

CDOR transition – Impact assessment checklist

Introduction

This document is intended as a starting point for firms' as they prepare for the cessation of the Canadian Dollar Offered Rate (CDOR). The document may not be exhaustive for your individual firm but provides guidance on the key points to consider when assessing the impact to your firm of the cessation of the rate and the replacement with Alternative Reference Rates (ARRs).

Important disclosures about the checklist

- This document leverages the ARRC framework with minor adaptations for the Canadian market and any additional details based on experience of LIBOR transition.¹
- It is provided for informational purposes only.
- It does not constitute legal, accounting, tax or financial advice and is not exhaustive.
- It does not define regulatory or supervisory expectations, and whether and to what extent any market participant makes use of it is voluntary.
- It identifies risks and mitigations for asset managers and asset owners. Specific suggestions may not be applicable to all firms. Each market participant should decide for itself whether and to what extent to use the checklist in preparing for the transition from CDOR.
- It focuses on the issues facing firms that manage CDOR linked assets or exposures but does not address non-CDOR exposures.
- While it might be helpful for other types of users, this checklist is focused on asset managers and asset owners.

Summary - Practical implementation checklist

The CDOR transition is a significant event impacting a broad set of financial products and market segments. Given how deeply embedded CDOR is in the financial ecosystem, it is important to plan, mobilize, and execute a program that encompasses the entirety of a firm's potential exposures. This checklist was developed to provide considerations for potentially impacted firms.

- 1. **Establish Program Governance**: Implement a robust governance framework with accountable senior executives to oversee the delivery and coordination of the firm's enterprise wide CDOR transition program.
- 2. **Develop Transition Management Program:** Establish an enterprise-wide program across functions and businesses to evaluate and mitigate the risks associated with transition with specific considerations for unique product and client exposures.
- 3. **Implement Communication Strategy:** Develop and implement an enterprise-wide strategy with clear objectives to proactively engage, communicate, and increase levels of education with impacted internal and external stakeholders.

¹ Adapted for Canadian market from ARRC working group: https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2020/ARRC Buy Side Checklist.pdf



- 4. **Identify and Validate Exposure:** Quantify and develop a flexible approach to monitor CDOR-linked assets and exposures through the transition period. Obtain or develop capabilities to value CORRA-based products where transitioning to using those products. Ensure that the link between contractual exposure to CDOR and transaction level exposure is made and can be tracked.
- 5. **Develop Product and Portfolio Strategy:** Develop a strategy for redesigning or transitioning the existing portfolio of CDOR products, where needed, including consideration of using new products based on CORRA. For portfolios tied to CDOR as a benchmark or investment guideline, understand the implications for the forward portfolio and transition where appropriate.
- 6. **Risk Management:** Identify, measure, monitor and control financial and non-financial risks of transition, establishing processes and oversight routines for ongoing management. Determine whether any model changes would require regulatory approval.
- 7. **Assess Contractual Remediation Impact and Design Plan:** Understand the financial, customer, and legal impacts resulting from transitioning from CDOR via fallbacks, and plan mechanisms for implementing those fallback provisions.
- 8. **Develop Operational and Technology Readiness Plan:** Develop a plan to address the operating model, data and technology implications required as a result of CDOR transition, including with respect to vendors.
- 9. **Accounting and Reporting:** Determine accounting, reporting, and NAV considerations.
- 10. **Taxation and Regulation:** Determine tax and regulatory considerations. Connect with appropriate industry and regulatory bodies to ensure alignment with developments in these areas.



Detailed practical implementation checklist for CORRA adoption and CDOR transition

1. Program Governance

Goals: Implement a robust governance framework with accountable senior executives to oversee the delivery and coordination of the firm's enterprise wide CDOR transition program.

- Stakeholders list with RACI matrix
- Project team identified/resource affected
- Project/program Steering Committee created, and sessions scheduled
- 1.1. Appoint Executive Sponsor(s) and accountable Senior Executive(s) to coordinate and oversee multi-year CDOR transition program activities across impacted business lines and functions.
- 1.2. Identify accountable business sponsors, project/workstream leads, and supporting project management staff to execute transition program activities.
- 1.3. Determine the approach for rollout of program governance and management framework to all impacted business lines and enterprise functions. Example: forums, presentations, trainings.
- 1.4. Mobilize a Steering Committee chaired by the Executive Sponsor(s), with appropriate senior leadership representation across all business lines and enterprise functions. Mobilize workstream leaders accountable to the Steering Committee.
- 1.5. Define periodic communications and reporting with senior management, Board of Directors, Executive Management Committee(s), and appropriate sub-committees.
- 1.6. Define and prioritize program objectives, success criteria and internal milestones. Review the transition milestones published by the CARR and other known industry milestones, such as those published by vendors, custodians, and central clearing counterparties (CCPs).



2. Transition program mobilization

Goals: Establish an enterprise-wide program across functions and businesses to evaluate and mitigate the risks associated with the transition from CDOR, with specific considerations for unique product and client exposures.

- List of impacted business lines and financial products
- List of impacted processes and actors involved (ops, accounting, IT, etc.)
- List of impacted systems and IT teams
- Project team composition and staffing completed
- Project budget assessed and assigned
- Project management framework in place (governance meetings defined and frequency determined)
- Project scope defined and broken down
- Project Plan developed
- Communications and training plan developed
- Compliance/Legal team expert assigned to industry news monitoring
- 2.1. Conduct a comprehensive impact assessment across key areas including financial products, contracts, business processes (including systems, models, and regulatory reporting), benchmarks, portfolio guidelines, and fee calculations.
- 2.2. Develop an implementation roadmap with specific considerations outlined for impacted businesses, products, and enterprise functions. The roadmap should identify interdependencies.
- 2.3. Request and confirm resource and budget to deliver the activities in the implementation roadmap.
- 2.4. Establish a project management framework to monitor the progress of the implementation plan, and to identify and escalate risks.
- 2.5. Proactively monitor and adjust the implementation plan based on evolving and/or shifting external industry and/or regulatory developments. Communicate the importance of being aware of restrictions on CDOR trading and being ready to trade CORRA-based products.



3. Communication strategy

Goals: Develop and implement an enterprise-wide strategy with objectives to proactively engage, communicate, and increase levels of education with impacted stakeholders including senior management, the corporate Board, or fund Board(s) as needed.

- List of impacted groups (vendors, CCPs, market data providers, internal and external)
- Training materials
- Internal communication plan
- External communication plan
- Inventory of market data providers pricing/model changes key milestones
- Timeline documented and aligned with CCPs transition(s) for cleared derivatives
- Client education materials
- 3.1. Define the key objectives and priorities of the external communication plan; align with internal communication efforts.
- 3.2. Confirm internal and external impacted groups (clients, regulators, employees, trade associations, the CARR, and other working groups), prioritizing and segmenting as appropriate.
- 3.3. Confirm communication channels/sources to be used. Establish specific communication workstreams as appropriate, such as for regulators or clients.
- 3.4. Develop materials for internal and external stakeholders (e.g., formal training material and educational videos, newsletters, client disclosures).
- 3.5. Educate internal stakeholders (including business leadership) on CDOR transition program objectives, industry developments and relevant business impacts.
- 3.6. Provide clear and consistent messaging on transition impacts to both internal and external stakeholders identified in 3.2 above, including clients, investors, shareholders, and regulators. Collaborate as needed.
- 3.7. Review sales documents, performance benchmarks and regulatory reporting to identify and replace CDOR references.
- 3.8. Work to understand key relationships and vendors that may have varying timelines and any potential impact to the implementation roadmap. As needed, work closely with external relationships and vendors to proactively manage legal, financial, operational, conduct, and reputational risks.



4. Exposure management

Goals: Quantify and develop a flexible approach to monitor CDOR-linked product exposure through the transition period.

- Exposure report containing # of contracts, gross and net exposure by type (Assets, Liability, Derivatives) and detail of financial products (securities, interest-rate swaps, cross-currency swaps, Loans, etc.)
- Identify linkage between contract and transaction level exposure and determine method of tracking
- New CORRA product implementation checklist (approvals, testing, training, etc.)
- Pricing curves required with changes identified
- 4.1. Conduct a product and asset and liability inventory exposure analysis to determine and categorize CDOR-linked exposures (by asset class, tenor, and maturity) including off-balance sheet exposures such as lines of credit, derivatives, as well as asset types such as loans, insurance contracts, and cash deposit accounts. The exposure monitoring process shall include reports from all systems containing transactions/products/assets referencing floating rates. Measuring the number of contracts, positions and product types is useful to assess the level of impact based on volume and products complexity. Data analysis is required to gain a comprehensive understanding of the firm's exposure to CDOR-linked products.
- 4.2. Analyze exposure data to prepare for issuing and/or investing in non-CDOR-linked products.
- Requirement gathering for section 5:
 - a. Quantify exposures for CDOR products maturing beyond 2023/4 including best assessment of future exposures.
 - b. For all existing products linked to CDOR, identify alternative products available for ongoing investments in the future where needed.
 - c. Evaluate the impact of CDOR-linked securities on investment performance and on associated investment fees.
 - d. For all products identified as alternatives to CDOR-linked products, establish internal criteria (such as liquidity, outstanding volume, and system readiness) for suitable replacement of existing portfolios of CDOR-linked products.
 - e. Establish cut-off dates for avoiding continued issuance or investment in CDOR, to the extent permitted by clients or within the control of the investment advisor.



5. Portfolio and product strategy

Goals: Develop a strategy for redesigning (or transitioning) the existing portfolio of CDOR products where needed, including creating or using new products based on CORRA which support new business on CORRA products (Term CORRA and O/N compound CORRA).

- Inventory of proposed products on CORRA and Term CORRA
 - Loans
 - o Securities: FRN, BDN, etc.
 - Derivatives: Interest rate swaps, cross-currency swaps, swaptions, caps-floors, futures, options, etc.
- List of operational risks identified for CORRA-linked funds/products
- List of approval requirements for CORRA-linked products
- Industry non-CDOR activities reviewed and documented
- Align with CARR milestone dates for replacing new CDOR business with CORRA
 - o CORRA 1-month futures launch January 23, 2023
 - Term CORRA launch end of Q3 2023 (expected)
 - 'CORRA First' initiative

 January 9, 2023 -Switch interdealer trading from CDOR to CORRA for Linear Derivatives
 - 'CORRA First' March 27, 2023- Switch interdealer trading from CDOR to CORRA for Cross-Currency Swaps
 - 'CORRA First' March 27, 2023- Switch interdealer trading from CDOR to CORRA for Non-Linear Derivatives
 - Cease new use of CDOR in all Derivatives (OTC, ETD) and Securities-June 30, 2023, with limited exceptions permitted for derivatives that hedge or reduce CDOR exposure
 - Initiate new loans in-arrears CORRA or Term CORRA (when available) by Q3
 2023
- Term CORRA-linked loan trading enabled
- BA markets exposure replacement follow CARR white paper, align with industry guidance
- BA rates exposure monitoring (loans, BA assets, BA issuance only for banks)
- List of Loans referencing BA rates
- List of BA assets
- Provide requirements to Ops and infrastructure workstream for implementation link with section 8
- 5.1. Define business strategy and timeline for reducing the reliance on CDOR for fund / product usage. Define specific milestone dates.
- 5.2. Define timelines for using new CORRA-linked or alternate non-CDOR products and benchmarks, considering alignment of hedged product liquidity.



- 5.3. Define risk and new fund/investment approval requirements for CORRA-linked funds/products/benchmarks.
- 5.4. Understand as appropriate what others in the industry are doing for non-CDOR funds/products/benchmarks.



6. Risk management, Valuation and Models

Goals: Identify, measure, monitor, and control financial and non-financial risks of transition, and establish processes and oversight routines for ongoing management.

- List of transition risks across the firm and mitigating actions
- Monitoring process of material risks Market risk activities
- Forum in place for material risks communication to management
- CDOR-linked risk models updated for CORRA
- Control tasks assigned to Internal and External Audit teams.
- Reach-out to custodians and vendors for CDOR transition support
- 6.1. Define the key transition risks resulting from CDOR discontinuation (including market readiness, business impact, documentation requirements, financial and legal) and assess across the firm's risk framework.
- 6.2. Establish processes to measure and monitor the identified material risks under baseline and alternative transition scenarios (e.g., market adoption, product and currency liquidity, current and stress market conditions, internal and external system readiness, vendor preparedness, regulatory consequences, performance impacts, hedge mismatch, client concerns).
- 6.3. Identify mitigating actions to address identified transition risks with focus on fund, product, hedge effectiveness, operational, client engagement and conduct.
- 6.4. Establish processes for updating business risk management routines.
- 6.5. Periodically report the identified material risks to management, including project funding, status, and the path to a low/no-risk assessment.
- 6.6. Assess impact to CDOR-linked risk models and develop processes for updating including guidelines for validation requirements. *Requirements/specs to provide for section 8*
- 6.7. Establish role of key control functions such as Internal and External Audit.
- 6.8. Solicit assurances from custodians and vendors that their systems are robust to CDOR cessation.
- 6.9. Understand alternative benchmark data needs for valuation, pricing system, and model updates. *Requirement gathering for section 8.3 Market data*
- 6.10. Ensure that valuation models using CDOR-based curves are able to handle new curves using new indices, including CORRA / alternative rates. Requirement gathering for pricing curves/models updates to be implemented by section 8 Pricing systems
- 6.11. Develop a repeatable process for evaluating and reporting what will be post-2024 exposures for trend analysis, sizing of effort, and management. Include scenarios for assets or liabilities that fall back to historical terms. Market Risk group transition testing activities (Scenario's analysis, VaR & UMR impacts, valuation impacts, etc).



6.12. Construct / obtain access to a CORRA interest rate curve to be used for pricing CORRA-based products, calculating interest on CAD collateral, and discounting CAD-denominated derivatives. Firms are advised to confirm vendor system readiness for pricing and risk analytics, as appropriate. – *Pricing curves construction update (data source, systems updates) – Gather and validate business requirements for implementation in section 8.*



7. Contractual remediation

Goals: Understand the financial, customer, and legal impacts resulting from transitioning from CDOR to CORRA or other specified rate for contracts that may move to their contractual fallback.

- Contract Inventory
- Regular contract inventory tracking and reporting
- Contingency plans for those contracts without a fallback strategy
- 7.1. Review existing CDOR-related contracts, service level agreements and benchmarks, including but not limited to offering memorandums, fund prospectuses, investment management agreements or similar documents, International Swaps and Derivatives Association (ISDA) agreements, insurance policies, and credit agreements, to determine the presence and financial impact of fallbacks. This should include documenting the triggers, changes to terms, financial impact, customer impact, and potential legal interpretations. The review should assemble relevant information into a vehicle for capturing contractual data, and may entail the use of imaging or automation, depending on volumes. Please note that this information may come from third parties such as product administrators, trustees, or vendors.
- 7.2. Using this review, project the impact if the fallbacks are triggered and use this to inform future steps and priorities. This is a combination of expected financial, legal, client/customer, and operational impact.
- 7.3. Develop tools to track remediation progress.
- 7.4. For all new contracts that reference CDOR, incorporate robust fallbacks where possible, such as the recommended fallback language developed by CARR, ISDA, and other industry working groups.
- 7.5. For existing contracts and benchmarks that reference CDOR, define the approach and prioritization strategy for renegotiating / repapering where needed in order to include enhanced fallbacks or amendments simplifying transition. The approach should consider the work required to remediate in advance and to realize economies of scale. Following industry standards and guidance, begin either (a) amending contracts to incorporate enhanced fallback language, or (b) determining if contracts can be renegotiated or closed out prior to *June 28, 2024*.
- 7.6. For securities or contracts with fallback language that is either inadequate or nonexistent, begin efforts to negotiate or otherwise establish a process through which sufficient fallback language can be determined. These efforts may involve bilateral negotiations with counterparties or issuers, or other solutions as they become available.
- 7.7. Assuming a material number of contracts cannot or need not be remediated, determine size and program needed to understand, value, and implement fallback language, and begin



planning in addition to contingency plans for those which cannot be remediated. Note this includes customer notification processes as legally required and appropriate to the business.



8. Operational and technology readiness

Goals: Develop a plan to address the operating model, pricing models, data, benchmark, and technology implications to enable a successful transition.

- Comprehensive list of all impacted systems from all business sectors
- Transition process by asset class (cleared derivatives, bilateral, loans, etc.)
- Backlog of all requirements and deliverables by teams and systems
- Transition feature implemented in impacted system for legacy trades
- Testing completed with CCP for cleared derivatives conversion(s)
- Alignment with CCP for discounting and pricing of cleared derivatives trades
- Testing completed for every new product referencing CORRA or Term CORRA
- 8.1. Assess where CDOR is used front-to-back across all affected business processes and operations. Different business lines will have different types of usage and need different levels of prioritization. Identify transition process by product for existing CDOR transactions/positions.
- 8.2. For each business line, and for core functions (such as Finance, Treasury, Portfolio Management, and Investment Accounting), inventory technology, operational processes, enduser computing and modeling tools to understand specifically where they are using CDOR.
- 8.3. Develop a process to incorporate new market data sources and related new calculation methodologies into firm systems, coordinating with vendors as appropriate and needed. As new products using new rates emerge it will be essential to be consistent with industry best practices. Market participants, however, should use readily available alternative rates rather than wait for the development of other markets or benchmarks.
- 8.4. Define requirements and implement capabilities to invest in CORRA products that will be the replacements for CDOR-linked products. Determine operations and technology changes required to support new products, including market data, model changes, operational changes, interaction with third parties.
- 8.5. Support the technology needs of fallback processing, both for the transition itself and for ongoing processing (refer to item 7 for contract remediation).
- 8.6. Prepare internal systems and validate external system readiness (e.g., custodial and pricing services) for processing corporate actions and other bulk contract amendments across invested assets and hedges.
- 8.7. Build testing plan(s) for new product capabilities, models / model validation and the operationalization of fallback processing. Ensure the readiness plan will encompass oversight of the readiness state of material operational and technology vendors.
- 8.8. Begin to plan for internal testing, third party validation and readiness for transition. Prepare for potential industry-wide testing.



- 8.9. Conduct table-top exercises with internal stakeholders and/or key vendors to cover the transition, ongoing processing, and contingency planning. The exercises should consider factors such as volume and processing capacity for both successfully and unsuccessfully converted CDOR-products.
- 8.10. Collaborate where appropriate and as needed with industry associations to test the transition across asset classes validating inter-company inter-operability; for example, work with vendors and counterparties to potentially test transitional corporate actions and ongoing alternate-rate processing via "dummy" securities.
- 8.11. Ensure that documentation around key controls is updated.



9. Accounting and Reporting, including Investment and Client Accounting

Goals: Determine the technical accounting considerations along with related reporting considerations, including fund performance and customer statements.

- 9.1. Identify CDOR-based benchmarks, develop alternatives, and build those alternatives into performance contracts.
- 9.2. Identify and understand impacts to hedge accounting standards and processes based on current guidance (e.g., hedge de-designation, ineffectiveness).
- 9.3. Identify and understand impacts to accounting standards and processes for cash products, tracking accounting developments as finalized.
- 9.4. Identify impact on fair value accounting and impairment to P&L, credit allowances, and changes to the fair value hierarchy.
- 9.5. Identify impact on current state finance systems, operations, reporting and customer statements, and assess control environment for impacted processes.
- 9.6. Determine transfer pricing implications of a multi-rate environment on intercompany funding arrangements and derivatives.
- 9.7. Determine accounting implications of fall-back conversions on the NAVs of affected share-classes, as well as of an ongoing multi-rate environment.
- 9.8. Update financial disclosures.
- 9.9. Remediate systems and processes as necessary. Test and implement accounting and reporting changes accordingly.



10. Taxation and Regulation

Goals: Determine the applicable tax and regulatory considerations along with related reporting considerations.

- 10.1. Identify and understand tax impact of hedge accounting based on current guidance. Tax documentation may need to be updated to ensure hedging continues to be effective.
- 10.2. Determine tax accounting and compliance implications including, but not limited to, (a) whether the fallback transition is a taxable event, and (b) implications of taxable gain / loss to debt holders, swap counterparties, general account assets, and investment clients.
- 10.3. Determine impact of tax on regulatory capital. Forecast potential impact of deferred tax assets on Common Equity Tier 1 and Risk Weighted Assets.
- 10.4. Determine tax reporting requirements.
- 10.5. Identify if regulations such as those covering public companies or other types or regulated entities would require disclosure of the impact of the issue in public filings or in other disclosures—and if so, begin process of making such disclosures.
- 10.6. Determine impact on operations and effectiveness of liquidity risk management programs.