

# The New Basel Capital Accord, Basel II - A Business Intelligence Perspective

A Whitepaper Prepared By Michèle McCormac, Managing Director, Adastra Corporation, In Conjunction with MicroStrategy Incorporated

The New Basel Capital Accord, also known as Basel II, has sparked on-going discussion in the global financial institution sector on risk management, with volumes published on the formulae and risk modeling approaches that will be utilized to determine portfolio risk segments, operational risk levels, and the associated required capital allocation.

This paper summarizes highlights of the accord and addresses what each bank can do now to prepare for compliance with Basel II in light of known reporting, analysis, and disclosure requirements.

## What Is the New Basel Capital Accord (Basel II)?

The Basel II accord is a document that outlines the minimum capital requirements to which all large, internationally active banks in the G10 countries must adhere. It is published under the auspices of the Bank for International Settlements (BIS), specifically the Basel Committee on Banking Supervision, and is intended to be adopted in all of the G10 jurisdictions. It is also expected that many of the principles of the accord may also be adopted for internationally active banks in other jurisdictions, outside of the G10. The first draft of the accord was published for review and commentary in 1999 and the most recent version was resubmitted for comments and input in April 2003.<sup>1</sup> At this time, the BIS hopes to finalize the accord by the middle of 2004 with full implementation by the end of 2006.

The accord has three key pillars:

- **Pillar I** outlines the specific methodologies and approaches to determine **minimum capital requirements** based on **credit risk, market risk, and operational risk**;<sup>2</sup>
- **Pillar II** provides guidelines for **supervisory review** by local banking regulators;
- **Pillar III** outlines the BIS perspective on **market discipline**, with particular emphasis on core disclosures that participating banks will be required to provide to the market as part of the reinforcement of safety and soundness within the banking industry.

## What Is the Link Between Basel II and Information Technology?

Banks are quickly identifying that Basel II requirements for product portfolio risk segmentation and operational risk data management will require them to capture and manage extensive instrument, account level and operational risk event information across all business lines. Banks that have already invested in data warehouses and business intelligence (BI) solutions should be able to leverage what has already been built to provide the foundation for delivering Basel II compliance.

Basel II requirements are, in most cases, likely to require additional data capture, new data models, enhanced data quality, and new reporting structures. There is also a component of the accord that prescribes an intent to ensure that banks are utilizing the same data for financial reporting, market disclosure, and internal day-to-day management. This would require linkages to be built between the financial reporting structures and the Basel II reporting environments. Likewise, banks will benefit from consolidating reporting and analysis applications on a unified BI architecture.

---

<sup>1</sup> Refer to <http://www.bis.org/bcbs/publ.htm> for all official publications of the Basel II accord and related documents.

<sup>2</sup> Market risk capital allocation methodologies were covered in the first Basel Capital Accord, which was published in 1988 and adopted in 1992. The Basel II accord does not provide for any significant changes to the market risk capital allocations for large international banks.

## What Do Banks Need to Do Now to Meet the 2006 Target for Basel II Compliance?

While the new accord requirements have not yet been completely finalized, there is sufficient information available for most large, internationally active banks to initiate Basel II projects, and many have been developing plans and strategies for some time.

- **In the US**, banking regulators have agreed that the new accord will only be applied to a limited number of large, internationally active banks. It is anticipated that this would apply to approximately six to ten banks in the US. Additionally, the US regulators have indicated that any other bank that meets the qualifying internal and control infrastructure standards for risk management and reporting can apply to utilize Basel II's advanced approach for capital calculation. It is expected that another six to ten US based institutions will choose this qualification for competitive purposes.
- **In Canada**, it is expected that the five to six large banking organizations will qualify for Basel II compliance.
- **In Europe**, local regulators are developing domestic approaches, with input from the European Commission. The current view is that Basel II will be applied to most European based banking institutions, with coverage of some elements also being applied to insurance and investment subsidiaries.

From an operational perspective, there are many areas where BI service providers can provide proactive assistance to their banking clients including:

- Supporting development of the gap analysis and operational solutions to assess the additional data requirements that are not currently met through existing data warehouses;
- Identifying internal and external options for data capture;
- Determining and developing approaches to support the incremental data quality, data auditability, and data storage that will be required to meet Basel II compliance standards;
- Working with clients and local banking regulators to develop standardized reporting requirements;
- Developing checklists of reconciliation requirements (Basel II data to general ledger, Basel II data to financial reporting, etc);
- Ensuring the Basel II environment is integrated into the overall data warehousing architecture;
- Working with client groups to develop potential extraction, transformation, and loading (ETL) solutions where historic information may not be available for risk model testing, etc.

From a value added perspective, leveraging current data warehouses and consolidating reporting and analysis applications on a unified BI architecture as the foundation for Basel II compliance, will provide impacted banks with an ability to:

- Maximize previous data management investments; and
- Ensure they are moving towards the objective of providing consistent management information across the enterprise.

The focus on data integrity, and the need to provide regulatory and market transparency in conjunction with Basel II compliance will raise the data quality standard for all of the organization's BI solutions. Finally, the organization will leverage existing BI investments, provided that the BI architecture scales to large volumes of data, accommodates large user bases, and provides for distributed access to the complete range of reports and analysis that will be required by Risk Management Groups, Finance, Business Line Management, Senior Management, Audit and Local Regulators.

## Summary

While there are many operational details yet to be finalized before Basel II is considered to be a completed agreement, the key elements are sufficiently clear to initiate development of the business plan and associated project plan. This would include sizing of the activities to develop the functional data management environment (including a full data gap analysis) and establishing the key data reconciliation and control processes. While external reporting requirements may not yet be completed, internal stakeholders can initiate development of their reporting requirements and the project teams can develop options to ensure full integration of reporting across the corporate entity. Options can be developed that will support the data audit requirements that are likely to be specified by local regulators. Work can also be undertaken to establish viable options for capturing or creating default values where historic modeling information may be unavailable.

In closing, while the range of unknowns may appear to provide a high risk backdrop to moving forward and developing and implementing Basel II solutions, the risk of not starting now is even greater. For those involved in BI service industry, it is imperative that we work with our clients now to ensure earlier BI investments are leveraged and integrated into the Basel II compliance structure. Not only will this reduce the cost of compliance, but it will align with the strategic objective of ensuring the organization is using accurate and standardized data for all decision support, management information, and performance assessment processes.

---

## About the Author

*Michèle McCormac* is the Managing Director, New Basel Capital Accord Practice at Adastra Corporation. She has over 20 years experience in the financial institution sector and has been involved with a number of successful, large business intelligence initiatives. Her practice area has developed operational project plans, gap analysis templates, data quality and reconciliation tools, implementation options and control and governance plans for financial institutions which are moving towards Basel II compliance.

## Disclaimer

©2003 Adastra Corporation. This document is the intellectual property of Adastra Corporation and is wholly owned by the company, all rights reserved. No part of this document may be used, copied, distributed, transmitted, publicly displayed, publicly performed, reproduced, edited, translated, or reformatted, without prior written consent from Adastra. The information, documentation, data, logos, trademarks, artwork, text, pictures, and other materials contained within this document are owned by Adastra, and are protected by copyright and trademark laws and international treaties, and may also be the subject of other intellectual property rights of Adastra Corporation. The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

