent with the applicable laws and regulations under which Pay.UK operates.
Key Considerations	**Rationale**
1.1 What are the material aspects of the FMI's activities that require a high degree of legal certainty? *For example, rights and interests in financial instruments; settlement finality; netting; interoperability; immobilisation and dematerialisation of securities; arrangements for DvP, PvP or DvD; collateral arrangements*	• Section A sets out the material aspects of Pay.UK's activities as an FMI. Pay.UK maintains a separate suite of contractual arrangements and rules for each of the three payment systems, and it is these arrangements and rules that provide a high degree of legal certainty for Pay.UK's material activities. • These address the material aspects of payment system operations, including default procedures, responsibilities and liabilities of DPs, eligibility criteria for new DPs, withdrawal of DP rights, suspension and exclusion of existing DPs, and financial contributions of DPs. • A material aspect of Pay.UK's activities is the continued provision of the CI for the three payment systems, for which Pay.UK maintains an outsourcing arrangement with Vocalink.

(including margin arrangements): and default procedures.	Currently, Pay.UK holds a number of contracts with Vocalink that are specific to each payment system. These contracts articulate a clear and enforceable legal basis, securing contractual certainty for Pay.UK as the RPSO as a service recipient.

1.2 An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulation.	• Pay.UK's contracts, rules and procedures applicable to DPs are:
	  ○ Enforceable (specific legal opinions are sought in relation to the enforceability of contractual arrangements and rules with participants established outside of the UK);
	  ○ Drafted, reviewed, and supported on an ongoing basis by both in-house lawyers and external legal counsel;
	  ○ Signed by all relevant parties including, where appropriate, Vocalink as supplier to Pay.UK of the CI, and the BoE as supplier of RTGS for settlement;
	  ○ Consistent with applicable English law and regulatory requirements; and,
	  ○ Complemented by the rules of the relevant payment system and appropriate processes.
	• In March 2023 Pay.UK updated its Rules & Standards Management Framework (RSMF) to ensure consistent control and oversight for the management and governance of rules and standards. This framework contains the formal governance and controls that must be followed when updating, changing, introducing or retiring a rule or a standard. The revised RSMF better enables Pay.UK to proactively manage service related systemic risks via its service rules in response to a dynamic ecosystem.

1.3 An FMI should be able to articulate the legal basis for its activities to relevant authorities, Participants, and, where relevant, Participants' customers, in a clear and understandable way.	• All activities are articulated in a clear and understandable manner and via several media (legal documents, operational procedures, briefing notes, and face-to-face meetings) depending on the intended audience. • Pay.UK also operates a multitude of fora and committees (see Principles 2 and 21), which help Pay.UK articulate the legal basis for its activities in a more interactive manner.

	• Consultation with relevant stakeholders is at the cornerstone of the majority of Pay.UK activities and encourages dialogue with wider stakeholder groups.
1.4 An FMI should have rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the FMI under such rules and procedures will not be voided, reversed, or subject to stays.	• Bacs, FPS and ICS contractual arrangements and rules are all governed by English law, with jurisdiction in the English courts. Contractual arrangements with participants require compliance with payment system rules before they are on-boarded and as appropriate whenever rules are updated. • Pay.UK ensures the legal enforceability of its contractual arrangements and rules and other system documentation across the three payment systems. These documents hold adequate mechanisms for resolving challenges at system level (inter-participant disputes are also addressed in the system procedures) which materially mitigates the likelihood of challenges. • The system documentation for each payment system is drafted in consultation with DPs, external legal advisers and is further reviewed by Pay.UK's in-house legal function. As part of our Strategic Roadmap, we began work in Q2 2023 to consider whether Pay.UK needs additional levers (including in rules and standards) to deliver on the broader role envisaged in our strategy. This broader role relates to Pay.UK delivering outcomes beyond our role a systemic risk manager and is also envisaged in the PSR's strategy.
1.5 An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.	• This consideration is not applicable. The Pay.UK payment systems do not conduct their business in multiple jurisdictions; all business is conducted in the United Kingdom (UK). Pay.UK's operations are entirely conducted in the UK and it provides settlement for GB Sterling transactions in the UK. Pay.UK does not provide clearance and settlement for non-GB Sterling Transactions.

Principle 2 – Governance

Rating:	**Observed**

Summary	
An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.	***Applicability:*** This principle is applicable to the combined governance arrangements that Pay.UK applies to the operation of the entire company, including the three payment systems. ***Rating:*** Pay.UK has the documented and disclosed governance arrangements as required by the principle, which help ensure that Pay.UK supports the robustness, resilience and efficiency of our payment systems. In early 2021, Pay.UK commissioned a third-party review of corporate governance which confirmed the Board's view of the need to move to a 'new phase' of corporate governance, and identified several areas in which governance could be enhanced to make it more effective. In 2021 Pay.UK assessed this principle as 'broadly observed' while we were implementing these measures. We have successfully implemented the transition plan to address the areas for enhancement, resulting in the opinion that the principle is now observed. The Internal Audit review and the subsequent Board Evaluation carried out in 2022 both demonstrated improvements in governance, including a significant uplift in the quality of information presented to Board to support effective discussion and decision making, and in general the overall governance arrangements of the business. In January 2023, the Board considered and approved the Board Effectiveness Maturity Framework and Success Factors matrix as the means by which the effective governance of Pay.UK will be measured and continuously assessed.
Key Considerations	**Rationale**
2.1 An FMI should have objectives that place a high priority on the safety and efficiency of the	• A strategic refresh has been completed since our 2021 self-assessment to reinforce the primary focus of robustness and resilience of our infrastructure, as well as driving platform efficiency in support of the wider UK economy.

FMI and explicitly support financial stability and other relevant public interest considerations.	• Pay.UK's strategic KPIs place a high priority on resilience and efficiency. There are six strategic goals, listed below, which are publicly disclosed on our website (including via the Annual Report). These objectives help ensure that Pay.UK remains focused on our responsibilities and that we respond to the needs of stakeholders, and ultimately the public. **1. Drive enduring resilience, by:** Identifying and mitigating systemic risk across our platform. Continually enhancing our platform. Proactively managing our suppliers; **2. Deliver value, by:** Delivering cost-effective payment services. Getting the best value from our suppliers. Automating and enhancing processes that drive efficiencies. Driving platform value through use of data; **3. Strengthen safety and security, by:** Delivering continually-evolving fraud detection and prevention functionality, rules and standards. Working with the wider industry and beyond to mitigate fraud and enhance consumer protection. Building deep insight, based on global trends, and reacting accordingly; **4. Enhance access and innovation, by:** Enabling better use of data. Evolving our platform to drive end user-focused innovation. Providing choice in the way our customers connect to our platform; **5. Increase customer satisfaction, by:** Proactively responding to the evolving needs of our customers. Monitoring and tracking customer satisfaction and understanding changing end user needs. Having continual outcomes-focused engagement with our customers; and, **6. Inspire our colleagues, by:** Developing an empowering and inclusive culture. Focusing on attracting, developing and retaining talent. Living our values and delivering results.
2.2 An FMI should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be	• Pay.UK has documented governance arrangements that specify clear lines of responsibility. These have been refreshed as part of implementing the external governance review's

disclosed to owners, relevant authorities, Participants, and, at a more general level, the public.	recommendations to help ensure that the Executive Committee is fully empowered to take executive accountability.
	• The Pay.UK Board has delegated specific matters to Board reporting committees and the CEO, with its reserved matters being clearly defined in the Board Terms of Reference. Further delegation of authority by the CEO to roles within the business is detailed in the Further Delegated Authorities Register.
	• As a result of the 2021 governance review, enhancements have been made to lines of responsibility and accountability. Audit and RiskCo memberships were reviewed, and joint meetings have been introduced, in addition to the individual schedule of meetings. This allows for items covered by both Committees to be jointly considered, to provide clear and streamlined outcomes and approvals. For example, the joint meeting will consider the Pay.UK recovery and wind down plans.
	• The first of these joint meetings was held in September 2022, with at least two joint meetings being scheduled per year. They are co-chaired by the Chair of the Audit Committee (AuditCo) and the Chair of the RiskCo.
	• Board has agreed success factors to ensure appropriate performance measurement, and governance documents are reviewed to ensure consistency and clarity.
	• The Board has a number of committees, all of which have Terms of Reference setting out roles, responsibilities, delegated authority and reporting lines into the Board.
	    o **Risk Committee** which is responsible for overseeing the effective management and reporting on Pay.UK's overall risk profile;
	    o **Audit Committee** which is responsible for overseeing the integrity of Pay.UK's internal audit, external audit and internal control environment;
	    o **Nomination Committee** which is responsible for reviewing the structure, size and composition of the Board, ensuring that it has the necessary balance of skills,

	knowledge, experience, and diversity. In addition, it undertakes an annual review of the chairmanship and composition of each committee or stakeholder group which reports to the Board; ◦ **Remuneration Committee** which is responsible for advising the Board on matters relating to the remuneration of Board members and the executive; and, ◦ Other special purpose committees or councils may be set up and maintained as deemed necessary by the Board. • A description of Pay.UK's Board and its committees is published in the Annual Report and on the Pay.UK website (alongside Guarantor details and Board minutes, redacted where appropriate). • The Terms of Reference, meeting papers, and minutes for relevant Board and Board reporting committees are all provided to the Bank of England. • The Board of Directors operates in accordance with Pay.UK's Articles of Association, Matters Reserved for the Board, policies, and best practice to confirm it is compliant with UK company law and any relevant codes of practice. Furthermore, the Board adheres to the principles in the UK's Corporate Governance Code, where appropriate, and also the BoE's Code of Practice and Supervisory Statement relating to the governance of Recognised Payment System Operators.
2.3 The roles and responsibilities of an FMI's board of directors (or equivalent) should be clearly specified, and there should be documented procedures for its functioning, including procedures to identify, address, and manage member conflicts of interest. The board should review both its overall performance and the performance of its individual board members regularly.	• The roles and responsibilities of the Pay.UK Board are specified in its Terms of Reference, as noted in Key Consideration 2.2. • Pay.UK has procedures in place to identify and manage conflicts of interest. Board members are required to declare their conflicts of interest in the Board's Register of Interests. At every Board meeting, each Board member present must declare any direct or indirect interests in the proposed transactions or items to be considered at the meeting in accordance with Section 177 of the *Companies Act 2006* and the Company's Article of Association.

	• In addition to Board members, all staff are required to comply with Pay.UK Policy on Conflicts of Interest and the Corporate Governance Team advises both staff and their line managers when any potential conflict of interest is raised. • The Pay.UK Board reviews its overall performance annually. In 2022, the Board commissioned an external third party to run an effectiveness review of its performance. • In terms of reviewing the performance of individual Board members, the Chair and Senior Independent Director (SID) are responsible for carrying out and commissioning a review for each of the members (in addition the Chair has regular one-to-one discussions with each Board member). The SID is also responsible for reviewing the performance of the Chair. The last review was carried out on 6 July 2023.
2.4 The board should contain suitable members with the appropriate skills and incentives to fulfil its multiple roles. This typically requires the inclusion of non-executive board member(s).	• The Pay.UK Board is comprised of qualified and suitable members including a diverse group of experienced independent non-executive members. Executive committee members also attend and contribute to Board discussions. • Our Board brings a wide range of knowledge and expertise to guide and deliver change successfully while maintaining a focus on service delivery. The Board has an independent chair and includes the Pay.UK CEO, six independent non-executive directors and two other non-executive directors. • There have been changes at Board level since the 2021 self-assessment: ○ Three non-executive directors (NEDs) resigned December 2021; ○ A new independent non-executive director (INED) was appointed in January 2022; ○ A new NED was appointed in May 2022; ○ An executive director (ED) resigned August 2022; ○ Two NED resigned in November and December 2022 respectively; and, ○ Two new appointments of INEDs in January 2023.

	• The INEDs and NEDs on the Board are not involved in the day-to-day running of Pay.UK. INEDs, apart from their approved remuneration, do not have any material pecuniary relationship with Pay.UK. • A skills and capabilities matrix was prepared and completed to enable a full assessment of the capabilities of the Board, its future needs and to support succession planning. The annual performance review of the Chair was initiated in May 2021. • The Board and all Board reporting committees have access to subject matter experts (from the Pay.UK executive) who attend meetings and provide advice as needed.
2.5 The roles and responsibilities of management should be clearly specified. An FMI's management should have the appropriate experience, a mix of skills, and the integrity necessary to discharge their responsibilities for the operation and risk management of the FMI.	• All management team responsibilities are clearly specified within role profiles. As well as the requirements for skills and knowledge, these profiles include behavioural requirements, to help ensure high levels of integrity. • Pay.UK has improved the capability of its management in terms of skills and experience of key individuals since the 2021 self-assessment. The Executive Team is now composed as follows: 1. the **Chief Executive Officer** (CEO), responsible for the overall management of Pay.UK as well as setting its overall vision; 2. the **Chief Payments Officer** (CPO), responsible for On-boarding and Assurance, Payments Operations, NPA Operational Delivery, Payments Risk and Payments Business Support; 3. the **Chief Business Development Officer** (CBDO), responsible for Product Development, Business Development and Fraud functions; 4. the **Chief Internal Auditor** (CIO), responsible for the Internal Audit function; 5. the **Chief People and Culture Officer** (CPCO); responsible for the Human Resources function;

	6. the newly created **Chief Financial Officer** (CFO), responsible for planning, implementing, managing and controlling all financial-related activities of the Company; 7. the newly created **Chief Policy and Engagement Officer** (CPEO), responsible for Regulatory Engagement and Policy, Communications, and Industry Engagement functions; 8. the newly created **Chief Technology Officer** (CTO); responsible for critical technology projects that underpin the organisation's long-term strategy, including the NPA; and, 9. the newly appointed **Chief Risk Officer** (CRO), responsible for our Strategic Risk function and our role as a systemic risk manager. • An assessment of the skills and capabilities of the Pay.UK executive team was undertaken as part of the external governance review in 2022. • All Executive Committee appointments, are by the CEO with the involvement of specific Board directors with the necessary relevant experience. The CEO is responsible for bringing forward candidates for the endorsement of the Nomination Committee.
2.6 The board should establish a clear, documented risk management framework that includes the FMI's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crises and emergencies. Governance arrangements should ensure that the risk management and internal control functions have sufficient authority, independence, resources, and access to the board.	• The Pay.UK Board has approved the ERMF as discussed under Principle 3. The ERMF assigns responsibilities and accountability for risk decisions as well as authority in times of emergency. The ERMF includes statements and policies on: ○ Risk-tolerance policy; ○ Responsibilities and accountability for risk decisions; ○ Decision making during incidents, crises, and emergencies; and, ○ Limits of authority. • The CRO reports to the RiskCo every other month on the top risks and threats facing Pay.UK and has 'unfettered access' to the Chair of the RiskCo. *Three lines of defence model (3LOD) of risk management*

	• Pay.UK operates a three lines of defence model of risk management, as detailed in Key Consideration 3.1. *Risk Committee* • RiskCo meets every two months. It is chaired by one of the INEDs. Minutes of RiskCo are copied to the Board and a committee report is presented at every Board meeting. • Given its responsibility for ensuring the effective management and reporting on Pay.UK's overall risk profile, RiskCo advises the Board on the setting of: the risk appetite and tolerance; risk identification, assessment, mitigation, and monitoring; risk breaches; internal controls; and oversight of the risk management function. *Crisis management* • The Board maintains overall responsibility for crisis management, but due to the practical realities of crisis resolution, does not have an 'in crisis' role, having delegated responsibility for crisis management to the Executive. The Executive are entitled to take all such decisions relating to the operation of Pay.UK and its three payment systems as may be necessary to ensure that the robustness and resilience of the systems is maintained (consulting with the Chair as soon as practical). • Once a crisis has been resolved, the executive will report to the Board on the situation and allow the Board to review and make appropriate decisions moving forward.
2.7 The board should ensure that the FMI's design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its direct and indirect Participants and other relevant stakeholders. Major decisions should be clearly disclosed to relevant	• The Board also has two advisory councils, the Industry Advisory Council (IAC) and the End User Advisory Council (EUAC), the latter chaired by an INED to provide it with input and advice to Pay.UK's strategy and decisions, thereby ensuring that they reflect the interests of Pay.UK's stakeholders. • These two councils help the Board to remain sufficiently informed about the wider ecosystem and broader strategic issues and help to appropriately reflect the legitimate interests of

stakeholders and, where there is a broad market impact, the public.	Pay.UK's various stakeholders by understanding the separate views of end users and participants. • Members of the two councils are appointed based on their industry expertise and independent representation of their respective communities. • Decisions taken by Pay.UK can be disclosed to stakeholders through the two councils. As discussed under other key considerations, decisions are also disclosed to relevant stakeholders and the public through published (redacted) minutes. • Pay.UK also runs a number of other engagement forums, for example the Customer Engagement Forum (CEF) where direct participants discuss issues of common interests and developments. The Chief Information Officer / Chief Technical Officer Forum (CIO/CTO) also engages CIO's from direct participants to collectively discuss key issues and concerns. • Pay.UK also runs the Strategic Participant Group (SPG) The SPG is a senior industry engagement forum for leading industry professionals to provide strategic recommendations to the Pay.UK Board. It keeps the industry updated on progress, captures input from experts and provides feedback to the Pay.UK Board. There are also a number of supporting committees which support the delivery of the NPA.

Principle 3 – Framework for the comprehensive management of risks

Rating:	**Broadly Observed**

Summary	
An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.	***Applicability:*** This principle is relevant to the ERMF that Pay.UK applies to the operation of the three payment systems and the broader organisation and so a single rating has been applied. **Rating:** This principle was rated as broadly observed in 2021 to reflect the need for further enhancements of the ERMF. We refreshed the ERMF in November 2022, and developed a risk maturity model that was approved by the RiskCo in March 2023. Mandatory risk management training has been rolled out across the organisation and the Risk Directorate has undergone an organisational design (OD) process to enhance second line capability and capacity. Pay.UK has taken a cautious approach and continues to rate itself as broadly observed to reflect the requirement to continue our risk maturity journey from a maturity level of "Developing" (2), to an "Advanced" level (4) and to fully embed all aspects of the ERMF. This includes ensuring the ERMF is fully understood and embedded throughout the organisation through the 2023 Risk Training and Communications Plan. Work throughout 2023/24 will also ensure that risk is considered, and that this is evidenced, in all key business decisions. Associated metrics and triggers will also be finalised and agreed for each defined risk appetite statement.

	Next steps (path to 'observed'): Pay.UK will consider itself fully observed against this principle when the ERMF has been fully embedded across all directorates and all risk levels, and we have delivered against our risk maturity development plans.
Key Considerations	**Rationale**

3.1 An FMI should have risk-management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the FMI. Risk-management frameworks should be subject to periodic review.	• Pay.UK operates a three lines of defence model of risk management.
	    ○ The first line is accountable for identifying, owning and managing risks within Pay.UK;
	    ○ The second line risk function is responsible for the risk policies and ERMF and provides the first line with support, oversight and challenge. This is supported by a second line compliance function, which provides Pay.UK's directors with assurance on Pay.UK legal and regulatory compliance. In addition, a second line security and technology function provide assurance and oversight of the effectiveness of security and technology controls both within Pay.UK and Vocalink, and subject matter expertise in an advisory capacity to all areas of the business; and
	    ○ Internal audit, the third line of defence, provides independent assurance on the effectiveness of the first and second lines of defence.
	• Pay.UK manages risk through the ERMF, which was last approved at Board in November 2022, and is reviewed on an annual basis as a minimum. Supporting this, we developed a simpler, clearer and more consistent risk management framework. The creation of a new risk taxonomy and simplified risk assessment matrix has resulted in us measuring and managing risks more consistently across our organisation. Our tools and framework are also easier to understand and use, which helps in developing the risk management culture.
	• The ERMF is supported by multiple procedure documents such as RCSA, Key Risk Indicator (KRI) and Root Cause Analysis (RCA) Guidance. Further detail on the ERMF can be found in Key Consideration 2.6.

	• Risk Appetite Statements are reviewed, updated and re-approved, at least annually, by Pay.UK's Board. The existing risk governance arrangements allow for effective monitoring of the corporate risk profile. The statements are set against Pay.UK's recognised risk impact areas (Financial, Operational, Compliance and Market Confidence), which inform the tolerances set in the Risk Assessment Matrix. • Principal Risks are those risks that can seriously affect Pay.UK's performance, future prospects or reputation, including those that could threaten our business model and strategy. Principal Risks that are outside of appetite, result in approved actions being put in place to bring the risk profile within appetite within a maximum of six months. These are closely monitored through robust governance until completion of all actions. • We refreshed Pay.UK's Principal Risks that are tabled at senior risk committees (based on their residual risk profile) and this has led to better oversight of the risk landscape and more informed discussions and decision making. We have revisited risk appetite, Key Risk Indicators and risk governance structures. This (combined with clearer and more action orientated risk reporting) means we are better at getting the right information to our Executive management and to Board and RiskCo, enabling richer risk discussions with clearer risk treatments.
3.2 An FMI should provide incentives to Participants and, where relevant, their customers to manage and contain the risks they pose to the FMI.	• For each of the three payment systems, participants are expected to comply with all of the documented rules and procedures. • Pay.UK monitors compliance and takes necessary enforcement action through its risk-based assurance programme. This ensures that participants discharge their responsibilities effectively and manage the risks that could impact the three payment systems or other participants, such as inadequate internal controls that could result in breaches against Service Level Agreements (SLAs), frequent and prolonged outages, or failure to settle. • Pay.UK monitors and manages participant performance against the respective scheme SLAs through regular meetings with each participant to discuss performance and any material matters or concerns documented in the monthly participant performance dashboards.

	In addition, participants are required to self-attest on a regular basis to the effectiveness of the key controls that they have in place to mitigate risk to the payment systems and other participants, covering subjects including incident management, security, and business continuity. The responses and associated evidence are reviewed and challenged by Pay.UK as part of the participant assurance process. • A formally-documented participant enforcement action process is used if it has been determined that a participant is not complying with the participation requirements and/or introducing risks to the payment systems and other participants that merit priority attention.
3.3 An FMI should regularly review the material risks it bears from and poses to other entities (such as other FMIs, settlement banks, liquidity providers, and service providers) as a result of interdependencies and develop appropriate risk management tools to address these risks.	• There are a number of key enhancements we have made since the 2021 self-assessment: 1. **We have revised our focus on identifying, assessing, managing and monitoring the payments eco-system risks**: We have established the perimeter scope for which Pay.UK's systemic risk management extends – this includes the critical services and third parties that form part of the payments ecosystem. We have refreshed Pay.UK's Principal Risks leading to better oversight of the risk landscape and more informed discussions; 2. **We have invested in capacity and capability across the first and second line risk teams**. This includes additional colleagues in the first and second line risk teams, and rolling out of staff risk training to increase the understanding and application of systemic risk management across the organisation; and 3. **Enhanced collaboration across the business:** We have launched a series of cross-function forums where knowledge is shared across first and second line risk teams. This has resulted in more regular, richer discussions about our risk exposures and strategies, leading to more comprehensive oversight of our risk positions, and enhancing the implementation of the risk management framework across Pay.UK. *Bank of England (RTGS) as settlement agent*

	• Pay.UK has a *Settlement Service Provider Agreement* with the BoE to provide settlement services for Bacs, FPS, and ICS, and for the provision of security custodian services for the participants (including their pre-funding accounts). • Pay.UK holds quarterly meetings with the BoE to review any risks or issues that may be materialising. • Pay.UK maintains oversight of the risks it bears from the BoE through the BoE's independently-produced ISAE3402 audit (which covers governance and accountabilities, business process integrity, security, operational stability and resilience, and change management). *Critical Service Providers* • Pay.UK regularly reviews the risks posed to the operation of its three payment systems from Vocalink as the outsourced CI provider. Pay.UK maintains contracts with Vocalink for each payment system. The contracts clearly set out provisions for availability requirements, how system changes are made, and incident management and escalation procedures. The contracts are supported by service manuals and user guides, which set out the day-to-day obligations and processes between the two parties. • We have developed a new operating model to centralise our third-party management capability. Alongside this, we had already implemented a series of policies and procedures at the end of 2021 that make up the third party management framework, and appointed the CTO as accountable executive for overseeing the application of the framework and for the overall relationship with our critical outsourced suppliers. • In H1 2023, we put in place an enhanced critical third-party governance structure to oversee Vocalink's performance. The new structure consists of a joint executive committee supported by four sub-committees focusing on: (i) performance oversight; (ii) risk and security; (iii) product and technology; and (iv) change implementation. These monthly meetings are enhanced opportunities for greater insight and scrutiny, and will support timely identification

	and reporting of risks and associated controls. These committees utilise first and second line expertise and insights, supported by targeted third line activities. • We recognise that further development is required of our oversight of critical service partners. • Further work is needed to improve the two-way process with the critical service providers to evolve risk governance and reporting to ensure full transparency and alignment. We also recognise the need to clearly evidence decisions and track actions to competition.
3.4 An FMI should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.	*Scenario Analysis* • Scenario Analysis forms part of the Pay.UK ERMF and identifies potential scenarios that could manifest and pose a threat to Pay.UK strategic objectives, providing an opportunity to identify relevant additional mitigation activity and risk management treatment for consideration. • The approach to operational resilience validation exercises is similar to that adopted for scenario analysis, however, works on the principle that the extreme but plausible situation has occurred and all controls have failed, requiring contingency strategies to be activated. This type of 'reverse stress testing' helps prove capability for recovery of assets within recovery time objectives, and the important business service they support within defined impact tolerances. • Scenarios were recommended to and approved by the Board in November 2022, and revised in May 2023. *Recovery Plan* • The Board approved the updated Pay.UK Recovery Plan in March 2023. The plan details the mechanics to navigate through idiosyncratic, market-wide, and combined stress scenarios that may impact Pay.UK capital adequacy and liquidity. In addition, Pay.UK developed five scenarios. These scenarios have been developed so that they, although plausible, are extreme in nature, and if left without action they are likely to take the Firm into recovery. • These scenarios are:

	1. NPA - delay or failure in obtaining participant commitment; 2. Military Conflict ; 3. Competition Disruption; 4. Cost of Living Crisis; and, 5. Central Infrastructure - Misconfiguration of Vocalink's Internal Systems. *Wind-Down Plan* • Pay.UK has developed a Wind-Down Plan which was last approved by the Board in September 2022. The Wind-Down Plan is an element of Pay.UK's contingency planning to ensure continuity of critical services and the orderly management of the winding down of the company during an event that would lead to the ceasing of Pay.UK operations. • The Recovery Plan is subject to annual review and re-approval through Pay.UK governance fora. The Wind-Down Plan will now be aligned with the Recovery Plan annual submission so the next update will be in March 2024.

Principle 4 – Credit risk

Rating:	**Observed**

Summary	
An FMI should effectively measure, monitor, and manage its credit exposure to Participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each Participant fully with a high degree of confidence.	***Applicability:*** This principle is applicable to the combined approach that Pay.UK takes to managing credit exposure across the three payment systems. ***Rating:*** Pay.UK observes this principle. As a retail payment systems operator, Pay.UK is only exposed to a minimal amount of credit risk, which it monitors and manages on a regular basis. Credit risk between DPs within the three payment systems is managed well with more information set out below.
Key Considerations	**Rationale**

4.1 An FMI should establish a robust framework to manage its credit exposures to its Participants and the credit risks arising from its payment, clearing, and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.	*Credit risk Pay.UK is exposed to*
	
	• Pay.UK is only exposed to a minimal amount of credit risk, directly linked to the following events:
	    ○ DPs defaulting on the price per click (PPC) invoices;
	    ○ DPs defaulting on invoices payable to Vocalink (the operator of the central infrastructure for the three payment systems) for which Pay.UK is liable;
	    ○ Third party income not paid for the services Pay.UK delivers. This supplementary income is for rent and other support type of services (e.g. IT, Finance, HR, MI, and Secretariat) that Pay.UK provides for services such as UK Finance, Swift, LINK and EBA; and,
	    ○ Failure of the UK commercial bank(s) at which Pay.UK holds its capital reserves risk. Our Risk Capital reserves are held in a number of UK ring-fenced commercial bank accounts to reduce concentration risk.

	• In 2023 Pay.UK conducted a stress testing exercise (and repeats such a test annually), where severe but plausible scenarios were developed to assess the financial losses arising from credit risks. Based on our modelling, in the severe but plausible scenarios, Pay.UK is forecasting to have sufficient liquidity to continue trading and meet its capital and liquidity obligations. • Pay.UK has also calculated the amount of financial resources required to cover the firm's credit exposure. The outcome of both exercises was that credit risks, from a financial perspective, have an immaterial impact on Pay.UK. • Pay.UK has continued to increase the amount of its invoice income received via Direct Debit and continues to promote this as a method of payment where possible. Pay.UK has also tightened the monitoring of debtor reporting, which is monitored monthly, and continues to maintain KRIs for credit risk. *Credit risk between participants in the payment systems* • Within the Bacs, FPS, and ICS payment systems, credit exposures arise between DPs (on a multilateral basis), and do not expose Pay.UK. These exposures are managed through prefunding arrangements, operated by using central bank money in the RTGS system. See Section A for an overview of the Bacs, FPS, and ICS payment system arrangements.
4.2 An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk-management tools to control these risks.	*Credit risk to which Pay.UK is exposed* • To assist in monitoring and measuring the credit risk relating to the collection of DP fees, the Pay.UK executive is provided with monthly debtors reporting, including aged debtors. Volumes and risk capital are also monitored. • Pay.UK maintains and monitors its Capital Reserves and, in March 2023, the Board approved the updated Recovery Plan. The Recovery Plan provides key recovery tools to address any deficit that may arise from a credit event. • Pay.UK's risk capital is held as net liquid assets, held in a number of UK commercial banks, ring fenced from other operational accounts. These resources are readily accessible and able to be

	used to mitigate credit losses arising from participants in default or unpaid invoices from third parties. *Credit risk between participants in the payment systems* • The Pay.UK Payments Operations Team receives alerts from the Bacs, FPS, and ICS payment system CI when the effect of outgoing credits, or incoming debits, risks putting a DP's net debit position above the value of cash lodged in RTGS as collateral in the case of default. Prefunding arrangements require additional cash collateral to be lodged by DPs – either in or out of hours – to ensure their debit cap is not breached. System-enforced hard debit cap arrangements mean the payment systems will not close with a DP's net debit position above its collateralised cap. The system will immediately prevent FPS and ICS participants from exceeding their collateralised debit position, while Bacs requires this to be remediated by closedown on the day. • Pay.UK also produces and reviews DPs' stress testing data each month, which is provided to participants in individual stress testing reports. The stress testing examines whether DPs could withstand various stress scenarios, such as what would happen if a large participant defaults, and the effects of this on other participants.
4.3 A payment system or SSS should cover its current and, where they exist, potential future exposures to each participant fully with a high degree of confidence using collateral and other equivalent financial resources (see Principle 5 on collateral). In the case of a DNS payment system or DNS SSS in which there is no settlement guarantee but where its participants face credit exposures arising from its payment, clearing, and settlement processes, such an FMI should maintain, at a minimum, sufficient resources to cover the	• This consideration is not applicable. All DPs' settlement obligations for all three payment systems are covered by cash held in reserve at the BoE in RTGS (Pay.UK does not itself hold any collateral provided by DPs).

exposures of the two participants and their affiliates that would create the largest aggregate credit exposure in the system.	
4.4 A CCP should cover its current and potential future exposures to each participant fully with a high degree of confidence using margin and other prefunded financial resources (see Principle 5 on collateral and Principle 6 on margin). In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. In all cases, a CCP should document its supporting rationale for, and should have appropriate	• This consideration is specific to central counterparties (CCP).

governance arrangements relating to, the amount of total financial resources it maintains	
4.5 A CCP should determine the amount and regularly test the sufficiency of its total financial resources available in the event of a default or multiple defaults in extreme but plausible market conditions through rigorous stress testing. A CCP should have clear procedures to report the results of its stress tests to appropriate decision makers at the CCP and to use these results to evaluate the adequacy of and adjust its total financial resources. Stress tests should be performed daily using standard and predetermined parameters and assumptions. On at least a monthly basis, a CCP should perform a comprehensive and thorough analysis of stress testing scenarios, models, and underlying parameters and assumptions used to ensure they are appropriate for determining the CCP's required level of default protection in light of current and evolving market conditions. A CCP should perform this analysis of stress testing more frequently when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by a CCP's participants increases significantly. A full	• This consideration is specific to central counterparties (CCP).

validation of a CCP's risk-management model should be performed at least annually.	
4.6 In conducting stress testing, a CCP should consider the effect of a wide range of relevant stress scenarios in terms of both defaulters' positions and possible price changes in liquidation periods. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions.	• This consideration is specific to central counterparties (CCP).
4.7 An FMI should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its Participants with respect to any of their obligations to the FMI. These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMI may borrow from liquidity providers. These rules and procedures should also indicate the FMI's process to replenish any financial resources that the FMI may employ	*Credit risk Pay.UK is exposed to* • The Pay.UK Recovery Plan documents the tools the firm has at its disposal to replenish its financial resources in periods of credit stress events. These include, but are not limited to: ○ Increasing the revenue streams income via an uplift in the PPC on an annual or biannual basis; ○ Reducing the cost base by suspending temporarily or discontinuing permanently non-critical or uncommitted costs; and, ○ A combination of the above.

during a stress event, so that the FMI can continue to operate in a safe and sound manner.	

Principle 5 – Collateral

Bacs rating:	FPS rating:	ICS rating:
Observed	**Observed**	**Observed**

Summary	
An FMI that requires collateral to manage its or its Participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limit.	***Applicability:*** As Direct Settling Participants settle in each payment system separately, separate ratings have been applied against this principle. ***Rating:*** All three payment systems observe this principle. All DPs' settlement obligations for all three payment systems are covered by cash held in reserve at the BoE in RTGS (Pay.UK does not itself hold any collateral provided by DPs). Reserve limits are adjusted on an ongoing basis to match the actual and anticipated largest debit position for each DP. Accordingly, there are no credit, liquidity, or market risks inherent in the three payment systems, and therefore no need for 'haircuts' or concentration limits.
Key Considerations	**Rationale**
5.1 An FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity, and market risks.	• Pay.UK only permits DPs to hold cash reserves in Sterling at the BoE as collateral for the three payment systems. Should a DP default on its settlement obligations, this cash collateral will be accessed, and used by Pay.UK to ensure settlement proceeds.
5.2 An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.	• Given Key Consideration 5.1, there is no requirement for 'haircuts'.
5.3 In order to reduce the need for procyclical adjustments, an FMI should establish stable and conservative haircuts that are calibrated to	• Given Key Consideration 5.1, there is no requirement for 'haircuts' or procyclical adjustments.

include periods of stressed market conditions, to the extent practicable and prudent.	
5.4 An FMI should avoid concentrated holdings of certain assets where this would significantly impair the ability to liquidate such assets quickly without significant adverse price effects.	• Given Key Consideration 5.1, there is no risk of adverse price effects or market conditions, and no risk to the ability to liquidate the collateral.
5.5 An FMI that accepts cross-border collateral should mitigate the risks associated with its use and ensure that the collateral can be used in a timely manner.	• Given Key Consideration 5.1, there is no scope for cross-border collateral to be used.
5.6 An FMI should use a collateral management system that is well-designed and operationally flexible.	• Each Pay.UK participant has an account at the BoE in RTGS.[9] Within each DP's RTGS account, there is an area reserved to hold collateral to cover its maximum debit position – the Prefunding Account. Its primary features are: ○ The minimum credit balance is set by Pay.UK once agreed with DPs and these funds cannot be accessed by the DP; ○ The minimum credit balance always matches or exceeds the DP's maximum debit position, which is the highest debit amount that a DP can have at any one time; ○ The credit balance can be changed at the DP's request, but not below the prevailing maximum debit position; and, ○ If a DP defaults on its settlement obligations, Pay.UK would liaise with the BoE and they would access the required amount from the Prefunding Account to meet this obligation. The subsequent day's settlement obligations can be met this way by utilising remaining

[9] The exception to this is the BoE in its role as a DP in the Bacs System. As the central bank it is considered to bring no credit risk. This is a separate role to the BoE's role as Settlement Agent.

	cash collateral until the Prefunding Account balance is exhausted, and this may result in the participant exclusion process being invoked.

Principle 7 – Liquidity risks

Bacs rating:	FPS rating:	ICS rating:
Observed	**Observed**	**Observed**

Summary	
An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the Participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.	***Applicability:*** This principle applies to Pay.UK as the operator of the three payment systems. While Pay.UK does not take on any liquidity risk as part of its operation of the three payment systems, as PSO it monitors, and puts in place requirements to manage liquidity risk between DPs. Given the requirements are codified separately for the three payment systems, separate ratings have been assigned. ***Rating:*** All three of Pay.UK's payment systems observe this principle. Pay.UK's contractual arrangements and rules provide the framework and legal basis to manage the liquidity risks which arise between DPs. All collateral is in the form of Sterling cash and is lodged with the BoE in RTGS. Settlement positions in each payment system are monitored by Pay.UK on an ongoing basis and DPs are made aware in advance of their settlement obligations.
Key Considerations	**Rationale**
7.1 An FMI should have a robust framework to manage its liquidity risks from its Participants, settlement banks, nostro agents, custodian banks, liquidity providers, and other entities.	• In each of the three payment systems, liquidity risk arises if a DP is unable to fund a debit settlement position. The prefunding arrangements (discussed in Section A) guarantee settlement will proceed.
7.2 An FMI should have effective operational and analytical tools to identify, measure, and	• **Bacs**: End-of-day settlement positions for all DPs are collated daily. This enables Pay.UK to compile monthly stress testing reports, which show DPs' settlement positions in relation to

monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.	their debit caps and its two threshold trigger points, for one, two, and three-day positions, though these are based on the overall position, not split by day. Each DP's debit cap is set based on its anticipated highest debit position (highest debit amount that a DP can have at any one time). Pay.UK and DPs manage cap changes in relation to actual and anticipated debit positions. DPs are able to view their live net balances. The CI monitors for debit cap breaches on a 'trigger point' basis (i.e. each DP has two thresholds set – typically a lower threshold of between 30-70 per cent of their maximum potential debit balance and an upper threshold of between 75-95 per cent, this varies by DP according to their individual profile) and system-generated emails alert Pay.UK and the affected DP should this occur. Pay.UK has set an additional threshold (Threshold 3) for each DP to provide early warning additional to the Threshold 1 and 2 alerts every 30 minutes. • **FPS**: Settlement and funding flows are monitored through the CI. DPs' net settlement positions are instantaneous and monitored by Pay.UK Payments Operations throughout the day. Settlement positions relative to Net Sender Caps (NSC) are monitored by the CI and highlighted to the relevant DPs, with positions updated live every few minutes and visible on the User Interface (to Pay.UK Operations and DPs). An additional alerting mechanism has been developed, independent of the DP-set Net Sender Threshold, which notifies participants when they surpass a certain per cent of the NSC, to provide early notification to Pay.UK that a DP's Net Settlement Position is increasing. Participants must add additional cash collateral in RTGS to increase their NSC if surplus funds are not already available. • **ICS**: DPs are informed of their forecast settlement position as early as 12:30 am. Pay.UK maintains a dashboard displaying updated participant settlement balances and alerts DPs if they have exceeded 50 or 70 per cent of their cap utilisation. Due to the timing of settlement, DPs have sufficient time to increase their cap before the 15:30 cut-off (ahead of settlement in RTGS at 16:30). DPs are required to maintain sufficient funds in their pre-funding account to cover two days of settlement obligations. Stress testing analysis on ICS assesses the previous positions, including intraday profiles; plausible future scenarios, including extreme but credible

	circumstances; and, credit and liquidity exposure of non-defaulting participants in the event of other participant defaults.
7.3 A payment system or SSS, including one employing a DNS mechanism, should maintain sufficient liquid resources in all relevant currencies to effect same-day settlement, and where appropriate intraday or multiday settlement, of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation in extreme but plausible market conditions.	• This consideration is not applicable. Pay.UK does not need to maintain liquid resources of its own to support settlement.
7.4 A CCP should maintain sufficient liquid resources in all relevant currencies to settle securities-related payments, make required variation margin payments, and meet other payment obligations on time with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions. In addition, a CCP that is involved in activities with	• This consideration is not applicable. It is specific to central counterparties (CCP) and Pay.UK does not need to maintain liquid resources of its own to support settlement.

a more-complex risk profile or that is systemically important in multiple jurisdictions should consider maintaining additional liquidity resources sufficient to cover a wider range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions.	
7.5 For the purpose of meeting its minimum liquid resource requirement, an FMI's qualifying liquid resources in each currency include cash at the central bank of issue and at creditworthy commercial banks, committed lines of credit, committed foreign exchange swaps, and committed repos, as well as highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If an FMI has access to routine credit at the central bank of issue, the FMI may count such access as part of the minimum requirement to the extent it has collateral that is eligible for pledging to (or for conducting other appropriate forms of transactions with) the relevant central bank. All	• This consideration is not applicable. Pay.UK does not need to maintain liquid resources of its own to support settlement.

such resources should be available when needed.	
7.6 An FMI may supplement its qualifying liquid resources with other forms of liquid resources. If the FMI does so, then these liquid resources should be in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or repos on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions. Even if an FMI does not have access to routine central bank credit, it should still take account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. An FMI should not assume the availability of emergency central bank credit as a part of its liquidity plan.	• This consideration is not applicable. Pay.UK does not need to maintain liquid resources of its own to support settlement.
7.7 An FMI should obtain a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a participant of the FMI or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a	• This consideration is not applicable. Pay.UK does not need to maintain liquid resources of its own to support settlement.

liquidity provider's performance reliability with respect to a particular currency, a liquidity provider's potential access to credit from the central bank of issue may be taken into account. An FMI should regularly test its procedures for accessing its liquid resources at a liquidity provider	
7.8 An FMI with access to central bank accounts, payment services, or securities services should use these services, where practical, to enhance its management of liquidity risk.	• This consideration is not applicable. Pay.UK does not need to maintain liquid resources of its own to support settlement.
7.9 An FMI should determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. An FMI should have clear procedures to report the results of its stress tests to appropriate decision makers at the FMI and to use these results to evaluate the adequacy of and adjust its liquidity risk management framework. In conducting stress testing, an FMI should consider a wide range of relevant scenarios. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking	• This consideration is not applicable. Pay.UK does not need to maintain liquid resources of its own to support settlement.

stress scenarios in a variety of extreme but plausible market conditions. Scenarios should also take into account the design and operation of the FMI, include all entities that might pose material liquidity risks to the FMI (such as settlement banks, nostro agents, custodian banks, liquidity providers, and linked FMIs), and where appropriate, cover a multiday period. In all cases, an FMI should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains	
7.10 An FMI should establish explicit rules and procedures that enable the FMI to affect same-day and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its Participants. These rules and procedures should address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures should also indicate the FMI's process to replenish any liquidity resources it may employ during a	• Pay.UK has in place explicit rules and procedures that enable it to effect agreed settlement of payment obligations on time following any individual or combined default among participants. • For all three payment systems, rules and procedures enable settlement to continue in the event of default of any DPs, as provided for by the Settlement Agreement and prefunding arrangements. Each Settling Participant has to sign up to the Bank of England's Deed of Charge, which allows Pay.UK to utilise the participants pre-funded balance to effect settlement if normal settlement cannot be achieved.

stress event, so that it can continue to operate in a safe and sound manner.	

Principle 8 – Settlement finality

Bacs rating:	FPS rating:	ICS rating:
Observed	**Observed**	**Observed**

Summary	
An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.	***Applicability:*** As the three payment systems operated by Pay.UK utilise separate contractual arrangements and rules, individual ratings have been provided. ***Rating:*** Pay.UK observes this principle for each payment system. Settlement finality is clearly defined within the Pay.UK contractual arrangements and rules. Bacs, FPS, and ICS have clear and certain points of final settlement.
Key Considerations	**Rationale**
8.1 An FMI's rules and procedures should clearly define the point at which settlement is final.	• **Bacs:** As defined in the Bacs contractual arrangements and rules, payments become irrevocable at 23:00 on day one of the Bacs cycle, although this can be extended at the discretion of Pay.UK in certain circumstances. The point of irrevocability of an individual payment is normally up to close down on day one. Settlement is final at 'settlement time' on the 'due date' which is 09:30 on day three of the Bacs cycle. • **FPS:** As defined in the FPS contractual arrangements and rules, the point of irrevocability of an individual payment is the moment a payment is submitted to the CI. After this point no payment can be reversed and the system has no revocation messaging capability. The point of settlement finality when a net settlement payment (as opposed to an individual payment) is irrevocable is at the point the payment (single amount) is recorded with the RTGS timestamp.

	• **ICS:** As defined in the ICS contractual arrangements and rules, ICS payments become irrevocable at the point where a request to pay ('RTP') pay decision is made and marked against the participant's running settlement position, although settlement takes place at 16:30.
8.2 An FMI should complete final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. An LVPS or SSS should consider adopting RTGS or multiple-batch processing during the settlement day.	• See Section A for details of settlement times for the three payment systems. • Pay.UK has contingency processes in place in the event that settlement cannot occur by the end of the value day (including seeking extensions and delaying settlement cycles in RTGS). The prefunding settlement model guarantees settlement between Direct Participants in all three payment systems.
8.3 An FMI should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a Participant.	• See Key Consideration 8.1.

Principle 9 – Money settlements

Bacs rating:	FPS rating:	ICS rating:
Observed	**Observed**	**Observed**

Summary	
An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.	***Applicability:*** Bacs, FPS, and ICS each have different settlement frequency and times. Pay.UK has therefore applied three separate ratings against this principle. ***Rating:*** All three of Pay.UK's payment systems observe this principle as final settlement occurs at the BoE over the RTGS infrastructure and in central bank money.
Key Considerations	**Rationale**
9.1 An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.	• For all three payment systems, final settlement occurs at the BoE over the RTGS infrastructure in central bank money (see Section A for the specific times).
9.2 If central bank money is not used, an FMI should conduct its money settlements using a settlement asset with little or no credit or liquidity risk.	• This consideration is not applicable to Retail Payment Systems. Settlement of Pay.UK payment systems occurs using Bank of England's RTGS system.
9.3 If an FMI settles in commercial bank money, it should monitor, manage, and limit its credit and liquidity risks arising from the commercial settlement banks. In particular, an FMI should establish and monitor adherence to strict	• This consideration is not applicable to Retail Payment Systems. Settlement of Pay.UK payment systems occurs using Bank of England's RTGS system.

criteria for its settlement banks that take account of, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability. An FMI should also monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks.	
9.4 If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.	• This consideration is not applicable to Retail Payment Systems. Settlement of Pay.UK payment systems occurs using Bank of England's RTGS system.
9.5 An FMI's legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received should be transferable as soon as possible, at a minimum by the end of the day and ideally intraday, in order to enable the FMI and its participants to manage credit and liquidity risks.	• This consideration is not applicable to Retail Payment Systems. Settlement of Pay.UK payment systems occurs using Bank of England's RTGS system.

Principle 13 – Participant default rules and procedures

Bacs rating:	FPS rating:	ICS rating:
Observed	**Observed**	**Observed**

Summary	
An FMI should have effective and clearly defined rules and procedures to manage a Participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.	***Applicability:*** As Bacs, FPS, and ICS each utilise separate contractual arrangements and rules, individual ratings have been provided. ***Rating:*** Pay.UK observes this principle for each payment system. The contractual arrangements and rules, maintained through the RSMF (detailed in Key Consideration 1.2), for all three payment systems clearly define the rules and procedures in place to manage a DP's default without affecting the ability of the payment systems to continue operating. In the event of a default, with a DP in a debit position, the defaulting DP's cash collateral would be accessed from its prefunding account (held in RTGS) and used to meet the settlement obligation.
Key Considerations	**Rationale**
13.1 An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in the event of a Participant default and that address the replenishment of resources following a default.	• For all three payment systems, the relevant contractual arrangements and rules define default criteria (including insolvency, dissolution, and administration) and enable Pay.UK to act when a default is declared for a DP. This includes the blocking of payment messages and the removal of the DP's participation in the relevant payment system. The BoE is able to access the defaulting DP's prefunding account in RTGS to complete settlement. DPs must advise Pay.UK immediately once they become aware of any circumstance that may lead to them not meeting system eligibility requirements, including a default event. • In the event of a DP's default, Pay.UK will no longer benefit from the income that is generated via per click fees. Pay.UK's capital reserves are designed to cater for any unexpected losses (including losses of income). Please see Principle 4.

13.2 An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.	• Pay.UK has comprehensive internal plans that set out the roles, responsibilities, and authorities for addressing a default in FPS, Bacs, and ICS. Testing is in place throughout the year to ensure that all parties (Pay.UK, its DPs, and the BoE) are aware of the procedures required to fund and defund their prefunding accounts held in RTGS.
13.3 An FMI should publicly disclose key aspects of its default rules and procedures.	• Key aspects of the default rules and procedures are set out in the contractual arrangements and rules for the three payment systems. These are made available to existing and prospective participants (see Principle 23), and also on the appropriate website for each system, except where sensitive material is contained. All documents are reviewed on an annual basis (to include any changes made following testing – see Key Consideration 13.4).
13.4 An FMI should involve its Participants and other stakeholders in the testing and review of the FMI's default procedures, including any close-out procedures. Such testing and review should be conducted at least annually or following material changes to the rules and procedures to ensure that they are practical and effective.	• There is a comprehensive plan in place to test Pay.UK procedures for participant default in the three payment systems. Testing involves DPs, the BoE, and Vocalink as required, and is performed twice per year. Test results are reviewed to identify any changes that are necessary to Bacs, FPS, or ICS contractual arrangements and rules.

Principle 15 – General business risk

Rating:	**Observed**

Summary	
An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.	***Applicability:*** This principle is applicable to the business risks that apply across Pay.UK and therefore a single rating has been provided. ***Rating:*** Pay.UK observes this principle. As discussed under Principle 3, Pay.UK operates an Enterprise Risk Management Framework (ERMF) which enables the organisation to identify, assess, monitor, manage, and report general business risks. Pay.UK maintains its Risk Capital and continues to monitor it on an ongoing basis through the tools set out below.
Key Considerations	**Rationale**
15.1 An FMI should have robust management and control systems to identify, monitor, and manage general business risks, including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.	• Pay.UK identifies regulatory, operational/system, technological, credit and financial risks, which could have financial implications to the organisation's financial resilience. • Each year we conduct a stress testing exercise whereby the risk team identify business risks and the finance team assess their impact on our capital. We also utilise these to assess the level of risk capital we should hold to ensure it is sufficient. We conducted this exercise in Q1 2023 and document this in our Recovery Plan and Risk Capital update. This was approved by Board in March 2023. • The process for monitoring and managing Pay.UK's general business risks aligns to the monitoring processes defined in the ERMF – see Principle 3. The monitoring of risk includes: ○ Monthly reviews of key risks including the review of RCSAs.

	○ Monthly monitoring and reporting of KRIs. • Stress testing is used to quantify the potential financial losses arising from business risks, to determine the financial implications on the organisation's capital and cash base, should an unexpected stress event crystallise.
15.2 An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold should be determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.	• The approach to maintaining risk capital by Pay.UK is that its capital reserves must have: ○ At least six months' worth of current non-discretionary operating expenses to deliver Pay.UK's payment services; ○ Sufficient to cover general business risks (including the risk of extraordinary one-time losses); and, ○ Sufficient funds to cover credit risk losses. • Pay.UK holds these funds in cash in UK ring-fenced bank accounts with UK commercial banks. • Pay.UK maintains a capital reserve buffer to mitigate the risk of triggering the Recovery Plan should Pay.UK suffer a small unexpected financial loss that prevents the company from falling below the minimum regulatory capital reserve requirement. Based on our modelling, even in the severe but plausible scenarios, Pay.UK is forecasting to have sufficient liquidity to continue trading and comfortably meet its capital and liquidity obligations.
15.3 An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover Participant defaults or other risks covered under the	• Pay.UK has built and updates annually its Recovery Plan. The Recovery Plan has taken into consideration business risks which, if crystallised, could result in the Plan being triggered. These risks are extreme but plausible, and could threaten the organisation's financial resilience by significantly depleting risk capital reserves and, in extreme scenarios, requiring Pay.UK to recapitalise. • Pay.UK's objective is to maintain an appropriate level of financial resources to enable the organisation to absorb extraordinary losses and be in a position to implement the Recovery Plan, should such action be needed.

financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.	• As detailed in Key Consideration 15.2, Pay.UK holds more than six months' worth of current non-discretionary operating expenses to deliver Pay.UK's payment services.
	• Pay.UK has distinguished between the financial resources required to cover: (i) credit exposures and; (ii) the financial resources to cover for general business risks. The total risk capital reserves calculated is the sum of the two.
	• Pay.UK updates its Recovery Plan annually, with the last update in March 2023, Pay.UK submitted an updated version of its Recovery Plan to BoE.
	• The key components are:
	  ○ **Recovery trigger framework:** The Recovery Plan includes a framework of KRIs that are deemed appropriate and sufficient to monitor in order to detect early signs of financial stress. Thresholds have been set against each KRI;
	  ○ **Escalation framework:** The Recovery Plan explains how the breach of one or more thresholds will trigger an escalation process, which will ultimately result in a crisis management body being convened to implement recovery actions; and,
	  ○ **Recovery Tools:** The Recovery Plan also details the tools that Pay.UK has at its disposal to alleviate financial distress and return to business as usual.
	• Pay.UK has a Wind-Down Plan which was reviewed and approved most recently in late 2022 and has been provided to BoE. More information is found under Principle 3.

15.4 Assets held to cover general business risk should be of high quality and sufficiently liquid in order to allow the FMI to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.	• Pay.UK's risk capital is held in liquid net assets in the form of cash with these assets held in UK ring-fenced commercial bank accounts. This cash is readily available to be used for the purposes of mitigating any losses. This cash is diversified between several UK ring-fenced bank accounts, with the funds available on a liquid basis.

15.5 An FMI should maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan should be approved by the board of directors and updated regularly.	• Pay.UK has a range of tools, explained in the Recovery Plan, which may be used to raise additional capital if the current forecast levels were to fall below the amount needed. This is reviewed and updated on an annual basis. The Pay.UK Board approved both the risk capital reserve calculation and Recovery Plan in March 2023. In periods of severe stress, where Pay.UK may be required to raise additional capital, the Board will be advised accordingly.

Principle 16 – Custody and investment risks

Rating:	**Observed**

Summary	
An FMI should safeguard its own and its Participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.	***Applicability:*** This principle is applicable to the combined approach that Pay.UK takes to managing its custody and investment risks, and to how the custody risks of DPs' cash collateral is managed. Therefore, a single rating has been provided. ***Rating:*** Pay.UK observes this principle. Pay.UK has safeguarded its own assets by placing them within UK regulated commercial banking institutions DPs' cash collateral assets are held in central bank money in RTGS at the BoE.
Key Considerations	**Rationale**
16.1 An FMI should hold its own and its Participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets.	*Pay.UK's assets* • As noted under Principle 4, Pay.UK's financial resources are held as cash in a number of UK commercial banks to reduce concentration risk. • These amounts are ring-fenced from the cash sitting in Pay.UK's operating current accounts and will only be used to mitigate business losses. • With surplus funds to the risk capital, Pay.UK intends to mitigate against inflation risk by investing these surplus funds in accordance with our agreed low risk appetite. *Direct participants' assets* • Pay.UK does not hold any assets provided by DPs. DPs' Sterling cash collateral assets are held, for pre-funding purposes, in central bank money in RTGS at the BoE. Assurance over robust accounting practices, safekeeping procedures and internal controls in RTGS is derived from: (i) primarily the BoE's annual ISAE3402 audit of RTGS; and (ii) the BoE's Annual Report.

16.2 An FMI should have prompt access to its assets and the assets provided by Participants, when required.	*Pay.UK's assets* • Pay.UK holds its risk capital as net liquid assets (cash) with UK regulated commercial banks in UK ring-fenced bank accounts. These bank accounts operate under dual authorisation with authorised signatories and the risk capital is spread across multiple UK commercial banks. • Pay.UK has prompt access to all of its financial assets, with access via authorised signatories. *Direct participants' assets* • The nature and timing of access to DP assets (held for pre-funding purposes) for the three payment systems is governed by the contractual arrangements and rules.
16.3. An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.	*Pay.UK's assets* • Pay.UK has diversified the number of UK commercial banks it holds cash balances to mitigate against custodian exposures. • Pay.UK intends to maintain its diversified exposure across our bank accounts. *Direct participants' assets* • For the three payment systems, cash assets (for pre-funding purposes) are held in central bank money in RTGS at the BoE.
16.4 An FMI's investment strategy should be consistent with its overall risk-management strategy and fully disclosed to its Participants, and investments should be secured by, or be claims on, high-quality obligors. These investments should allow for quick liquidation with little, if any, adverse price effect.	• Pay.UK does not currently hold any other forms of investment, however Pay.UK intends to mitigate against inflation risk by investing surplus funds (non-risk capital funds) in accordance with our agreed low risk appetite.

Principle 17 – Operational risk

Rating:	**Broadly observed**

Summary	
An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.	***Applicability:*** Under the overarching Pay.UK ERMF, the three payment systems operated by Pay.UK utilise the same suite of operational risk control processes. Therefore, a single rating has been provided, noting there are a small number of payment system-specific elements within this. ***Rating:*** Pay.UK's operational risk management processes enable the organisation to identify and mitigate the operational risks that could impact its operation of the three payment systems. Pay.UK has resilient processes in place to ensure operational reliability and business continuity. Pay.UK is continuing its programme to enhance and improve our overall risk framework. We have simplified the operational risk processes, including how we assess risks (Risk Assessment Matrix, RAM), reduced to two levels of risk Principal (enterprise-wide) and Directorate (RCSA), and updated our operational risk appetite. We are currently focussing on control articulation and testing to ensure our controls remain fit for purpose. We are working to develop our systemic risk management capability, through the systemic risk management programme (moving to the PSO Performance Programme post-September 2023), which will allow for improved identification and management of risks impacting the payments systems. In particular, our CTP Aggregator Project considering how to improve our understanding and management of risks posed by aggregators that present material concentration in the ecosystem, will be key to our observance. We are also making improvements to incident management which will allow us to lead the industry in better preparing for incidents and overseeing Vocalink and participants to ensure a swift and smooth response and recovery. ***Next steps (path to 'observed')***: Pay.UK will consider itself fully observed against this principle when we have completed the systemic risk management projects and completed the

	improvements to incident management preparation and processes, as well as reaching our target state risk maturity.
Key Considerations	**Rationale**
17.1 An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.	• Pay.UK has operational risk management processes in place that are used for managing the operational risks to the three payment systems. • Risk Registers are in place for each Directorate with ongoing periodic RCSA reviews as agreed with the ERSC. RCSA enhancement work is ongoing as business functions develop control testing schedules. • Through the RCSA process, Pay.UK has identified the operational risks that could impact the three payment systems and Pay.UK overall. These risks include a CI outage or data integrity incident, CI security breach, and wider payment system resilience issues. Controls and owners have been identified to manage these risks. The risks and controls are reviewed on a monthly basis by the first line of defence with second line of defence support, oversight and challenge. These are fully documented and saved within the Pay.UK I.T. network to provide an audit trail. • The RCSA process has been enhanced, with the simplified RAM, and a new RCSA template produced, which has been adopted across Pay.UK. This has allowed for clearer and more consistent documentation of our risks and controls. Detailed RCSA Guidance has also been produced to support the first line, with training also provided across the risk champion network. • The first and second line Risk teams continue to provide 1-2-1 support and training sessions for colleagues to enhance corporate risk management capability, and a mandatory e-learning was rolled out to provide an introduction to systemic risk management to all colleagues across Pay.UK.

	• Aside from the operation of the three payment systems (where the CI is operated by Vocalink), Pay.UK corporate operational risks (e.g. relating to internal IT, buildings etc.) are managed by specialist functions via RCSAs and reported through risk governance. • Controls are in place, with collaboration between Vocalink and Pay.UK to manage changes to the CI to ensure the smooth functioning of the payments systems. • As discussed under Principle 3, we have enhanced and simplified the ERMF, which will improve our capacity to manage systemic risks across the ecosystem that could impact our operation of the three systems. *Incident Management* • In addition to our operational risk management processes, we are continuing to develop our incident management approach, policies and procedures. • We are making improvements to the way for prepare for and manage incidents, including developing our communication playbooks, testing and management of Vocalink and participants. • We are also considering what Pay.UK's role in leading the industry in preparing for incidents may look like. Work on incident management will continue throughout 2023 and 2024.
17.2 An FMI's board of directors should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI's operational risk-management framework. Systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes.	• Pay.UK has clearly defined roles and responsibilities under the 3LOD model, as well as processes and procedures for addressing operational risk (with the approach to managing operational risk approved by the Board). These are defined and documented in the ERMF and supporting procedural documents, and enhancements including the introduction of a Risk Event Procedure and root cause analysis requirements, will be rolled out across the business in the remainder of 2023. • Pay.UK maintains an appropriate suite of human resources policies and controls to ensure its personnel are well-qualified and trained to operate the payments systems, and to meet the

	needs of the organisation. Controls and policies are also in place to manage staff retention, loss of knowledge and fraud prevention.
	• While Pay.UK Board maintains overall responsibility for Pay.UK's risk management, responsibilities for crisis management have been delegated to the Pay.UK Gold Incident Response Team, which is comprised of Executive Committee members and subject matter experts (due to the practical realities of crisis resolution, the Board does not have an 'in crisis' role).
	• Operational policies and procedures for each of the three payment systems are tested periodically as below:
	  ○ **Bacs**: Systems, operational policies, procedures, and controls are reviewed (to reflect changes in people or processes), and tested (periodically) and after significant changes. This includes the Bank Reference Data Service;
	  ○ **FPS**: Systems and operational procedures, and controls are reviewed (to reflect changes in people or processes), and tested periodically throughout the year in either a live or test environment and in accordance with the contingency testing schedule as set out in the FPS Participant Procedures. A contingency testing table is also available for participants to view. This document shows the scheduled dates of planned testing and gives a post testing view on the success of the testing; and
	  ○ **ICS**: Systems and operational procedures, and controls are reviewed (to reflect changes in people or processes), and tested periodically throughout the year in either a live or test environment and in accordance with the contingency testing schedule. This document shows the scheduled dates of planned testing and gives a post testing view on the success of the testing. Additionally, any test plans are shared with participants by way of change requests.
	• Controls testing commenced in to the first line risk team in H2 2022, who independently test the controls in the RCSA for all schemes.

17.3 An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.	• Pay.UK's three payment systems each have clearly defined operational reliability objectives and policies. • For each payment system, the key operational reliability objectives are set out in the service levels required from Vocalink for the CI (SLAs covering availability and timeliness of input, processing, output, and settlement functionality). • As detailed in Key Consideration 3.3, Pay.UK monitors the Vocalink provision of service of the CI on a daily basis against these service levels. Pay.UK undertakes monthly reviews of the performance report provided by Vocalink, which includes any incidents and their impact on agreed service levels. Performance of the CI is also discussed with participants at regular Pay.UK participant groups. • The Bank Reference Data Service has clearly defined operational reliability objectives and is covered by the above monitoring arrangements.

17.4 An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.	• Pay.UK's payment systems have scalable capacity and are generally well placed to handle increasing stress volumes.
	  ○ **Bacs:** The Bacs capacity is 150 million items in one processing cycle which exceeds the peak daily volume of around 120 million items processed one day per month.
	  The comparison of projected volumes to known system capacity is conducted on an ongoing basis with forecasts revised and updated. Forecasts are provided by Vocalink to Pay.UK monthly;
	  ○ **FPS:** Vocalink operate a dual site process at 3000 transactions per second (TPS) split across two nodes. Since the 2021 Self-Assessment each node has been upgraded to process 1,500 TPS from 750 TPS, with the current live TPS record is 1,133 (on 01 November 2022). In the event that Vocalink needs to operate from a single site, which is frequently carried out during scheduled maintenance, Vocalink will operate at 1500 TPS on the single site. There is a low risk of the system exceeding the TPS available capacity, particularly when the CI is running on single site node, which is addressed by centrally

	managing submission flows. Peak processing is most likely during the Standing Order processing window (00.00 to 06.00 on banking days) when aggregated simultaneous demand of participant submissions results in a high TPS rate, including month end runs, dividend runs, and bank holidays (due to the longer weekend).; and ○ **ICS:** Based on peak hour performance requirements, Pay.UK's service level objective is to be able to process 440,000 transactions in an hour. The system is currently tested to process close to double this.
17.5 An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.	• Pay.UK has comprehensive information security policies that address the potential vulnerabilities and threats Pay.UK may face. • In addition, Pay.UK maintains oversight of the risks it bears from Vocalink as the prime supplier through the independently-produced ISAE3000 audit and Vocalink's continuance of ISO27001 certification.
17.6 An FMI should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a widescale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan should be designed to enable the FMI to complete settlement by the end of the day of the disruption, even in a case of extreme circumstances. The FMI should regularly test these arrangements.	• Pay.UK continues to make progress against compliance with regulatory requirements concerning operational resilience, including identifying and assessing important business services, conducting asset mapping and defining impact tolerances. • Pay.UK's systems all have continuity plans that address the events that pose a significant risk of disrupting operations (see Principle 3). Impact Tolerances were established in 2022 for each Pay.UK Important Business Service, including Bacs, FPS, and ICS. • For Bacs and ICS, Vocalink holds current ISO/IEC 22301:2012 business continuity management certification, and is contractually obliged to carry out business continuity testing annually which includes: ○ Transfer of the full Bacs and ICS services (including Bank Reference Data) from the primary to the secondary data centre for an agreed period of live processing. This must be completed within four hours.

	○ Two exercises to perform a switchover and switchback of the Bacs and ICS channels and map performance against the agreed SLAs. The channels, used to input to – and receive output from – the CI, are considered to be key systems, and must resume operation within two hours. • RTGS has a full secondary site operation. The BoE can also activate the Market Infrastructure Resilience Service (MIRS), in the event of a complete failure of RTGS, which will allow settlement to proceed. MIRS is geographically remote from the BoE and is technologically independent.
17.7 An FMI should identify, monitor, and manage the risks that key participants, other FMIs, and service and utility providers might pose to its operations. In addition, an FMI should identify, monitor, and manage the risks its operations might pose to other FMIs.	• Pay.UK identifies, monitors, and manages the key risks that participants and other entities may pose to it and the risks Pay.UK may pose to them (see Principle 3). • Service and utility providers also pose risks to Pay.UK's operation of the three payment systems. *CHAPS* • The FMI most likely to be impacted by an outage of one of Pay.UK payment systems is CHAPS. The risk Pay.UK brings to CHAPS is volume-based initially; an extended outage of FPS, for example, may cause participants and their customers to instead send credit payments (push payments) by CHAPS. Unavailability of Bacs for Direct Debits (pull payments) may lead to a further shift to the use of credit payments if, for example, utility companies call for push payments from their customers. • A CHAPS outage could cause more credit payments to be sent through FPS or Bacs, noting the limitations, e.g. that FPS transaction limits are lower than CHAPS, and Bacs (which has higher item limits) is not a same day processing system (the same would apply if cheques were used via the two-day Image Clearing System). This may also lead to unexpected settlement values, which would be managed through existing prefunding arrangements. • Pay.UK, the BoE (as PSO for CHAPS), and LINK (the ATM operator) participate jointly in the *Industry Incident Management Communication Framework* which allows the retail and wholesale

	FMIs to share information in the event an incident affects one or more of the Sterling payment systems. *Participant risk and concentration of participant suppliers* • In early 2022, we stood up our Systemic Risk Programme Steering Committee to address key systemic risk management programmes, such as on managing Cloud and Concentration Risk. In June 2022, we recognised the need to improve the rigour and oversight of this work which was enhanced with more focused programme management disciplines. *Concentration Risk Project* • In 2022, as a part of the systemic risk management programme, Pay.UK mapped the FPS and Bacs ecosystems, looking at the end to end payment journey to identify the Payments Value Chain (PVC) – the critical functions to the payment systems. This allowed us to reset our boundary of control, identify critical third parties and points of concentration in the ecosystem. • In addition to our operational risk of disruption of individual participants, mitigated by our rules, concentration risk introduces the risk of more widespread disruption. In response, we are enhancing our monitoring, management and reporting of the risks. *Critical Third Party (CTP) Aggregator Risk project* • A number of FPS DPs use a third-party provider (TPP) for technical connectivity to FPS. The term 'aggregator' is applied to a TPP that supports more than one DP in FPS. Pay.UK undertakes an accreditation programme to test the TPP's technical ability to send and receive FPS transactions. • Pay.UK has assessed the risks presented by the use of FPS aggregators (including concentration risk) through our Systemic Risk Programme projects. Our CTP Aggregator project is considering options for mitigating the risks, now and in NPA. This work is set to continue to end January 2024. *Cloud Risk Project*

	• In August 2022, Pay.UK developed a Cloud Risk Policy and the Cloud Code of Conduct, which provides rules for participants on cloud service use. • Pay.UK implemented the Policy and Code, and we have been working with systemically important participants and Bacs Bureau to gather assurance on their compliance with the Code. • We have continued to develop our management of cloud risk through implementation of concentration risk monitoring, including cloud concentration risk, and enhancement of the assurance process. This work will continue throughout 2023.

Principle 18 – Access and participation requirements

Bacs rating:	FPS rating:	ICS rating:
Observed	**Observed**	**Observed**

Summary	
An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.	***Applicability:*** The three payment systems each have separate access and participation requirements and have therefore been assigned separate ratings. ***Rating:*** The Bacs and ICS payment systems observe this principle as they have objective, risk-based, and publicly disclosed criteria that permit fair and open access. FPS also has such criteria, but Pay.UK rated this principle in 2021 as broadly observed, because we had some outstanding policy work to complete regarding the FPS aggregator model. One outcome of this policy work was the decision not to restrict concentration of an aggregator, as this would breach our open access requirements. Whilst work continues to improve our understanding and management of risks posed by the aggregators that present material concentration in the ecosystem through our CTP Aggregator Risk project, as covered in Key Consideration 17.7, our work on aggregators will not impact on access, and therefore will no longer impacts on the observance of this principle. In 2022 we received regulatory attention to participant use of the public cloud (including with aggregators) which saw a restriction placed upon onboarding and migration whilst this was addressed. In August 2022, Pay.UK developed a Pay.UK Cloud Risk Policy and the Cloud Code of Conduct, which provides rules for participants on cloud service use. Pay.UK Board approved a Cloud Risk Policy, allowing the restriction to be lifted. We recognise that there are further aspects to deliver to improve our systemic risk management, as detailed in Principle 17. However, following completion of the aggregator policy work, cloud work

	and the restriction on onboarding being lifted, we judge that FPS permits fair and open access and the principle is now considered to be observed.
Key Considerations	**Rationale**
18.1 An FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect Participants and other FMIs, based on reasonable risk-related participation requirements.	• Pay.UK has dedicated on-boarding managers and support teams for the three payment systems who actively engage with prospective participants. The on-boarding managers provide introductory information to outline requirements for the services (see Key Consideration 18.2) while also exploring potential participants' requirements and needs. • As reflected in the PSR Access and Governance Report on Interbank Payment Systems 2022, Pay.UK has had success in participants joining the systems (including a number of new NBPSPs). • Pay.UK is developing a streamlined access management process so the payment systems are accessible to participants in the simplest manner, commensurate with the underlying risks.
18.2 An FMI's participation requirements should be justified in terms of the safety and efficiency of the FMI and the markets it serves, be tailored to and commensurate with the FMI's specific risks, and be publicly disclosed. Subject to maintaining acceptable risk control standards, an FMI should endeavour to set requirements that have the least-restrictive impact on access that circumstances permit.	• Pay.UK continues to harmonise participation (and assurance) requirements across the three payment systems. During 2020, Pay.UK successfully implemented a consolidated assurance programme across the three systems. This has allowed for a simplified and consistent process for multi-system participants, whilst maintaining risk controls and standards, thereby supporting access to our systems. • In the second half of 2023 we will integrate the new Cloud Code of Conduct into the consolidated assurance. The requirements are commensurate with operating safely within the UK retail payments ecosystem and the associated risks. • **Bacs:** Direct participation access requirements are stated on the Bacs website and are included in the contractual arrangements and rules. Current and prospective participants must: ○ Be an authorised Payment Service Provider (PSP) under the *Payment Services Regulations 2009;*

	○ Hold a Sterling Settlement Account at the BoE, or be able to use a Sterling Settlement Account held by a Group Company at the BoE; ○ Either carry out business and operate an office in the UK or, where requested, provide an independent council / legal opinion which confirms that the payment service agreements are legally binding and enforceable in the jurisdiction where the prospective participant is domiciled, and which confirms any other matters so required, to ensure the safety, integrity and efficiency of the payment service; and, ○ Enter an agreement in respect of participation and of the settlement arrangements. • **FPS:** Direct participation access requirements are stated on the FPS website. In accordance with the contractual arrangements and rules, current and perspective participants must: ○ Be an authorised Payment Service Provider (PSP) under the *Payment Services Regulations 2009;* ○ Hold a Sterling Settlement Account at the BoE or be able to use a Sterling Settlement Account held by a Group Company at the BoE; ○ Be able to comply on a continuous basis with the technical and operational requirements of the system; ○ Have, or be eligible to hold, at least one unique sort code; ○ Enter an agreement in respect of participation and of the settlement arrangements; and, ○ Either carry out business and operate an office in the UK or, where requested, provide an independent council / legal opinion which confirms that the payment service agreements are legally binding and enforceable in the jurisdiction where the prospective participant is domiciled, and which confirms any other matters so required, to ensure the safety, integrity and efficiency of the payment service.

	• As noted in Key Consideration 17.7, our CTP Aggregator project is considering options for mitigating risks posed by aggregators, now and in NPA. This work is set to continue to end January 2024.
	• **ICS:** Participation requirements are published on the Cheque and Credit website. In accordance with the contractual arrangements and rules, current and perspective participants must:
	    o Be an authorised PSP under the *Payment Services Regulations 2009;*
	    o Hold a Sterling Settlement Account at the BoE or be able to use a Sterling Settlement Account held by a Group Company at the BoE;
	    o Carry out their business and operate an office within the EEA;
	    o Have the ability to comply with the technical and operational requirements of the ICS; and,
	    o Pay the costs associated with participation in the ICS as a participant.

18.3 An FMI should monitor compliance with its participation requirements on an on-going basis and have clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a Participant that breaches, or no longer meets, the participation requirements.	• For each of the three payment systems, DPs are expected to comply with all of the documented rules. From June 2023, Pay.UK has instigated a single, enhanced RSMF (Rules & Standards Management Framework) as noted in Key Consideration 1.2. • Monitoring of compliance with these rules, and enforcement, is carried out by Pay.UK on a risk-basis, ensuring that participants discharge their responsibilities effectively and manage the risks that could impact the three payment systems or other participants e.g. avoiding mismanagement of internal controls that could result in breaches against SLAs, frequent and prolonged outages, failure to settle etc. • Performance against the respective system SLAs is managed by regular meetings with each participant to discuss performance and any material matters as documented in the participant performance dashboards, which are produced and shared each month. In addition, participants self-attest on a regular basis to the effectiveness of key controls that could introduce risk to the three payment systems and other participants, such as in areas including incident

	management, security, and business continuity. The responses and associated evidence are reviewed by Pay.UK. • A formally-documented participant enforcement action process is applied where it has been determined that a participant is not complying with the participation requirements and/or is introducing risks to the payment systems and other participants that merit priority attention.

Principle 19 – Tiered participation arrangements

Bacs rating:	FPS rating:	ICS rating:
Broadly observed	**Broadly observed**	**N/A**

Summary	
An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.	***Applicability:*** The three payment systems each have separate methods of identifying and monitoring risks from tiered participation and have therefore have been assigned separate ratings, though as ICS does not have tiered participation an N/A rating has been assigned. ***Rating:*** Bacs and FPS broadly observe this principle. An organisation is considered to be an indirect participant where they access our payment systems by a contractual arrangement with an indirect access provider that already has direct access to our payment systems. The arrangement is called 'tiering'. While Pay.UK can identify and monitor the risks arising from tiered participation in each payment system, Pay.UK does not have clearly defined thresholds to identify the point at which concentration risk from tiering requires intervention, or levers for managing risks from tiering should the need arise. ***Next steps (path to 'observed')***: Further work is planned to review the broader operational risks presented by tiered participation in FPS and Bacs and develop proposals to strengthen the control frameworks. Completion of this work should enable a fully observed rating.
Key Considerations	**Rationale**
19.1 An FMI should ensure that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and manage any	• Pay.UK's contractual arrangements and rules for Bacs and FPS enable it to gather information about direct participants and their indirect participants in order to monitor and manage risks arising from tiered participation. • **Bacs and FPS:** On a monthly basis, Pay.UK collects information on Bacs and FPS volumes and values submitted by indirect participants from the relevant DPs (by extracting data from the CI).

material risks to the FMI arising from such tiered participation arrangements.	• **ICS**: There are currently no indirect participants in ICS and so Pay.UK only has a relationship for ICS with settling DPs. The ICS rules allow for indirect participants and so this position could change in future.
19.2 An FMI should identify material dependencies between direct and indirect Participants that might affect the FMI.	• **Bacs:** This activity was reintroduced for Bacs from Q1 2021, which will enable material dependencies to be identified. • **FPS:** When volumes for indirect participants increase, Pay.UK discusses this with the indirect participant, including the merits of direct participation. • **ICS:** There are no material dependencies.
19.3 An FMI should identify indirect Participants responsible for a significant proportion of transactions processed by the FMI and indirect Participants whose transaction volumes or values are large relative to the capacity of the direct Participants through which they access the FMI in order to manage the risks arising from these transactions.	• See Key Considerations 19.1 and 19.2.
19.4 An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.	• Pay.UK reviews and reports on the risks arising from tiered access via the monthly RCSA review process. This relates to the work undertaken as part of the concentration risk project in mapping the PVC and identifying CTPs and concentration risk hotspots, as noted in Key Consideration 3.3. • Pay.UK is currently limited in the action it can take to mitigate tiered participation arrangements, although prefunding removes the credit risk associated with tiering. • Pay.UK is unable to place requirements onto indirect participants directly, creating the risk that indirect participants do not participate in the payments systems in a consistent or proper manner. Our current approach to mitigating this risk is to place requirements, through our

	rules, primarily on direct participants that provide either settlement services or indirect access to our systems for other PSPs, which they apply to their indirect providers. • There are requirements placed on those who sponsor firms into the schemes as well as guidance, such as the Code of Conduct for Indirect Access Providers. There is one exception to this, which is the FPS DCNSP model, through which we place requirements directly on non-settling participants in FPS, this gives Pay.UK greater control over this segment of indirect participants. • Notwithstanding that Pay.UK views the risks arising from tiering to be low, we plan to undertake a review of tiering risk in FPS and Bacs to develop our understanding of the risks and inform our thinking on how these may be controlled in the current systems and also in NPA.

Principle 21 – Efficiency and effectiveness

Rating:	Observed

Summary	
An FMI should be efficient and effective in meeting the requirements of its Participants and the markets it serves.	***Applicability:*** As operator of the Bacs, FPS, and ICS payment systems, Pay.UK aims to be efficient and effective in meeting the requirements of our participants and the wider ecosystem. The business processes that Pay.UK applies to manage and operate these payment systems are common and consistent and as a result a single rating has been provided. ***Rating:*** Pay.UK has assessed itself as being observed against Principle 21, which is changed from 2021 where we rated the principle as broadly observed, in recognition of the need to evolve the KPI set under the new strategy that was being developed at the time. In March 2022, Pay.UK published its corporate strategy and in May 2023, a Strategic Roadmap was baselined. A KPI dashboard has been created to align with these, with new KPIs, data sources, and thresholds set. We have continued to iterate and evolve our KPI targets and reporting, Pay.UK will finalise the Strategic KPIs and business planning process, and implement this in October 2023. Pay.UK has maintained efficient and effective operation of the payment systems to meet participant and market needs.
Key Considerations	**Rationale**
21.1 An FMI should be designed to meet the needs of its Participants and the markets it serves, in particular, with regard to choice of a clearing and settlement arrangement; operating structure; scope of products cleared,	• Through the development of Pay.UK's company strategy, we have agreed a purpose for Pay.UK; *'to power payments, champion innovation and give the UK choice in how it pays'* and a vision statement; *'to be the smartest way to move money now and in the future'.* • Five strategic priorities have been developed which we align priorities and activities against;

settled, or recorded; and use of technology and procedures.	1. **PSO performance** – ensuring that our customers and end users (and everyone else) have confidence in us to operate payments systems and services; 2. **Platform Leadership** – that we maximise access to our systems and co-ordinate the market, acting as a force for innovation for the benefit of end users; 3. **Product Innovation** – that we enable innovation in payments to benefit end users; 4. **Next Generation Infrastructure** – that we have the NPA infrastructure, rules and standards, and commercial model to deliver our strategy; and, 5. **Organisational Excellence** – that our people, processes and technology enable us to deliver. • We have identified six key strategic goals focussed on ensuring we are able to realise our vision and deliver on our strategic priorities; 1. **Drive enduring resilience, by:** Identifying and mitigating systemic risk across our platform. Continually enhancing our platform. Proactively managing our suppliers; 2. **Deliver value, by:** Delivering cost-effective payment services. Getting the best value from our suppliers. Automating and enhancing processes that drive efficiencies. Driving platform value through use of data; 3. **Strengthen safety and security, by:** Delivering continually-evolving fraud detection and prevention functionality, rules and standards. Working with the wider industry and beyond to mitigate fraud and enhance consumer protection. Building deep insight, based on global trends, and reacting accordingly; 4. **Enhance access and innovation, by:** Enabling better use of data. Evolving our platform to drive end user-focused innovation. Providing choice in the way our customers connect to our platform; 5. **Increase customer satisfaction, by:** Proactively responding to the evolving needs of our customers. Monitoring and tracking customer satisfaction and understanding changing

	end user needs. Having continual outcomes-focused engagement with our customers; and, 6. **Inspire our colleagues, by:** Developing an empowering and inclusive culture. Focusing on attracting, developing and retaining talent. Living our values and delivering results. • Our priorities and goals are designed to allow us to meet our vision and purpose. A key aspect of this is to meet the needs of our participants demonstrated through the focus on delivering value, enhancing access and innovation and increasing participant satisfaction. • Governance arrangements continue to help Pay.UK Board assess that it is meeting stakeholder needs. • As noted in Key Consideration 2.7, we have maintained Advisory Councils and forums for industry engagement with participants and other ecosystem entities as well as end users. This seeks to ensure that participant needs are heard and taken into account in our activity.
21.2 An FMI should have clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk management expectations, and business priorities.	• As discussed in Key Consideration 21.1, Pay.UK has further developed its company strategy which is now baselined along with the strategic priorities and our strategic roadmap which covers the period of 2023 – 2030. • Delivery of the strategic roadmap is managed, measured and reported through existing Enterprise Change and business planning processes and is reported through to the Executive Team on a monthly and quarterly basis. Each Board meeting includes updates and reporting of progress on key strategic initiatives. • Pay.UK has continued to enhance key business metrics which are aligned to its strategy. Core metrics consist of company targets, strategic KPIs and business KPIs, and are reported through to the Executive on a monthly and quarterly basis and to Pay.UK Board on a quarterly basis. A Quarterly Business Review (QBR) process has been introduced for the Executive Team to review all aspects of the business operations, focussing on previous quarter's performance and planning for the future quarter's targets.

	• As noted in Key Consideration 3.3, since the 2021 self-assessment Pay.UK has improved its risk management capabilities and processes to identify, assess, manage and monitor the payments eco-system risks.
21.3 An FMI should have established mechanisms for the regular review of its efficiency and effectiveness	• As discussed under Principle 2, the Board itself undergoes an annual review of its effectiveness, and in 2021 there was an external governance review. The Board also regularly reviews the performance of the executive management. • Beyond this, KPIs allow for regular reviews of how Pay.UK is achieving its objectives. Engagement with participants also allows for the delivery of feedback on Pay.UK's efficiency and effectiveness.

Principle 22 – Communication procedures and standards

Bacs rating:	FPS rating:	ICS rating:
Observed	**Observed**	**Observed**

Summary	
An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.	***Applicability:*** The three payment systems each utilise a different standard and have therefore been assigned separate ratings. ***Rating:*** All three of Pay.UK's payment systems observe this principle. The operation of payment systems relies on the transference of standardised structured electronic data.
Key Considerations	**Rationale**
22.1 An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.	• Standards play a key role in controlling systemic risk by ensuring the data exchanged in our services conforms to a specific structure and definition, enabling a near seamless information flow. Part of those obligations is the mandatory use of a standard. • Pay.UK has established a dedicated Rules and Standards function to establish and monitor effective standards within the Chief Technology Officer and is accountable to the Pay.UK executive. • Currently, Bacs, FPS, and ICS each utilise a different standard; each of which should be fully specified, monitored for its effectiveness and maintained by Pay.UK using its RSMF (see Key Consideration 1.2). • **Bacs** has used a standard format for the exchange of payments messages since 1968 (given its age, the standard it uses is not aligned to an ISO standard, it is proprietary from Pay.UK). ○ The Settlement messages are handled separately from the payment messages used within Bacs. The Bacs Settlement uses MT SWIFT Messages which will be migrated over

	to the ISO standard, allowing transition to RTGS2. This is currently being delivered as a Change Request by Vocalink to ensure the messages can be generated in the ISO standard (as opposed to the MT-format) when required by the Bank of England; and ○ As detailed in 2.6 we are considering the future of Bacs as part of our strategy. • **FPS** utilises an internationally accepted standard (ISO 8583) that is open and accessible under ISO governance. • **ICS** utilises a proprietary standard but it is based upon the internationally accepted standard (ISO 20022) that is open and accessible under ISO governance.

Principle 23 – Disclosure of rules and key procedures

Bacs rating:	FPS rating:	ICS rating:
Observed	**Observed**	**Observed**

Summary	
An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable Participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.	***Applicability:*** The three payment systems each have their own rules and procedures and have therefore been assigned separate ratings. ***Rating:*** All three of Pay.UK's payment systems observe this principle. Pay.UK maintains clear and comprehensive rules (and fee structures) which are fully disclosed to participants and prospective participants.
Key Considerations	**Rationale**
23.1 An FMI should adopt clear and comprehensive rules and procedures that are fully disclosed to Participants. Relevant rules and key procedures should also be publicly disclosed.	• Pay.UK has adopted comprehensive procedures, setting out activity relating to participation in the payment systems, as highlighted under Principle 1. Contractual arrangements with participants require compliance with payment system rules. All documentation is available to all participants (and to applicants). As noted in Key Consideration 1.2, an enhanced RSMF is in place. • **Bacs:** Pay UK reviews any proposed changes to Bacs rules and procedures with participants through consultations. The rules and procedures are referenced in contracts and are also available for review by participants. The list of guides and rules available to Bacs direct and indirect participants is available on the Bacs website (though login details are required owing to aspects of commercial sensitivity): https://www.bacs.co.uk/resources/pages/documentlibrary.aspx.

	• **FPS:** Pay UK reviews any proposed changes to FPS rules and procedures with participants through consultations. FPS rules and procedures are referenced in contracts and are also available for review by participants' legal departments. The list of system documentation is available on the Pay.UK website: https://www.wearepay.uk/what-we-do/payment-systems/faster-payment-system/. • **ICS:** Contractual arrangements and rules are publicly available on the website. Some operational documentation is only available to existing participants and prospective participants upon signing of a Non Disclosure Agreement. The list of documentation relevant to the ICS is published on the website: https://www.wearepay.uk/what-we-do/payment-systems/image-clearing-system/image-clearing-system-contractual-framework/.
23.2 An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and Participants' rights and obligations, so that Participants can assess the risks they would incur by participating in the FMI.	• All existing Pay.UK participants have access to all rules, procedures, and operational documentation which include participants' rights and obligations. Changes to the rules and procedures are managed via a consultation process through the appropriate committees.
23.3 An FMI should provide all necessary and appropriate documentation and training to facilitate Participants' understanding of the FMI's rules and procedures and the risks they face from participating in the FMI.	• Pay.UK can provide the necessary training and explanations required for participants. Pay.UK is available to meet with all new applicants, or new staff of existing participants, to explain requirements as needed. • For Bacs, Pay.UK provides additional training to service users via the 'Bacs masterclasses' (enabling the sharing of subject matter expertise) webinar training and 'e-learning from Bacs' (a forum for shorter presentations with a wider reach).
23.4 An FMI should publicly disclose its fees at the level of individual services it offers as well as its policies on any available discounts. The FMI	• Pay.UK discloses the costs of participating in each system on the respective payment system websites. Details of the fee structure are made available to existing and also prospective participants before they make the decision to join the system.

should provide clear descriptions of priced services for comparability purposes.	
23.5 An FMI should complete regularly and disclose publicly, responses to the CPSS-IOSCO disclosure framework for financial market infrastructures. An FMI also should, at a minimum, disclose basic data on transaction volumes and values.	• Pay.UK published the 2021 PFMI self-assessment on our website: https://www.wearepay.uk/wp-content/uploads/20210908-PFMI-self-assessment-report.pdf. The 2023 self-assessment (i.e. this document) will also be published on our website. • Pay.UK also discloses transaction volume and value data on our website: https://www.wearepay.uk/factsandfigures/.

5 Principles which are not relevant to Pay.UK

Principles which are not relevant to Pay.UK	Description	Why the principle is not relevant to Pay.UK
Principle 6 - Margin	A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.	This principle is specific to central counterparties (CCPs).
Principle 10 - Physical deliveries	An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.	Pay.UK does not settle transactions. Final settlement of the three payment systems Pay.UK operates occurs at the BoE over the Real-Time Gross Settlement (RTGS) infrastructure in central bank money which does not involve physical deliveries.
Principle 11 - Central securities depositories	A CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimise and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry.	This principle is specific to central securities depositories (CSD).

Principle 12 - Exchange-of-value settlement systems	If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.	Pay.UK does not settle linked obligations. transactions.
Principle 14 - Segregation and portability	A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP with respect to those positions.	This principle is specific to central counterparties (CCP).
Principle 20 - FMI links	An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.	Pay.UK's payment systems are not linked to other FMI.