Box Article

Project STREAM: Modernising BNM's Data Collection

Summary

- BNM is undertaking Project STREAM to modernise data collection from Reporting Entities (REs), shifting from manual, template-based reporting to automated, API-enabled submissions.
- The initiative is underpinned by three principles: **Collect once**, use many times; **Automate** collection; and **Future-proof** reporting.
- Implementation will proceed steadily with the initial phase focusing on data on deposits, payments and derivatives. Industry feedback indicates support and general readiness for Project STREAM.

Introduction

Under the Central Bank Act (2009), Bank Negara Malaysia (BNM) is tasked with a statutory mandate to safeguard monetary and financial stability. Discharging this mandate depends on the timely availability of high-quality data. Accordingly, BNM collects a wide range of regulatory and statistical data from Reporting Entities (REs)[1] primarily through the Integrated Statistical System (ISS) – a system that has served BNM well since 2012. However, the financial sector's rapid digital transformation, marked by rising data volumes and growing demand for more granular analytics, presents an opportunity to modernise the reporting framework beyond traditional template-based processes. BNM has therefore initiated Project STREAM (STatistical Reporting Modernisation) to modernise its data collection infrastructure.

The Case for Modernisation

Engagements with REs and data users identified three recurring challenges under the current framework. First, duplicate reporting arises as REs submit similar data across multiple datasets with varying dimensions. Second, manual effort remains significant, with compilation relying heavily on web-based interfaces and Excel templates. Third, aggregated and periodic reporting constrains BNM's ability to access the more timely and granular information needed to support evolving analytical and decision-making needs.

Accordingly, Project STREAM is guided by three principles:

1. Streamline reporting by **collecting data once**, as far as practicable, to eliminate duplication across requirements;
2. Modernise collection through **automated** API-based submissions of machine-readable data; and
3. **Future-proof** the framework by collecting granular data that serves as a single source of truth for multiple downstream uses, thus reducing the need for ad-hoc data requests.

[1] Reporting entities include banks, insurance companies, Takaful operators and payment system providers.

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Benefits to REs and the public

Project STREAM will bring immense benefits to BNM, REs and the financial industry. Standardised data models and API-driven automation will reduce or eliminate manual reporting, thus unlocking new possibilities for the scale and speed of collection. Higher-quality submissions from REs will enable BNM to publish faster and more granular open data, which will benefit not only the public at large but also REs themselves – via better peer benchmarking and analytics. It is worth noting that **REs will gain the most if they apply these principles across their internal systems**, rather than only at the point of submission to BNM. The enhancements undertaken for Project STREAM will create robust and interoperable data systems, which then enable a more data-driven, AI-ready and innovative financial sector – through broader data sharing and initiatives such as Open Finance.

Implementation: A Phased, Collaborative Approach

Project STREAM will be implemented gradually, with the initial phase targeting three data domains – **deposits, payments, and derivatives** – with data collection expected to commence in late 2028. Future phases will cover data domains such as cash balance of payments and credit, as well as compliance reporting. In each phase, a holistic data review is conducted to harmonise definitions and collect granular data to build outputs from a common data foundation, thus minimising REs' reporting burden.

Importantly, BNM views Project STREAM as a shared journey – it can only succeed through productive collaboration with the financial industry. In that spirit, Project STREAM has, since the very beginning, been anchored by the Industry Working Group (IWG) comprising BNM, REs and industry associations. This forum enables BNM and REs to jointly fine-tune key details and pressure points, before finalised requirements are communicated to CEOs and Heads of Reporting.

Consultations to date indicate that the industry is generally ready and supportive of the proposed direction. REs have nonetheless raised practical considerations, including the operational impact of the required infrastructure upgrades, the capacity development needed to implement automated reporting, and the feasibility of the proposed timeline. BNM is committed to addressing these considerations collaboratively as the project progresses.

Looking Ahead

Project STREAM is more than a regulatory exercise – it is a collaborative path to a more data-driven and innovative financial ecosystem. Beyond modernising reporting processes, the initiative will strengthen BNM and the industry's analytical capabilities, support data-driven policymaking, and improve all BNM's data sharing initiatives. BNM will continue to engage REs closely through each phase of implementation, ensuring the transition remains well-informed, inclusive, and aligned with industry readiness.