



Statistical Reporting by Financial Institutions (FIs) Improving data quality for reporting



Background of Statistical Reporting

Overview

April 2016

- Bank Negara Malaysia (“BNM”), Jabatan Perkhidmatan Statistik (“JPS”) department initiated a dialogue session with the Head of Reporting (“HOR”) from all the FIs on the expectations of Statistical Reporting to BNM.
- BNM has taken the approach of enforcing the Statistical Reporting Enforcement Framework (“SREF”) with imposition of administrative monetary policy (“AMP”) on non-compliances with Statistical Reporting.

July 2017

Audit request to be conducted on all Statistical Reporting

- Scope of audit:
 - Compliance to the reporting requirements for all statistical reports.
 - Roles and responsibilities of the HOR.
 - Status of remedial action on ITIS and CCRIS following the compliance audit on 22 July 2015 and 5 September 2016.
 - A total of 59 types of statistics covering numerous submission systems.

September 2018

Audit request to be conducted on all Statistical Reporting

- September 2018 was the deadline for all FIs to submit internal audit report for Statistical Reporting.
- All FIs are required to track the action plan and provide progressive updates to BNM on a quarterly basis.

Objectives of Statistical Reporting

Statistics are critical for effective surveillance and policy formulation:



Promote and Provide monetary stability, research support and growth related issues to the government.



Manage Investment and Operations on domestic liquidity, exchange rates, external reserves and providing advice and assistance in the area of debt and fund management to the government.



Regulation - FIs are regulated to promote, provide and enhance the financial stability of the country, competitive environment and financial capability of consumers.



Effective Supervision by developing and implementing an effective surveillance framework for enforcement purposes.

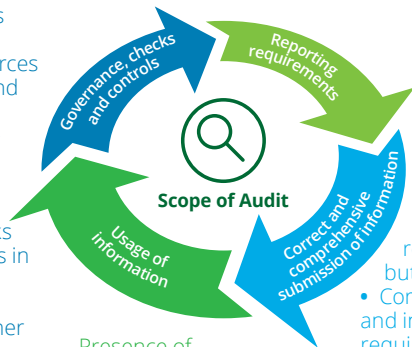


Promote a Robust Payment System to promote reliable, secure and efficient clearing, settlement and payment systems in the country.

Scope of Statistical Reporting

The following is the audit scope requirement by the JPS:

- Availability of resources (human and IT) and competencies of resources to manage reporting and submission.
- Structured governance process as well as establishment of checks and controls to prevent or mitigate risks of errors and omissions in reporting/submission.
- Cross checking of information against other Statistical Reporting (whichever applicable) to ensure reporting consistency.



Presence of strict data access control and procedures.

Establishment of reporting framework to ensure compliance with reporting requirements specified in the respective Policy Documents/Guidelines.

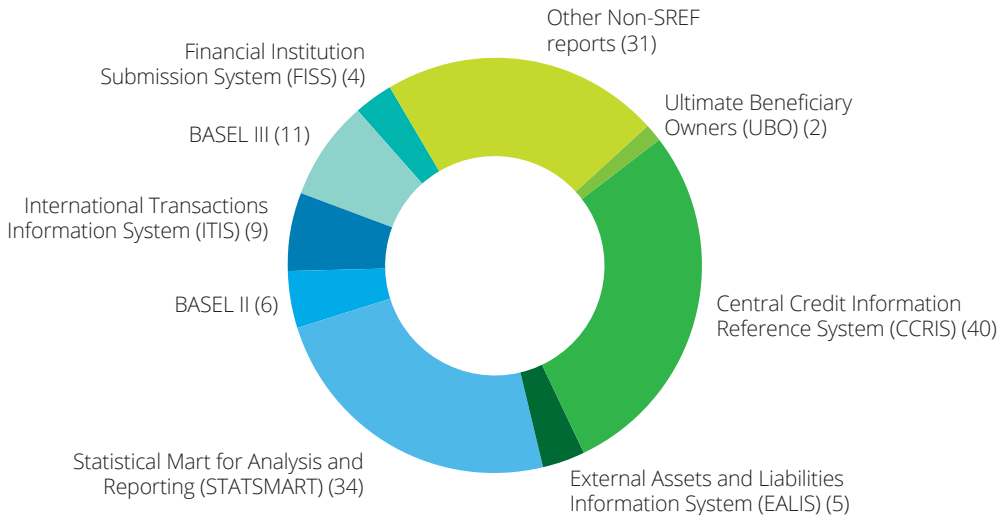
Availability of processes and procedures to ensure accuracy and comprehensiveness in statistical reporting to JPS. These can include but are not limited to the following:

- Correct submission of all statistics and in accordance with reporting requirements specified in the relevant Policy Documents/Guidelines;
- Justifications on amendments to data submitted are true and supported by relevant evidences; and
- Performance of data quality checks prior to submission of statistical information to JPS.

Source: BNM's Circular - Internal Audit on Statistical Reporting by FIs dated 12 July 2017

Overview of areas of Statistical Reporting

Snapshot of statistical reports by types



CCRIS

Submission of credit information to the Credit Bureau via CCRIS for the following information:

- (a) Customer identity and credit application information;
- (b) Update of credit application;
- (c) Submission of other details of customer, credit account details and collateral information (for newly approved applications);
- (d) Submission of month-end balances of all credit accounts;
- (e) Submission of month-end provisions for impaired and declassified impaired accounts; and
- (f) Updates of customer details, credit account, collateral information, legal action information, month-end balances and provisions (for previously submitted records).

ITIS

Payments and receipts between Residents and Non-residents and all transactions that affect the External Accounts and Foreign Currency Accounts/Cash Holdings affected through the banking system.

UBO

Statistics on Ringgit Assets held by Non-Resident ultimate beneficial owners (UBO). The information gathered would also facilitate further development of the financial market by BNM.

EALIS

EALIS reports are a record of the stock and transaction flows of Malaysia's external financial assets and liabilities with the rest of the world, including income accrued from holding of the external financial assets and liabilities. Data from an EAL Report shall be used for compilation of Malaysia's International Investment Position (IIP), Balance of Payments (BOP) and External Debt Statistics (EDS).

FISS

Submission of loans/financing extended by FIs classified according to one or any combination of the following dimensions, i.e. by type, by customer, by maturity, by sector/purpose and by state.

STATSMART

Collation of statistical information for purposes related to the regulatory objectives of the FSA and IFSA in promoting financial stability to foster the safety and soundness of financial institutions. There are 3 broad categories of reporting, i.e. Financial Reporting, Compliance Reporting, Industry Specific Reporting. There are 28 types of reports on financial condition and results of its operations to BNM via STATsmart portal.

Basel II

As part of Capital Adequacy Framework to quantify the Risk-Weighted Assets (RWA) for credit risk, market risk and operational risk. The requirements set out are intended to improve the overall risk sensitivity of the capital adequacy framework.

Basel III

The submission is in conjunction with BNM's plan to implement the Basel III reform package which comprises measures to further strengthen the existing capital and liquidity standards for banking institutions in Malaysia. The liquidity standards comprise the Liquidity Coverage Ratio (LCR), Net Stable Funding Ratio (NSFR) and liquidity risk management standards.

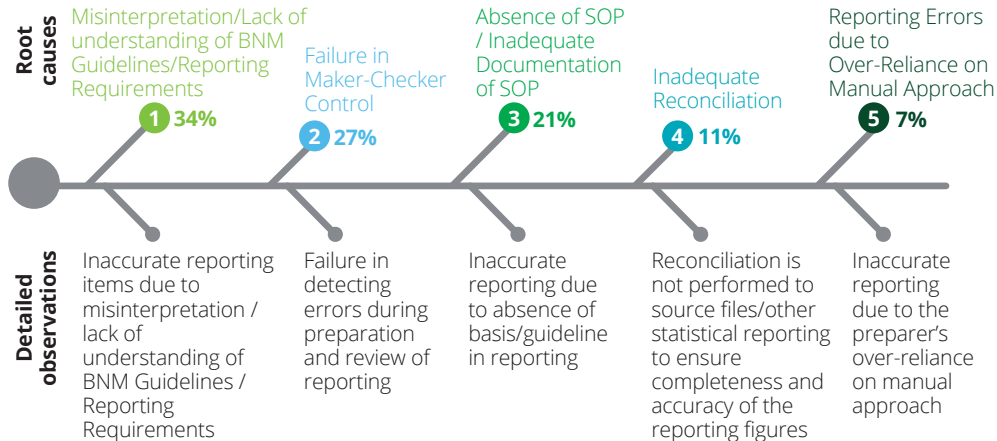
Others

Covering 31 types of Non-SREF reports. These reports are ancillary to the other reports for BNM to compile monetary, financial and macro-economic statistics from various sources. The information support BNM in working towards refining the quality of publication to support a better monetary policies implemented by the central bank that drives the economic growth.

Summary of root causes

Top 5 key root causes

Based on our extensive work done with FIs in Malaysia, we have identified the major root causes as below:



Challenges encountered by FIs



People

- Incorrect legacy practice of preparation of reports. Preparer of reports lack scepticism to question how things were done in the past and prepare the report for the sake of preparing.
- Inadequate understanding of the BNM Guidelines resulted in misinterpretation of BNM guidelines.
- Inadequate dialogues between FIs and BNM to clarify inconsistent data fields between guidelines and submission templates.



Process

- Preparation team working in silo resulted in limited knowledge transfer and sharing session between departments (e.g. Group Finance prepares Basel reports, but required inputs provided from Group Risk).
- Poor maker-checker control in detecting errors during review processes.
- Lack of training/guidelines in assisting reporting preparation.



Technology

- Lack of automation processes in report preparation, in relation to data extraction which resulted in incomplete reporting due to manual extraction from FI's system.
- Manual computation and preparation of the reporting.

Moving forward: Modernising regulatory reporting in banking & securities

Applying Robotics Process Automation (“RPA”) and Cognitive Intelligence (“CI”)



Redeployment of skilled resources to more value add tasks



Business benefits



Improve efficiency, effectiveness and productivity of the whole regulatory reporting process landscape



Enhancements in quality of data, documentation and overall report accuracy



Ability to further streamline the process with every cycle by enhancing the bots with additional logic based on new requirements and errors identified during any submission cycle



Execution of currently manual tasks on a 24x7 schedule with minimal human supervision



Impact of processing errors can be magnified by high-paced bots



Bot-related errors can negatively affect the integrity of reports and may generate incorrect results



Changes to the IT platform will affect critical element of the workforce, including replacement/ repurposing of the FTEs - and may require additional training for the workforce



Challenges



None of these are deal breakers and can be managed by:

A well-defined framework and a governance structure to establish the IT and business interaction model, along with a strong control environment focused on automation



Sustainability and maturity of existing processes and systems could potentially impact automation, especially if they are constantly evolving



Reporting structure siloes and lack of enterprise-wide governance and accountability



Fragmented data architecture and data quality issues

Getting started



Organisations that intend to embark on RPA or implement CI into its regulatory reporting landscape should consider the following:

- RPA is not a one-size fits all panacea
- Complete automation is complex, costly, involves transformation in the mindset and culture of the organisation with lengthy multi-year implementation



Short term solution by targeting improvements in areas that typically emphasises efficiency, productivity and process enhancement – an approach that requires a relatively small investment and a short implementation timeframe

Proposed implementation roadmap



2 to 3 months

Quick wins

- Validate concepts and demonstrate benefits before scaling up
- An example is automating the data extraction and data cleansing activities, or automating a set of testing activities that have high frequency and volume



4 to 8 months

Intermediate opportunities

- Medium-term (4-8 months) initiatives around process optimisation, standardisation efforts that can accelerate strategic solutions



8 to 18 months

Strategic solutions

- Initiatives that are more ambitious in scale and impact

Firms should consider pursuing a two-pronged strategy focusing on activities where automation and CI can deliver tangible benefits in the short time-frame. Starting with quick wins help build momentum and support.

Deloitte's value proposition

Our team can assist in better interpretation of the reporting guideline due to:



1. Multi-disciplinary team experience

Our team is made up of experienced **internal and external auditors, risk managers, Basel specialists, ex-regulators and data analytics specialists** with strong credentials that have successfully delivered similar exercises to various financial institutions in Malaysia.



2. Proven track record and assets in financial services

Our team is able to leverage on our **existing experience and methodologies** to customise the review approach and efficiently conduct the review for compliance with BNM guidelines.



3. Effective knowledge transfer

Our internal review approach involves **structured on-the-job training** by having one or more FTE in-house Internal Audit team members shadowing our team from the audit planning stage until final reporting.

During the review, we can help to **develop FI's in-house capabilities** on the statistical reporting subject matter and analytics-driven audit approach.

Methodology and Proposed Approaches

Our team is familiar with the challenges commonly faced in the process of statistical reporting review



Interpretation of reporting guidelines

Our team has knowledge of the reporting practices in the industry and we are ready to assist FIs to interpret and apply such reporting guidelines prudently.



Range of statistical reports for review

We adopt a structured approach in our review which will minimise interferences to process owners.

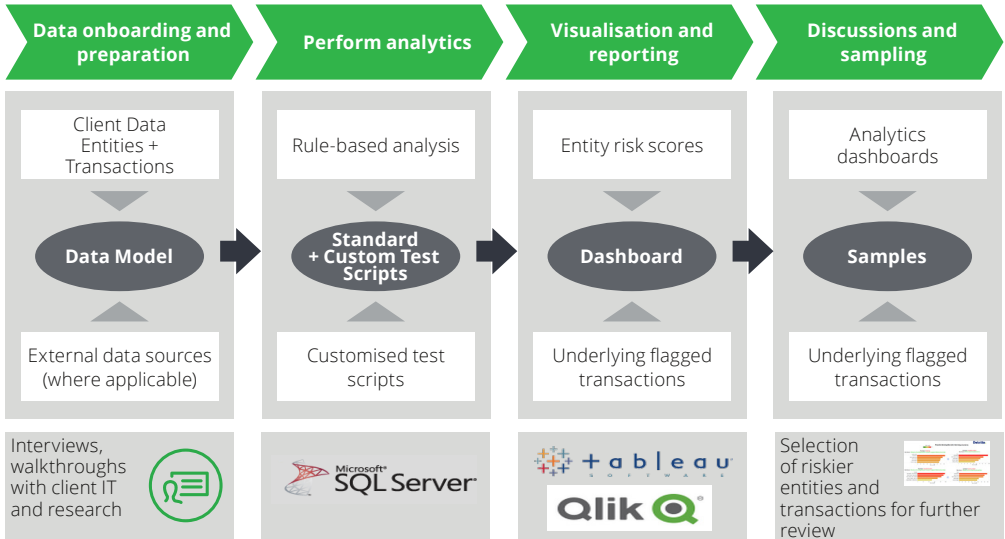


Analytics-driven sampling & testing

We adopt an analytics-driven approach that supports 100% review of the population and assesses the pervasiveness of any observations in our review.

Analytics-driven sampling approach

An illustrative summary of the typical approach used for performing analytics is being illustrated here, from data extraction from client's database, data preparation, execute analysis and risk evaluation culminating in an interactive dashboard creation:



Analytics-driven sampling and testing

Where data is available and usable, our Analytic-driven approach supports 100% review of the population and assesses the pervasiveness of any observations.

Aspect	Typical controls testing	Controls testing with analytics	
Work flow	<pre> graph TD A[Understand the business] --> B[Random sampling] B --> C[Test samples] C --> D[Identify findings] </pre>	<pre> graph TD A[Understand the business] --> B[Understand the data] B --> C[Perform data analysis] C --> D[Focused sampling] D --> E[Test samples] E --> F[Identify findings] </pre>	<ul style="list-style-type: none"> Identify potential analytics Extract, transform and load data Analyse data: Compare, profile, visualise Develop testing hypothesis and enhance test script
Testing	Random sampling	100% analysis and focused sampling	
Correlating data	Data correlation from different sources is manually-intensive, almost impossible	Ensures data from different sources are correlated and supports conclusion	
Findings	Higher possibility of being arbitrary, ambiguous and subjective	Fact-based and data driven (incontestable) resulting in more insightful recommendations	
Testing errors	Higher risk of human errors	Reduces risk of human errors	

Contact



Justin Ong

Partner

Financial Services Industry

+60 3 7610 8895

keaong@deloitte.com

Deloitte.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited (“DTTL”), its global network of member firms, and their related entities. DTTL (also referred to as “Deloitte Global”) and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more.

Deloitte is a leading global provider of audit and assurance, consulting, financial advisory, risk advisory, tax and related services. Our network of member firms in more than 150 countries and territories serves four out of five Fortune Global 500® companies. Learn how Deloitte’s approximately 286,000 people make an impact that matters at www.deloitte.com.

Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities provide services in Australia, Brunei Darussalam, Cambodia, East Timor, Federated States of Micronesia, Guam, Indonesia, Japan, Laos, Malaysia, Mongolia, Myanmar, New Zealand, Palau, Papua New Guinea, Singapore, Thailand, The Marshall Islands, The Northern Mariana Islands, The People’s Republic of China (incl. Hong Kong SAR and Macau SAR), The Philippines and Vietnam. In each of these, operations are conducted by separate and independent legal entities.

About Deloitte Malaysia

In Malaysia, services are provided by Deloitte Risk Advisory Sdn Bhd and its affiliates.