



---

<b>TITLE:</b>	<b>RISK DATA AGGREGATION AND REPORTING PRINCIPLES</b>
<b>WORKING GROUP:</b>	<b>RISK DATA WORKING GROUP</b>
<b>DATE:</b>	<b>JULY 2019</b>
<b>DISTRIBUTION:</b>	<b>ALL BC CREDIT UNIONS</b>

---

## **BACKGROUND INFORMATION**

Over the past several years, FICOM has identified inconsistencies in risk data collection, aggregation, and reporting across credit unions. Events from the global financial crisis to local wildfire threats highlighted the importance of strong risk data aggregation capabilities and risk reporting practices in supporting the quality of risk management and timely decision making. To that end, a Risk Data Working Group between credit unions and the regulator was convened to define best practices for risk data collection and reporting and set data quality expectations. Specifically, the objectives of the working group were to:

- identify meaningful risk data attributes for risk reporting and aggregation;
- increase confidence in risk data quality by establishing common data definitions and standards; and
- align expectations on risk data aggregation and risk reporting.

This report summarizes the outcome of the working group discussions. The discussions were aimed at formulating aspirational goals rather than just acknowledge current capabilities. As best practices for risk data evolves with the overall risk environment, these discussions should be regularly revisited.

## **PRINCIPLES FOR EFFECTIVE RISK DATA AGGREGATION AND REPORTING**

In addition to identifying key risk data, data governance policies should state an institution's expectation for data quality standards. According to the "Principles for Effective Risk Data Aggregation" by the Basel Committee on Banking Supervision (BCBS239), three key components of data quality that contribute towards confidence in risk reporting are:

- timeliness;
- completeness; and
- accuracy.

---

### **Timeliness**

Timeliness of data is the practice of working with the most recent data while having the ability to draw upon the data as and when required. Timeliness is defined by the following criteria:

- recency of the data;
- response times for reporting; and
- frequency of reporting.

Timeliness of data varies depending on the type of data, materiality of metrics and external circumstances. Under business-as-usual scenarios monthly reporting may be sufficient, as certain records follow predictable cycles throughout the month. In situations of stress however, more frequent reporting is required to monitor the state of the institution as it progresses through a crisis.

Timeliness in this sense is the ability to draw upon relevant data to provide both management and regulators the information required to assist in timely decision making. Timeliness includes the flexibility to adapt to the changing needs for data in any given situation.

### **Completeness**

Completeness of data depends on the type of analysis intended. For example, a record may be complete for credit risk analyses but not complete for liquidity risk analyses. Completeness of records is measured along two dimensions:

- number of records filled; and
- extent of risk captured.

Completeness does not necessarily imply that all data attributes must be available for every record. With respect to missing fields, overall risk captured by each record including the exposure and other risk characteristics should be considered.

Missing critical data fields could materially impact the results of risk analyses. A common practice is to apply the most conservative estimates for missing values. However, that may not provide an accurate measure of an institution's risks. Given the differing nature of data fields and their associated record, discretion should be applied when addressing missing data.

Older data are more likely to have missing fields. It can be noted that as financial institutions upgrade their systems and apply enhanced data standards, completeness is expected to improve. This is because older data will be overwritten as loans are renewed and migration of data to newer systems occurs.

Applying tolerances to data standards is a form of defining completeness. Tolerances can be guided by either number of records or materiality of records. Generally, requirements regarding data completeness are guided by the intended use and associated risks of the data.

Completeness in this sense is not only referring to the number of missing fields, but also the overall risk captured by the record.

## Accuracy

Accuracy describes whether data is correct. For instance, a loan's collateral value can meet the criteria of being timely and complete while still being inaccurate if it is set to zero or some value that does not reflect reality. Establishing criteria for accuracy should be guided by tackling magnitude, materiality and relevance of the data under consideration.

Accuracy of the data needs to address:

- how: standards, controls and automation;
- when: frequency and availability of reporting; and
- who: outsourced/in-house.

Financial institutions have annual internal and external audits tied to financial reporting that ensure proper reconciliation of the financial statements. In general, no similar process is dedicated to risk management.

One possibility is to certify processes to ensure data accuracy. However, different approaches to data collection warrant different certification requirements. If processes were manual, regular re-certification would be required. On the other hand, the consistency of automated processes allows for the system to be certified rather than the data. The risk of entering inaccurate data is a form of operational risk and should be managed as such.

Sampling is another approach that can be applied to ensuring data accuracy. This is already applied to securitizations where financial institutions outsource the function to an external firm to check the attributes for a sample of loans. Financial institutions can develop an in-house practice to ensure their own risk data accuracy.

The working group agreed that completeness of risk data should reach the following standards in two to three years:

- commercial credit: 85-90%;
- retail credit: 90-95%; and
- liquidity and treasury: 95-100%.

## REFERENCES AND ADDITIONAL DOCUMENTATION

Minutes and agendas of the Risk Data Working Group as of January 26, February 23, March 16, April 19, and May 23, 2018 (available upon request).

Risk Data Working Group Terms of Reference (available upon request).

Risk Data Working Group Work Plan (available upon request).

[“Risk Data Fields.xlsx”](#); list of data attributes for retail credit risk including borrower affordability, commercial credit risk, and liquidity and treasury risk (attached as Appendix 1).

“Principles for Effective Risk Data Aggregation” by the Basel Committee on Banking Supervision (BCBS239), January 2013.