Adoption of real-time payments is accelerating rapidly, driven by regulatory pressures and the threat of non-bank competition. Joy Macknight looks at the different paths taken in the quest to future-proof domestic payments infrastructures.

The march towards faster payments continues apace. As more countries come online with real-time rails, they also spur on others to follow suit. Today, more than 23 countries are operating, implementing or in the process of developing real-time retail payments systems (RT-RPS).

The UK and, more recently, Singapore have launched immediate payments platforms, while Australia and Bahrain are in the process of implementing new RT-RPS. Other jurisdictions are working closely with key industry stakeholders to map out future infrastructures, notably the US, Canada and the eurozone.

Of those countries that have built new real-time functionality, each has developed its own ‘flavour’ depending on legacy systems, ability to invest, policy decisions and main drivers of change. These drivers include the aim of fostering innovation in the payments services sector, improving financial inclusion and reaping the efficiency gains of a cashless society.

While the business case for individual banks might not be immediately apparent – US Federal Reserve analysis in 2014 found it to be neutral or slightly negative – real-time payments can improve the stability of domestic banking systems. “Liquidity risk is removed at the clearing and settlement level because payments are cleared on an instant or timely basis, not in a batch cycle at the end of the day. Therefore, from a central bank perspective, a real-time payments platform removes a significant systemic risk that can become meaningful in an economic crisis,” says Francesco Burelli, a partner at Innova value Management Advisors.

Those countries still fashioning their roadmaps are incorporating the lessons learned by the ones that have forged ahead. As Sean Rodriguez, recently appointed strategy leader and chair of the US Federal Reserve’s Faster Payments Task Force, says: “We have identified what worked well in other countries and what hasn’t, so we are taking heed and learning from other countries that have gone down this path. In many ways we have benefited from not being on the leading, bleeding edge.”

**UK and Singapore: lessons learned**

Regulators played an important and positive role in moving the UK and Singapore to real-time payments infrastructures, according to George Evers, head of international product
development and immediate payments at VocaLink. “They moved the whole community forwards at the same time around a common objective,” he says.

The payment systems company built the UK’s Faster Payments Service (FPS) platform and provides the core infrastructure for Singapore’s Fast and Secure Transactions (FAST).

FPS launched in May 2008 with 10 member banks, while FAST went live in March 2014 with 14 banks. Both countries set upper limits for transactions: S$10,000 ($7150) in Singapore; and the UK began with a cap of £10,000 ($15,350) and increased it to £100,000 two years later. The maximum transaction time is 15 seconds for both schemes. FAST is underpinned by the ISO 20022 messaging standard, which was not mature at the time FPS went live.

Both systems operate 24/7 and are based on the hub model, where a third party runs a central hub to handle interbank clearing and manages the deferred net settlement with the central bank’s real-time gross settlement service (RTGS) – three times a day in the case of FPS and twice a day with FAST. Recently FPS introduced a pre-funding settlement system, which guarantees settlement between all participants without shared risk.

While a regulatory push is helpful in terms of speed and consistency of outcome, one of the lessons from the FPS project was that there needs to be some flexibility in order for innovation to emerge. Due to a strict regulatory environment, the first key retail innovation – Paym – was released in April 2014, six years after FPS went live. In contrast, the banks on the FAST platform are already thinking about the next phase of innovation that can be delivered on the back of the core infrastructure, according to Mr Evers.

“The banks are thinking about how quickly they can roll out new propositions, such as peer-to-peer payments or using ISO sets for request for payments,” he says, adding that the gap between a core infrastructure upgrade and new services being delivered to the end users is narrowing considerably.

Australia making progress

Mr Evers’ assessment is certainly true in the case of the New Payments Platform (NPP) being implemented in Australia. Encouraging innovation from the outset, the platform permits participating banks to develop competitive applications, called overlay services, for different customer segments. The NPP plans to announce the winning tender for delivering the first overlay service, called the ‘initial convenience service’, this month, well ahead of launching the new platform in late 2017.

“Our layered virtual architecture delivers ease of access and the ability to incorporate many players into the game. It creates scalability for the participants, gives flexibility to add new products and hopefully creates process efficiency,” says Paul Lahiff, the independent chair of NPP Australia.

Twelve Australian banks contracted Swift to build the new infrastructure at the end of 2014, following a nudge from the Reserve Bank of Australia (RBA). “The challenge now is to keep those 12 moving at the same speed, even though they may have different interests at different times,” says Mr Lahiff.
The NPP is a virtual hub comprised of a network, a central clearing utility, an addressing service and the ability to connect to the RBA for settlement. The new model consists of a network cloud where all 12 participant gateways connect to all other gateways. “The gateway software creates the same responsiveness and support as a central hub clearing system, without the need for a single central switch,” says Mr Lahiff.

The NPP will operate 24/7 and incorporates the ISO 20022 standard to facilitate the inclusion of richer information with transactions. There will not be a maximum limit on transactions and each payment will be settled in a matter of seconds.

“The Australians decided to settle each payment immediately in central bank money, which is unusual,” says Elie Lasker, head of corporate markets at Swift. “Most payments systems calculate exposure centrally and then net settlement happens between banks at the central bank at the end of the day, or two or three times per day. This model completely removes settlement risk.”

Bahrain breaks through

While regulators also encouraged Bahrain’s adoption of real-time payments, the country’s model differs from both the UK/Singapore and Australian approaches. The Central Bank of Bahrain appointed the Benefit Company, which is owned by 14 Bahraini and international banks, to implement and operate a new electronic fund transfer system (EFTS), which will serve banks, government institutions and the public on a 24/7 basis.

Bahrain’s model is a three-in-one system: an interbank near real-time transfer, which occurs in 30 seconds or less; deferred net settlements twice a day; and electronic bill presentment and payment (EBPP).

“The EFTS will be a big improvement in efficiency in payments processing between banks, but the main beneficiary will be the consumer who will see the payment time go from one day to less than 30 seconds,” says Ahmed Al-Mahri, supervisor – business development, at Benefit Company.

In the new system, which is planning to go live by November 5, the near-real-time transfers will be more focused on low-value payments, with transactions capped at BD1000 ($2650); deferred net settlements transactions will have no cap. The faster payments limit may increase over time based on market needs and demand, according to Abdulwahid Janahi, the CEO at Benefit Company, but ultimately is subject to the regulator’s direction.

The new EFTS operates as a separate system and then settles all payments in the country’s RTGS. It is built on a private, highly secured fibre-based network. Like NPP and FAST, it is based on the ISO 20022 standard.

Stakeholder engagement

The regulatory push has been softer in the US, Canada and the eurozone, which has allowed more time for engaging stakeholders in drawing up a roadmap to faster payments. The complex and fragmented payments ecosystems in these jurisdictions warrant this approach: the US banking community, for example, consists of more than 10,000 different institutions.
The eurozone has the added complexity of legacy domestic clearing and settlement infrastructures still in existence despite a common currency.

All three jurisdictions are preparing to take their real-time projects to the next level. On July 21, the US Federal Reserve System set up two task forces: one for faster payments (chaired by Mr Rodriguez and consisting of 320 members), and the other for secure payments. Earlier in the year, the European Payments Council set up its ad hoc Instant Payments Task Force, chaired by Anthony Richter, head of strategic business development, payments and cash management at HSBC.

In August, the Canadian Payments Association (CPA) engaged global consulting firm McKinsey to conduct stakeholder interviews and prepare a fact-based analysis to support its multi-year project to modernise its payments system.

There is a general perception that a window of opportunity is open for industry participants to take action before regulators step in and impose a solution. “Instead of waiting for a mandate, the Federal Reserve, in consultation with stakeholders, decided that there is enough energy and enthusiasm around the issue that we could collaborate with one another and divine a way forward that makes sense,” says Mr Rodriguez.

“The whole process is creating visibility and awareness across the ecosystem, which has led to constructive participation from different stakeholders,” adds Peter Gordon, senior vice-president, payment strategy in enterprise product office at IT company FIS, and a member of the Fed’s Faster Payments Task Force steering committee. “There is momentum and we will meet the Fed objectives of moving the process along enough to not have regulatory intervention, at least in the short term.”

The high level of stakeholder involvement has spurred larger players within the payments ecosystem into action. For example, in late 2014 the Clearing House, which is owned by 24 global banks, announced its plans to undertake a multi-year effort to build a RT-RPS. In October, EBA Clearing, which has 60 shareholder banks, sent out a request for proposal (RFP) for the delivery of a pan-European instant payment infrastructure within the next two years.

While many countries are looking for a single solution, the US is fostering competition. “The Fed is helping the industry identify solutions for the marketplace. And I say solutions with an ‘s’ – there won’t be just one winner,” says Mr Gordon. “FIS’s approach is to enable its customers to participate in the real-time networks as they achieve scale.”

He does not believe that any of the payment instruments in the US will disappear in the next 10 years. “Cheques, wires, automated clearing houses, credit/debit cards, electronic funds transfers – they will all exist and faster payments will be an added rail,” says Mr Gordon.

Many paths to faster payments

While each jurisdiction is grappling with common themes – efficiency, access, functionality, security, risk management and speed – they also have to address country-specific idiosyncrasies. “If there is anything remarkable about the several solutions in place around the globe or ready to be launched soon,” says Javier Santamaria, chair of the European Payments Council (EPC), “it is that there are few features in common between any of them.”
Payment speed is a case in point. According to Mr Santamaría, the EPC believes that there is only one level of timeliness in instant payments: they should occur within a maximum, set number of seconds after payment initiation. The CPA, on the other hand, argues that there could be different speeds. “We recognise that not all types of payments have the same timeliness requirements,” says Gerry Gaetz, president and CEO of the CPA.

Australia’s NPP incorporated the concept of different speeds in its design from the outset. “While the infrastructure has a fast turnaround of several seconds, the overlay services will determine the customer experience, including timeliness,” says Mr Lahiff.

There is one commonality across all RT-RPS being developed today: the ISO 20022 messaging standard. Mr Lahiff believes that ISO 20022 is absolutely critical to NPP. “The capacity for data-rich payments, which the ISO standard provides, is critical to ensure support for the digital economy of the future,” he says.

“The use of global standards for a future instant payments scheme, as for any existing scheme, is one of the main objectives of the EPC,” adds Mr Santamaria. “The ISO 20022 XML messages are becoming a mainstream technology foundation in the payments environment.”

Global standards will also help facilitate cross-border interoperability. In August, the ISO Real-Time Payments Group, made up of 50 global experts, published a first draft of ISO 20022 messages for cross-border real-time payments. “We are fully on board with ISO 20022, an important building block,” says Mr Gaetz. “Our first objective is to figure out what Canada wants to do, but we must also have an eye on cross-border payments and interoperability.”

Mr Rodriguez agrees, adding: “Any capability we build into a faster payments infrastructure will have ISO-capable formats because we must think globally when doing something of this magnitude.”