
PayTechs of Canada

International Benchmarking & Emerging Developments

April 2020 Final Report

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Major International Market Developments since 2017

United Kingdom:

- Bank of England Settlement & Faster Payment System 'Access Reform' allowing in eligible non-bank PSPs
- Open Banking including Payments Initiation now in operation for 2 years
- Architecture for New Payment Platform; PSR Regulator launch in 2020 of Review 'Competition & Innovation'

Australia:

- Reserve Bank of Australia Exchange Settlement Account (ESA) 'Access Reform'
- New Payment Platform Australia 'Functionality & Access' Review; 'Roadmap to 2022' and 'native' functionality; Reviews/Inquiries launch in 2020 re FinTech: by Senate/Reserve Bank/AusPayNet

European Union:

- Payment Services Directive 2 (PSD2) 'Fair Market Access': 'Proportionate, Objective, Non-Discriminatory' (POND)
- Single European Payments Area (SEPA) and TARGET Instant Payments System (TIPS); may legislate TIPS
- EU launch in 2020 of 'Review of Retail Payments Strategy'

Footnote: Interesting developments in Instant Payments - Sweden and Brazil

Key International Learnings: United Kingdom

- New independent Payment System Regulator (PSR) in 2015 with strong competition mandate has been instrumental in positive developments since 2017 around Governance and on Access by non-bank PSPs, both of current payment systems as well as with the New Payments Architecture project currently underway. Progress is reported on annually in a dedicated Governance and Access review.
- Bank of England led the way to an understanding of what risk-based access means, and worked with other regulators to get legislation enabling greater access to the Settlement function.
- Pay.UK Faster Payments System (FPS) followed, enabling not only greater access to payments infrastructure but also new intermediaries (accredited access vendors) that are cost and process effective to allow non-bank PSPs real-time capability.
- Enabling greater access worked: for example there were no new entrants to FPS since its inception with 10 members in 2008; there are now 33 participants and 8 new accredited access vendors.
- The Financial Conduct Authority (FCA) put in place eligibility criteria based on EU guidelines and the application and review process for Open Banking that has allowed 200 participants including PSPs into the Open Banking Implementation Entity (OBIE) 'Directory'.

Key International Learnings: Australia

- Reserve Bank of Australia revised their application policy for Exchange Settlement Accounts (ESA) to meet the goal of promoting competition in the market for payment services by providing access to non-bank entities while ensuring that operational, liquidity and other associated risks are appropriately managed.
- Reserve Bank of Australia and the Australian Competition Commission (ACCC) reviewed the 'Functionality and Access' of the new real-time New Payments Platform and made recommendations around governance, access and implementation timing, which necessitated a response by the NPPA governing organization and led to the 2022 Roadmap and implementation schedule.
- Reviews and consultations by the Reserve Bank of Australia, Senate Committee and AusPayNet industry association have allowed FinTech/PayTech voices to be heard on access and participation.



Key International Learnings: European Union

- EU with the Payments Services Directives (1/2009 and 2/2018) has displayed a fundamental conviction that there is a market benefit in allowing non-bank PSPs to provide electronic payment services, and has put in place the enabling conditions including regulatory technical standards.
- In payments, the EU drive across all payment types and systems is to allow individuals, businesses and governments to make payments across EU country borders as easy, efficient and secure as 'national' payments within any EU country. The goal is a well-functioning 'Single Euro Payments Area' (SEPA).
- New focus is on 'Instant Payments' with TIPS system to forestall the creation of national, proprietary or closed loop systems that might introduce 're-fragmentation' of EU payments.

Observations/Arguments for Canada from International Benchmarking

- The Bank of England and the Reserve Bank of Australia managed not only to get comfortable with providing greater access to their central bank infrastructure but even convinced that “innovation stemming from expanded access should promote financial stability by: creating more diverse payment arrangements with fewer single points of failure”. Bank of Canada must keep pace.
- The New Payments Architectures in the UK and Australia after extensive review by regulators and consultation with stakeholders will support modes of direct and indirect access including commercial aggregators. PayCan should build on a similar plan and carefully examine the criteria being/o be used in these markets.
- EU and the UK Open Banking Financial Conduct Authority prescribe in detail what is necessary for authorization of Payment Initiation Service Providers (PISP). The Guidelines could provide a basis for Bank of Canada regulatory payments oversight and Open Banking participation. The Open Banking UK ‘Directory’ approach, also being used for the ‘Register’ in Australia Open Banking, is useful as mechanism for consumers to know they are dealing with accredited participants.



What's Different or Missing in Canada particularly vs UK and Australia?

No prominence, awareness of or support for FinTech at a national level, including by government.

Canada: FinTech mentioned once by Carolyn Wilkins in a Bank of Canada speech in June 2016; once by Trudeau in a speech in Singapore in November 2018; a couple of OpEd articles 2017 by Michael King, UWO professor/Tangerine Bank Finance Chair; despite well-attended FinTech conferences /FDATA association active.

UK: George Osborne, Chancellor of the Exchequer and David Cameron Prime Minister, avid FinTech supporters from 2015. Osborne speech November 2015 called for making UK the 'Global centre for FinTech'; launched trade association 'Innovate UK' in 2016; pressed for Open Banking from 2015. Mark Carney as Bank of England Governor started supporting FinTech in 2016; promised in 2016 to open access to new participants in Bank of England infrastructure in 2016; started a FinTech accelerator and sandbox within the Bank of England with dedicated resources.

Australia: Scott Morrison, then Treasurer now Prime Minister met with FinTech in 2016; accepted Recommendation from FinTech Australia to make FinTech a 'national priority'; created a FinTech Advisory Group to advise government; pressed for Open Banking Inquiry.

<https://www.gov.uk/government/speeches/chancellor-on-developing-fintech>

<https://www.bankofengland.co.uk/speech/2016/enabling-the-fintech-transformation-revolution-restoration-or-reformation>

<https://www.bankofengland.co.uk/speech/2019/mark-carney-speech-at-innovate-finance-global-summit-2019>

<https://www.bankofengland.co.uk/speech/2019/dave-ramsden-speech-at-innovate-finance-global-summit-2019>



What's Different or Missing in Canada particularly vs UK and Australia?

No systematic reviews of competition in Banking/Payments and no competition mandates or formal secondary competition considerations for Financial Regulators.

Canada: Competition Bureau FinTech Study useful but insufficient as a catalyst to government or industry. Canada's Competition Bureau is a department of Innovation Science and Economic Development. Does not have the powers of regulators in UK and Australia, such as formal Market Study or ability to promulgate policy.

UK: Competition in financial services, banking and payments specifically has been studied since the seminal 'Cruickshank Review' in 2000. A 21-month study from November 2014 by the Competition and Markets Authority (CMA) on retail banking resulted in the remedy of 'Open Banking' imposed on the nine largest retail banks. Subsequent developments in payments include an independent Payments System Regulator with extensive competition powers. Financial Regulators themselves, including the Bank of England and the Financial Conduct Authority have specific secondary competition mandates.

Australia: Competition studied again in 2013 for the first time since 1997 with the 'Murray Inquiry' and more recently 'Coleman Review of Four Banks' and 'Productivity Commission Report'. Australian Competition Commission now has dedicated 'Financial Services Unit'.

What should PayTechs of Canada do?

Reinforce already-stated Canadian commitments on Access and Participation by the Bank of Canada and Payments Canada.

- Canada was peer-assessed in 2018 for adherence to the 2012 BIS Payment Framework Market Infrastructure Principles including the one on requirements for Access and Participation: “Objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.”
- Bank of Canada in their 2016 Guidelines for Prominent Payment Systems notes specifically on Access: “Objective, risk-based and publicly disclosed criteria for participation that permit fair and open access: by direct and, when relevant, indirect participants, payment service providers and other FMIs based on reasonable risk-related participation requirements; requirements that have the least-restrictive impact on access that circumstances permit.”
- Payments Canada in their Modernization Target State 2017 for the Real Time Rail on Access: “Open, risk-based approach wherein exchange and settlement functionalities will be unbundled allowing for multiple participation models.”

What should PayTechs of Canada do?

Be clear to Key Constituencies of what PayTechs is aiming for:

- Bank of Canada/Finance Canada to finalize Retail Payments Oversight Framework.
- Payments Canada to propose new membership/representation criteria for non-bank PSPs.
- Payments Canada to allow PayTech representation on MAC/SAC.
- Finance Canada to formally add 'Payments Initiation' to the Open Banking Terms of Reference.
- Interac for FinTech access to 'Instant Payments' and assess implications for PayCan RTR.

What should PayTechs of Canada do?

Some Other Ideas to Consider:

- Survey (sub)set of FGS 'Maple' Database of PayTechs around access: to bank customer data/accounts/services; payments infrastructure; Bank of Canada facilities (e.g. UK IPSP Survey 2016).
- Research equivalent concept in Canada to UK 'commercial aggregators' to provide RTR access (see Faster Payments UK/Accenture Study 2016).
- Review EU EBA Guidelines for PISP (Payment Initiation Service Providers) Authorisation, implemented by UK FCA for Open Banking 'Directory'; would equivalent be suitable in Canada?
- Consider 'Open' release of Board minutes at PayCan, a practice now observed e.g. in the UK at the PSR and OBIE.
- Encourage PayCan to launch similar Consultation to AusPayNet seeking "broad industry stakeholder input to the development of a strategic view of the possible future state of our payment systems".



Appendix

Canada Review — slides 15 - 21

International Review — slides 22 - 63

- United Kingdom
- Australia
- European Union
- Footnote: Sweden & Brazil



Canada

Canada: Timeline

- 2010: Finance Minister Flaherty 'Task Force on Retail Payments' to keep up with technology changes
- 2011: Task Force makes key recommendations: gaps in governance/oversight framework/functionality
- 2012: Finance Canada/Bank of Canada 'Payments System Governance Review'
- 2015: Payments Canada new governance begins implementation; Payments modernization announced
- 2015: Finance Canada Consultation on 'Retail Payments Oversight Framework'
- 2016: Payments Canada rebranding; 'Vision for Canada's Payment Ecosystem'
- 2017: Competition Bureau 'FinTech Market Review' released
- **2018**: BIS Level 2 Peer Assessment of Market Infrastructure Principles: satisfactory
- **2019**: Federal Budget proposes new legislation for 'Retail Payments Oversight Framework'
- **2019**: FinTech Growth Syndicate first 'PayTech Report'
- **2019**: Department of Finance Report 'Review of the Canada Payments Act'
- **2019**: Finance Canada Open Banking Review (payments not included in Terms of Reference)
- **2020**: Finance Canada release of Open Banking Advisory Committee Report - moving to 'Stage 2'

Canada: Real Time Rail Access Plan



RTR: REAL-TIME RAIL

OVERVIEW OF THE RTR

The RTR will be a new capability for Canada, operating 24/7/365, and will deliver funds in real-time using a push mechanism for single credit transfers

Settlement Model: There are two options under evaluation for the settlement model.

Risk Model: A 'cover-all' defaulter pay model is being considered

Access: Open, risk-based approach wherein exchange and settlement functionalities will be unbundled allowing for multiple participation models

Payment Processing: Real-time

https://www.payments.ca/sites/default/files/21-Dec-17/modernization_target_state_companion_reader_en_final.pdf

Canada: Real Time Rail

The real-time payments system will consist of the underlying technology platform and infrastructure that enables payments, and a competitive market for services. These services are known as Overlay Services.

SERVICE LAYER

Overlay Services consist of customer-facing products/services developed by Payment Service Providers for the real-time exchange of payments. They will connect to the system through ISO 20022-based APIs, providing a connectivity mechanism that facilitates innovation.

Example Potential Overlay Services

- Bill payments
- Tax remittances
- Insurance reimbursements
- Online checkout

SYSTEM LAYER

The system includes all core payment functionalities and key enablers, such as rules and procedures, and messaging management for ISO 20022. It also includes a legal and business framework.

Functionality

- Exchange and clearing
- Settlement
- Request-to-pay
- Legal, rule framework, and risk model
- Shared services, for example proxy database
- Integration and reporting
- Payment capacity management
- ISO 20022

https://www.payments.ca/sites/default/files/21-Dec-17/modernization_target_state_companion_reader_en_final.pdf



Canada: Payments Canada new Board Composition & Accountability Framework 2015

Old: has 16 directors (12 CPA members, 3 independent directors appointed by the Minister of Finance and a Bank of Canada representative as Chair). Voting on major recommendations, including annual operating and capital budgets, is weighted by members' payment volumes (i.e., the number of transactions), thereby concentrating decision-making power with the largest members.

New: new Board will be composed of 13 directors: 7 independent directors, 3 CPA members that are direct participants in the system, 2 CPA members that are not direct participants and the President of the CPA. One of the independent directors will act as Chair. The Bank will no longer have a role on the CPA Board. Voting will be based on the principle of one member, one vote.

New Members Advisory Council + continuation of Stakeholder Advisory Council

Accountability Framework: Annual Report with Performance Objectives Reporting + 5-Year Corporate Plan

Canada: Retail Payments Oversight Framework 2019 Report Conclusions/Observations

- **Broadening membership and access** for non-traditional payment service providers would enable Payments Canada to better meet its public policy objectives, as long as risks are appropriately mitigated.
- Respondents expressed a wide diversity of views on how associate membership should be incorporated into the Canadian Payments Act.
- Respondents generally agree that governance changes would be required to appropriately integrate a **new associate member class** into Payments Canada membership; potential legislative amendments to the Canadian Payments Act to incorporate associate membership would follow the implementation of the proposed Retail Payments Oversight Framework.
- Retail payment services are increasingly being provided by non-traditional providers. These non-traditional PSPs are not eligible for Payments Canada membership and cannot directly participate on any of Payments Canada's systems, including the real-time rail currently under development.
- Most respondents support **exchange-only access for associate members**, provided associate members meet the same operational and technical standards as full members.

<https://www.canada.ca/content/dam/fin/migration/activity/consult/rcpa-elcp-report-rapport-eng.pdf>



Canada: Bank of Canada 2016 Criteria and Guidelines for 'Prominent' Payments Systems

- FMI can be designated as Systemically Important to the Canadian financial system or as Prominent Payment Systems (PPS). The new Real Time Rail is expected to be designated a 'PPS'.
- **Governance:** governance arrangements that are clear and transparent, promote the safety and efficiency of the PPS, support confidence in and the smooth functioning of the markets it serves, and support other relevant public interest considerations as well as the objectives of relevant stakeholders.
- **Access:** objective, risk-based and publicly disclosed criteria for participation that permit fair and open access: by direct and, when relevant, indirect participants, payment service providers and other FMIs based on reasonable risk-related participation requirements; requirements that have the least-restrictive impact on access that circumstances permit.
- **Tiered Participation:** ensure that rules, procedures and agreements allow PPS to gather basic information about indirect participation; identify material dependencies between direct and indirect participants.

<https://www.bankofcanada.ca/wp-content/uploads/2016/02/criteria-risk-management-standards.pdf>



United Kingdom

UK: Timeline

- 2003: Chancellor Brown announces Office of Fair Trading to lead new Payments System Task Force
- 2007: new Payments Council takes over some functions of Association of Payment & Clearing Services (APACS)
- 2008: Faster Payments Service (FPS) ; 2014: separate company; 2018: Pay.UK regulated as Operator (PSO) of FPS
- 2011: Payments Council clash with Government on “end cheques by 2018”
- 2013: HM Treasury Report ‘Opening Up Retail Payments’
- 2014: Payments Council reduced regulatory powers & governance change; new Payment System Regulator (PSR)
- 2014: Faster Payments Service ‘New Access Model’ White Paper; Accenture study ‘Economics of Indirect Access’
- 2015: Payments Council re-launched as trade association Payments UK; 2017: folded into new UK Finance
- 2016: BoE Governor Carney commits to revised settlement account policy that includes non-bank PSPs
- 2017: BoE starts accepting non-bank applications to Real Time Gross Settlement System RTSG
- 2017: New Payments Systems Operator (NPSO); 2018 rebranded Pay.UK; consolidates operation of UK systems
- **2018:** Bank of England live with ‘New Access Model’ for RTGS
- **2018:** Faster Payments Service opens up for non-bank PSPs with own funds; 2019 with client funds
- **2018:** Open Banking initial launch; full Sept 2019; Jan 2020, > 200 participants authorised by FCA in ‘Directory’
- **2018:** Pay.UK ‘New Payments Architecture’ (NPA) launched; 5-stage competitive process
- **2020:** PSR Consultation: call for input ‘Competition and Innovation for the NPA’



Organizations Involved in Governance of Payments & Payments Initiation

- Bank of England: Central Bank
- Payment Systems Regulator (PSR): independent regulator; subsidiary of FCA
- Pay.UK: the retail payments authority + New Payments Platform (NPP) architecture
- Open Banking Implementation Entity (OBIE): PISPs + Directory of accredited participants
- Financial Conduct Authority (FCA): authorises PISPs participants
- Competition & Markets Authority (CMA): co-regulator Open Banking

Payments Systems Regulator (PSR)



The call for a regulator to oversee the payment systems industry began with a series of reviews, starting with the Cruickshank Report in 2000. Treasury Select Committee 2012 'Setting the Strategy for Retail Payments': options were to reform the Payments Council; set up new public body Payment Strategy Board with FCA; or new regulator.

1 April 2015: The Payment Systems Regulator (PSR) officially launches with full regulatory and concurrent competition powers alongside the Competition & Markets Authority (CMA). Independent; subsidiary of Financial Conduct Authority (FCA); funded by industry; accountable to Parliament.

Statutory objectives: to ensure that **payment systems are operated and developed** in the interests of businesses and consumers/to **promote effective competition** in the markets for payment systems and services/to **promote innovation** in payment systems, including infrastructure.

Improving access to payment systems and making the governance of payment system operators more inclusive and transparent remains a key priority: published annual **Governance and Access Report**.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/81567/setting_strategy_uk_payments190712.pdf

<https://www.psr.org.uk/psr-publications/policy-statements/access-and-governance-report-june-2019>

Bank of England 'New Access Model' for RTGS



In the past, non-bank PSPs were only able to participate in these payment schemes as a directly connected non-settling participant or as an indirect participant. This type of indirect participation is still available to non-bank PSPs as a participation option.

Why does the Bank now allow non-bank payment service providers to access payment schemes directly?.

The Bank allows non-bank PSPs to open settlement accounts, subject to appropriate safeguards, by meeting one of the key entry criteria to become a direct settling participant. Access allows non-bank PSPs to compete on a more level playing field, be less dependent on competitors and able to offer a wider range of payment services.

Longer term, the innovation stemming from expanded access should promote financial stability by: creating more diverse payment arrangements with fewer single points of failure; identifying and developing new risk-reducing technologies; and expanding the range of transactions that can take place electronically and be settled in central bank money.

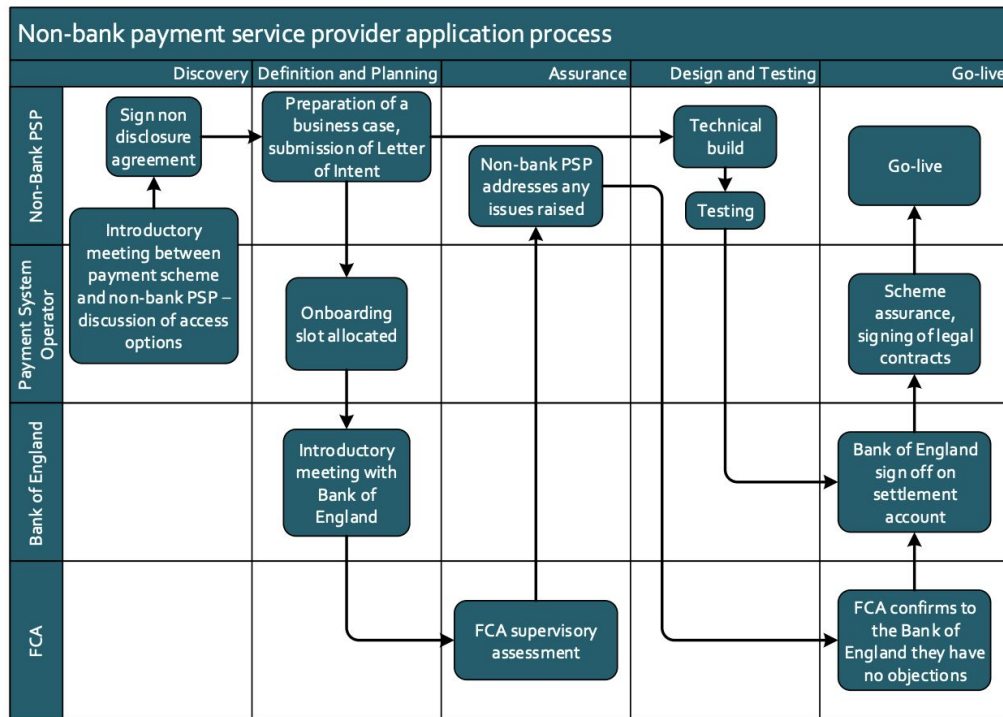
Bank of England 'New Access Model' for RTGS - Application Process



RTGS Governance:

- Chair is Deputy Governor for Markets and Banking;
- 4 independent external appointed Directors;
- 4 Executive Directors

First few new RTGS access participants:
Transferwise; Modulr; and Fair FX.



<https://www.bankofengland.co.uk/-/media/boe/files/markets/other-market-operations/accessfornonbankpaymentserviceproviders>

Bank of England 'New Access Model' for RTGS - Access Criteria



For non-bank PSPs, there are three key criteria for opening a settlement account:

- be either an e-money or a payment institution authorised in the UK by the Financial Conduct Authority (FCA), who will perform a supervisory assessment including governance and risk management arrangements; safeguarding of customer funds; and investigation into financial crime.
- have the operational capacity to participate in and efficiently settle transactions in RTGS. which involves a connection to SWIFT, the messaging network for the Bank; undertake testing before the account can go-live and participate in other routine testing exercises.
- sign up to legal documents with the Bank including the RTGS Account Mandate Terms & Conditions; and the Annex for each specific payment scheme.

Opening Up Access to Participants in Faster Payment Service



Faster Payments (FPS) – provides real time payments 24/7 and is used for standing orders, single immediate payments, forward dated payments, return payments; for internet, telephone banking and mobile payments.

Delivery of this project further opens up access to the UK payments market. It is a change that benefits non-bank PSPs, such as authorised payment and e-money institutions, which may not otherwise have been able to meet the capital obligations required to join the payments schemes. It enables them to gain direct access to a payments scheme without relying on a third party (usually a competitor) either to submit payments or settle payments on their behalf.

Pay.UK has worked with the Bank of England, the Financial Conduct Authority and HM Treasury to develop and implement the contractual and legislative changes that have enabled this positive development to be brought to reality. As well as ensuring that payments remain secure and dependable, these changes will maintain protection of the funds used to make payments, whilst minimising systemic risk for the UK's financial system and its participants.

<http://www.fasterpayments.org.uk/sites/default/files/Faster%20Payments%20Access%20Programme%20Economics%20Report%20-%20Online%20Version.pdf>

Faster Payment System Access: New Access Model - Indirect Participants



Old: since Faster Payments Service (FPS) began in 2008, there had been no new participants from the original 9 banks and 1 building society. Indirect access to 400 others was available only through 4 sponsor banks who were direct participants: Barclays; HSBC; Lloyds; RBS. Problem: bank operational functional infrastructure, suitable for other batch clearing systems like UK Bacs, was not actually delivering the real-time capabilities of FPS.

Study: study by FPS in 2015 with Accenture on Economics of commercial aggregators who could provide direct technical access; concluded potential for a viable market for multiple vendors to operate profitably and provide services to PSPs at a lower cost than using a sponsor bank.

New: now 8 accredited vendors part of FPS and 17 potential vendors listed on FPS website as 'in discussion'.

<http://www.fasterpayments.org.uk/sites/default/files/Faster%20Payments%20Access%20Programme%20Economics%20Report%20-%20Online%20Version.pdf>
<http://www.fasterpayments.org.uk/technical-aggregator-solution-providers-consultants>

Faster Payment System Access: New Access Model - Direct Participants



Eligibility Criteria:

- be an authorised Payment Services Provider (PSP) under the Payment Services Regulations (2009)
- hold or be able to use a Sterling Settlement Account at the Bank of England
- comply on a continuous basis (i.e. 24*7) with technical and operational requirements of the system
- become a Participant of the Company
- have, or be eligible to hold, at least one unique sort code
- commit to pay any additional legal costs incurred with regard to membership
- validly execute and remain party to all legal agreements
- no joining fee to join Faster Payments itself but must pay the fees to support the technical implementation, testing and on-going connectivity with the central infrastructure

<http://www.fasterpayments.org.uk/sites/default/files/Faster%20Payments%20Access%20Programme%20Economics%20Report%20-%20Online%20Version.pdf>
<http://www.fasterpayments.org.uk/technical-aggregator-solution-providers-consultants>

Faster Payment System Access: New Participants



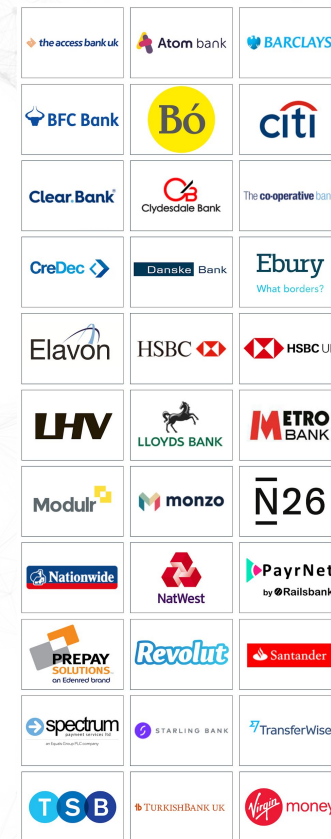
Since the report was produced in mid-2019, the participants in FPS have grown to 33 including challengers (banks and non) like Monzo, Revolut and N26 as well as PSPs like PayrNet, Modulr, Bo and Spectrum.

	New participants in 2017	New participants in 2018	New participants in 2019*
Bacs	3	4	2
CHAPS	2	5	3
FPS	6	8 ^	10
Total	11	17	15
Of which were 'unique' users	7	12	13

*Estimated

^ While there were nine new participants in FPS, one had an agreement with an existing participant to replace its position.

<https://www.psr.org.uk/psr-publications/policy-statements/factsheet-access-and-governance-june-2019>
<http://www.fasterpayments.org.uk/directly-connected-participants>



Pay.UK — Governance and Mandate



Runs the UK's retail payments operations, including 3 systems: Bacs, Faster Payments and Cheques.

PayUK new governance framework May 2018: (NB: all Board minutes are released 'Open')

- 1 Directors including independent Chair and Executive Director;
- 7 independent non-Executive; 2 non-Executive; 1 other Executive
- End User Council + Participant Council + New Payment Architecture (NPA) Working Group

End User Council (14 members): includes government, business, not-for-profit organisations, public services, consumers and citizens of all descriptions. In first annual report: asked that Pay.UK considers whether there is enough involvement of fintechs and potential new service providers in discussion on NPA architecture.

Participant Council (14 members): includes Large/medium/small/new entrant payment service providers (PSPs) and challenger banks, and corporates, government, fintechs, foreign banks and related. In first annual report: advising on process for NPA Core procurement and on NPA implementation timing.

<https://www.wearepay.uk>

<https://www.wearepay.uk/wp-content/uploads/2019/06/EUAC-Annual-Report-2018-19.pdf>

<https://www.wearepay.uk/wp-content/uploads/2019/06/PAC-Annual-Report-2018-19.pdf>



Pay.UK — Mandate & Responsibilities



Runs the UK's retail payments operations, which includes Bacs, Faster Payments and Cheques and deliver a variety of services relating to payments.

We are working to **transform the way that payments are delivered** in the UK and, in time, we will bring all of these products and services closer together. We are also **building the rails** on which UK payments move. Through our infrastructure and services, Pay.UK enables £19.2 billion in payments every single day and, at our core, that's what we're all about.

At the same time, we are **creating common standards and new infrastructure**, which will be the engine driving excellence and success throughout the industry. These ensure that every payment processed is done so safely and securely.

<https://www.wearepay.uk/>



Pay.UK — New Payments Architecture



Pay.UK has taken **responsibility for the NPA Blueprint** The NPA Blueprint was published in December 2017 by the Payment Strategy Forum (PSF), the body set up by the Payment Systems Regulator (PSR) to bring the payments industry and users together. The NPA programme will **deliver the NPA Blueprint in stages**. The **core clearing and settlement layer**, which is forecast for implementation after **2021** is undergoing a 5-stage competitive procurement process. Specific **projects like Confirmation of Payee and Request to Pay** continue to roll out.

Payment System Regulator (PSR) issued a call for input in January 2020 'Competition and Innovation in the NPA', including technical design and governance design, and competition issues that could arise in the NPA in the selection and bidding process. Call is meant to inform the PSR's future policy on regulating the NPA.

<https://www.wearepay.uk/new-payments-architecture-programme/>
<https://www.psr.org.uk/psr-publications/news-announcements/new-payments-architecture-call-for-input>



Open Banking Implementation Entity (OBIE): Structure & Governance; PISPs

OPEN BANKING

The OBIE is a private body; its governance, composition and budget is determined by the Competition and Markets Authority (CMA).

Funded by the UK's nine largest current account providers; overseen by the CMA, the Financial Conduct Authority and Her Majesty's Treasury. The nine mandated institutions (referred to as the 'CMA9') are: AIBG, Bank of Ireland, Barclays, Danske, HSBC, Lloyds Banking Group, Nationwide, RBS and Santander.

- **PISPs** (Payment Initiation Service Providers) **are a fundamental part of PSD2; UK Open Banking is in compliance with EU PSD2**
- PISPs (> 200) are accredited by the FCA and registered in the Directory of Open Banking participants
- Standardised Open APIs specifications support Payment Initiation Services that enable a PISP to initiate a payment order, with the account holder's explicit consent, from their online payment account held at their bank (50,000 payments made in January 2020 from non-bank account app)
- Customer Experience Guidelines, best practice for implementation of customer journeys for PISPs

<http://openbanking.org.uk/>

Financial Conduct Authority (FCA): PISP Authorisation for Open Banking



Based on European Banking Authority 18 Guidelines for applicants, which include providing:

- Program of Operation and Business Plan including marketing/budget
- Structural Organization including staffing and forecast
- Evidence of initial capital
- Measures to safeguard funds (if applicable)
- Governance and internal controls including audit function
- Monitoring and handling security incidents
- Access to sensitive payments data
- Security policy and business continuity
- Anti-money laundering and related controls
- Identity and suitability of controlling shareholders and Directors
- Professional Indemnity Insurance

<https://www.ebf.eu/wp-content/uploads/2020/01/EBF-PSD2-Guidance-Final-v.120.pdf>



Australia

Australia: Timeline

- 2010: Australia Payments Clearing Association (APCA)
- 2012: Reserve Bank Australia (RBA) 'Strategic Review of Innovation in Payments'
- 2013: first discussion about Faster Payments
- 2014: 'Real Time Payments Committee' formed
- 2014: Financial System Inquiry ('Murray Inquiry') Final Report
- 2017: AusPayNet rebrand & Australian Payments Council for RBA Strategy
- 2017: Independent Review of Open Banking ('Farrell Report')
- **2018**: New Payments (NPPA) Real Time goes live with overlay Osko
- **2018**: Final Productivity Commission Report 'Competition in the Financial System'
- **2019**: RBA Update to Exchange Settlement Account (ESA) policy
- **2019**: RBA/ACCC Conclusions: 'NPPA Functionality and Access'; NPPA Roadmap to 2022
- **2019**: RBA Issues Paper 'Review of Retail Payments Legislation'
- **2019**: Senate Select Committee launch 'Inquiry into FinTech & RegTech'
- **2019**: AusPayNet launch 'A Future State for Australia's Payment System'
- **2020**: Inquiry into Consumer Data Right ('Second Farrell') - includes Open Banking 'write' access

Reserve Bank of Australia (RBA)



Responsibility for Payments since 1997

- No specific licensing or authorisation requirements for payment service providers.
- Reserve Bank's Exchange Settlement Account Policy: RBA was one of the first central banks to liberalise access and in 1999 expanded eligibility for access to ESAs to non-bank providers of third-party payment services.; led to an increase in the number of ESA holders, including non-bank third-party payment providers such as Tyro, Adyen, First Data and EFTEX.
- A greater number of enquiries about ESA applications, including from a variety of fintech firms. prompted the Bank to review and update its ESA Policy earlier in 2019.

RBA Policy Reform on Exchange Settlement Accounts (ESA)



Revised ESA Policy, effective in July 2019, seeks to ensure that the Bank is able to promote competition in the market for payment services by providing access to ESAs for non-bank entities, while also ensuring that operational, liquidity and other risks associated with ESAs are appropriately managed.

The main changes:

- More granular information about documentation for applicants (e.g. audited financial statements; business continuity plans; reporting lines and corporate governance)
- RBA able to commission a report relating to the conduct and standing of the applicant itself, directors, key management personnel, shareholders and other related entities
- RBA to require a report from an independent expert approved by the RBA assessing the applicant's policies and procedures related to sanctions and to anti-money laundering and counter terrorism financing (AML/CTF) and the applicant's compliance

The changes to the Policy are designed to enable the Bank to appropriately manage risks – including AML/CTF risks – relating to potential ESA holders, while continuing to provide ESA access to a wide range of participants that may need to settle obligations arising in payment systems.

New Payments Platform Australia (NPPA)



Launched in February 2018 including first overlay service Osko. The platform enables the real-time movement of money, account to account, 24/7. SWIFT designed, built and operated under contract.

- 80 financial institutions offering real-time payments via the NPP to more than 55 million Australian accounts,
- supports payments between BSB and account numbers as well as PayID, the capability to confirm the name of the payee that the payment is being made to prior to the payment being processed
- will be enabled to support the final domestic leg of an inbound cross-border payments
- built on the ISO 20022 message standard and uses ISO 20022 for all payment messaging within the system.
- NPPA has also developed an API Framework and Sandbox

New Payments Platform Australia (NPPA)



NPPA operates on a guiding principle of being economically self-sustaining (i.e. cost recovery/not profit)

The NPP is mutually owned by 13 organisations:



Organisations that wish to connect directly to the NPP to clear and settle payments are required to join NPP Australia Limited as a shareholder.

<https://nppa.com.au/the-company/>

New Payments Platform Australia (NPPA): Governance



Although supplying about 80% of the capital to build the NPP, **the Board of NPPA is not controlled by the four major banks**, whose appointed directors have only four votes from 11 voting directors. (NB: all Board minutes are released 'Open').

The Board includes two independent directors and a representative from the Reserve Bank of Australia. A third independent director will join the Board in February 2020.

Each of the four major banks and the Reserve Bank appoints a director; other four directors elected by the remaining small and mid-size shareholders of NPPA. Unlike in some other payment systems where voting is proportional to shareholdings or to transaction shares, each NPPA director has only one vote, except for the CEO who is a non-voting director.

A Governance Committee made up of NPPA's independent directors makes decisions regarding access, transaction pricing and compliance.

RBA and ACCC Consultation on New Payments Platform



November 2018: consultation on NPP functionality and access, with input from Australian Competition and Consumer Commission (ACCC); concerns expressed about the slow rollout of NPP services by the major banks; overlay services to leverage the NPP capabilities; potential constraints on access. Was also a recommendation by Productivity Commission's 2018 'Inquiry into Competition in the Australian Financial System'.

June 2019 Recommendations:

- Authorised Deposit Institutions (i.e. Banks) requirement for participants: NPPA assess of options for participation requirements for non-ADI participants.
- Shareholding requirement for participants: (i) introduce gradation bands into the shareholding requirement (ii) allow shares to be acquired in instalments (iii) allowing applicants that did not exist when the NPP was being developed to subscribe for lower amount of shares.
- NPPA governance: (i) appoint a third independent director (ii) review its arrangements for dealing with applications for access and for assessing potential overlay service providers, (iii) report, once a year, on the number of applications for access received (iv) notify the Bank's PSB within one week whenever an application for access was not supported by NPPA's Board.
- Fees: Greater transparency of the NPP's wholesale transaction fees.

<https://www.rba.gov.au/publications/submissions/payments-system/financial-and-regulatory-technology/>

New Payments Platform Australia (NPPA): Access



A growing number of organisations, including wholesale payment service providers (aggregators) and non-bank fintechs offer NPP connectivity.

NPP connectivity is increasingly offered to third parties via APIs. Greater availability of APIs will help provide more fintechs, corporates and businesses with the ability to access and use the NPP.

As of January 2020, there were 90 Financial Institutions connected: 12 Direct; 78 'Identified Parties'; 3 Clearing & Settling for others.

Table 1: NPP Access Eligibility Criteria

	Direct Participant	Indirect Participant	Identified Institution	Connected Institution
Shareholder of NPPA	✓	✓	✗	✗
Licensed by APRA as an ADI (or RADl)	✓	✓	✗	✗
Hold an ESA at the Reserve Bank	✓	✓	✗	✗
Connect via own payment gateway	✓	✗	✗	✓
Connect via third-party payment gateway	✗	✓	✓	✗

Source: NPPA

Entities can also apply to NPPA to become an overlay service provider. Any organisation can apply as long as it can demonstrate a sound business plan backed by the required expertise to deliver their proposed product or service. Overlay service providers will offer their product or service to NPP participants and identified institutions on a commercial basis to make available to their customers.

<https://nppa.com.au/fintech-select-senate-committee-submission-explains-npps-open-approach/>
<https://www.rba.gov.au/payments-and-infrastructure/new-payments-platform/pdf/functionality-and-access-report.pdf>

New Payments Platform Australia (NPPA): Access Options Criteria



Full Participant: an Exchange Settlement account at the RBA and an ADI licence (including a restricted ADI licence); meet certain technical connectivity requirements; have real-time fraud protection and detection controls and capabilities in place; requisite KYC and AML controls and policies in place; become a shareholder of NPP Australia.

NPP Settlement Participant: an Exchange Settlement account at the RBA (not an ADI licence); commercial arrangement with a sponsoring NPP Full Participant to provide payment clearing services; real-time fraud protection and detection controls and capabilities, or have supplied by sponsoring Full Participant; satisfy sponsor that requisite KYC and AML controls and policies in place; to become a shareholder of NPP Australia.

NPP Identified Institution (majority of participants): commercial arrangement with an NPP Full Participant; use the Exchange Settlement sponsor to settle customers' payments real-time fraud protection and detection controls and capabilities, or have supplied by sponsoring Full Participant; satisfy sponsor that requisite KYC and AML controls and policies in place; own BSB (Bank/State/Branch) number and SWIFT BIC code.

https://nppa.com.au/wp-content/uploads/2020/01/Senate-Select-Committee-on-Financial-Technology-and-Regulatory-Technology_NPPA-submission_29-Dec-2019_final.pdf

New Payments Platform Australia (NPPA): Access Options



Access Options include 'Direct' connections or as 'Identified Institutions' with an Indirect connection.

Access Option	Examples of participating organisations	Overview of access option	Requirements and cost considerations
1) Directly connected NPP Participant	<ul style="list-style-type: none"> Major banks – ANZ, CBA, NAB and Westpac Aggregators – ASL, Cuscal and Indue Others – Macquarie, RBA Banking 	<ul style="list-style-type: none"> Contribute capital to build and operate platform (investment required which will reduce over time) Extensive technical connectivity requirements Significant risks associated with direct connection (security, fraud, etc.) Manage own compliance and risk Must commit to bi-annual releases and additional mandated functionality Need to be an ADI (including restricted ADI) if performing clearing functions 	<ul style="list-style-type: none"> Charged a wholesale transaction price (set by NPPA) Fee charged by the RBA for settlement Overlay Service charges may apply High upfront costs (in order to meet high technical connectivity requirements)
2) Identified Institution via directly connected NPP Participant	<ul style="list-style-type: none"> 77 organisations including credit unions and building societies Fintechs including neo-banks, Assembly Payments and Monoova 	<ul style="list-style-type: none"> Sponsored via directly connected Participant Compliance is managed by directly connected sponsoring Participant Do not contribute to build and operational costs of infrastructure Will generally, but not always, have a core banking system or 'journal of record' from which payments are made No requirement to be an ADI Tend to have some payments experience 	<ul style="list-style-type: none"> Lower upfront integration costs Generally "cost plus" transaction pricing (pass through of wholesale transaction fee plus margin)
3) As a customer or 'end-user' of a directly connected Participant or an Identified Institution	<ul style="list-style-type: none"> Azupay Block8 Earn'd Numerous crypto exchanges / 'on-ramps' 	<ul style="list-style-type: none"> Access generally provided via API Use cases will often include: <ul style="list-style-type: none"> Receiving a payment from an account held elsewhere ('push payment') (In future) initiating a payment from an account held elsewhere ('pull payment') Compliance and risk managed by directly connected Participant May have limited payments knowledge 	<ul style="list-style-type: none"> Possibly no or limited upfront costs Typically charged a transaction fee only

https://nppa.com.au/wp-content/uploads/2020/01/Senate-Select-Committee-on-Financial-Technology-and-Regulatory-Technology_NPPA-submission_29-Dec-2019_final.pdf

RBA and New Payments Platform: Final Participation & Access Decision

Authorised Deposit Institutions (i.e Bank) requirement for participants: NPPA assessment of options for participation requirements for non-ADI participants.

NPPA Conclusion: that the ADI requirement remains prudent and appropriate for full or clearing participants given the 'pronounced operational and security risks associated with clearing activities', but could be removed for settlement participants. NPPA argued the rules framework was based on NPP participants being prudentially supervised by APRA, to reduce counterparty risks to other participants and relieve NPPA of the responsibility to oversee participants. It argued that a variation was not justified given the indirect participation options available.

RBA Response: satisfied particularly given the indirect participation options that seem to be working well. Not aware of many non-ADI entities that are looking to become full or clearing participants. A few non-ADIs (including Assembly Payments and Monoova) have joined the NPP as identified institutions. The number of NPP participants providing agency services has also grown over the past few months.

RBA committed, along with the ACCC, to commence another review of NPP functionality and access issues no later than mid-2021.

<https://www.rba.gov.au/publications/submissions/payments-system/financial-and-regulatory-technology/>

New Payments Platform Australia (NPPA); New Roadmap to 2022



The roadmap between to the end of 2022 has a number of planned components, including the development of a 'mandated payments service' to support recurring and 'debit-like' payments, **implementing a payment initiation capability across the platform**, making services to support the domestic leg of an inbound cross-border payment and supporting the use of QR codes.

By developing **native platform capability**, governed by a common rules framework administered by NPPA, it is akin to providing 'building blocks' that others can put together in different ways to deliver payment products and services outside the platform. NPPA does this by establishing different 'business services' that have different uses. A business service can either be used in its native form by participating financial institutions and third parties, or it can be further built on and commercialised by an organisation wanting to develop an overlay service on top.

Of note is the **development of third party initiation on the NPP**, which would see users being able to approve payments initiated on their account in advance, with a digital arrangement or a 'mandate'.

AusPayNet: Industry Association & Self-Regulatory Body



Three broad membership categories:

- Participant members: organisations that directly participate in the payments system
- Operator members: commercial operators of payment systems, technology companies
- Affiliate members: suppliers of goods and services to card issuers, acquirers and schemes

Given the rapid and increasing pace of change in payments, AusPayNet has launched a **consultation on 'A Future State for Australia's Payment Systems'**. The aim of this consultation process is to stimulate thought, invite comment and seek the further contribution of ideas in forming a view on a future state for Australia's payment systems over the next 5-10 years. (November 2019).

<https://www.auspaynet.com.au/about>

<https://www.auspaynet.com.au/network#core-systems>

<https://www.auspaynet.com.au/insights/consultations/future-state>

Reserve Bank of Australia: 2020 Review of Retail Payments Regulation



Opportunity for stakeholders to identify whether there are further functionality gaps in the retail payments system or broader strategic issues that should be addressed.

Received and has published close to 40 submissions, including FinTech Australia association.

In early April, the RBA announced it would suspend the review to 2021.

<https://www.rba.gov.au/payments-and-infrastructure/new-payments-platform/pdf/functionality-and-access-report.pdf>
<https://www.rba.gov.au/media-releases/2019/mr-19-32.html>
<https://www.rba.gov.au/payments-and-infrastructure/review-of-retail-payments-regulation/review-of-retail-payments-regulation-issues-paper.html>
<https://www.rba.gov.au/payments-and-infrastructure/review-of-retail-payments-regulation/issues-for-the-review.html>
<https://www.rba.gov.au/payments-and-infrastructure/submissions/review-of-retail-payments-regulation/index.html>

Review of Retail Payments Regulation: Issues Paper

November 2019

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Senate Select Committee on FinTech & RegTech: Terms of Reference



To inquire and report on:

- the size and scope of the opportunity for Australian consumers and business arising from FinTech & RegTech
- barriers to the uptake of new technologies in the financial sector
- the progress of FinTech facilitation reform and the benchmarking of comparable global regime
- current RegTech practices and the opportunities for the RegTech industry to strengthen compliance but also reduce costs
- the effectiveness of current initiatives in promoting a positive environment for FinTech and RegTech startups

The Committee has called for written submissions to its inquiry by 31 December 2019. The Committee received over 150 submissions including from the Reserve Bank of Australia and from the FinTech Australia association. As with the RBA 'Review of Retail Payments', as of April 2020 the review work has been suspended, but are accepting further submissions.

https://www.apf.gov.au/Parliamentary_Business/Committees/Senate/Financial_Technology_and_Regulatory_Technology

https://www.apf.gov.au/Parliamentary_Business/Committees/Senate/Financial_Technology_and_Regulatory_Technology/FinancialRegulatoryTech/Issues_paper

https://www.apf.gov.au/Parliamentary_Business/Committees/Senate/Financial_Technology_and_Regulatory_Technology/FinancialRegulatoryTech/Submissions

Access: FinTech Australia 2019 Submission to Senate Select Committee FinTech/RegTech



Q: Is the New Payments Platform accessible enough for FinTech startups and scale-ups? If not, how should this issue be addressed?

A: FinTech Australia is supportive of the NPPA's roadmap and many FinTech Australia members are looking to use this new technology. Most fintechs (76% according to the FinTech Census) believe that providing more transparent access points for fintechs to connect to the NPP is an effective industry growth initiative.

However access to the NPP is restricted to ADIs. Members would like to see more fintechs approved for full usage of the NPP. Approval for full usage is a cost issue as much as it is a regulatory and compliance one. The significant costs of direct access mean that new entrants remain reliant on third party incumbents to access. This further entrenches incumbents and longer term will prevent further innovation in the payments space. Opening up access involves more than just accepting members into the sandbox. Instead, opening up direct access to the NPP should be viewed as a future initiative to drive competition in the payments space.

<https://www.psr.org.uk/psr-publications/market-reviews/MR1512-indirect-access-interim-report-annexes>

Access: FinTech Australia 2019 Submission to Senate Select Committee FinTech/RegTech



FinTech Australia appreciates that realising the full potential of the NPP requires the technical and ideological alignment of all the banks, which takes time. Members acknowledged that while the NPP has not been easy to access for fintechs, many of the services fintechs demand are simply not available yet.

The recently released NPP roadmap does create more transparency around the plans and future service rollouts. This roadmap to 2022 for the NPP includes the following components:

- NPP message standards to utilise the structured data capabilities
- 'Mandated Payments Service' to support recurring and 'debit-like' payments on the NPP
- payment initiation capability across the platform ('Basic Payment Initiation Service')
- services to support the domestic leg of an inbound cross-border payment
- use of QR codes on the NPP'
- extension of the NPP API framework and an upgrade of the API sandbox

Recommendation: The NPPA, Government and RBA implement the NPP Roadmap.

<https://www.psr.org.uk/psr-publications/market-reviews/MR1512-indirect-access-interim-report-annexes>

Inquiry into the Future of the Consumer Data Right: 'Second Farrell Inquiry'



Australian Government

The Treasury

Terms of Reference

1. The Inquiry will make recommendations to the Treasurer on options to:
 - 1.1 Expand the functionality of the Consumer Data Right.
 - 1.2 Ensure the Consumer Data Right promotes innovation in a manner that is inclusive of the needs of vulnerable consumers.
 - 1.3 Leverage Consumer Data Right infrastructure (such as the Data Standards Body and accreditation regime) to support the development of broader productivity enhancing standards and a safe and efficient digital economy.
 - 1.4 Leverage the developments of the Consumer Data Right with other countries that are developing similar regimes to enhance opportunities for Australian consumers, businesses and the Australian economy.
2. The recommendations will include examination of:
 - 2.1 How the Consumer Data Right could be expanded to include 'write' access to enable customers to apply for and manage products (including, for Open Banking, by initiating payments) through application programming interfaces.
 - 2.2 Linkages and interoperability with existing and potential frameworks and infrastructures, including the New Payments Platform.
 - 2.3 How the Consumer Data Right can be utilised to overcome behavioural and regulatory barriers to convenient and efficient switching between products and providers.
 - 2.4 Similar regimes being developed in other countries and how Australia should be engaging with these countries to leverage the Consumer Data Right.

<https://treasury.gov.au/review/future-directions-consumer-data-right/TOR>



European Union



EU: Timeline

- 1999: Euro introduced
- 2001: issue of seamless cross-EU border payments as if domestic: Single European Payments Area (SEPA)
- 2001: European Payments Council (industry body) & Eurosystem formed
- 2002 - 2007: concept of Payment Services Directive; 'fair market access'
- 2008: SEPA Credit Transfer launched in 36 countries: one-off/recurring/single & bulk
- 2009: PSD1 implemented
- 2013: Euro Retail Payments Board chaired by ECB; proposal for PSD2
- 2015: PSD2 announced
- 2016: European Payments Council mandated to deliver SEPA Instant Credit Transfer
- **2018**: SEPA 'Target Instant Payments' (TIPS) launch; participation, optional; but now considering regulation
- **2018**: PSD2 transposed into national schemes
- **2018**: General Data Privacy Regulation (relevance is data portability)
- **2019**: PSD2 Regulatory Technical Standards including 'Strong Customer Authentication'
- **2020**: EU Consultation on 'Retail Payments Strategy'



Single European Payments Area (SEPA) and Target Instant Payments (TIPS)

European Central Bank (ECB) is the central bank of the 19 European Union countries which have adopted the euro and **Eurosystem** comprises the ECB and the National Central Banks of those countries. **European System of Central Banks** comprises the ECB and the National Central banks of all EU Member States.

- From November 2018, TIPS enables payment service providers to offer fund transfers to their customers in real time and around the clock in euro, every day of the year.
- Based on the SEPA Instant Credit Transfer scheme for pan-European instant payments; developed as an extension of TARGET2 the real-time gross settlement (RTGS) system owned and operated by the Eurosystem.
- Goal is to maximize 'reachability' of TIPS to avoid 're-fragmenting' retail payments in Europe; avoid new national/proprietary/closed loop systems.
- Direct Participants with TARGET 2 accounts; Reachable Partners with contractual relationship with Participants; Instructing Parties including PSPs. 30 major banks Direct; 3800 Reachable Partners.
- First non-euro nation to join is Sweden, which should be rolled out by 2022.

<https://www.ecb.europa.eu/paym/target/tips/html/index.en.html>



Payment Services Directive (PSD1/PSD2)

- “The most significant EU financial services regulation ever in payments market”
- PSD1 2007 is the legal foundation for an EU single market for payments for safer and more innovative payment services. The objective to make cross-border payments as easy, efficient and secure as 'national' payments within any EU country.
- Modern and comprehensive rules for all electronic payments services: rules for credit transfers/direct debit/card payments; information requirements & rights and obligations.
- Not a SEPA Directive; replaced the EU countries national rules; nations continue to authorize PSPs
- Objectives of PSD2: a more integrated and efficient European payments market; level playing field for payment service providers (including new players); make payments safer and more secure; protect consumers.
- PSD2 opens the EU payment market for companies offering consumer or business-oriented payment services based on the access to the information from the payment account – so called **‘payment initiation services providers’**; and ‘account information services providers’. For online payments, constitute a true alternative to credit cards, and an easily accessible payment service, where the consumer only needs to have an online payment account.

<https://www.ecb.europa.eu/paym/target/tips/html/index.en.html>



Footnote on National Instant Payments:

Sweden & Brazil



Sweden: 'Swish' Instant Payments

- Structure of Banking system (4 main = 80% assets) payments culture (becoming cashless/high innovation)
- Riksbank: Central Bank payments oversight; RIX System: governance & access
- Swish launched/owned by 6 largest banks from a Working Group of the Swedish Bankers Association
- Concern that Tech companies/other groups might offer payments solutions competitive to banks
- Transfers are instant and free: need smartphone/mobile bank ID/Swedish bank account/Swish app
- Only need mobile money to make payments
- Works only within Sweden, payments in SEK (Sweden not euro)
- Used by 7/10 Swedes since launch end of 2012
- Payment settlement in private money backed by central bank currency takes place on BIR network
- On April 2020 Sweden Riksbank announced transitioning to EU TIPS Instant Payments by 2022
- In future, Swish will settle in central bank money on the TIPS platform

<https://www.getswish.se/support/>



Brazil: 'PIX' Instant Payments

Central Bank of Brazil announced in February 2020 launch in November 2020 of new 'Pix' Instant Payments

- involved 13 institutions input in a Working Group over 2 years; guideline produced December 2018
- A project "led by" the Central Bank but not entirely "of" the Central Bank (from interview)
- Will be mandatory for financial institutions with greater than 500,000 accounts; optional below
- Objective is to foster use of electronic payments rather than cash;
- and reach large unbanked population that does not have access to credit and debit cards/credit transfers
- Central Bank tried to get industry to develop solution; published reports/workshops 2015/2016 requesting
- Convened International Workshop with Canada/Australia/Portugal/ ECB but industry did not move
- Will be used for all kinds of payments not just P2P; including merchants/Government/taxes/pensions
- 24/7/365 transactions is less than 5 seconds
- PIX will be direct competition to banks whose fee income from cash transfers/card payments will decrease

<https://www.bcb.gov.br/en/financialstability/instantpayments>

Note: Access to Payment Systems & Infrastructure: Grounding Principles of BIS & EU PSD

Access to What? Customer data; bank accounts and services; payments infrastructure; Central Bank clearing & settlement

How to Access? Direct; indirect; sponsor; aggregator; technical connection

Access by Whom? Banks; other Financial Institutions; Non-bank Payment Service Providers (PSPs)

Bank for International Settlement (BIS) Principles for Financial Market Infrastructures (FMI): Principle 18 on Access and Participation requirements (2012): **“An FMI (which includes Payment Systems) should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.”**

EU: PSD1/PSD2 ‘POND’ Principle: **“Proportionate, Objective and Non-Discriminatory”**; Regulations 103 to 105 (2017) Prohibition on restrictive rules on access to payment systems; Indirect access to designated payment systems; Access to bank accounts