



# BCBS 239 Progress Report: Significant work still needs to be done for full compliance

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Center *for*  
**Regulatory  
Strategy**  
**US**

In November 2023, the Bank for International Settlements (BIS) published the Progress in adopting the *Principles for effective risk data aggregation and risk reporting (BCBS 239) report*.<sup>1</sup> The report, published almost 10 years after the original publication of BCBS 239, assesses banks' compliance with the BCBS 239 principles. Like prior assessments, the report finds only a small number of banks are fully compliant (i.e., two out of 31 banks assessed) and no principle has been fully implemented across banks.<sup>2</sup> In a positive development, the principles are being extended to banks' financial and regulatory data, legal entities, and emerging risks. According to the 2023 report, banks have established programs to achieve compliance. These programs are often underfunded, limited in scope, and lack the appropriate level of attention from the board of directors and senior management leading to fragmented information technology (IT) solutions and data landscapes and resulting in ineffective data aggregation and reporting capabilities.

The 2023 report did note that significant efforts have been made by institutions to improve on the principles within the three focus areas: (1) overarching enterprise governance and data programs; (2) IT system streamlining and rationalization; and (3) data quality monitoring.<sup>3</sup> While strides have been made to improve data quality, delays continue in adoption caused by the inability of banks to integrate fragmented IT solutions and legacy systems, which results in manual adjustments. These shortcomings make it difficult to respond to regulatory demands for granular, high-frequency data.

The data needed to monitor risk during recent stress events (e.g., the COVID-19 pandemic, 2023 banking turmoil) has brought weaknesses in banks' data environments and data programs to regulators' attention, requiring accelerated remediation of data shortcomings. Central banks and supervisors are increasingly focused on monitoring and mitigating systemic risks in the

financial system where data is key. Therefore, regulators seek frequent, granular, and comprehensive data from financial institutions, and their expectations for quality and availability are growing. Data consumers rely on this data to identify and manage risks as they emerge. These factors make banks' data capabilities of prime importance to regulators, boards of directors, and bank senior management.

Regulators continue to stress the importance of end-to-end processes to ensure high-quality data, and banks' ability to assess and evidence the effectiveness of data controls and the maturity of quality assurance programs is critical to meeting those expectations. Second- and third-line testing programs are essential in assessing progress and effectiveness of data programs.

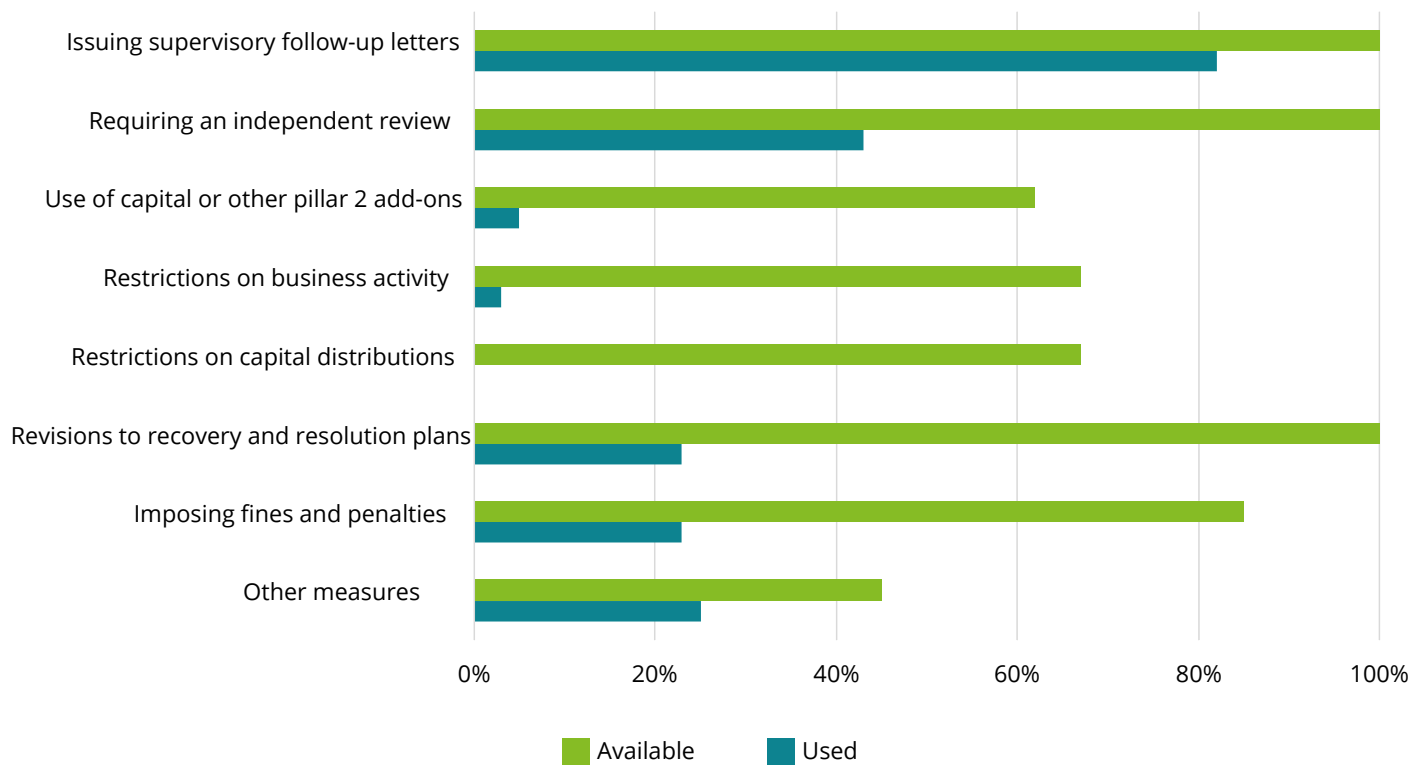
The 2023 report recommends that "supervisors should take appropriate measures to address delays and ineffective implementation."<sup>4</sup> Specifically, as in the past, the 2023 report recommends that banking supervisors:

- Conduct on- and offsite reviews, inspecting banks' management information systems to determine whether they have addressed previously identified data-related issues, and if any issues have surfaced, and progress in adopting the principles for effective risk data aggregation and risk reporting.
- Mandate external banks to assess the implementation status of the principles.
- Conduct fire drills to evaluate banks' risk data aggregation capabilities.
- Increase supervisory intensity in areas where weaknesses have been found.

Figure 1 shows the actions that regulators are authorized to take and how often they take them. By far, issuing follow-up from the supervisory review (e.g., Matters Requiring Attention (MRAs)) is the most common action taken, creating the need for remediation

programs to respond to supervisory findings. Independent reviews are the second-most common action taken. These have proven effective in uncovering systemic weaknesses in banks data environment.

**Figure 1: Availability and usage of supervisory measures**

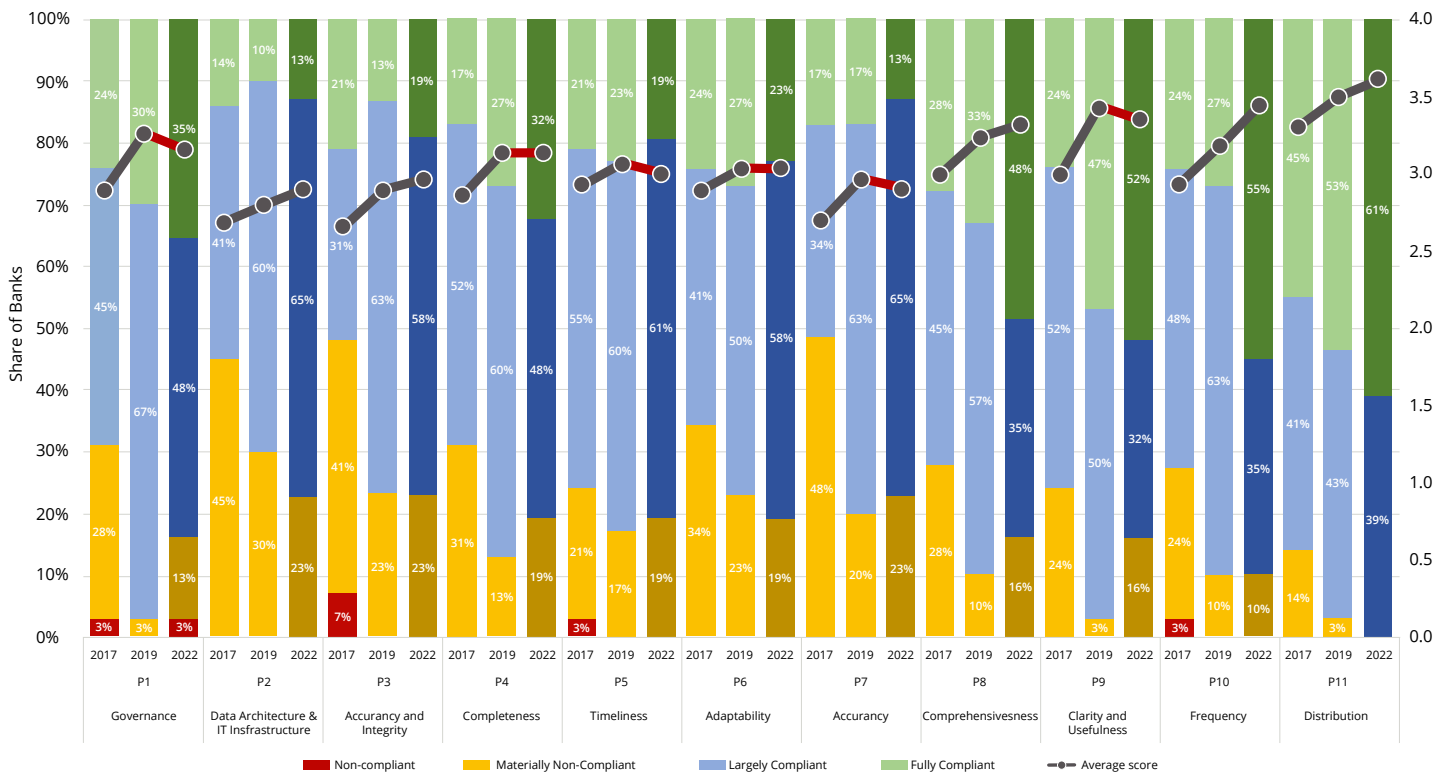


Source: Bank for International Settlements<sup>5</sup>

Even with significant efforts by banks to improve data capabilities' progress in meeting the principles has been slow. Figure 2 shows the assessment of progress with the principles in 2022 compared to the 2017 and 2019 reports. The results show deterioration in Principles 1 (governance), 4 (completeness), 5 (timeliness), and 9 (clarity and usefulness) from 2017 to 2022. Increasing regulatory

expectations of data capabilities and data quality, uncovering data weaknesses discovered during detailed onsite examinations, performing regulatory exercises, and obtaining responses from data requests during recent stress events played significant roles in the deterioration levels of the current assessment.

Figure 2: Bank compliance ratings by Principle in 2017, 2019, and 2022



Source: Bank for International Settlements<sup>6</sup>

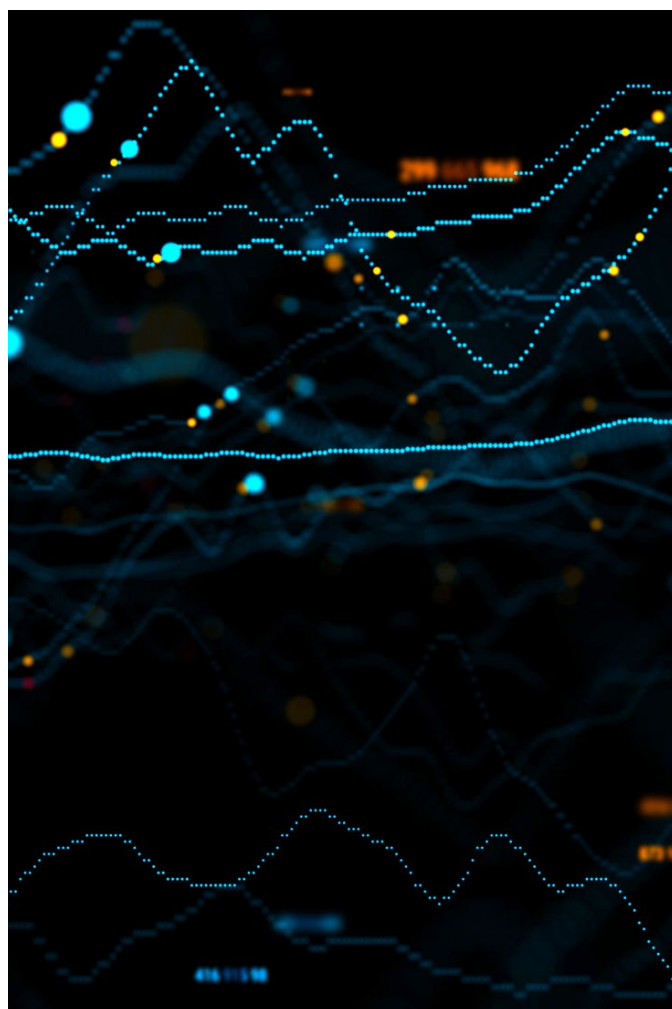
Principles 1 and 2 are foundational for overall compliance with BCBS 239. The key takeaways for these principles include the following:

- Principle 1 – Governance:** Banks have made progress by advancing the maturity of enterprise-wide data management. This has been achieved by designing effective escalation processes, beginning to establish clear ownership and accountability for data, and developing metrics to measure data quality. Banks have begun to establish independent units (control functions) for validating data quality and data management. In addition, Chief Data Officers (CDOs) serve an increasingly critical role as the standard setter and second-line of defense for data quality. After initial implementation, CDOs are evolving as they gain experience with the data issues, governance structures, and advancing data capabilities.
- Principle 2 – Data Architecture and IT Infrastructure:** Only 13% of banks are fully compliant with this principal. Banks operate with fragmented IT solutions resulting in a prevalence of end-user computing (EUC) desktop applications and legacy systems that are siloed and prevent the adoption of effective data standardization. The lack of compliance with this principle is often the root cause of challenges with implementing Principles 3 (accuracy and integrity), 5 (timeliness), 6 (adaptability), and 7 (accuracy). The 2023 report noted that banks should do more to allocate the necessary resources (e.g., talent and investment) to address these weaknesses

Progress has occurred at some banks by streamlining and harmonizing their IT systems across legal entities and expanding the use of Authoritative Data Sources (ADS). Many banks are also moving to cloud computing environments to improve resiliency and compatibility of applications, enhance data protection, and increase performance.

Independent assessments of data capabilities are a crucial step to ensuring that gaps are uncovered and data programs are moving in the direction that meets regulatory expectations.

Business growth and regulatory compliance are not mutually exclusive. For example, banks have always sought to find the optimal design that lends itself to a flexible organization, with an adaptable data environment and IT infrastructure.





## Challenges to adoption

Complying with the principles of BCBS 239 can be complex and resource-intensive and have multiyear implementation timelines. The report points out several challenges to complete adoption:

- Moving to the target-state IT and data architecture has proven difficult. The migration from legacy environment is expensive and hard to integrate into business processes.
- Data lineage and traceability remain elusive making it difficult to harmonize systems and to provide fit-for-purpose data.
- Banks have not gained full executive support to hold all stakeholders accountable for data and provide the resources needed to address compliance as a strategic initiative.
- Banks continue to have data quality issues, requiring programs to cleanse data attributes to meet data requirements before implementing strategic solutions.

- The dynamic nature of data demands and technology require effective change management processes and constant assessments of data policies and procedures.

Banks are taking different approaches to address these challenges, which include:

- Creating and updating policy, procedures, and standards to apply to data throughout the firm.
- Expanding internal audit performance of data activity audits.
- Enhancing the internal control framework to prevent data issues and mitigate the risk of manual processes.
- Identifying data elements that require detailed data lineage.
- Automating critical data processes to eliminate manual adjustments.
- Sourcing data at the transaction level rather than relying on aggregated data from data owners.



## Recommendations to banks to gain full compliance

The 2023 report states that banks' perception of their compliance to the principles is more positive than regulators' perception. Regulators noted certain banks that consider themselves to be compliant continue to struggle with remediating broader data issues. Banks noted, in these cases, that the principles are narrower than the issues banks are facing. The principles are foundational to implementing an effective data program and remediating data quality programs, and implementation of the principles should not be viewed as a separate effort.

The 2023 report makes the following recommendations:

- **Banks' boards should prioritize and intensify oversight of data governance**, including the development, implementation, and maintenance of robust data governance frameworks, risk data aggregation, and reporting. Resources and funding are critical to effective implementation of the principles. Without executive oversight and sponsorship, the appropriate level of commitment cannot be obtained.
- **Banks should foster a culture of ownership and accountability for data quality across the organization.** Data is an enterprise-wide activity. Accountability policies need to be in place with specific actions established for poor data quality and noncompliance with standards. This includes developing meaningful metrics that measure compliance and are shared with senior management and the board of directors.
- **Banks should apply the principles comprehensively to risk data in a broader context.** The scope of the principles should be well documented for all business processes, from data origination to data aggregation.

- **Banks should ensure sound data quality as the foundation for digitalization projects.** Data quality should be addressed as part of any digitalization project.

## Specific steps banks should consider taking

There are several steps banks can take to meet compliance with BCBS 239 and, more broadly, have an effective data program that meets regulatory expectations, including the following:

- **Develop a comprehensive enterprise strategy for data and related capabilities**, including detailed plans for the allocation of appropriate resources to effectively integrate databases from disparate legal entities, subsidiaries, and branches. These strategies should consider:
  - Addressing root causes of supervisory findings from examinations, findings from internal audit, or other reviews and processes (e.g., work of quality assurance functions).
  - Providing detail road maps that encompass long-term initiatives rather than tactical solutions to data quality and data aggregation issues.
  - Identifying data quality gaps and remediation plans to close these gaps and developing training on improving data quality.
- **Replace EUCs with more integrated reporting platforms.**
  - Review the EUC policies generally. EUCs are a tactical solution; therefore, EUC policies should be explicit for EUC owners to provide committed time in which they will decommission EUC and migrate users onto a robust and viable system or platform.

- **Conduct an overall infrastructure and data assessment.**

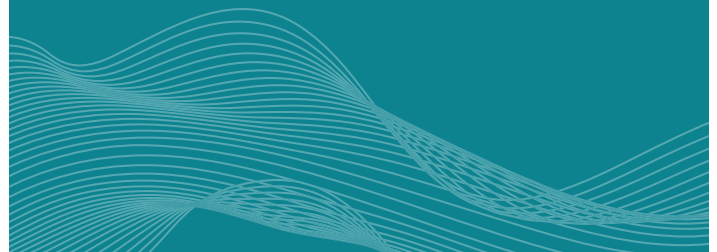
Conducting an overall assessment of the data environment and reporting processes is an effective practice to help banks understand where data gaps may exist and where controls should be strengthened to prevent material data errors. Identifying and assessing the risk of poor data quality, especially for related business processes and data infrastructure, can help determine areas for prioritization and further development. Independent risk and data assessments should occur regularly.

- **Refine critical data elements (CDEs).** Remediating data quality issues and creating an effective data infrastructure require careful prioritization. Banks should conduct an analysis of data attributes and determine the impact those attributes have on managing risk, meeting regulatory needs (e.g., risk-based capital levels), and preparing management reports. Once designated, CDEs should have enhanced controls to ensure the proper level of quality. The use of CDEs is critical to prioritizing remediation and allocating resources.

- **Implement data lineage.** A key role for data lineage is to identify the original sources of data used for reporting and decision-making. Banks should operate with an end-to-end ownership model throughout the data life cycle to enable ongoing data oversight and remediation. Without data lineage, this is not possible.

## Prioritize resources and investment

As banks continue along the path toward a mature data environment that complies with the principles of BCBS 239 and meets regulatory expectations, it will be critical to prioritize these efforts appropriately and allocate the necessary level of resources and investment. Road maps and plans that can get to the root cause for a target state must go beyond filling in tactical gaps to strategic investments. These road maps should create a path to a future state where data across the bank is discoverable, accessible, and can be easily aggregated. Solutions should enable banks to easily designate ADS and monitor data quality throughout the data life cycle. As important as providing these capabilities are, it is equally important to have a culture of accountability for data throughout the bank that starts at the C-suite level.





# Endnotes

- 1 Bank for International Settlements (BIS), [Progress in adopting the Principles for effective risk data aggregation and risk reporting](#), November 28, 2023.
- 2 Deloitte, [“It is time to reprioritize BCBS 239 compliance,”](#) September 2023; Deloitte, [“BCBS 239 Progress Report: How much has the needle moved and why is it still not enough?”](#) 2020; Deloitte, [“BIS assessment of BCBS 239 compliance,”](#) 2019.
- 3 BIS, [Progress in adopting the Principles for effective risk data aggregation and risk reporting](#).
- 4 Ibid.
- 5 Ibid.
- 6 Ibid.

# Contacts

**Richard Rosenthal**

Principal | Deloitte & Touche LLP

[rirosenthal@deloitte.com](mailto:rirosenthal@deloitte.com)

**Alexandre Brady**

Principal | Deloitte & Touche LLP

[alebrady@deloitte.com](mailto:alebrady@deloitte.com)

**Cory Liepold**

Principal | Deloitte & Touche LLP

[cliepold@deloitte.com](mailto:cliepold@deloitte.com)

**Dinesh Patel**

Principal | Deloitte & Touche LLP

[dineshpatel@deloitte.com](mailto:dineshpatel@deloitte.com)

**Simon Fisher**

Partner | Deloitte & Touche LLP

[sifisher@deloitte.com](mailto:sifisher@deloitte.com)

**Lakshmanan Balachander**

Principal | Deloitte & Touche LLP

[lbalachander@deloitte.com](mailto:lbalachander@deloitte.com)

**Ken Lamar**

Independent Senior Advisor to Deloitte &

Touche LLP

[kelamar@deloitte.com](mailto:kelamar@deloitte.com)

**Deloitte Center for Regulatory Strategy****Irena Gecas-McCarthy**

FSI Director, Deloitte Center for Regulatory  
Strategy, US

Principal | Deloitte & Touche LLP

[igecasmccarthy@deloitte.com](mailto:igecasmccarthy@deloitte.com)

**Kyle Cooke**

Manager | Deloitte Services LP

[kycooke@deloitte.com](mailto:kycooke@deloitte.com)

**Aaron Salerno**

Manager | Deloitte Services LP

[asalerno@deloitte.com](mailto:asalerno@deloitte.com)

# Center for Regulatory Strategy US

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