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APAC's settlement patchwork – a problem automation was made to solve

By Ben Challice, CEO of Pirum

If T+1 looms large in Europe, the picture in Asia Pacific is considerably more intricate.

APAC is an even more complex mosaic of jurisdictions, each operating through a different CSD, under a different regulatory framework, on a different settlement cycle, with different short-selling rules that can be switched on or off by a regulator's instruction.

India and China operate T+1 settlement for equities, with T+0 pilots underway. Japan, Hong Kong, South Korea, Taiwan and Australia remain on T+2 but other Southeast Asian markets operate on longer timelines. For any firm running a multi-market APAC book, the operational consequence is a daily collision of cut-off times, currency schedules, and collateral deadlines spanning multiple time zones – managed, in too many firms, by a patchwork of legacy systems and manual workarounds.

This complexity is not merely an inconvenience with high operational cost. It is a structural source of settlement risk, much of which is unacceptable culturally, as well as by the regulators. As APAC regulators follow their Western counterparts in endeavouring to compress settlement cycles, firms that have not yet automated their end-to-end trade lifecycle will find the fragmentation and associated risks compounding.

The calculus is straightforward: automation that delivers a very high percentage of Straight Through Processing (STP) in a single-jurisdiction environment becomes even more commercially critical when that same STP rate must be sustained simultaneously across Tokyo, Sydney, Seoul, Singapore, and Shanghai. The question for APAC businesses is not whether to automate. It is whether they can afford to wait.

What the North American transition taught us

The US, Canada and Mexico T+1 transition in 2024 was a forcing function unlike anything the securities finance industry had seen in a generation. It did not merely compress settlement timelines – it exposed, with brutal clarity, where the real fragility in firms' operating models lay.

Before the transition, the bottlenecks were known in theory but rarely confronted in practice. When the settlement window shrank overnight from two days to one, the invisible bottlenecks – including fragmented, batch-based internal systems running on incompatible formats, and a lack of visibility into trade status during the pre-matching phase – became expensive ones.

The industry's responses divided into three distinct cohorts – and the distance between them is still visible today. Some firms had already invested in connected automation infrastructure. For them, T+1 Day was largely unremarkable; the transition was operationally smooth, and the focus shifted quickly to growth.

A second group threw headcount at the problem: adding staff across time zones to cover the gaps their systems could not. They achieved compliance, but at a price that is still being absorbed in elevated staffing costs and fragmented, unscalable operations. A third group chose to wait and see – and discovered, as settlement fails and associated costs mounted faster than anticipated, that reactive remediation is considerably more expensive than proactive preparation.

The lesson the transition delivered is straightforward, even if its implications are not: operational resilience in an accelerated settlement environment cannot be staffed into existence. It requires clean, enterprise-wide data, pre-trade visibility, and automated settlement instruction management that eliminates manual intervention before it becomes a fail.

The firms that emerged strongest understood something else too. The connected data infrastructure built for T+1 compliance is not merely a regulatory cost centre. It is the prerequisite for AI-enabled operations – the foundation on which large language models (LLMs), predictive settlement analytics, and agentic AI collateral optimisation are built. Getting to T+1 was the compliance case. What that infrastructure enables next is the competitive one.

The EU and UK transition – what the roadmap is already telling us

With its T+1 Industry Committee's High-Level Roadmap now public and the October 2027 deadline confirmed for the EU, UK, and Switzerland, the governance structure for the EU's transition is in place. What is clear from ESMA's recommendations is that Europe's transition will be considerably more complex than the appetiser that was the US.

ESMA's report calls, for example, for the elimination of manual interventions across the post-trade lifecycle, improved automation of securities lending recalls

and return instruction flows, automated pre-matching of all securities lending instructions on trade date, and the use of triparty RQV tools to forecast funding and position needs in real time.

The report is equally explicit about the consequences of inaction, warning that non-STP processing will “add unnecessary latency and operational risk to an already time-constrained operating environment” and that manual and legacy processes are likely to increase the incidence of settlement exceptions, fails, and cash penalties.

But it is the structural complexity of the European market that makes the North American lessons so valuable – and so urgently applicable to APAC. Where the US transition involved a single market, a single CSD, and broadly harmonised practice, October 2027 will require simultaneous compliance across multiple exchanges, multiple currencies, and multiple CSDs operating under different national frameworks.

Also consider the prevalence of non-cash collateral across these markets as another impact to complexity. The window for building and testing internal solutions is not 19 months. It is considerably shorter once implementation, integration, and testing cycles are properly accounted for – and ESMA’s own roadmap acknowledges this by setting out an “adhere or explain” mandate that leaves no room for the reactive approach that some firms relied on in 2024.

The firms that treated the North American transition as a compliance exercise rather than a platform investment are now facing that same investment decision again – this time with fewer months, greater complexity, and the direct P&L threat of escalating CSDR penalties already in force.

The firms that used 2024 to build connected, automated infrastructure are positioned to absorb October 2027 as an operational extension rather than a transformation programme. As Duncan Carpenter, Director of Product at Pirum and a member of the UK’s Accelerated Settlement Taskforce, has noted: “the question is no longer whether every institution will automate – it is which firms will do so proactively, with proven solutions, and which will automate reactively under stressed conditions.”

The institutions that will capture the opportunity in APAC offered by real-time and automated complete lifecycle securities lending are those that have already built the automation foundation – standardised, real-time, enterprise-wide data infrastructure – that makes integration with digital-native counterparties and platforms operationally viable.

Digital assets demand digital operations. Whilst DLT and tokenised assets may well prove to be the longer term solution, those firms still running on fragmented, partially manual systems will not be able to benefit from this evolution if the data and connectivity are not in place to take advantage of these new operating models. They will also find themselves structurally locked out of the most significant market evolution this industry has seen – AI-powered securities lending.

AI in APAC – the multiplier in a complex region

The AI conversation in securities lending has, until recently, been dominated by use cases that are relatively straightforward: settlement prediction, exception management, collateral optimisation. These are compelling, and the commercial case is proven. But for APAC desks, AI carries an additional and arguably more urgent value proposition: it is the only technology capable of processing the sheer volume and variety of market signals generated by operating across the region's mosaic of markets simultaneously.

Consider what an APAC securities lending operations team must monitor in real time: short-selling restriction announcements from Korean and Taiwanese regulators; intraday movements in collateral schedules across multiple CSDs; recall deadlines colliding across different settlement cycles; corporate action deadlines cascading across a book spanning a dozen currencies.

The implications go beyond operational efficiency. LLMs trained on rich, standardised post-trade data are beginning to deliver genuine predictive capability – anticipating settlement stress before it crystallises, identifying collateral substitution opportunities before a deadline forces a penalty, flagging client-level risk concentrations before they become a call. For APAC desks managing this complexity with lean teams, this is not an incremental improvement. It is a step change in what those teams can achieve.

But – and this is the critical point – AI models are only as good as the data they are trained on. The firms that will extract transformative value from AI are those that have first invested in the connected, automated infrastructure that generates the clean, consistent, real-time data these models require. AI does not replace the case for automation. It makes it existential.

As a result, securities finance firms are adopting proven solutions today that protect their business against compressed settlement timelines and a growing roster of regulatory obligations.

Pirum's Complete, Connected Lifecycle platform enables firms to deliver best-in-class securities lending, fixed income and collateral services through end-to-end automation spanning pre-trade connectivity, post-trade processing, collateral management, and regulatory reporting – achieving up to 99.9% Straight Through Processing (STP) with 24/7 recalls automation.

The customisable platform answers the fragmented, multi-market complexity that defines the APAC landscape head on, delivering enhanced risk management, fewer settlement fails and overdrafts, and improved P&L.

Leading firms across the region are, unsurprisingly, investing heavily in automation to realise P&L benefits today, and to future-proof their business for the impact of AI. The real-time, standardised, enterprise-wide data that complete automation delivers isn't just operationally beneficial – it's the essential foundation for AI and LLMs. And these models will define competitive advantage through 2030 and beyond.

From compliance to competitive exercise

This year, this global securities lending industry will bifurcate into two fundamentally different operating models: firms with connected automation infrastructure powering AI-enabled operations, capable of competing on innovation, speed, and intelligence; and those trapped in manual, fragmented legacy systems – where even the most talented teams are operating with limited visibility, unable to match the scale, accuracy, and insights their automated competitors deliver as standard.

In APAC, where operational complexity already stretches teams beyond what manual processes can sustainably absorb, the distance between those two camps will widen faster than anywhere else.

As Andrew Douglas, Chair of the UK Accelerated Settlement Taskforce, recently said on our industry-led T+1 webinar The Future of Securities Finance, “This is a once in a lifetime opportunity to rethink how you behave in this marketplace. The tools exist. The standards are being developed. The regulators are supportive. The question is whether your firm approaches this as a compliance exercise to survive or a competitive exercise to win.”

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