Canada Deposit Insurance Corporation
Société d'assurance-dépôts du Canada

CDIC Resolution Plan Guidance for Domestic Systemically Important Banks

July 2024

Canada

Contents

Introduction 4
Guidance 5
- Principles 5
- Assumptions 5

Module 1: Resolution Profile & Strategy 7
- 1.1 Resolution Profile 7
- 1.2 Resolution Strategy 8

Module 2: Financial Feasibility Analysis 14
- 2.1 Introduction 14
- 2.2 Assumptions: Resolution Scenario Base Case 14
- 2.3 Requirements: Resolution Scenario Base Case 16
- 2.4 Requirements: Sensitivity Analysis 20

Module 3: Operational Plan 22
- 3.1 Crisis Preparedness Capabilities 23
- 3.2 Bail-In Execution 25
- 3.3 Valuation Capabilities in Resolution 31
- 3.4 Capabilities to Support Recapitalization and Funding Actions 36
- 3.5 Operational Continuity of Critical Shared Services 38
- 3.6 Continuity of Access to FMIs 39
- 3.7 Trading Book Wind-Down Plan 43
- 3.8 Execution of Restructuring Options 50
- 3.9 Key Regulators and Actions to Satisfy Regulatory Requirements 51

Module 4: Resolution Plan Testing 53
- 4.1 Introduction 53
- 4.2 Requirements: Testing Program 53
- 4.3 Requirements: Joint Testing 55

Module 5: Impediments and Work Plan 56
- 5.1 Impediments 56
- 5.2 Work Plan 57

Appendix A: Definitions 58
Appendix B: Point of Entry 64

Appendix C: Scenario Reporting Schedules....66
Appendix D: Self-Assessment of Governance....69
Appendix E: Self-Assessment of Resourcing....71
Appendix F: Self-Assessment of Communications....73
Appendix G: Valuation Challenges in Resolution....75
Appendix H: Self-Assessment of Valuation Readiness....76
Appendix I: Self-Assessment of Liquidity and Funding....80
Appendix J: Self-Assessment of Operational Continuity....83
Appendix K: Remediation of Internal and External Contracts....88
Appendix L: FMI Contingency Plan Templates....89
Appendix M: Trading Book Wind-Down Template....91
Appendix N: Examples of Wind-Down Strategies....94
Appendix O: Remediation of EFCs....95
Appendix P: Definitions of Test Types....97
Appendix Q: Testing Inventory....98
Appendix R: Work Plan Template....102
Appendix S: Recommended Resolution Plan Table of Contents....103

Introduction

The resolution of a domestic systemically important bank (D-SIB, bank) in Canada, while a remote possibility, would be an unprecedented, and high consequence event. An important component of the Canada Deposit Insurance Corporation's (CDIC, the Corporation) preparedness for such an event is the development and maintenance of resolution plans for each of the banks.[1] CDIC considers it a priority to ensure that banks undertake the necessary work to create resolution plans, demonstrate feasibility, and address any impediments to ensuring their failure can be dealt with in an orderly fashion. These plans will serve as a tool to illustrate how each bank can be resolved through stabilization and restructuring processes without giving rise to significant economic disruption or exposing taxpayers and/or CDIC to loss.

Following the 2008 financial crisis, the Financial Stability Board (FSB) set out the responsibilities and powers that countries should have in place to resolve large complex banks. These were endorsed by Canada with other G-20 countries and are known as the *Key Attributes for Effective Resolution Regimes for Financial Institutions*. The objective of the *Key Attributes* is to allow authorities to resolve large complex banks in a manner that protects eligible deposits, maintains the flow of critical financial services, protects the economy, and minimizes risk to taxpayers.

Consistent with the G20 financial sector reform agenda aimed at addressing the factors that contributed to the 2008 global financial crisis, Canada has taken a number of steps to strengthen the banking sector and reduce the risk associated with bank failures. In 2017 the Federal Government made amendments to the *Canada Deposit Insurance Corporation Act* (CDIC Act)[2] to reflect CDIC's by-law making authority[3] and to designate CDIC as resolution authority.[4] *CDIC Resolution Planning By-law* (By-law) came into force in May 2019.[5] The By-law establishes a framework for the development, submission, and maintenance of resolution plans by the D-SIBs, and a process for highlighting and addressing deficiencies in those plans.

This guidance document represents the blueprint for a comprehensive bank-authored resolution plan and documents CDIC's expectations and requirements, in accordance with the By-law. Amendments to this guidance document, in the form of technical notes, may transpire as work evolves and legislative developments occur.

[1] Note that references to "bank" throughout this document are only in relation to the banks that are subject to the By-law (i.e., the D-SIBs) and refer to the "bank group" as defined in the By-law, s1.
[2] *CDIC Act*
[3] *CDIC Act*, paragraph 11(2)(e).
[4] *CDIC Act*, paragraph 7(d).
[5] *Canada Deposit Insurance Corporation Resolution Planning By-law*

Guidance

CDIC has set out high-level guiding principles and assumptions to frame the bank's analysis and plan development:

Principles

The following principles are intended to guide the overall tone and development of the plan.

- **Accountable:** The bank's Board of Directors is responsible for ensuring that a credible and feasible[6] resolution plan is in place and can be operationally implemented.
- **Strategic:** Strategically focused and reflects senior management's conclusions necessary to implement the strategy given the bank's unique legal, financial, and operational structure.
- **Comprehensive:** Applied to the comprehensive group and takes into account the characteristics of the bank including size, complexity, and geographic footprint.
- **Implementable:** Demonstrates how it can be practically implemented including the extent to which crisis management capabilities have been or can be tested.
- **Current:** Reflects the current state of the bank as well as the legal and regulatory framework in which it operates.

Assumptions

The following assumptions underpin the plan development.

- **The bank has failed, or is likely to fail, and resolution is necessary:**
  - Canadian D-SIB peers are experiencing stress but are able to demonstrate that the stress can be mitigated through their initial set of short-term recovery actions.
  - A combination of macroeconomic, market, and idiosyncratic events has triggered the implementation of the bank's recovery plan, but those actions have proved ineffective due to the size and speed of the stress. Limited recovery actions have been implemented. The bank has been more adversely affected than its D-SIB peers and meets the conditions for resolution.
  - The point of non-viability has been reached due to the inability of one or more material legal entities (MLE)[7] to meet capital, liquidity, or licensing requirements.
  - The Superintendent of Financial Institutions forms an opinion that the D-SIB (the parent bank) is no longer viable or about to become non-viable, where viability cannot be restored through the exercise of the Superintendent's powers at which point he/she informs the CDIC Board. A Governor-in-Council (GIC) order is made authorizing CDIC to take control or ownership of the failed member (resolution entity) after the close of business, followed by an announcement of the resolution strategy.

[6] For definition, please refer to *Appendix A*.
[7] For definition, please refer to *Appendix A*.

If applicable, other domestic and foreign authorities apply their powers to the other resolution entities[8] as envisaged in the resolution strategy.

- **Rational actors:**
  - All stakeholders would act in accordance with these circumstances in their own self-interest, within the constraints of applicable legal regimes and contractual terms upon which they contract with the bank.
  - The bank's regulators act in a manner consistent with their statutory objectives.
  - There is a general lack of market confidence including, but not limited to, the following:
    - The bank's credit ratings have been downgraded to non-investment grade.
    - The bank's stakeholders (i.e., deposit holders, investors, financial market infrastructures (FMIs),[9] counterparties) have lost confidence in its prospects to remain a going-concern and are taking actions to protect themselves and/or manage their exposures and risk.
    - The bank experiences a run on deposits in-line with the stressed condition of the bank.

It may be necessary for the bank to make additional assumptions to produce a credible resolution plan. Assumptions which are critical to the orderly resolution of the bank must be supported by well-founded legal, industry, market and/or historical justification. All necessary assumptions and the evidence for their justification should be explicitly recorded.

[8] For definition, please refer to *Appendix A*.
[9] For definition, please refer to *Appendix A*.

Module 1: Resolution Profile & Strategy

1.1 Resolution Profile

1.1.1 Introduction

The intent of the resolution profile is to provide a comprehensive view of the bank, identifying those material elements that, if not initially dealt with in resolution, could lead to a systemic disruption of financial stability. The profile should clearly and concisely describe the material elements of the bank, highlighting the critical functions[10] that it performs for the economy and financial system as well as the critical shared services that support those functions. Planning for the continuity of these functions and services upon entry to resolution should serve as the focus of the resolution strategy.

1.1.2 Requirements

Within the resolution strategy, the bank will be required to develop a set of actions to resolve the material elements of the bank. Given that resolution authorities apply their tools/powers at the legal entity level, the profile should provide a legal entity view of where these critical pieces of the bank are located. As a first step in the identification process, the bank will need to form a view of its critical functions and shared services. The bank should reference the FSB *Guidance on Identification of Critical Functions and Critical Shared Services* in identifying its critical functions and critical shared services.[11]

Critical functions

The bank should identify its critical functions and link them to the legal entities and lines of business that perform them.

This analysis should also identify critical functions identified by host jurisdictions, where relevant.

Critical shared services

The bank should identify its critical shared services mapping them to the critical functions they support and the material legal entities that perform them.

Material legal entities

The bank should identify its material legal entities (MLEs) consistent with the definition provided in Appendix A and provide a brief description for each. The description should provide both qualitative and quantitative information relevant to resolving the entity:

- Information to understand scope:
  - Jurisdiction of incorporation/operating jurisdiction,
  - Critical functions/critical shared services performed, and

[10] For definition, please refer to *Appendix A*.
[11] For definition, please refer to *Appendix A.*

  - Ownership percentage.

- Information to understand size:
  - Basic financial information (assets, income, expenses),
  - Capital/liability structure, and
  - Intra-group guarantees or other support mechanisms.

- Regulatory information:
  - Applicable protection schemes, supervisory, regulatory and resolution authorities, and
  - Relevant regulations and local regulatory/capital requirements.

Mapping of material legal entities to simplified corporate structure chart

The bank is asked to plot its MLEs on a simplified corporate structure. The simplified corporate structure will facilitate the analysis to be performed in *Resolution Strategy*.

Legal entity structure review

Legal entity structure reviews should form part of the bank's ongoing resolution plan maintenance, as the bank's structure changes over time. The bank should establish a process to ensure that material changes are identified and, if necessary, incorporated into the bank's resolution plan in a timely manner.

1.2 Resolution Strategy

1.2.1 Introduction

A feasible and effective resolution strategy should outline how CDIC and the host resolution authorities could apply their resolution powers to avoid the destabilizing impact that would result from multiple competing insolvency proceedings.

The bank's resolution strategy must be appropriate for the size, complexity, and geographic footprint of the bank. The strategy should link to the bank's resolution profile and outline the approach for resolving the material elements of the bank.

A feasible and effective resolution strategy will:

- Set the strategic objectives for dealing with critical functions and associated MLEs,
- Identify the preferred point(s) of entry into resolution in support of the strategic objectives,
- Identify resolution tools that would be used by home and host authorities,
- Outline stabilization options, and
- Outline options to restructure the bank to successfully exit from resolution.

Resolution timeline

For the purpose of developing and sequencing the resolution strategy, the bank should utilize the below illustrative a timeline and description of resolution periods.

Figure 1: Resolution timeline

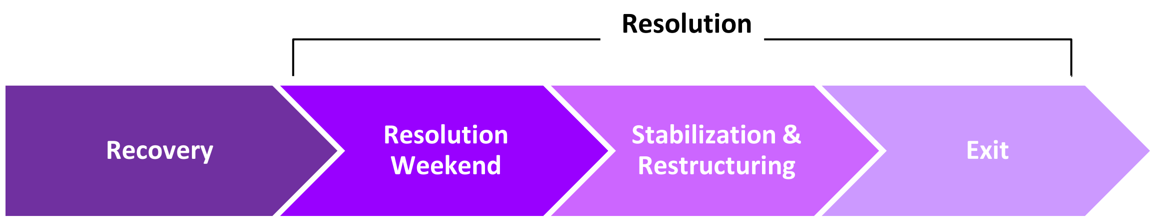


Figure 2: Description of the resolution periods

Resolution period	Description
Recovery	• The period prior to the point of non-viability is covered in the bank's recovery plan. The bank has commenced recovery actions, however, those actions are proving ineffective due to the size and speed of the stress. Resolution should be thought of as a natural progression from an unsuccessful attempt to recover.
Point of non-viability and resolution weekend	• The point of non-viability has been reached due to the inability of one or more MLEs to meet capital, liquidity or licensing requirements. • This is the period when the authorities execute the legal steps to place the failed D-SIB into resolution.
Stabilization	• Stabilization occurs during the initial phase of a resolution in which the bank is recapitalized and when funding is available to support operations in-line with the objectives of the resolution strategy. • The stabilization period is considered to be highly critical to the successful resolution of the bank and many of the necessary actions will be applicable regardless of the circumstances.
Restructuring	• The restructuring phase is the period in which the bank's business model is reconfigured with a view to developing a sustainable institution that can be returned to the private sector. This will involve the bank exiting from certain businesses, undertaking de-risking activities, and disposing of businesses / assets. • Actions taken during the restructuring period are substantially dependent on the circumstances facing the bank at the time of resolution.

1.2.2 Requirements

Strategic objectives for critical functions and material legal entities

The bank should set high-level objectives for critical functions and MLEs identified in the resolution profile. The objectives are intended to provide clarity into how those elements of the bank should be dealt with if the bank's ability to perform the function were to become impaired (due to severe financial distress) and/or MLEs were to become insolvent or deemed non-viable by their regulators.

The objectives should set a generalized course of action (both immediate and over the longer-term) relevant to the critical functions and the MLEs in which those functions reside. The objectives at the functional and entity level should fit with the overarching objective of minimizing disruption to the broader financial system.

The strategic objectives should also outline the key dependencies or preconditions that would need to be in place for the objective to be achieved. Where these dependencies are detailed in other parts of the plan (e.g., resolution profile or as part of the recovery plan) corresponding references should be made in the resolution plan. The bank should demonstrate the extent to which these legal, financial or operational preconditions can be satisfied as part of its feasibility analysis (*Module 2: Financial Feasibility Analysis*, and *Module 3: Operational Plan*). By identifying objectives and understanding what needs to be in place to achieve those objectives, the feasibility and implementation of the broader resolution plan can begin to be understood.

Figure 3: Illustrative example of critical function objectives

Critical Function	Immediate objective	Longer-term objective	Key dependencies
Retail Deposit Taking	• Maintain full customer access (branch, online, mobile, ATM network). • Sufficient liquidity maintained to meet expected outflows.	• Function is viewed as core to the bank and would not be easily separable as a discrete divestiture. • Longer-term preservation of value would be defined by customer retention and competitive pricing.	• Reliance on branch and technology infrastructure to maintain operations. • Access to emergency liquidity assistance. • Maintain access to critical FMIs.
Trading Portfolio, Fixed Income	• Achieve orderly wind-down and exit. • Parent bank would deploy capital and liquidity to keep broker-dealer(s) solvent. • Enact stay provisions to avoid early termination.	• Orderly wind-down of longer dated maturities. • Novation of trades or movement of client positions to an alternate provider.	• Sufficient loss absorbency to recapitalize broker-dealer(s) and avoid insolvency proceeding(s). • Access to liquidity to close out positions. • Maintain access to critical FMI. • Contractual language that supports stay on termination.

For MLEs, other than the parent bank, the objective should be stated in terms of whether:

i. The MLE, assuming it was deemed non-viable or insolvent, could enter the applicable winding-up or corporate insolvency regime without giving rise to broader systemic disruption or significant impairment to the parent bank, or

ii. Winding up/liquidation of the entity should be avoided, due to concerns as to the broader systemic consequences or risk of significant impairment to the parent bank.

Where option (ii) is viewed as the best course of action, the resolution plan should also describe how this could be accomplished through one or more of the following:

- Deployment of capital and financial resources from the parent bank or other source, and/or
- Direct intervention by the applicable resolution authority.

Figure 4: Illustrative example of material legal entity objectives

Entity	Objective	Rationale	Preconditions
ABC Securities Inc.	Deploy capital and funding from the parent bank to keep the entity operational.	Entering insolvency regime would have material destabilizing impact on brokerage clients and impede successful resolution of the parent bank.	• Sufficient loss absorbency/funding capacity at parent bank level to recapitalize and financially support subsidiary.
US DTI	Deploy capital and funding from the parent bank to keep the entity operational (or) direct intervention by the applicable host resolution authority.	Primary focus would be to deploy funds from the parent bank to protect its US franchise (or) the US resolution regime provides clear powers for resolution authority to intervene and resolve non-viable US operations.	• Sufficient loss absorbency at parent bank level to recapitalize subsidiaries. • Continued provision of services from Canada to support US operations.

Point(s) of entry into resolution

The bank is required to detail a point of entry approach that supports the objectives set for its critical functions and MLEs.

Determination of the point(s) of entry is important to establish prior to the bank's entry into resolution given that each approach involves different levels of coordination and decision points amongst CDIC and host resolution authorities. Once the bank reaches the point of non-viability, resolution authorities will begin to take action and apply their tools at the resolution entity level.

The bank's plan should indicate its rationale for why the selected point(s) of entry approach supports the bank's strategic objectives, including:

- A determination of resolution entity/entities and resolution group(s).[12] This involves assessing whether MLEs are to be resolved independently, as one whole group, or as multiple sub-groups. The bank should consider the level of operational and financial dependencies (both domestic and cross-jurisdictional) and other forms of inter-connectedness amongst critical functions and MLEs when deciding how the functions and entities will be resolved.
- Identification of the points of entry for resolution.[13]

Application of resolution tool(s)

The resolution strategy should identify the resolution tool(s) to be applied at the selected point(s) of entry, inclusive of all relevant domestic and foreign resolution regimes.

The bank's resolution plan should address the following points:

- The resolution regimes/tools applicable to each point of entry, including the associated resolution authorities,
- A narrative on the sequencing of actions where tools are applied by multiple resolution authorities,
- The impacts/risks to the execution of the resolution strategy if there is a disruption in the sequencing of resolution actions, and
- Impediments related to coordination/competing actions of various resolution authorities and the use of multiple resolution tools across the bank.

Stabilization options

The bank is required to identify and describe options necessary to recapitalize and fund the bank in resolution. The options may vary depending on the chosen resolution tool. The feasibility of the bank to execute these options should be demonstrated in the operational plan.

The bank's resolution plan should address the following points:

- Options for recapitalizing the bank,
- Whether potential impediments could constrain the flow of capital and liquidity between parent bank and subsidiary/subsidiaries,
- Potential private and public sources of funding in resolution, and
- Possible constraints to accessing those sources of funding.

---

[12] For definition, please refer to *Appendix A*.

[13] *Appendix B* provides an overview of the single point of entry (SPE) and multiple point of entry (MPE) approaches to resolution as provided by the FSB. Although *Appendix B* illustrates use of either an SPE or MPE approach, a combination of options that aligns with the bank's strategic objectives can also be discussed.

Restructuring options

This component of the resolution plan will assist in developing a restructuring strategy for the bank in resolution to support an exit from resolution and reduce its systemic risk when the bank is returned to the market as a viable business. In resolution, restructuring measures may be used to quickly generate liquidity and release capital to stabilize the bank's financial position, and to redeploy resources to support critical functions. The restructuring strategy will vary depending on the circumstances leading to failure, prevailing market conditions and results of the recovery actions and stabilization efforts, therefore, the bank's resolution plan should outline restructuring actions that provide optionality in a crisis.

The bank's resolution plan should address the following elements:

- Identify the scope of potential restructuring options across the bank's businesses, asset portfolios, and applicable entities. Restructuring options should be assessed for the entire bank, including any material legal entities and critical functions that would not be maintained and retained by the bank after the exit from resolution,
- For each restructuring option, define the method for restructuring (e.g., divestment via share or asset sale, spin off, winding down and de-risking, or other) and the impacted functions and entities,
- Specify potential variants of the restructuring option (e.g., how the business or asset sale could be structured) to respond to varying external conditions, and
- Estimate a high-level timeframe and a preferred sequence of the restructuring options.

As part of the ongoing resolution plan maintenance, the bank should review business lines, asset portfolios, and significant assets to identify components that could be restructured in resolution.

It is expected the proposed options will leverage the bank's recovery plan, however the bank must demonstrate that these restructuring options support the bank's resolution strategy and critical function/MLE objectives.

The feasibility of the bank to execute these actions should be demonstrated in the operational plan (*Module 3: Operational Plan*).

Module 2: Financial Feasibility Analysis

2.1 Introduction

Through resolution planning, CDIC seeks to understand the spectrum of measures that may be necessary to stabilize a failed D-SIB and the capital and liquidity needs of the bank to maintain financial stability in Canada.

The bank's ability to demonstrate the financial feasibility of executing its resolution strategy, including minimizing reliance on public sector financial assistance and ensuring that MLEs have access to sufficient loss absorbing capacity and liquidity, is a critical component of a credible resolution plan. In its resolution scenario analysis, the bank will need to model the potential resources needed to execute the resolution strategy under varying conditions.

The resolution scenario should consist of a base case and additional sensitivity analysis.

2.2 Assumptions: Resolution Scenario Base Case

This section provides general assumptions to guide the scenario. Additional assumptions used by the bank as part of the analysis should be explicitly identified in the submission. Unless otherwise indicated by CDIC, the bank should apply consistent assumptions in the current resolution plan as the prior resolution plan submission, if they were previously deemed adequate by CDIC.

The bank should ensure that all current regulatory requirements pertaining to capital and liquidity that are in force as of the time of the scenario as-of date are incorporated and reflected in the resolution scenario.

The resolution plan scenario contemplates a general period of macroeconomic stress with additional idiosyncratic events that lead to a general loss of confidence in the bank.

Recession period

- Systemic vulnerabilities in the Canadian financial system are increasing. The recession period should model a severe, plausible macroeconomic stress event which triggers a deterioration in macroeconomic and financial market fundamentals.
- While there is a flight to safety to large banks, the bank is an outlier due to unique market-perceived challenges. The bank should not assume positive inflows similar to what was experienced during the COVID-19 pandemic.
- The recession period modelled in the scenario should last approximately 11 months.

Resolution runway

- Idiosyncratic shock(s) layered on the weakened macroeconomic environment have led to a general lack of market confidence in the failing bank, including but not limited to, the following consequences:
  - The bank's credit ratings have been subject to a series of downgrades,

- The bank's stakeholders (i.e. deposit holders, investors, FMIs, counterparties) are losing confidence in its prospects to remain a going-concern and are taking actions to protect themselves and/or manage their exposures and risk by demanding additional collateral,
- The bank experiences a run on deposits in-line with the stressed condition of the bank.

- A resolution runway period of no more than 30 days may be assumed.
- With respect to recovery actions that could be taken, the bank may assume that recovery actions have commenced, but were not sufficient to prevent non-viability and did not result in a material reduction to the bank's size, complexity, or interconnectedness. In this respect, it may be assumed that management actions have been taken during this period (such as monetization of assets, attempts to raise market funding or restore the capital position), but these actions would not result in disposals of material business lines or a material reduction to the balance sheet size before the point of non-viability.
- Assumptions on the level of liquidity stress and deposit outflows are expected to be of a severity comparable to experiences observed internationally during the previous financial stress events, consistent with the condition of the bank, and should cause a breach of the liquidity coverage ratio (LCR) metric. However, the fall of the LCR metric below the 100 percent threshold alone should not be treated as an automatic resolution trigger. The bank should use its high-quality liquid assets (HQLA) and optimize the use of all its available collateral to obtain liquidity.[14]
- Access to private sources of funding should be consistent with both the idiosyncratic liquidity stress and the macroeconomic scenario. During the runway period, the bank should assume that all new funding would be secured and short-term, and unsecured wholesale funding would not be available. The securitization programs should be assumed to behave in accordance with contractual terms and conditions, and sensitivity of the contractual terms and conditions to the stress events.
- The bank may assume availability of the Bank of Canada Emergency Lending Assistance (ELA)[15,16] as a source of temporary public assistance, as long as sufficient eligible collateral is available.
- Given the resolution plan scenario contemplates a background of systemic stress, along with idiosyncratic shocks, the Bank of Canada's market-wide facilities can be assumed to be available to eligible institutions during the runway period. However, these facilities are not designed for institutions near or beyond the point of non-viability. Furthermore, once the bank accesses ELA, it should not assume continued use of market-wide facilities.
- The bank should assume a degree of challenge in accessing the foreign exchange market from the runway until the end of the initial stabilization period.

Point of non-viability to restructuring

- The bank experiences sustained stress during the initial stabilization period, driving significant losses for the parent bank, as well as domestic and foreign material operations.

---

[14] Refer to OSFI Liquidity Adequacy Requirements.
[15] For terms and conditions of the Bank of Canada Emergency Lending Assistance, including eligible collateral and possible haircuts, the bank should refer to Bank of Canada's *Emergency Lending Assistance.*
[16] For definition, please refer to *Appendix A*.

- All contractual arrangements (including financial contracts, securitization structures, funding programs, FMI memberships, and service agreements) should be assumed to behave in accordance with contractual terms and conditions, and sensitivity of the contractual terms and conditions to the stress events and application of resolution tools.
- If not assumed to be the case in the runway, the bank's credit ratings should be assumed to be downgraded to non-investment grade following the entry into resolution. Investment grade credit ratings can be assumed to be regained when the bank in resolution satisfies the relevant requirements of each rating agency.
- The unsecured funding markets should be assumed to be unavailable, with net outflows continuing, until a resolution strategy is announced, and market confidence is regained.
- To the extent the bank's access to private-sector funding is insufficient to maintain the continuity of critical functions in resolution, it should be assumed that public-sector backstop mechanisms could be utilized as an alternative source of liquidity. In doing so, the bank must not assume the use of public-sector backstop mechanisms beyond those currently available under prevailing legislation. The bank should also clearly identify the assumptions made (e.g. haircut rates assumed in collateralized facilities or the use of mortgages as collateral). Such public-sector assistance should be considered temporary, and banks should demonstrate a full return to private sources of funding.[17] For clarity, no form of assistance from the Government of Canada, or any other government, may be assumed in a resolution plan.
- The bank should assume that CMHC would act according to its respective securitization program guides. CMHC has a degree of discretion, and its actions will depend on whether the failure is directly related to the program requirements.

2.3 Requirements: Resolution Scenario Base Case

This section outlines the general requirements for the base case scenario. The resolution scenario analysis should be accompanied by reporting schedules. Please refer to the *Appendix C* for details and instructions.

Narrative

The bank is required to provide a narrative outlining the sequencing of events and actions, serving as the foundation for the quantitative assessment of liquidity needs and recapitalization requirements during resolution.

Timeline

The resolution periods to be covered under the base case scenario should be from the recession period to T+2y beyond the point of non-viability (PoNV) or to the point at which all public sector funding is fully repaid—whichever is longer. The recession period modelled in the scenario should last approximately 11 months and be followed by a runway of approximately 30 days to reach the eventual PoNV.

[17] The decision to activate and deactivate public sector funding sources, along with the ultimate sequencing of draws on public sector funding tools, will be ultimately determined by the authorities, however, for the purpose of the scenario analysis the banks may assume availability of Bank of Canada liquidity support programs designed for extraordinary circumstances, referred to in *Bank of Canada's Framework for Market Operations and Liquidity Provision*, along with availability of CDIC temporary assistance, referred to in section 10 of the *CDIC Act* and subject to the quantity of the ex-ante fund and/or borrowing authority referred to in CDIC's public *Reports and disclosure.*

The trading book wind-down analysis and FMI funding requirements that feed into the resolution scenario should be modelled through the same resolution periods, where applicable, as in the resolution scenario.

Liquidity and funding position

This component of the scenario analysis focuses on demonstrating there is sufficient liquidity to achieve the stated objectives for critical functions and MLEs. The bank should prioritize the use of internal liquidity sources to meet funding needs, to the extent possible. If public backstop mechanisms are resorted to, the bank must demonstrate the timely return to private funding sources.

The analysis should include explicit assumptions that are consistent with the stress scenario and resolution event triggers. The analysis should specify assumptions about:

- HQLA, liquidity outflows and inflows based on contractual terms, where applicable, supported by expert judgement to determine stakeholder behaviour under the stress scenario,
- Utilization of unencumbered assets and eligible collateral for central banks and other purposes,
- Counterparty actions associated with financial contracts subject to early termination or margin calls,
- Asset maintenance requirements that may be imposed on branches in foreign jurisdictions, and
- Increased liquidity needs for FMIs and intermediaries[18] and the peak usage of buffer for intra-day requirements.

The analysis should cover the following elements at each scenario milestone:

- A summary of the quantitative analysis of sources and uses of liquidity for selected MLEs or their groupings.[19] This analysis should consider:
    - Key drivers and / or triggers that create significant liquidity needs,
    - Impact of resolution on access to sources of liquidity and funding, including intra-group flows,
    - Amount of unencumbered assets available for pledging to central banks and other purposes,
    - Possible restrictions on the ability to transfer liquidity across MLEs during resolution based on: (i) legislative or regulatory restrictions that require approvals before execution, or (ii) restrictions based on conservative assumptions about regulatory actions that may prevent the cross-border liquidity flows.
    - Any other impacts associated with the scenario assumptions.
- A summary of the quantitative analysis of the potential funding gaps.

To the extent possible, in the analysis, the bank's internal liquidity sources (e.g. cash and liquid assets available for sale or use as collateral that are held by the bank) need to be optimized to meet funding needs and the private markets must be the preferred source of funding.

Where results indicate that internal sources of liquidity are insufficient to cover liquidity needs, an inventory of funding options should be provided and a description of how each option will meet the funding gap for each MLE. The inventory should identify:

---

[18] For definition, please refer to *Appendix A*.
[19] This information should be provided for the scope of MLEs agreed with CDIC.

- Credible funding options that could be available in resolution. The inventory should provide a two-track assessment distinguishing between funding options that would be available with and without temporary public-sector support,
- For the CMHC securitization programs, the plan should assess the publicly stated preconditions to maintain, or regain, access to the programs, and demonstrate financial and operational capabilities to ensure the relevant requirements can be met during resolution to the extent possible.
- Quantum of funding generated and its timing,
- Potential options for maintaining adequate liquidity in material currencies,
- Where collateralized facilities are envisioned, the options must include identification of the types of assets that could be rapidly sold or mobilized as collateral, and
- Exit strategies from public sector backstop support and timing.

Foreign currency needs

This component of the scenario analysis focuses on demonstrating the bank can manage or access sufficient funding in foreign currencies to support the stated objectives for critical functions and MLEs.

The analysis should cover the following elements:

- Description of the global liquidity management strategy for resolution, including actions that the bank could take prior to resolution in order to reduce foreign currency needs and cross-border flows of liquidity once in resolution and outline assumptions made with regard to the timing and impact of such actions.
- Description of the bank's strategy to access and manage its foreign currency funding needs if access is constrained before or during resolution, such as transacting with members in the Continuous Linked Settlement (CLS system), or with nostro banks. If access through nostro banks is assumed, the bank should specify whether it is accessing foreign currency held on deposit or on credit. The bank should consider risks and challenges, and the need to meet additional collateral requirements.
- Foreign currency needs for each material currency, as well as the foreign currency sources, the MLEs (or groups of MLEs) within which the foreign currency funding needs arise, in which foreign currency, and at what point in the resolution scenario these needs peak. The resolution scenario analysis should indicate how these foreign currency funding needs are met by the MLE (or groups of MLEs) and the key assumptions underpinning the assessment.
- Identify the activities that drive the foreign currency needs in resolution and quantify the amount of foreign currency required to support those activities[20]. For each identified activity, the Bank should indicate in what MLE(s) the activity is performed and describe any impact on the Bank's critical functions or critical shared services if the foreign currency flows associated with the activity were disrupted.

[20] Examples of these activities include foreign currency denominated funding maturing, outflow of foreign currency deposits, growth of foreign currency assets, and cashflows related to changes in FX derivatives due to imperfect hedging or other mismatches resulting from the resolution actions.

Total loss absorbing capacity (TLAC) and recapitalization needs

This component of the scenario analysis focuses on demonstrating how the resolution entity (or resolution entities, as applicable) has sufficient loss absorbing and recapitalization capacity available to:

i. Stabilize the resolution group(s),
ii. Ensure that its subsidiaries do not enter into separate insolvency proceedings (unless it is envisaged by the resolution strategy), and
iii. Restore confidence in the bank and avoid exposing taxpayers and/or CDIC to loss.

The analysis should include explicit assumptions consistent with the stress scenario and triggers associated with the resolution events. In particular, the analysis should specify assumptions about:

- Composition and amount of total loss absorbing capacity (TLAC)[21] within the resolution group,
- Ability to upstream losses and downstream capital and any associated restrictions, considering local regulatory capital requirements and parent bank standalone capital considerations,
- Levels of realized losses impacting the bank's capital position (consolidated and by MLE) and assumptions about how these losses are distributed among the parent bank and MLEs, and their timing before and after PoNV.

The analysis should cover the following snapshots at each scenario milestone:

- A summary of the quantitative analysis of development of losses in the resolution group and maximum level of losses that can be absorbed at the parent bank (i.e. the resolution entity), supported by a snapshot of the balance sheet, regulatory capital ratios and levels of internal and external loss absorbency for selected MLEs,[22]
- Options for each resolution entity to generate additional loss absorbency in resolution, if losses incurred were higher than the available TLAC, and
- Indicative losses that the shareholders and the different classes of creditors would face following the completion of the resolution strategy.

The bank should identify the timing of when, post-PoNV, it expects to be in compliance with OSFI's TLAC requirements and provide an explanation on how the bank will achieve compliance. If restoring TLAC is expected to take longer than the resolution scenario modelling period, the bank may provide a qualitative assessment of its expectation of when TLAC compliance is achieved. The bank should assume it needs to comply with OSFI's (1) minimum risk-based TLAC ratio (excluding the domestic stability buffer), (2) target TLAC leverage ratio, (3) minimum solo TLAC ratio no longer than two years following the exit from resolution.

[21] For definition, please refer to *Appendix A*.
[22] This information should be provided for the scope of MLEs agreed with CDIC.

Changes to the assumptions and results between plan submissions

The resolution scenario analysis should include a summary of any changes in assumptions and methodology in the current resolution plan, compared to the previous resolution plan, that had a material impact on the resolution scenario outcomes, including:

- Peak ELA (please refer to the *Appendix C* for reporting table),
- Time required to repay ELA,
- Peak foreign currency funding needs,
- Recapitalization needs,
- Time required to be in compliance to TLAC requirements.

2.4 Requirements: Sensitivity Analysis

The bank is required to provide analysis on the sensitivity (in terms of direction and magnitude) of the bank's liquidity needs from the following extreme hypothetical idiosyncratic shocks. The analysis should assess the impact on the peak ELA requirement and the time required to repay ELA.

If the sensitivity analysis for any of these factors results in no or insignificant impact beyond those identified in the base case, a thorough description and rationale should be provided.

- **Ring-fencing:** Assume punitive ring-fencing by foreign authorities with no repatriation of liquidity to the parent bank in all jurisdictions outside of domestic deposit-taking entities from T-30d to T+6M. As a result, net inter-company lending balances from domestic deposit-taking entities to all other jurisdictions should be assumed to remain largely consistent from the beginning of the Runway (T-30d) to Initial Stabilization (T+6M).

- **Credit rating:** Assume the parent bank issuer credit rating is downgraded to speculative grade (i.e. B or equivalent) at the PoNV and there is no increase to the rating until stabilization is achieved (T+1y).

- **Trading book wind-down timeframe:** Assume the wind-down of trading book takes place over 12 months with an assumed corresponding decrease in the time to exit most trading positions.

- **Pace of asset monetization:** Assume the amount of assets monetized is reduced by 25% in the recession period compared to the base case.

- **Access to long term unsecured funding markets:** Assume that the bank's ability to issue bail-in debt is constrained: (i) within Canada, only able to issue instruments after market confidence is restored (T+2y), and (ii) outside Canada, only able to issue instruments after CDIC's exit from resolution. The bank should estimate and comment on the timing implications to comply with OSFI's minimum risk-based TLAC ratio, target TLAC leverage ratio, and minimum solo TLAC ratio, in addition to the impact assessment on ELA.

- **Complete loss of access to FX markets:** Assume a complete idiosyncratic loss of access to *all* segments of FX markets (i.e., spot, forward, swap) from the runway until the end of the initial stabilization period. This includes losing the ability to access foreign currency through transacting with members in the CLS system, or with nostro banks. The intent is to quantify the potential size, drivers, and timing of funding gaps in foreign currency. In addition to the impact assessment on ELA, the plan should:

- Estimate the additional amount of foreign currency needed and the incremental foreign currency gap for each MLE (or a group of MLEs). The analysis should break down the funding gap by major currency, MLE (or a group of MLEs) impacted and identify the applicable drivers of the foreign currency needs during each resolution scenario period.
- Identify alternative sources of foreign currency funding available to the MLE (or a group of MLEs), if applicable, or management actions and strategies that could manage or curtail foreign currency needs, beyond those identified in the base case scenario.
- Assess and comment on the potential implications of foreign currency funding needs not being met (e.g. possible payment failures, difficulties closing out trading book, hedging, etc.).

Module 3: Operational Plan

The operational plan should demonstrate how the resolution strategy is legally and operationally feasible, including crisis readiness and essential information needed to implement the plan. The operational plan should provide an adequate analysis demonstrating the bank's capabilities to access information necessary for maintaining operational continuity in resolution as well as provide timely and accurate information to support CDIC's decision-making. It should clearly illustrate that placing the bank into resolution does not give rise to unmitigated risks to financial sector stability.

Development of the operational plan is an iterative process of self-assessing existing practices and capabilities necessary to execute the strategy and designing enhancements or removing impediments. The bank should include the identification of potential areas of internal validation or testing and their integration with the existing resolution plan testing programs (please refer to *Module 4: Resolution Plan Testing*). Any impediments to effective execution of the resolution strategy should be captured and addressed in the work plan (please refer to *Module 5: Impediments and Work Plan*).

Included within this is guidance on the various components required to operationalize the resolution strategy. The subsequent sub-modules cover:

1. Crisis preparedness capabilities,
2. Bail-in execution,
3. Valuation capabilities in resolution,
4. Capabilities to support recapitalization and funding actions,
5. Operational continuity of critical shared services,
6. Continuity of access to FMIs,
7. Trading book wind-down plan,
8. Execution of restructuring options, and
9. Key regulators and actions to satisfy regulatory requirements.

Information provided in the different sub-modules should be consistent.

3.1 Crisis Preparedness Capabilities

3.1.1 Introduction

CDIC's crisis readiness model comprises of CDIC's own internal capabilities supported by external third-party stand-by arrangements, with a significant reliance placed on the operational resilience of the bank's people, processes, technology and data/information (collectively, the bank's capabilities). Due to this reliance, it is critical that CDIC build its readiness in parallel with the bank's readiness capacity, and with a full understanding of each bank's existing crisis management capabilities and planned enhancements.

3.1.2 Governance

CDIC will take temporary control of the member institution upon entry into resolution and will remain accountable for the decisions required to implement the resolution strategy. In doing so, CDIC will leverage the expertise that resides within the bank to make informed decisions and leverage the bank's capabilities to execute the resolution strategy. CDIC would establish a resolution management office that would be the primary point of contact for the bank in resolution.

3.1.2.1 Requirements: Governance

The operational plan should demonstrate the bank's ability to maintain continuity of governance processes in the transition to, and through, resolution as well as an understanding of the bank's roles and responsibilities in executing the resolution strategy.

The bank should address the following areas in support of the resolution strategy:

- Activation of its financial crisis response teams and governance protocol for resolution in coordination with CDIC,
- The roles and responsibilities of governance personnel within the bank, and the distinct role of CDIC, are documented and understood by relevant personnel, and
- The plans and processes that exist to support large-scale replacement of the Board of Directors and executive management over resolution weekend, if required.

Please refer to *Appendix D* for the governance self-assessment template.

3.1.3 Resourcing

Execution of the resolution strategy relies on the availability and retention of key employees[23] of the bank in resolution. Effective resourcing enables the resolution strategy when:

- CDIC can rely on existing processes to identify and communicate with key employees across the bank at short notice,
- The bank has the necessary strategies and resources identified to maximize retention of key employees, and
- The bank is prepared with alternative strategies to fill vacancies among key positions in the event retention strategies are ineffective.

[23] For definition, please refer to *Appendix A*.

3.1.3.1 Requirements: Resourcing

The operational plan should demonstrate how the bank's capabilities support attaining the resourcing objectives described above. Specifically, the bank should describe, in sufficient detail, the processes for the following:

- Identification of key employees, ex-ante and over the resolution weekend,
- Communication with key employees during resolution, and
- Retention approaches for key employees and alternative strategies for vacancies in key positions in resolution.

Please refer to *Appendix E* for the resourcing self-assessment template.

3.1.4 Communication

Stabilization of the bank in resolution is contingent on the ability to make timely public disclosures, to instill confidence in the bank and the credibility of the resolution strategy. While public authorities will lead the communication strategy, the effective execution of crisis communication relies on CDIC leveraging the bank's capabilities.

An effective resolution communications strategy:

- Is well-coordinated between the safety net authorities and the bank as to timing and content of messages,
- Employs relevant channels with monitoring capabilities, and
- Provides depositors, clients, regulators, employees, vendors, rating agencies, key counterparties, investors, and other stakeholders with timely, transparent, and appropriately detailed information on the resolution process.

3.1.4.1 Requirements: Communication

The operational plan should demonstrate the bank's preparedness for managing internal and external communications throughout the resolution period, including:

- A communication plan that covers resolution-specific stakeholder analysis (e.g., objectives, risks, messages, and channels for each stakeholder group), public messaging, communication infrastructure, and contacts CDIC could leverage,
- Processes to issue communications (e.g., message development and approval) including a proposal on how it would integrate the role of CDIC, and
- Mechanisms in place to review, test, and evaluate the bank's crisis communications specific to a financial crisis.

Please refer to *Appendix F* for the communications self-assessment template.

3.2 Bail-In Execution

3.2.1 Introduction

This section of the plan is intended to address the operational aspects of the bail-in tool ensuring that a resolution strategy using the bail-in tool is credible and the bank is operationally prepared to support the execution of the bail-in tool.

This guidance draws on principles described in the Financial Stability Board's (FSB) *Principles on Bail-in Execution*.

3.2.2 Scope

The bank is to include the required information in a Bail-in Execution Playbook (bail-in playbook) that covers both Canada and foreign jurisdictions. The bank has flexibility in the manner it presents and organizes information in its bail-in playbook.

The bail-in playbook should include all the information required by the guidance, including describing the actions and information that are required to effect a bail-in conversion and the implications of securities law and securities exchange requirements in a bail-in resolution.

The bank is expected to include information in its bail-in playbook for those jurisdictions which account for 95% or greater of the bank's total amount of outstanding bail-in debt[24] that has been issued (the coverage threshold). CDIC will review the coverage threshold on an ongoing basis to ensure there is sufficient operational information on bail-in debt issuances in foreign jurisdictions. This may result in CDIC increasing the coverage threshold to include all jurisdictions where bail-in debt has been issued.

Stakeholder consultation

To the extent that consultations are needed to inform the development of the bail-in playbook, CDIC expects the bank will engage with relevant domestic and foreign stakeholders.

In order to assess preparedness and accuracy of the information presented on bail-in execution, CDIC may share sections of the bank's bail-in playbook with relevant domestic and foreign stakeholders to confirm the information provided and the reasonableness of any assumptions made.[25]

3.2.3 Bail-in conversion assumptions

Information on the bail-in tool in Canada and CDIC's approach to bail-in execution can be found on CDIC's website: *Bail-in and D-SIB restructuring powers (E-FIRP) - CDIC* and *How bail-in works*. This information lays out the legal framework for the bail-in tool and describes the various stages of a bail-in resolution, including the actions or events that might take place at each stage.

[24] Calculation should be based only on outstanding bail-in debt (equity, capital instruments, and legacy senior debt are excluded).
[25] To address any confidentiality concerns, D-SIBs could: provide letters/confirmations from external stakeholders on process, information requirements and key steps avoiding the need for CDIC to onward share with that stakeholder, structure the bail-in playbook to only include non-confidential information, or, when submitting its bail-in playbook, indicate which sections they are not comfortable with CDIC onward sharing.

As the *CDIC Act* provides CDIC with the flexibility to determine the portion of bail-in debt to be converted into common shares, as well as the timing of a conversion, CDIC expects the bank to have the operational capabilities to support several bail-in scenarios, including situations where a bail-in conversion occurs quickly.

The manner in which CDIC would effect a bail-in conversion in a resolution would depend on the circumstances at the time. However, to assist in the development of the bail-in playbook, the following assumptions should be made:[26]

- **CDIC control/ownership:** CDIC would take control of the D-SIB (the parent bank) using the Share Enhanced-Financial Institution Restructuring Powers (E-FIRP) provisions of the *CDIC Act*, which would result in all outstanding common shares and non-Non-Viability Contingent Capital (NVCC) preferred shares and subordinate debt vesting in CDIC at the time of the GIC order. A GIC order placing a failed bank into temporary CDIC ownership will also include a bail-in conversion order directing CDIC to undertake a bail-in of a failed bank.
- **NVCC conversion:** Immediately after CDIC takes control of the bank, the Superintendent of Financial Institutions announces that the conditions have been met to trigger the NVCC conversion.
- **Valuation:** At the time of the GIC order, sufficient valuation information exists to allow CDIC to determine the size of the loss and conversion terms for the bail-in debt.
- **Timing:** The bail-in conversion would be executed over a weekend. This means that the bail-in conversion terms would be announced by CDIC during the resolution weekend.
- **Reporting:** A bail-in resolution would occur off-cycle and mid-month in a financial reporting period, such that information on the scope of bail-in instruments would need to be updated and business-as-usual reporting processes would have to be adjusted.
- **Interest:** For bail-in debt, CDIC would expect interest to continue to accrue until such time as the debt is converted. Payments on excluded instruments (i.e., instruments that cannot be bailed-in, such as covered bonds) can continue.
- **Foreign currency:** The latest posted rate by the Bank of Canada can be used for foreign exchange conversions.

3.2.4 Bail-in execution playbook

The bank is required to include the following information in its bail-in playbook.

3.2.4.1 Summary of the overall plan for bail-in execution

This section should include:

- A description of the bank's overall plan to manage and support bail-in execution. This would include a description of the bank's capabilities (i.e., people, processes, technology and data/information) and timing to execute such plan, and

[26] CDIC may choose to implement the bail-in tool differently than as set out under these assumptions and the approach described should not be viewed as CDIC's preferred approach to a bail-in resolution. Regardless of whether the conversion occurs over the resolution weekend or is delayed, the information requirements and processes to facilitate bail-in are largely the same, but with different time constraints.

- A summary of any impediments related to bail-in execution, including how these impediments could be addressed and an overall conclusion on the bank's ability to execute the bail-in tool.

The development of this section should be informed by the specific bail-in execution information required below.

3.2.4.2 Information on bail-in debt issuances and other information

The bank is required to provide the following information in its bail-in playbook:[27]

- A list of the jurisdictions in which the bank has issued instruments that would be impacted by a bail-in resolution and other related actions (i.e., Share E-FIRP as a pre-requisite to bail-in). This includes common shares, non-viability contingent capital (NVCC), non-NVCC preferred shares and subordinated debt, and bail-in debt.
- A breakdown of the total size and frequency of issuances of each type of instrument in each of the jurisdictions the instruments have been issued.

For those issuances falling within the coverage threshold (i.e., 95%):

- A description of the issuance programs (e.g., medium-term notes, certificates of deposit, structured notes) and the forms of the instruments (e.g., global certificate, dematerialized, physical, registered or bearer forms) that are issued in each jurisdiction,
- The relevant market participants[28] in each jurisdiction and a brief description of the role that participants would have in bail-in execution, and
- Any other bail-in execution information specific to the jurisdiction in which instruments are issued.

The bank should use the information provided to OSFI and CDIC in the *Capital and TLAC Planning Template* as a base for providing the information in this section.

To aid in the development of the bail-in playbook, the bank should identify jurisdictions that may fall within the coverage threshold by the next resolution plan submission and provide a brief rationale for issuing bail-in debt in those jurisdictions.

3.2.4.3 Systems and processes to provide data

At the time of a resolution, CDIC will need an accurate measure of the TLAC of the bank. CDIC will also need information about the scope of all instruments that would be impacted by a bail-in resolution and other related actions (i.e., Share E-FIRP as a pre-requisite to bail-in).

The bank is required to have the systems and processes in place to produce complete and accurate information on all instruments that would be impacted in a bail-in resolution within 24 hours of a resolution order being issued to facilitate a possible weekend resolution. Specifically, the bank should be able to produce up-to-date information on an instrument-by-instrument basis as requested by OSFI and CDIC in the *Capital and TLAC Planning Template*. In addition, the bank is also required to have the ability to (i) calculate the accrued interest on each instrument and the amount of any declared and unpaid dividends for all instruments within 24 hours of receipt of

---

[27] This information is based on actual issuances.

[28] These could include: central securities depositories, international central securities depositories, common depositories, registrars, paying agents, fiscal agents, transfer agents, trustees, settlement systems, and exchanges, as applicable. Collectively referred to as "relevant market participants" in this document.

notice from CDIC and (ii) update the calculations of accrued interest and applicable foreign exchange conversions at a subsequent time over the resolution weekend upon receiving direction from CDIC.

To demonstrate the above capabilities, the bank is required to describe the processes that it will use to track and produce key information related to the scope of instruments that would be impacted by a bail-in resolution. The bank should also describe the level of accuracy, the amount of internal review and the governance procedures related to producing the information.

As part of its internal preparedness, CDIC conducts its own internal analysis/testing to ensure that it is prepared to execute bail-in. As part of this process, CDIC may reach out to the bank in the future regarding the availability of additional information.

3.2.4.4 Conversion mechanics

This section is designed to:

- Describe the sequence of steps that would be needed to execute the bail-in conversion and other related actions, including identifying the information requirements of relevant market participants.
- Demonstrate capabilities to facilitate the steps and provide information required by relevant market participants to execute the bail-in conversion and other related actions.

Conversion mechanics refers to the process by which bail-in debt would be converted into common shares of the bank. As set out on CDIC's website, CDIC will use existing market technology and conventions primarily used by central securities depositories to convert liabilities and deliver common shares to bailed-in creditors.

As the conversion mechanism will rely on existing market technologies and conventions, the bail-in playbook should describe and provide an overall timeline of the sequential steps and processes that would be required to effect the bail-in conversion in each jurisdiction. Given the number of market participants involved in a bail-in execution, the identification of steps and/or processes should not only include those that are internal to the bank but also those of relevant market participants that the bank would interact with to effect the bail-in conversion.[29]

As part of developing an understanding of the specific steps and/or processes that would be followed in a bail-in, it is expected that the bank will engage with the relevant market participants in the development of the bail-in playbook.[30] These participants and their roles may vary across jurisdictions based on the manner and form that debt is issued. A key component of the information expected to be included in the bail-in playbook is the identification of any differences in these steps across jurisdictions.

At a minimum, the bail-in playbook should include a description of the following steps:

- The steps the bank would take to notify relevant market participants of its entry into resolution.[31]
- The steps the bank would take:
  - internally to reflect the transfer of outstanding common shares and non-NVCC preferred shares or subordinated debt to CDIC in the case of Share E-FIRP,

[29] More details are available in the Bail-in Conversion Mechanics Playbook (CDS Protocol) provided to banks in 2019.
[30] The bank may consider entering into protocols, playbooks or other forms of agreement with relevant market participants.
[31] This will involve a determination of whether the depositories wish to receive instructions directly from CDIC, or from the D-SIB or relevant direct participant (CDIC understands that some depositories will only accept instructions directly from participants).

  - to provide instructions to depositories to reflect the transfer of shares and other instruments in CDIC.

- The processes for communicating instructions to depositories and other market participants to halt dividend, interest or principal payments, including unpaid redemptions amounts, following entry into resolution.
- The steps the bank would take to convert NVCC instruments.
- A description of the process the bank would take to provide instructions to depositories to reflect the conversion terms determined by CDIC on an instrument-by-instrument basis (i.e., the number of shares that will be provided for each liability). This process should include a description of calculating accrued interest and foreign currency conversions for each instrument. This should also include the process to amend global notes (i.e., to zero in the case of a full conversion or to the appropriate proportion in the case of a partial conversion) or modify book entries.
- The internal processes for issuing new common shares to NVCC and bail-in debt holders, including the creation and delivery of new global certificates to depositories (or the modification of book entries) in all relevant jurisdictions.
- The instructions that would be provided to depositories at CDIC exit to inform shareholders of the return of their voting rights.

For each step of the bail-in process, the bank should include a description of the specific information required by relevant market participants to facilitate each action.

As part of the above descriptions, the bail-in playbook should demonstrate that the bank has considered the following:

- How unsettled transactions would be treated following entry into resolution or a description of depositories capabilities in this regard,
- How the D-SIB's systems and processes to effect the conversion consider the legal forms of the securities affected by bail-in resolution,[32]
- The information, format and manner in which the list of impacted securities and conversion terms are to be provided to depositories,
- Whether there are any added complexities associated with a partial conversion, and, if so, a description of how the processes or information requirements might differ from a full conversion,
- Whether the new shares issued as a result of the conversion meet all requirements of depositories (e.g., eligibility criteria), and
- Contact information of relevant market participants that would be needed for purposes of bail-in execution and a process to keep this information up to date.

[32] It is understood that most securities impacted by a bail-in are held through depositories and are cleared and settled. However, there may be some situations where securities are held in physical form or are not registered at depositories. Where this is the case, the bank should also have processes in place to identify these holders, inform them of the impacts of a bail-in resolution (i.e., for common shares the suspension of voting rights and potential vesting in CDIC) and effect the conversion.

3.2.4.5 Securities law and securities exchange requirements

The bank should include in its bail-in playbook a description of the implications of securities law and securities exchange requirements in a bail-in resolution.[33] The scope of the considerations in this section relates to all instruments that are distributed (publicly or privately), held, listed, and/or traded on an exchange in a jurisdiction within the coverage threshold. These considerations should be developed in consultation with securities authorities in each jurisdiction.

This section of the bail-in playbook is designed to:

- Identify the main securities law and securities exchange requirements that are relevant in a bail-in resolution in each jurisdiction,
- Describe the bank's approach and capabilities to comply with the requirements, including the use of any exemptions or extensions,
- Identify the implications of failing to comply with the requirements, and
- Identify any actions to mitigate the impact of failing to comply with any requirements.

Identification of securities law and securities exchange requirements in a bail-in

The bank should identify and briefly describe the main securities law and securities exchange requirements with which it may be difficult to comply during a bail-in resolution.

Within a Canadian context this could include:[34]

Securities law:

- Continuous disclosure obligations and publication of material change reports,
- Take-over bid, insider reporting, and early warning reporting requirements, and
- Requirements for distributing new common shares.

Exchange requirements:

- Continuous listing requirements,
- Timely disclosure requirements, and
- Listing requirements for new common shares.

Plan to comply with securities law and exchange requirements

The bank should describe its approach to complying with the identified rules and requirements in a bail-in resolution, including disclosure requirements and requirements related to the distribution of new shares. The bank should identify and describe any exemptions or extensions from securities law or exchange requirements that it would rely on and the situations or factors that would be considered in their application.

[33] For the bail-in playbook, the bank can utilize previous work done with Canadian securities regulators, the TSX and IIROC on the securities implications in bail-in execution.
[34] In this section the terminology used is based on Canadian securities law and exchange requirements. The use of this terminology should not limit the applicability of these requirements to other jurisdictions where there may be similar concepts using different terminology.

To the extent that securities law and exchange requirements differ across jurisdictions, the bank should describe how it intends to coordinate its actions with respect of these potentially differing requirements.

The bank should also describe whether a consistent approach to the listing and trading of its securities would be pursued across jurisdictions while in resolution (e.g., whether the bank would seek to facilitate trading in the same jurisdictions as prior to resolution or seek to trade in fewer jurisdictions).

Implications and mitigants for failing to comply with identified requirements

The bank should include a description of the consequences of failing to meet identified securities law and exchange requirements, including whether the failure to meet certain requirements may result in a cease trade order (CTO), trading suspensions, de-listing from exchanges, or other actions in a particular jurisdiction. This discussion should consider the full range of instruments that could be impacted by cease trade orders.[35]

The bank should assess how these consequences could impact its overall resolution strategy, including its access to funding and liquidity, ability to absorb or contain losses, market communications, etc.

The bank should include a description of strategies to limit the impact where compliance with any securities requirements is impossible in the circumstances. For example, to the extent the bank's securities may be subject to a CTO, the bank should provide a description and justification for potential carve outs for particular trades from a CTO.

3.3 Valuation Capabilities in Resolution

3.3.1 Introduction

The resolution plan should demonstrate that the bank has the appropriate level of readiness (including people, system output, information, mark-to-market models, and internal controls) to support various types of valuations in resolution, with a primary focus on the valuations required to support an immediate bail-in conversion.

3.3.2 Types of valuations in resolution

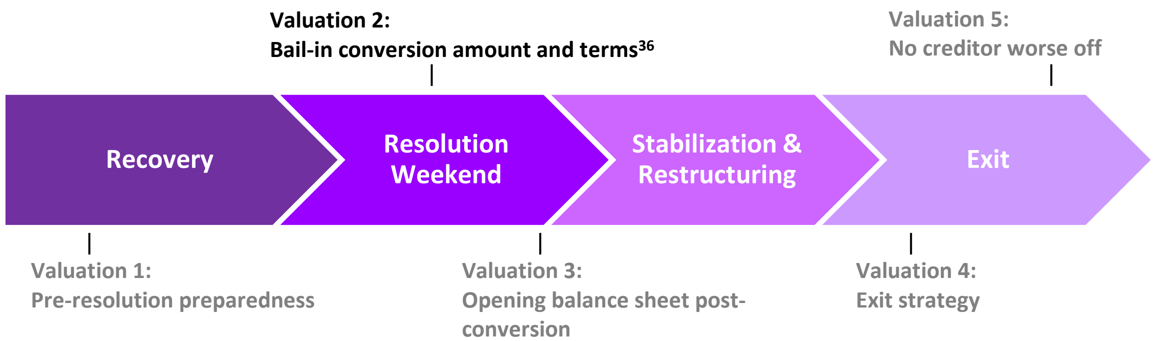
CDIC expects that multiple valuations will be carried out in a bail-in resolution at different points in time by a qualified valuator to inform CDIC's decisions throughout the resolution process.

Valuations will be critical to informing the amount of bail-in debt to convert, the terms for conversion, the exit strategy, and the determination of whether creditors were made worse off in resolution than in liquidation.

In all cases, it is expected that CDIC would retain external valuation experts to perform the valuations on behalf of CDIC, leveraging the bank's valuation capabilities to the maximum extent possible.

[35] CDIC recognizes that this requirement goes beyond the scope of bail-in debt and could include securities such as eligible financial contracts (EFCs), covered bonds, or short-term funding. As the securities implications, impacts, as well as mitigating actions related to these instruments are similar to bail-in debt, CDIC expects that these issues should be considered together in the bail-in playbook.

Figure 5: Types of valuations in resolution



Valuation 1: Pre-resolution preparedness

A preliminary valuation would commence as early as possible in the lead-up to resolution to inform CDIC's recommendations to take control and to estimate its exposure to loss. Significant reliance would be placed on the bank's valuation capabilities at this stage. In the lead up to resolution, it is anticipated that financial instruments and other assets (e.g., banking book assets, business lines) would be fair valued with increased frequency and rigor to support the execution of the bank's liquidity and capital recovery actions.

Valuation 2: Bail-in conversion amount and terms

The requirement to maintain adequate capital when carrying out a bail-in conversion is intended to ensure that the bank emerges from the bail-in conversion appropriately recapitalized to facilitate returning it to viability and restoring market confidence. The recapitalization amount will be informed by an estimate of the losses incurred as of the GIC order date and the expected losses, and therefore will require valuations (balance sheet and enterprise)[36] to be conducted at that point in time.[37]

CDIC would include a conservatism buffer when signaling the upper end of the loss and determining the conversion amount, to account for the constraints inherent in preparing a complex valuation in a short period of time in distressed market conditions. To avoid the risk of over bail-in, valuators will need to ensure the buffer is not overly conservative or unnecessarily large.

---

[36] For definitions, please refer to *Appendix A*. The conversion amount would be informed by a balance sheet valuation. An enterprise valuation would provide an important soundness check on the reasonability of CDIC's conversion decisions.
[37] In the event that the resolution strategy for the bank is to dispose of certain foreign subsidiaries either in recovery or shortly after entry into resolution the bank may only exclude those subsidiaries if the resolution plan demonstrates, with high degree of confidence, that these entities would meet the IFRS criteria for disposal accounting treatment at entry to resolution.

Based on CDIC's consultation with third party valuation experts, an immediate valuation would only be feasible if:

- There is sufficient lead time pre-resolution to begin the valuation, or
- The loss is contained to a single asset class.

In both cases, the bank must have reliable capabilities and information in place to support the valuation. Consistent with the target state of readiness outlined in section *3.2 Bail-in Execution*, the bank should have the capabilities to support a bail-in conversion within 48 hours of entry into resolution.

The focus of resolution plan is to ensure readiness for "Valuation 2: Bail-in Conversion Amount and Terms".

Valuation 3: Opening balance sheet, post-conversion

Once CDIC takes control and completes the bail-in conversion, counterparties, investors, credit rating agencies, and securities regulators will be looking for updated and accurate balance sheet data for the recapitalized bank. The bank will retain the responsibility for financial statement reporting in resolution, and the bank will need to understand the information that will be required to restore market confidence and have a plan in place to meet those demands.

Valuation 4: Exit strategy

An enterprise valuation[38] (whole bank or single business lines) would assess the viability of the resolved entity and, along with other information, inform the timing and manner in which CDIC exits from resolution (up to five years after entry into resolution).

Valuation 5: No Creditor Worse Off

As described in the Compensation Regulations the "No Creditor Worse Off" safeguard involves comparing a hypothetical liquidation value[39] to a resolution value[40]. Compensation would be owed to impacted shareholders and creditors if the estimated liquidation value of their investment exceeded the estimated resolution value. The resolution value would reflect an enterprise valuation, prepared on a going-concern basis as of the exit date. Whereas the liquidation value would be prepared on a gone-concern basis as of the resolution entry date. The compensation process would begin when CDIC issues a notice published in the Canada Gazette and the bank's website that CDIC is no longer in control.

3.3.3 Valuation Challenges in Resolution

The valuation challenges associated with resolution are well recognized internationally and converge on the broad themes of:

- unprecedented size and stress,
- complexity of asset portfolios,
- wide-scale use of derivatives,
- distressed market conditions, and
- speed.

[38] For definition, please refer to Appendix A.
[39] For definition, please refer to Appendix A.
[40] For definition, please refer to Appendix A.

While some valuation challenges can be mitigated with additional time and resources, others present inherent challenges irrespective of the length of time taken to complete the exercise (e.g., the impacts of market illiquidity on asset valuations would present challenges in either an immediate or delayed conversion scenario). The challenges associated with a bail-in valuation are summarized in *Appendix G.*

3.3.4 Resolution Plan Requirements

3.3.4.1 Resolution valuation readiness checklist

CDIC's approach to valuation in resolution is founded on the premise that the banks regularly fair value[41] financial instruments (e.g., daily, weekly, monthly) and other assets (e.g., banking book assets) to meet existing regulatory requirements, statutory reporting, and internal financial and risk management standards. In resolution, significant reliance will be placed on the bank to have in place well-documented and clear processes for valuation such that a third party can review and challenge the valuation. In some cases, a "ground up" independent valuation conducted by a third party for certain portfolios or instruments will be necessary. However, the first objective should be for the bank to provide the information necessary for a third party to assess the reasonableness of the valuation approach and results.[42]

Appendix H contains a list of information required by a third-party valuator to conduct the balance sheet and enterprise valuations required for an immediate conversion. While much of the information in the list could be gathered in the lead-up to resolution, some of the information would need to be updated upon entry to resolution to ensure the conversion decision captures all incurred and expected losses as of the GIC date. The bank should assess its ability to produce the information required to announce conversion within a 48-hour timeframe, consistent with the target state of readiness outlined in section *3.2 Bail-in Execution*.

The bank should update its valuation readiness assessment as part of maintenance of its resolution plan and indicate which subject matter experts were involved in the preparation and review of the checklist.

In completing the checklist, the bank should consider the following:

- The checklist is dual purpose:
  - it assesses which information must be updated over the weekend as compared to information that can be gathered in the lead-up to resolution, and
  - it assesses whether that information can be made available and relied upon within 48-hours.
- The 48-hour valuation is needed to signal an upper loss estimate (inclusive of a valuation buffer for conservatism) over the weekend and/or support an immediate conversion.
- The loss estimate is prepared on a going concern basis (not a liquidation basis) consistent with an open bank strategy.
- The valuation capabilities under assessment do not necessarily equate to producing full financial statements with note disclosures. However, if the bank's resolution strategy or funding strategy assumes

[41] For definition, please refer to *Appendix A*.
[42] For greater clarity, the bank should possess the capabilities to perform the valuation and not simply provide the underlying data. The valuation performed by the bank will be reviewed by a third-party expert, engaged by CDIC. This approach does not preclude CDIC from reaching an independent view on the losses.

(or implies) that counterparties, regulators, investors, credit rating agencies, would have access to any key financial data immediately, this should be reflected in the bank's readiness assessment.

- The bank should assume there is time in the lead-up to resolution to begin valuation activities and should disclose what assumptions were necessary to support its assessment.
- The bank should assume losses are pervasive to all asset classes reflecting a level of stress that is consistent with the assumptions defined in the *Resolution Scenario*.
- It may not be possible to achieve the same level of precision in a 48-hour timeframe under highly stressed conditions as would be required for business-as-usual reporting. However, there will need to be sufficient quality and rigor around the bail-in valuation, such that the accompanying decisions taken would not be meaningfully different had more time been available. There will be some subjectivity required in completing the checklist, therefore, the bank should define the assumptions it makes regarding rigor and quality of information and explain how the assumptions differ from business as usual within the checklist.

3.3.4.2 Mitigating valuation challenges

The resolution plan should identify the key risks and challenges of valuations in resolution, particularly in the context of an immediate conversion:

- The bank should review the list of challenges listed in *Appendix G* for completeness, identifying any additional challenges. The list should take into consideration the results of the assessment in *Appendix H* and any additional challenges identified through that process.
- The bank should identify its high-risk valuation areas (i.e., asset classes, portfolios, instruments) that are inherently subject to higher valuation uncertainty or volatility and that, due to their balance sheet significance, could materially impact the estimate of losses.

The resolution plan should identify mitigating strategies for each challenge and high-risk valuation area:

- Describe if and how the valuation challenges could be mitigated in crisis, or
- Propose ex-ante readiness measures that could either mitigate the challenges described above or expedite the valuation analysis.

The responsibility for estimating the valuation buffer in a bail-in conversion lies with CDIC. However, a methodology to estimate a buffer for valuation uncertainty could be considered a mitigating option for some of the challenges.

3.4 Capabilities to Support Recapitalization and Funding Actions

3.4.1 Introduction

The operational plan should demonstrate the bank's capabilities to:

- Identify, estimate, monitor and report on financial resources (i.e., capital and liquidity needs) for MLEs,
- Execute options to generate adequate funding in resolution, and
- Downstream capital and liquidity to MLEs in a timely manner and upstream losses.

3.4.2 Requirements: Recapitalization actions

The bank should demonstrate the ability to recapitalize regulated MLEs in a timely manner to support its resolution strategy. To achieve this, the bank should identify all options through which each MLE could be recapitalized (e.g., write-down of inter-company debt, equity injection) and describe the steps and timelines for each form of recapitalization.

The bank should provide its analysis of any potential legal or operational impediments to executing the recapitalization options. In this assessment, the bank should consider an MLE's position in its legal structure, required regulatory communications, approvals, and other operational requirements or other factors.

3.4.3 Requirements: Funding actions

Resolution puts significant pressure on the bank's ability to meet liquidity needs. Recapitalization is not by itself sufficient to ensure continuity of the bank's critical functions if the bank cannot maintain access to liquidity to refinance its liabilities as they fall due. To ensure there is sufficient funding and liquidity available for the bank in resolution, a credible resolution strategy must be supported by capabilities allowing the bank to:

- Estimate, monitor and report on funding needs for MLEs and material branches with reasonable precision and speed in a resolution stress,
- Manage liquidity/collateral in resolution, and
- Execute funding strategies (including the provision of liquidity to MLEs).

The bank should demonstrate the effectiveness of its capabilities (i.e., people, processes, technology and data/information) to manage funding and liquidity necessary to allow MLEs to continue operating in resolution.

The bank should address the following areas in support of the resolution strategy:

- Processes for estimating funding needs of MLEs. This could be achieved in the form of a contractual maturity ladder to identify the gaps between inflows and outflows using time buckets for MLEs on an individual currency, consistent with NCCF reporting,
- Capabilities to identify funding concentrations by counterparty, instrument, or products, including where rating downgrades could trigger liquidity draws,
- Capabilities and tools to monitor intraday liquidity needs by MLE,
- Capabilities to track payments, clearing and settlement activities, including transaction volumes, credit capacity, and impacts of payments, clearing and settlement services provided for internal and external parties,

- Processes that are capable of managing, valuing, and tracking available and encumbered collateral (including the effects of re-hypothecation) and tools to readily identify the amount, level, type, and eligibility of collateral by jurisdiction,
- Capabilities to measure the overall level of asset encumbrance,
- Capabilities to quickly produce information required to reinstate funding from investors in resolution (e.g., amount, quality, type, and jurisdiction of assets), and
- Whether the capabilities are sufficiently flexible to provide information suitable for decision-making under different resolution scenarios.

In addition, the bank should demonstrate its ability to execute its funding options in resolution. This could be documented in the form of a playbook covering the following areas for each option:

- Capabilities to execute of the option (e.g., steps for providing liquidity to each MLE along with analysis of any potential legal and operational impediments to doing so),
- Preconditions that MLEs would need to satisfy (e.g., legal, regulatory, or operational obstacles to transferring funds between entities),
- Processes for identifying assets that have the potential to be: (i) used as collateral to raise additional HQLA, (ii) used for secured funding in secondary markets, or (iii) eligible at central banks including collateral that has already been accepted at the central banks but remains unused. This should be supported by references to the operational procedures that would be used to monetize the collateral,
- Mitigating options for any legal or technical impediments to using the identified collateral in resolution. (e.g., to quickly identify and determine legal rights to all collateral pledged to, pledged by, or held in custody by material operating entities within the group),
- Communication strategies that would support the proposed actions,
- Ex-ante measures to support execution of options for maintaining or moving liquidity in different currencies (e.g., measures to maintain access to the foreign exchange markets).

Please refer to *Appendix I* for the liquidity and funding self-assessment template.

3.5 Operational Continuity of Critical Shared Services

3.5.1 Introduction

Operational continuity refers to ensuring or supporting continuity of the critical shared services that are necessary to maintain the provision of, or facilitate, the orderly wind-down of the bank's critical functions in resolution. A service delivery model that facilitates operational continuity, separability, and restructuring is necessary for resolving the bank. The risks to the interruption of services can arise from:

- Provision of services by a division within a regulated legal entity,
- Provision of services by an intra-group service company,
- Provision of services by a third-party provider, or
- Provision of services by entities or service providers located in a foreign jurisdiction.

Restructuring options contemplated under the resolution strategy should be considered in planning for operational continuity.

3.5.2 Requirements

The operational plan should demonstrate the bank's ability to maintain the continuity of critical shared services to support the resolution strategy. The analysis should focus on the feasibility of the actions required to retain or replace these services, the risks to interruption and the rights of use and access to operational assets (e.g., facilities, information technology, intellectual property, digital data).

Appendix J contains an operational continuity self-assessment to support the bank ensure that all key aspects of the *FSB's Guidance on Arrangements to Support Operational Continuity in Resolution - Revised version*[43] are assessed within its resolution plan. The bank is not required to submit the results of the self-assessment, but the resolution plan should cover all the arrangements listed therein.

The bank should ensure the contracts governing the provision of critical shared services (and by extension continuity of critical functions) support continuity of these critical shared services in resolution, or that the risk of a disruption can otherwise be mitigated. The operational plan should outline the methodology used by the bank to identify such contracts[44] and any remedial measures taken to reduce the risk of interruption in resolution, including the incorporation of resolution resilient clauses[45] in such contracts, or identification of specific contingency options[46] at a contract level. *Appendix K* includes a template the bank should use to track its remediation status of all material external and internal contracts, including those that have been fully remediated and those which are pending remediation.

The bank should have a business-as-usual process in place to require that resolution resilient clauses are embedded into every new and renewed critical contract.

[43] The "Supplementary Note" was added to clarify the requirements in response to an increasing use of third-party service providers and digitalization of services.
[44] Types of contracts to be covered through the contractual review include third-party suppliers, including financial intermediaries (e.g., correspondent banks, custodians, clearing brokers, payment agents, and others), as well as real estate lease agreements, and intra-group arrangements or service level agreements.
[45] Refer to *Appendix J*, section 4.6.
[46] Refer to *Appendix K* for examples of contingency options.

The operational plan should include a mapping of material contracts to MLEs and critical shared services.

In addition to the actions necessary to maintain critical shared services, the operational plan should assess the bank's capabilities to produce complete and accurate information on the internal and external contractual arrangements supporting critical shared services, including the MLEs they relate to, in a timely manner.

3.6 Continuity of Access to FMIs

3.6.1 Introduction

The operational plan should demonstrate the bank's ability to maintain continuity of access to critical Financial Market Infrastructures (FMIs)[47] and FMI intermediary services needed to perform payment, settlement and clearing functions in support of the resolution strategy.

3.6.2 Contingency plan requirements for each critical FMI

The bank should provide a contingency plan for each critical FMI (FMI contingency plan), outlining the risks to maintaining access in resolution and the actions to mitigate such risks.

The FMI contingency plans should focus on the financial and operational risks to continued access based on the bank's method(s) of FMI access (i.e., as a direct participant, or indirect via an intermediary).

The FMI contingency plans should be consistent with the FSB's *Guidance on Continuity of Access to Financial Market Infrastructures for a Firm in Resolution* and should leverage FMIs' responses to the *FSB's Continuity of Access to FMIs for firms in resolution: streamlined information collection to support resolution planning* (FSB questionnaire). The bank should also use the FSB's *Framework for information from FMI intermediaries to support resolution planning* to engage their critical FMI intermediaries to understand risks to continued service in resolution.

The bank should have a business-as-usual process in place to stay informed of significant changes that might impact its participation in critical FMIs to ensure that the FMI contingency plans remain comprehensive and incorporate the most current FMI responses to the FSB questionnaire.

The information contained in each contingency plan should be summarized in the operational plan.

3.6.2.1 Mapping and foundational information

This section of the FMI contingency plan should contain information on the relevant legal entities and intermediaries for each critical FMI, ensuring alignment with the bank's resolution profile and resolution strategy.

Each FMI contingency plan should provide the following:

- Organization chart illustrating legal entities that directly and indirectly participate in the critical FMI, as well as those MLEs that rely on the services of this critical FMI to perform critical functions,

[47] Critical FMIs do not include payment infrastructures such as Interac, SWIFT, Moneris and VISA. The risks to continued access to such systems should be addressed in *section 3.5 Operational Continuity of Critical Shared Services*.

- Identification of critical FMI intermediary(ies) (e.g., for indirect access, settlement, nostro accounts) required to access the critical FMI. For each critical FMI intermediary, the bank should provide:
  - The name of the intermediary,
  - Description of the service provided, and
  - MLEs (service recipients) relying on the intermediary services.
- Key employees required for the bank's business-as-usual access to the critical FMI, including:
  - number of FTEs required to maintain access to the critical FMI, and
  - location of FTEs (i.e., functional group, legal entity, and jurisdiction).
- The third-party service providers or systems that are necessary to support continued access to the FMI, including:
  - Name of service provider and/or system, and
  - Nature of service provided.
- Business-as-usual communication protocols with the critical FMI, including:
  - List of key contacts at the bank for the critical FMI (i.e., their position, email, phone number),
  - Primary responsibilities of the key contacts,
  - Location of the key contacts (i.e., functional group, legal entity, and jurisdiction), and
  - List of key contacts at the FMI (i.e., their position, email, phone number, and primary method of communication)
- Business-as-usual reporting requirements to the critical FMI or critical FMI intermediary including:
  - Name and description of report(s) required,
  - Reporting frequency, and
  - Functional area or operational group responsible for preparation of the report or collection of data.
- Regulatory and/or supervisory bodies for the critical FMI who would be involved if a direct participant (or affiliate of the direct participant) of the critical FMI entered resolution,
- Types and amount of collateral posted in business-as-usual,
- Types of credit facilities utilized, if applicable,
- 12-month historical daily value of margin required and the average daily transaction volume and value for each FMI. If the bank pre-funds its transactions, the bank should provide historical average pre-funding levels over the look-back period, and
- Identify any third parties relying on the bank for their indirect access to payment, clearing or settlement by the critical FMI, and if applicable, provide details about these arrangements.

3.6.2.2 Risk identification

Based on the mapping and foundational information, this section of the FMI contingency plan should identify bank-specific risks to maintaining access to the critical FMI in resolution. The analysis should reflect the bank's planned method of access in resolution (i.e., as a direct participant, or indirect via an intermediary), its legal and operating structure, and the FMI's unique rules, financial and operating requirements. The bank should identify each risk individually and clearly link the risk to the mitigating action(s) and assessment of residual risks.

The bank's risk identification should be informed by:

- **Bank's subject matter experts:** Opinions from those at the bank most familiar with the FMI's financial and operational requirements and the bank's processes and procedures to meet them.
- **FMI responses to the FSB Questionnaire:** Content of the FSB Questionnaires available for the critical FMI. Where the responses are leveraged in the bank's FMI contingency plans, they should be clearly identified and referenced. If the critical FMI did not provide a response to the FSB Questionnaire, the bank's FMI contingency plans should state that.
- **Engagement with the critical FMIs:** In-depth assessment of the rules and contractual requirements that govern the bank's relationship with the critical FMI and/or critical FMI intermediaries.
- **Engagement with critical FMI intermediaries:** Insights gained from discussion with critical FMI intermediaries using the FSB *Framework for information from FMI intermediaries to support resolution planning.* Where the responses are leveraged in the bank's FMI contingency plans, they should be clearly identified and referenced. The bank should indicate where a critical intermediary was not willing to engage in discussions. Please refer to the engagement with FMI intermediary(ies) template provided in *Appendix L*.

Each FMI contingency plan should include risk analysis covering:

- Actions and heightened requirements that may be imposed by the critical FMI or the critical FMI intermediaries during resolution including:
  - Estimate of worst case incremental financial resources for each phase of the *Resolution Scenario*. The bank should include incremental amounts of collateral or funding for the critical FMIs and critical FMI intermediaries (where relevant) and provide:
    - description of the methodology used to estimate incremental funding or collateral, and
    - the key assumptions driving the estimates.
  - Estimate of incremental reporting and communication requirements. Please refer to the data and reporting requirements template provided in *Appendix L,* and
  - Loss of existing credit facilities.
- Likelihood of loss of access not resulting from the requirements imposed by the critical FMI or critical FMI intermediary, such as:
  - Inability to retain key employees, with consideration for potential complexities related to legal entity and jurisdiction of employment,
  - Incremental staffing requirements at the bank to meet heightened operational requirements,

  - Continuity of critical third-party services supporting FMI access. Please refer to the third-party service provider template provided in *Appendix L*, or
  - Loss of critical FMI intermediary services.
- Inventory of actions that the critical FMI or critical FMI intermediary could take to terminate or suspend access if the requirements above cannot be met, including:
  - The timeframe in which these actions may be taken,
  - The likelihood that these actions are taken, and
  - Consequences to the bank's resolution strategy.

3.6.2.3 Actions for maintaining access

In this section of the FMI contingency plan, the bank should explain how it intends to maintain access to critical FMI services and provide an overall conclusion of the bank's ability to maintain access. This section should outline the actions for mitigating the identified risks and meeting the incremental financial and operational requirements imposed on the bank over the resolution timeline (from the runway through to the initial stabilization period). The mitigating actions should be linked to the relevant risks identified in *section 3.6.2.2*.

If the bank concludes that its business-as-usual capabilities would be sufficient to meet heightened requirements in resolution, the bank should provide rationale for its conclusion.

In outlining the possible mitigating measures, the bank should not rely on CDIC assurances, guarantees, or otherwise assume that CDIC or another authority would be able to persuade an FMI to provide continued access.

Where the bank has identified ex-ante actions to mitigate risks, they should be listed and described in the bank's work plan.

3.6.2.4 Obstacles and unmitigated risks

This section of the FMI contingency plan should highlight any residual (unmitigated) risks to continuity that cannot be controlled or resolved through ex-ante resolution planning. The analysis should include an impact assessment of the consequences of termination or reduced access on the bank's ability to execute its resolution strategy and rank criticality of the residual risk as: low, moderate, or high. As part of this analysis, the bank should consider potential disruption to the financial system and risk of contagion. The residual risks should be linked to the relevant risks identified in *section 3.6.2.2*, addressing only the unmitigated portion, including where FMI rules could lead to automatic suspension or termination of access.

The bank should identify possible ex-ante or in-crisis actions that can be taken by CDIC or another authority to reduce or mitigate the moderate and high criticality residual risks that cannot be mitigated by the bank.

3.7 Trading Book Wind-Down Plan

3.7.1 Introduction

In resolution a wind-down of the bank's trading book would be one of the single most impactful restructuring measures that can be undertaken, in addition to being a necessary means to de-risk the balance sheet and meet expected liquidity demands. It is therefore critical that the bank demonstrates that it is able to wind-down its trading book and is able to do so in a manner which:

- Promotes stability of the financial system in Canada,
- Helps meet its liquidity needs, and
- Minimizes losses.

This guidance serves to assist the bank in planning for a trading book wind-down, ensuring wind-down strategies are credible and that the financial impacts and legal and operational feasibility of such actions have been adequately considered and analyzed. This will allow for the risks associated with the wind-down to be identified, quantified and mitigated, as well as inform any public-sector responses that could be taken to promote an orderly resolution and wind-down.

3.7.2 Trading book profile

The intent of the trading book profile is to provide a comprehensive analysis of the size, composition, activities and location(s) of the bank's trading book as well as derivatives held as part of the banking book (e.g., structural hedges of the balance sheet of the bank).

For the purpose of this exercise, the scope of the positions considered for the trading book is wider than the accounting definition of trading book. The scope includes all trading activities, securities held by the bank (including available-for-sale portfolios held by treasury units within the bank) and all eligible financial contracts[48] (or EFCs), both exchange-traded and over-the-counter, including those used for structural hedges of the balance sheet, regardless of where within the bank they are booked.[49]

In order to determine the approaches to wind-down the different parts of the trading book, the bank should provide a segmentation of their trading book across key dimensions that are most relevant in resolution. This segmentation should serve as the basis for determining the strategic actions for each part of the trading book, as well as identifying trading book assets that either cannot be sold, or would be difficult to sell or exit.

3.7.2.1 Requirements

The bank should use the segmentation template in *Appendix M* to segment its trading book. The aim of the template is to provide a consistent description of the contents of each segment by requiring specific characteristics to be identified. All position characteristics that materially affect the wind-down approach should be reflected in the segmentation.

[48] For definition, please refer to *Appendix A*.
[49] While the scope of the trading book profile is intended to provide a complete overview of all of the bank's trading assets and EFCs, the focus of the analyses and discussions described in section *3.7.3* and *3.7.4* of this guidance is expected to be on the less liquid parts of the trading book.

The bank should segment their trading book by:

- Business area and sub-business area
- Product type,
- OTC,
- Governing jurisdiction,
- Booking entity,
- Structural balance sheet hedge, and
- Fair value hierarchy level/liquidity level.

The level of granularity in the segmentation should reflect the liquidity and complexity of positions. For less liquid and more complex positions, the bank should apply judgement to add any relevant segmentation dimensions, in addition to the list of dimensions above, in instances where the above dimensions would not be enough to differentiate between positions that would be subject to different sets of actions or assumptions in resolution. Conversely, the bank should also apply judgement in segmenting parts of the trading book that would likely be subject to similar sets of actions and assumptions, where lower granularity may be needed (e.g., in terms of product type). There might for example be no need for the bank to segment Level 1 High-Quality Liquid Assets (HQLAs)[50] into a long list of product types, if the bank anticipates it can quickly liquidate all assets within this category even under stress.

For each segment in the template, the bank should provide a description of the activities associated with the segment. In particular, where the assets in the segment are identified as assets that either cannot be sold, or would be difficult to sell, exit or move, the bank should provide a description of the characteristics that prevent such actions (e.g., illiquidity).

In addition to completing the template, the bank should provide a summary of the key activities in the trading book and the approach used to determine the segmentation.. The bank should also discuss parts of the trading book that are identified as less liquid, that are used as structural balance sheet hedges (i.e., positions that are linked to items attached to the balance sheet and as a result cannot be wound down without exposing the bank to material market risk and losses) or are otherwise difficult or potentially unbeneficial to wind-down.

[50] Refer to OSFI *Liquidity Adequacy Requirements (LAR) – Guideline (2023).*

3.7.3 Strategic actions and their impact on liquidity, capital and financial markets

The intent of this component is to provide an overview of the actions that would be taken to wind-down the trading book and the impact those actions would have on liquidity, capital and the stability of financial markets.

3.7.3.1 Requirements

Assignment and key characteristics of wind-down strategies

The bank should assign a wind-down strategy for each segment of the trading book[51] and describe the key characteristics of the proposed wind-down strategies, including:

- Timing of actions taken,
- Dependencies,
- Assumptions and triggers required to carry out the strategy, and
- Potential counterparty behavior and market factors that impact the choice of strategy.

The bank should describe how the preferred wind-down strategies are consistent with the characteristics of the respective segments, and how the pace of the wind-down balances the need to generate liquidity while minimizing losses and supporting the overarching objective of maintaining stability of the Canadian financial system. In some cases, the bank may assume it will not be able to wind down certain segments because of their illiquidity.

The bank should focus on the more illiquid and complex segments of the trading book and clearly identify where the bank expects it would face the most challenges in a wind-down, as more complex segments of the trading book are likely to be less liquid, may require a longer time to wind-down and are more likely to be closed at a loss. The bank should identify measures that could be taken, both ex-ante and in resolution, to ensure the wind-down can be carried out in an orderly manner. To the extent that segments of the trading portfolio will remain as a residual portfolio at the end of the wind-down period, the bank should describe the risk associated with this residual portfolio and how the risk can be managed.

In segments where the bank has a substantial market share as a market maker, the bank should identify the segments (or products) where market participants would likely be negatively impacted if the bank suddenly exited the market; and discuss how this role factors into the choice of the wind-down strategy. [52]

The bank should also discuss its ability to replace or find alternative hedging strategies in lieu of terminated or maturing bilateral (OTC) derivative contracts used for structural balance sheet hedges and the costs and risks associated with such alternatives.

In addition to the above description, the bank should complete the fields in the template as instructed in *Appendix M* by specifying the assigned wind-down strategies and time to wind-down for each segment.

[51] Examples of potential wind-down strategies are provided in *Appendix N*.
[52] The potential disruption would depend on both the bank's market share and on the number of other financial institutions who could absorb the bank's market share.

Analysis of impact on liquidity, capital and financial markets

To substantiate the impact on liquidity and capital, the bank should estimate the financial resources required to support the wind-down strategies. The analysis should include estimated losses[53] and liquidity needs until the completion of the wind-down. The impact on capital and liquidity should be quantified using a methodology grounded in well-established industry practices, market data, and/or historical observations.

Losses and net liquidity impact should be quantified for each trading book segment, at each point in time outlined, as described in *Appendix M*.

The results of the analysis on the impact on liquidity and losses should inform the *Resolution Scenario* analysis of the bank's liquidity and funding position and recapitalization needs in resolution.

3.7.3.2 Assumptions

The bank should include a discussion and justification of the assumptions made as part of the analysis on the impact on liquidity, capital, and financial markets, including:

- Haircuts and the assumed trade-off between the time to unwind and the price realized,
- Drivers of losses,
- Margin requirements (e.g., additional requirement to pledge collateral due to credit rating downgrades),
- Market capacity to absorb the level and pace of the wind-down,
- Counterparty actions (e.g., potential early termination of contracts), and
- Actions by authorities in foreign jurisdictions that could affect the trading book wind-down.

To substantiate the impact of key assumptions made, the bank should identify the assumptions having the most material impact on their aggregate estimates of losses and liquidity impact (e.g., time to wind-down, or haircuts).

Assumptions made by the bank should be conservative[54], supported by well-founded industry, market, legal and/or historical justification and consistent with the considerations described below.

Objectives and length of wind-down period

The wind-down of the trading book should support the bank's overall resolution strategy. In line with the outcomes that CDIC seeks to achieve through the resolution planning process, the wind-down of the trading book should allow the bank to minimize its reliance on public sector financial assistance, while being carried out in an orderly way to minimize losses for the bank and avoid disruption to the operations of the Canadian financial system.

[53] Losses refer to losses incurred due to actions associated with the resolution (e.g., counterparty actions) and actions taken by the bank as part of their strategy for the trading book (e.g., liquidation of positions). They do not refer to the expected losses due to market movements or counterparty defaults that are not the result of the trading-book wind-down.
[54] For example, the bank cannot assume any general gains on its derivatives exposures as a result of market movements.

Therefore, the timeframe of the wind-down should be determined by balancing these opposing considerations:

- Minimize the required liquidity,
- Minimize losses, and
- Minimize disruption to the operations of the financial system.

Different timeframes for the wind-down may be optimal for different banks, depending on the size and composition of the trading book, nature of the trading activities, the bank's need for liquidity and the availability of TLAC to cover losses. For the purpose of this exercise, CDIC expects that balancing the considerations above would likely result in a wind-down period no shorter than 12 months and no longer than 24 months. The bank should justify its suggested timeframe by discussing how it balances the above considerations.

CDIC expects that at the end of the wind-down period, there may still be a residual portion of the trading book that either cannot or should not be wound down. Positions which are required to minimize the overall risk exposure of the bank (e.g., hedges of the structural balance sheet) are not expected to be wound down by the bank. However, the bank should assess the risk that such positions could be terminated by the bank's counterparties and outline how the bank can respond to such actions.

Assumed market conditions and counterparty actions

The bank can assume that other Canadian systemically important banks are not in resolution or winding down their trading books. However, the market conditions assumed during the wind-down should reflect a severe liquidity stress in the financial market, with a widening of spreads and reduced market depth.

The bank needs to assess and justify its assumptions on the behaviour of market participants under such stressed conditions. The bank should assume that all counterparties would act in accordance with these circumstances in their own self-interest, taking actions to protect themselves and/or manage their exposures and risk. As such, the bank cannot assume that it would be able to enter into new bilateral derivatives[55] contracts or otherwise access OTC markets in resolution.

Where bilateral derivatives contracts for hedging purposes are assumed to be replaced with exchange-traded derivatives, the bank will need to consider, and account for, potential basis risk as a result of the replacement. The bank should also discuss other actions that could be taken to mitigate the impact of its inability to replace bilateral derivatives contracts for hedging purposes, including any public-sector responses that could facilitate an orderly wind-down.

Enforceability of stay provisions

The bank can assume that, following reaching the point of non-viability, an order has been issued for CDIC to take control that would stay the rights for an early termination of EFCs governed by domestic law, in accordance with the *CDIC Act*. Subject to this limited relief, the bank should assume all existing contractual arrangements are governed in accordance with their respective contractual terms and conditions.

The bank should analyze and make assumptions on the costs and challenges associated with finding alternatives for contracts being terminated, taking into consideration the expected exposure and applicable counterparty netting agreements. This should incorporate a quantification of contracts with terms that would enable

---

[55] For definition, please refer to *Appendix A*.

counterparties to terminate due to the resolution event and that would be at risk of not being covered by stay provisions in resolution.[56] In making assumptions to quantify contracts assumed to be terminated, the bank should further consider whether a counterparty would be likely to benefit from terminating a contract as well as the level of sophistication of the counterparty. Where the bank assumes counterparties forbear from exercising their termination rights, the bank should provide a rationale for this assumption.

Estimation of losses

Valuation of less liquid instruments is inherently judgmental, and the bank will need to use judgement in estimating haircuts and losses on assets disposed. When making assumptions on haircuts, the bank should consider both the liquidity of instruments under stressed market conditions (linking to the indicated fair value hierarchy level / liquidity) and the impact on the price of the volume and rate of disposals (i.e., considering the impact of the unwind on market supply and demand). To the extent possible, the assumptions should be supported by an analysis of market depth under stressed conditions (e.g., comparing the unwind to average daily trading volumes where applicable). The bank does not need to estimate or make assumptions on second order knock-on effects of systemic nature brought on by the wind-down.

3.7.4 Legal ability and operational capabilities to execute strategic actions

The bank should demonstrate that it can implement the proposed strategic actions, while considering the potential legal or regulatory constraints, and its operational capabilities to execute the wind-down.

3.7.4.1 Requirements

Legal ability

The bank's ability to wind down its trading book in an orderly manner could be limited by legal constraints, including limitations of the legal ability to enforce a stay of the rights for an early termination of EFCs.[57]

The bank should assess whether it meets the requirements set out in the *Canada Deposit Insurance Corporation Eligible Financial Contracts By-law* (EFC By-law) and provide the status of EFC subject to the *EFC By-law*[58] in the resolution plan using the template in *Appendix O*.

The resolution plan should also contain an estimate of:

- the number of EFCs entered into by subsidiaries that could contractually be at risk of early termination as a result of the bank's entry into resolution, and
- the number of EFCs that could be at risk of early termination due to changes to the bank's credit ratings.

Where remediation actions are required, the bank should identify and list the EFCs such actions apply to, assess the potential impact if a counterparty terminated those EFCs in resolution, and assess the likelihood of termination. The bank should outline the nature and timing of the planned remediation actions.

---

[56] Refer to *section 3.7.4.1* for further detail on the analysis on the eligible financial contracts (EFCs).
[57] Early termination of EFCs could result in a disorderly unwinding of positions and a significant loss of value due to the complex and time-consuming process required for valuation and netting of positions, as well as the counterparty claims for costs associated with the close-out netting process, and destabilizing effects on market asset pricing due to accelerated collateral liquidation.
[58] EFCs that are, or expected to become, part of the *"Prescribed class of eligible financial contracts"* as defined in the EFC By-law.

For the EFCs identified as at risk of early termination in resolution, as well as those identified to have requirements for additional collateral in the case of a downgrade or loss of credit rating, the bank should estimate and account for the impact on liquidity and capital as part of the analysis described under *section 3.7.3.1*, and outline a plan for mitigating actions that can be taken.

Regulatory constraints

Regulatory constraints may include restrictions on the bank's ability to wind-down, transfer or renew intra-group trades due to actions taken by authorities, such as ring-fencing actions or imposing other business restrictions.

The bank should describe how potential regulatory interventions could impact the wind-down, in particular in relation to cross-border inter-affiliate trades in the case when trading positions are managed as a single book across different jurisdictions.

The bank should also assess the likelihood and impact of actions by the subsidiary boards or authorities to restrict the wind-down, transfer or roll-over of trades, or restrict the flow of assets across entities in different jurisdictions (e.g., due to ring-fencing) and assess how such actions would impact the proposed strategic actions for winding down the trading book.

Operational capabilities

Operational capabilities include the bank's ability to produce necessary information in a timely manner[59] to determine the manner in which positions can be exited, as well as its ability to execute the proposed wind-down strategies. For example, where wind-down strategies rely on the ability to sell or novate positions with a limited number of market participants, the bank should discuss the extent to which it has established relationships with parties to which it believes it could offload positions in a wind-down.

The bank should demonstrate that it has the following capabilities:

- capabilities (i.e., people, processes, systems, information, and access to financial market infrastructure) to execute the wind-down strategies.
- system and information capabilities to track and monitor its risk positions during the wind-down and the ability to minimize and mitigate open risk arising as a result of the wind-down (e.g., due to asymmetric wind-down of positions).
- capabilities to ensure obligations under financial contracts can continue to be performed upon entry into resolution. This should include safe settlement, payment and delivery obligations and provision of collateral.

The bank should demonstrate the ability to produce the information needed for the wind-down in a timely manner[59] in resolution, including:

- Ability to rapidly aggregate detailed trading book positions and exposure data and classify positions by maturity and liquidity to determine how and when positions can be exited,
- System capabilities to produce the necessary information on all of its financial contracts, including identifying trigger events and contracts at risk of early termination in resolution,

[59] Timely should be interpreted as within the timeframe needed to support the wind-down which may vary by type of information (e.g., the information required for valuation may be required within 48 h, or information for determining wind-down actions may be required at different points during resolution).

- Capabilities to track sources and uses of collateral, including ability to produce timely information on collateral posted/received for each of the bank's legal entities and for each material counterparty group,
- Ability to produce timely information on netting arrangements, and
- Ability to produce contact details for counterparties, FMIs and authorities that would need to be contacted to support an orderly wind-down.

Where the ability to produce the above information in a timely manner in resolution has not been demonstrated through testing, the bank should self-assess its operational capabilities and the time needed to produce the information needed in resolution. Where enhancements are needed, these should be incorporated into the work plan.

3.8 Execution of Restructuring Options

3.8.1 Introduction

While in resolution, the bank may need to implement restructuring options to ensure that it is returned to the market as a viable business. The restructuring strategy will vary depending on the circumstances leading to failure, but its implementation will rely on a general set of the bank's capabilities (i.e., people, processes, technology and data/information). In this section of the operational plan, the bank should demonstrate the feasibility of its restructuring options, outlined in its *Resolution Strategy,* and the effectiveness of its capabilities to execute them.

3.8.2 Requirements

The bank should have an overarching framework for determining its restructuring strategy in a crisis to help determine the scope and method of restructuring, considering the nature of the crisis and prevailing market conditions. The framework should cover governance, reports/metrics to monitor progress of restructuring activities, and a process to evaluate effectiveness of restructuring process.

3.8.2.1 Restructuring execution playbook

The bank should establish a playbook (or multiple playbooks)[60] describing the processes and key considerations for executing the restructuring options that:

- Outlines the process and timeframe from initiation to closing, including all necessary governance and regulatory approvals.
- Estimates the impact on capital and liquidity upon execution of the restructuring option[61].
- Assesses ease of separation (including potential obstacles and mitigants), transitional services required and a likely transition period, including the potential impact on remaining businesses, and operational continuity.

[60] The playbook should cover those restructuring options impacting the bank's resolution profile (material legal entities, critical functions (lines of business)). The requirements for the wind-down of the bank's trading book are addressed in *section 3.7* Trading Book Wind Down Plan and as such do not require a separate playbook.
[61] If captured in the bank's Resolution Scenario, ensure the impact is clearly identified.

- For divestitures, assesses market interest and depth (leveraging precedent transactions), including potential buyers (considering strategic fit, potential scale and regulatory considerations) and precedent transactions,
- For divestitures, identifies any external valuations performed, if available,
- Identifies the execution team[62] responsible for overseeing and executing the option, and any unique capabilities required, and
- Identifies major stakeholders and communication considerations.

3.8.2.2 Operational readiness

Operational readiness involves ensuring that the bank's capabilities are prepared to support implementation of restructuring options. In the context of restructuring in resolution, experiences in other jurisdictions suggest that there are generally three constraints to executing expeditious transactions: (i) market interest and capacity, (ii) time to execute, and (iii) asset quality and data/information for the due diligence process. The completeness and quality of data/information provided for due diligence is essential to dealing with these constraints.

The bank should assess its operational capabilities, including the time needed, for the following:

- Produce the data/information to support the execution of the restructuring option. While the scope of data/information will vary depending on the restructuring option and the associated method, it will generally include, for example, financial statements, loan tapes, risk analyses of asset portfolios, valuation reports, budgets and forecasts, and legal agreements.
- The process to populate a data room with data/information in a timely manner, including on- and off-reporting cycle.
- The technology platform(s) and protocols to provide potential buyers with timely access to data/information, including support for technical issues, permission access, and monitoring of information.

Where enhancements are needed, these should be incorporated into the work plan.

3.9 Key Regulators and Actions to Satisfy Regulatory Requirements

3.9.1 Introduction

Individual jurisdictions may impose their own requirements for the application of specific resolution powers (e.g., local recognition of foreign proceedings) and national authorities will have varying prudential norms (e.g., the establishment of new financial entities, new licensing requirements, or approvals of the transfer of assets and liabilities of existing entities). The bank should consider applicable regulatory and resolution regimes, as well as any governance-related considerations, where the outcome is to understand the triggers that can lead to MLEs, or assets or funds of MLEs, becoming temporarily or permanently separated (i.e., leading to a loss of control of an MLE) during resolution. The ability to continue to meet existing regulatory requirements, as well as to obtain

[62] Should be captured as part of the bank's key employees.

the necessary approvals for executing the resolution strategy in a timely manner, will require proactive planning and preparation across jurisdictions where MLEs are incorporated.

3.9.2 Requirements

The operational plan should demonstrate how the regulatory requirements could be managed in a manner that supports the resolution strategy. The resolution plan should contain the following information for each authority identified in *Module 1: Resolution Profile & Strategy*:

- A description of the actions necessary to maintain regulatory compliance and/or obtain licensing or other regulatory approvals needed for each MLE, and contact information at the authority.
- A description of actions the bank can take to reduce the risk of the authority preventing the transfer or flow of funds from each applicable MLE.
- Contact information (departments, functional areas) at the bank who would be responsible for engaging with the identified authorities.

The bank should maintain a comprehensive and current list of the regulatory notice requirements and/or approvals needed to execute the resolution strategy and have a process in place to monitor changes to these regulatory requirements and/or approvals.

The separation of a subsidiary can occur because of the duties of its board of directors, regulator or creditor actions (e.g., petition for insolvency proceeding by debt holders), or actions by major stakeholders (e.g., significant counterparties or suppliers). The bank should identify these major stakeholders and consider situations where obligations towards them may conflict with obligations towards the parent bank, triggering a unilateral separation.

For branches there is a wide range of restrictions that can be imposed by authorities that in effect lead to their separation. The analysis should identify the powers and triggers for such actions for each MLE, including powers to restrict the ability to transfer funds from the MLE.

Banks that are subject to multiple regulatory regimes and have been, or will be, required to develop resolution plans for one or more foreign authorities should also include an assessment of the alignment of their resolution strategy and actions with these plans. The operational plan should contain an analysis of the following:

- The impact of the execution of the foreign resolution plan on the ability to execute the resolution strategy.
- The operational impediments, ex-ante actions identified in the foreign plans, their relevance to the execution of the resolution strategy and what remediating actions that are being proposed or under way with timelines for completion.

Module 4: Resolution Plan Testing

4.1 Introduction

Testing is an integral facet of building credible resolution plan. The bank should validate the effectiveness of its crisis capabilities through testing exercises. These internal testing exercises should leverage the significant progress the bank has made in recovery plan testing, developing playbooks and integrating crisis management into its business-as-usual policies and processes.

A testing program is a foundational element in validating the effectiveness of the bank's capabilities to implement its resolution strategy. The following are key objectives of resolution testing programs:

- **Enhance confidence in the strategy and resolution regime.** Testing should provide a degree of confidence that each bank's resolution strategy can be implemented within the Canadian framework.
- **Build awareness.** Testing exercises should increase awareness of the challenges associated with executing the strategy and build a crisis mindset within the bank.
- **Confirm roles in a crisis.** Testing should help confirm that the roles and responsibilities of the bank's financial crisis response team are clear and understood within the organization.
- **Validate capabilities and the level of preparedness to implement resolution plans.** To confirm that the necessary capabilities exist, function as expected, and produce the results needed to implement the plan.
- **Facilitate continuous improvement.** Testing exercises should be based on the assumption that improvements can be made, the objective should be to identify meaningful remediation actions. Testing programs should include a feedback process whereby identified issues are tracked and addressed as part of the work plan.

4.2 Requirements: Testing Program

The bank should establish policies and procedures that ensure its resolution plan is maintained and tested. The bank's resolution plan testing program should be subject to review by the bank's Internal Audit function, as such, the policies, processes and procedures related to the testing program should be incorporated into the internal audit universe and regularly reviewed by Internal Audit with the same rigor as is applied to other auditable areas of the bank.

Testing program

The multi-year testing program should demonstrate the bank follows a rigorous process in testing the required capabilities for execution of the resolution strategy. The testing program should include sufficient detail for CDIC to gain insight into which of the capabilities and resolvability areas the bank plans to test and in what priority. The testing program should contain a forward-looking (minimum one year) schedule of testing exercises the bank plans to undertake. There should be an appropriate level of governance embedded within the bank's testing program to ensure (i) the forward-looking schedule is appropriate to meet CDIC's testing expectations which includes the required testing frequency and (ii) the bank's scoping documents meet CDIC's requirements.

Figure 6: Testing program components

Component	Description
Objective	**Overall testing program objectives, for example:** • Increase confidence in the bank's ability to address a financial crisis, • Increase crisis management awareness, • Continuous improvement of the resolution plan, associated capabilities, and preparedness.
Governance, Roles, and Responsibilities	**Assignment of ownership and oversight for each stage of the testing:** • Planning, • Execution, • Analysis of results, • Reporting of results.
Testing Methodology	**A structured methodology for testing exercises including:** • Planning (i.e., resourcing, systems, coordination with third parties, utilization of types of tests, criteria for success), • Execution, • Analysis of results (postmortem), • Reporting (based on governance section), • Follow up actions (e.g., changes to the resolution plan or work plan).
Types of tests	**A description of the various testing methods available[63]** • List of the types of tests, • Pros and cons of each test type, • Areas where each test type could be used.
Testing Inventory	**A list of elements of resolution that could be tested[64]** The testing areas should be identified through the work plan[65] as they support the bank's progress toward resolvability.
Scheduling and Frequency	**Scheduling should include an estimated testing frequency where applicable.** • Tests from CDIC's testing inventory[64] should reflect the frequency prescribed by CDIC. • The timeline starts once the first test in a given resolvability area occurs. • When scheduling, the bank should consider if a single testing exercise may be able to address more than one resolution capability.

[63] *Appendix P* provides CDIC's definitions of test types.
[64] *Appendix Q* includes an inventory of capabilities the bank is required to test at a minimum.
[65] *Appendix R* contains the work plan template which includes a column linking the work plan to the testing plan. The bank should identify, within its work plan, any gaps or areas for improvement identified through the testing activities.

Test scoping documents

Prior to conducting all tests, including those with an annual frequency, the bank should submit comprehensive scoping documents detailing the:

- objective of test,
- scope,
- key success factors (quantitative and/or qualitative measures)[66],
- potential challenges or risks to successful test execution,
- participants,
- design,
- governance process over the scoping document and test results, and
- role of internal audit over the scoping document and test results.

Test results

Upon completion of a test, the bank should submit the results of the testing exercise to CDIC for review. Test results should identify the capability(ies) tested, the bank's findings, and the plan for remediating identified gaps. Test results can be submitted to CDIC outside of the resolution plan submission, however, test results and any gaps identified through testing should be captured in the bank's subsequent resolution plan and work plan.

Test results should include at a minimum:

- test administration,
- participation,
- results (tied to the key success factors identified in the scoping document),
- identified gaps in capabilities or enhancements, and
- remediations plan(s).

The content of the report should be an extension of the scoping document.

4.3 Requirements: Joint Testing

Joint testing forms part of the bank's resolution testing activities and should be distinguished from tests the bank undertakes itself to verify and improve upon its resolution plan and associated capabilities.

Joint testing is a testing exercise where both CDIC and the bank play a role in assessing resolution capabilities, identifying gaps or providing recommendations. CDIC's role during joint testing exercises with the bank may vary depending on the capability or area being tested and the testing approach selected. CDIC may play an active on-site role in the testing exercise, or as an observer, or may assess the results of a test off-site after the bank has conducted its test. CDIC's expectation is that joint testing exercises will increase in complexity over time. The bank should propose areas for joint testing in its testing program.

66 Specifically for production tests, the key success factors should explicitly consider validating the timeliness and accuracy of information produced.

Module 5: Impediments and Work Plan

5.1 Impediments

5.1.1 Introduction

An essential component of the bank developing a credible and feasible resolution plan is the identification of impediments (i.e., resolvability risks) to the timely implementation of the resolution strategy. It is essential to assess how these impediments are removed or mitigated through the bank's resolution planning and to assess what remains as a residual risk or uncertainty that cannot be mitigated ex-ante.

CDIC's assessment of the bank's resolution plan allows CDIC to conclude on the bank's ability to implement the resolution strategy. The outcomes expected to be demonstrated by the resolution plan form CDIC's assessment criteria. Applying the assessment criteria allows CDIC to identify the risk to executing the resolution strategy (i.e., the resolvability risk) and verifies how the bank mitigates the risk based on the information, analysis, and conclusions provided by the bank in the resolution plan.

CDIC's *Resolution Plan Assessment Framework* outlines the criteria used in assessing compliance of the resolution plan submitted by the bank with the *Resolution Planning By-law*. The ability to implement the resolution strategy is assessed across the following areas of key resolvability risks:

1. Legal structure suitability
2. Loss absorbency
3. Access to liquidity
4. Bail-in execution (including valuation)
5. Trading book wind-down
6. Continuity of access to FMIs
7. Operational continuity, crisis capabilities and governance
8. Resolution plan testing program

Through the issuance of the Notice of Compliance[67], CDIC outlines areas requiring further work for the bank (i.e., observations and deficiencies), where applicable.

5.1.2 Requirements

The bank should provide a summary of its assessment of impediments to the implementation of the resolution strategy, the impact of such impediments on CDIC's ability to implement the resolution strategy, and the impact on the continuity of critical functions. In its assessment, the bank should outline the measures taken to remove or mitigate the resolvability risks (across the areas listed in *section 5.1.1*) and what remains as a residual risk or uncertainty that cannot be mitigated ex-ante.

[67] *CDIC Resolution Planning By-law*, s.9

5.2 Work Plan

5.2.1 Introduction

The bank's work plan forms a critical component of the resolution plan as it allows CDIC to track and monitor the bank's progress towards resolvability and compliance with the By-law. Given its importance, the work plan will be used to guide bi-lateral discussions between the bank and CDIC throughout the resolution planning cycle.

5.2.2 Requirements

In the resolution plan, the bank should outline the governance process to ensure oversight over the development and the review of the work plan, prior to its submission to CDIC.

Where applicable, the work plan should link the work plan actions to the bank's testing program, identify the areas to be tested, and outline the testing approach.

The bank's work plan should outline a complete set of actions:

- For the maintenance, validation and testing of the resolution plan,
- To incorporate a material change[68] into the resolution plan, if the bank experienced a material change and provided a material change report prior to the submission of the current resolution plan,
- To remediate a deficiency[69], if it was identified in the prior submission of the resolution plan,
- To address an observation[70], if it was identified in the prior submission of the resolution plan, and
- To mitigate or remove impediments, to the extent there are remaining impediments identified by the bank, or to address gaps in capabilities identified the bank. Where the bank has not developed the operational capabilities related to specific requirements or has been unable to fully consider all issues required, its work plan should include a description of the actions required to develop the necessary capabilities and the corresponding approach to testing such capabilities, where appropriate.

The format of the work plan should allow CDIC to track the bank's progress in completing the work plan actions between the submissions of the resolution plans. The work plan actions should be mapped to the sections of the resolution plan. For each action the work plan should indicate a start and end date, ownership, and progress update, issues identified, and link to the testing plan, where appropriate. Please refer to *Appendix R* for the work plan template.

The work plan is required to be submitted as part of the resolution plan.[71]

[68] For definition, please refer to *Appendix A*.
[69] For definition, please refer to *Appendix A*.
[70] For definition, please refer to *Appendix A*.
[71] *CDIC Resolution Planning By-law*, s.7(k)

Appendix A: Definitions

For reference only.

Term	Definition and Reference
Bank	For the purpose of this document, the bank refers to a "banking group", or a domestic systemically important bank and its affiliates, any entity in which that bank has a substantial investment, and any business enterprise that that bank operates with other persons, including a joint venture or a special purpose vehicle.
	Refer to *CDIC Resolution Planning By-law*, s.1 and as *Bank Act*, s.2
Balance sheet valuation	A balance sheet valuation involves conducting a separate valuation of each asset and liability, including material business lines or subsidiaries, in accordance with IFRS and regulatory capital requirements. The valuation should provide a prudent and fair assessment of the financial position of the bank to ensure that losses (incurred and expected losses) as well as the restructuring plans and other associated resolution costs are fully recognized at the time of resolution. A balance sheet valuation is regarded as an extension of accounting and regulatory frameworks and as such should be consistent with IFRS and regulatory capital requirements. For financial liabilities carried at amortized cost, the accounting basis generally would not change from business as usual, unless the conditions in the lead up to resolution would trigger the requirement for restatement of some financial liabilities into fair value under IFRS. For financial liabilities that are designated at fair value, some adjustments may be necessary (e.g., to recognize changes in the credit risk spreads at the time of the non-viability which may then impact the estimate of loss).
Bilateral derivatives	Over-the-counter (OTC) derivatives that are not exchange traded or cleared through a central counterparty.
Credible/ feasible	Credible means that the strategy or an action *would be executed* considering potential internal and external impact. Feasible means that the strategy or an action *could be executed* based on the existence of legal, operational and financial capacity and capabilities (people, processes, technology and data/information) to do so.

Term	Definition and Reference
Critical function	An activity performed by an entity within the bank group for persons not affiliated with the bank group and whose absence or failure would have an adverse effect on the stability of the financial system or on the functioning of the economy in Canada. The following elements should be considered when assessing criticality of a function: • Size and role in the market • Barriers to substitutability (availability and ease) • Impact – importance of service continuity to customer's financial health and the functioning of the Canadian economy • Contagion risk and interconnectedness to other financial institutions and markets
	Refer to: *CDIC Resolution Planning By-law* and FSB guidance on *Identification of Critical Functions and Critical Shared Services*.
Critical shared service	An activity that is performed by an entity within the bank group or an external provider for one or more business units or legal entities of the bank group and whose absence or failure would lead to the cessation of, or present a material risk to the continuity of, critical functions. In identifying its critical shared services, the bank should consider: • Entities that provide global treasury operations, funding, or liquidity activities (inclusive of intercompany transactions) material to the exercise of the bank's critical functions • Entities that provide material operational support in resolution (key employees, information technology, data centers, real estate or other shared services) material to the exercise of the bank's critical functions • Entities that are engaged in derivatives booking activities that are material to the exercise of the bank's critical functions, including those that conduct either the internal hedge side or the client-facing side of a transaction • Entities that hold membership in FMIs deemed material to the exercise of the bank's critical functions • Entities engaged in asset custody or asset management activities that are material to the exercise of the bank's critical functions • Entities that enter into external service arrangements material to the exercise of the bank's critical functions
	Refer to: *CDIC Resolution Planning By-law* and *FSB Guidance on Identification of Critical Functions and Critical Shared Services.*
Critical Financial Market Infrastructure (FMI)	An FMI that provides clearing, payment, securities settlement and custody activities, functions or services, the discontinuation of which could lead to the collapse of (or present a serious impediment to the performance of) one or more of the bank's critical functions.
Deficiency	A deficiency in the resolution plan would, in the opinion of CDIC, prevent the implementation of the bank's resolution strategy
	Refer to: *CDIC Resolution Planning By-law*, s.11(4)(b) and s.11(4)(c)

Term	Definition and Reference
Eligible financial contract (EFC)	Eligible financial contract is: (a) a derivatives agreement, whether settled by payment or delivery, that: (i) trades on a futures or options exchange or board, or other regulated market, or (ii) is the subject of recurrent dealings in the derivatives markets or in the over-the-counter securities or commodities markets, (b) an agreement to (i) borrow or lend securities or commodities, including an agreement to transfer securities or commodities under which the borrower may repay the loan with other securities or commodities, cash or cash equivalents, (ii) clear or settle securities, futures, options or derivatives transactions, or (iii) act as a depository for securities, (c) a repurchase, reverse repurchase or buy-sell back agreement with respect to securities or commodities, (d) a margin loan in so far as it is in respect of a securities account or futures account maintained by a financial intermediary, (e) any combination of agreements referred to in any of paragraphs (a) to (d), (f) a master agreement in so far as it is in respect of an agreement referred to in any of paragraphs (a) to (e), (g) a master agreement in so far as it is in respect of a master agreement referred to in paragraph (f), (h) a guarantee of, or an indemnity or reimbursement obligation with respect to, the liabilities under an agreement referred to in any of paragraphs (a) to (g), and (i) an agreement relating to financial collateral, including any form of security or security interest in collateral and a title transfer credit support agreement, with respect to an agreement referred to in any of paragraphs (a) to (h).
	Refer to: *CDIC Act*, s. 39.15(9), and *CDIC Act's Governor in Council Regulations, EFC Regulations.*
Emergency lending assistance (ELA)	Emergency Lending Assistance is a loan or advance to eligible financial institutions and financial market infrastructures at the Bank of Canada's discretion. The provision of ELA is extraordinary and designed to provide last-resort liquidity to individual financial institutions or FMIs that are facing serious liquidity problems.
	Refer to: *BoC Emergency Lending Assistance.*
Enterprise value	Enterprise valuation refers to a whole-bank valuation, the purpose of which is to estimate the post-conversion value of the bank's equity. There are several standard approaches to conducting an enterprise or equity valuation recognized by Canadian and international valuation standard setting bodies (e.g., market-based approaches such as comparable trading multiples, comparable transaction multiples, dividend discount model, income-based

Term	Definition and Reference
	approaches such as discounted cash flow, asset-based approaches). The preferred valuation approach will depend on the circumstances at the time.
Fair value	The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (IFRS).
Financial market infrastructures (FMIs)	Financial market infrastructures are a multilateral system among participating institutions, including the operator of the system, used for the purposes of clearing, settling or recording payments, securities, derivatives, or other financial transactions. Also known as payment, clearing, and settlement systems.
	Refer to: *Committee on Payment and Settlement Systems (CPSS) Principles for Financial Market Infrastructures, published in April 2012.*
FMI intermediaries	Intermediaries are a broad category of financial institutions which act in an agency capacity for other banks. Common services include clearing of foreign currencies, security settlement for certain FMIs, tri-party repo clearing, and provision of access to FMIs. Also referred to as correspondent banks.
Key employees	Employees within the bank with specific expertise necessary to support the provision of critical shared services, critical functions, and/or the execution of the resolution strategy. Main areas include officers / executive management roles, line of business heads, operations (e.g., management of critical contracts, servicing functions for critical products such as mortgage servicing, maintaining access to critical FMIs), funding and liquidity monitoring and management, capital management and other treasury functions, finance, legal, communications, human resources, technology.
Key regulator	A domestic or foreign supervisory or regulatory authority of a material legal entity.
Liquidation value	The liquidation value of a share or liability is the estimated value that the prescribed person would have received in respect of the share or liability if an order under the *Winding-up and Restructuring Act* to wind up the federal member institution had been made immediately before the making of an order under subsection 39.13(1) of the Act in respect of the institution. Assumptions for estimating the liquidation value: • as if no order under subsection 39.13(1) of the *CDIC Act* has been made in respect of the federal member institution, and • without taking into consideration any assistance, financial or other, that is or may be provided to the federal member institution, directly or indirectly, by CDIC, by the Bank of Canada or by Her Majesty in right of Canada or a province after any order to wind up the institution has been made.
	Refer to: the *Compensation Regulations*.
Material change	A change in the bank's legal structure, business, operations, critical functions, critical shared services, material legal entities or the laws and regulations applicable to it which would require one or more amendments to the bank's resolution plan.
	Refer to: *CDIC Resolution Planning By-law*

Term	Definition and Reference
Material legal entity	A legal entity or branch within the bank group that meets at least one of the following criteria: (a) it performs a critical function or a critical shared service, (b) the failure or disruption of its operations might prevent the implementation of the bank's resolution strategy, or (c) it is a member institution. Legal entity or branch is considered material when it meets at least one of the following criteria: • Performs a critical function and/or critical shared service, • Has more than 5 percent of the group risk weighted assets, • Generate more than 5 percent of the total operating income of the consolidated group, or • Has total leverage exposure measure larger than 5 percent of the consolidated leverage exposure measure for the group. There may be other factors that may influence materiality of a legal entity, which may be identified by the bank or the authorities irrespective of whether the above criteria are met.
	Refer to: *CDIC Resolution Planning By-law*
Observation	A weakness in the resolution plan that would not affect the ability to execute the resolution strategy.
Resolution entity	Resolution entity is an entity to which resolution tools are applied in accordance with the resolution strategy. Depending on the resolution strategy, a resolution entity may be a parent bank, an intermediate or ultimate holding company, or an operating subsidiary. The bank may have one or more resolution entities.
	Adapted from: *FSB Total Loss-Absorbing Capacity (TLAC) Principles and Term Sheet*
Resolution group	A resolution entity and any entities that are owned or controlled by a resolution entity either directly ("direct subsidiaries") or indirectly through subsidiaries of the resolution entity ("indirect subsidiaries") and that are not themselves resolution entities or subsidiaries of another resolution entity. Each resolution entity and each direct or indirect subsidiary of a resolution entity is part of exactly one resolution group.
	Adapted from: *FSB Total Loss-Absorbing Capacity (TLAC) Principles and Term Sheet*
Resolution value	The resolution value of a share or liability is the total of the estimated value of the following: • the share or liability, if it is not held by CDIC and it was not converted, after the making of the order under subsection 39.13(1) of the *CDIC Act*, into common shares under subsection 39.2(2.3) of the *CDIC Act* or in accordance with their terms, • common shares that are the result of a conversion of the share or liability carried out, after the making of the order under subsection 39.13(1) of the *CDIC Act*, under subsection 39.2(2.3) of the *CDIC Act* or in accordance with their terms,

<table>
<tr><th>Term</th><th>Definition and Reference</th></tr>
<tr><td rowspan="2"></td><td>any dividend or interest payments made, after the making of the order under subsection 39.13(1) of the CDIC Act, with respect to the share or liability to any person other than CDIC, and
any other cash, securities or other rights or interests that are received or are to be received with respect to the share or liability as a direct or indirect result of the making of an order under subsection 39.13(1) of the CDIC Act and any actions taken in furtherance of the order, including cash, securities or other rights or interests to be received from any of the following:
CDIC or the federal member institution,
the liquidator of the federal member institution, if the institution is wound up,
the liquidator of a corporation described in subsection 10(2) of the CDIC Act, if the corporation is liquidated,
the liquidator of a bridge institution, if the bridge institution is wound up.</td></tr>
<tr><td>Refer to: the <u>Compensation Regulations</u>.</td></tr>
<tr><td rowspan="2">Total loss absorbency capacity (TLAC)</td><td>Total loss absorbing capacity refers to the feature of the Canadian bail-in regime whereby D-SIBs are required to maintain a minimum capacity to absorb losses. The purpose of the Total Loss Absorbing Capacity (TLAC) requirement is to provide a non-viable D-SIB with sufficient loss absorbing capacity to support its recapitalization. This would, in turn, facilitate an orderly resolution of the D-SIB while minimizing adverse impacts on the stability of the financial sector, ensuring the continuity of critical functions, and minimizing taxpayers' exposure to loss. D-SIBs are required to maintain a minimum risk-based TLAC ratio and a minimum TLAC leverage ratio as set out in orders made under subsection 485(1.2) of the Bank Act. The Superintendent may subsequently vary the minimum TLAC requirements for individual D-SIBs or groups of D-SIBs. D-SIBs will also be expected to hold buffers above the minimum TLAC ratios.</td></tr>
<tr><td>Refer to: <u>OSFI's Total Loss Absorbing Capacity (TLAC) Guideline</u> and <u>FSB Total Loss-Absorbing Capacity (TLAC) Principles and Term Sheet</u></td></tr>
<tr><td>Wind-down period</td><td>The time period from the point of non-viability until all strategic actions to wind-down the trading book have been performed.</td></tr>
</table>

Appendix B: Point of Entry

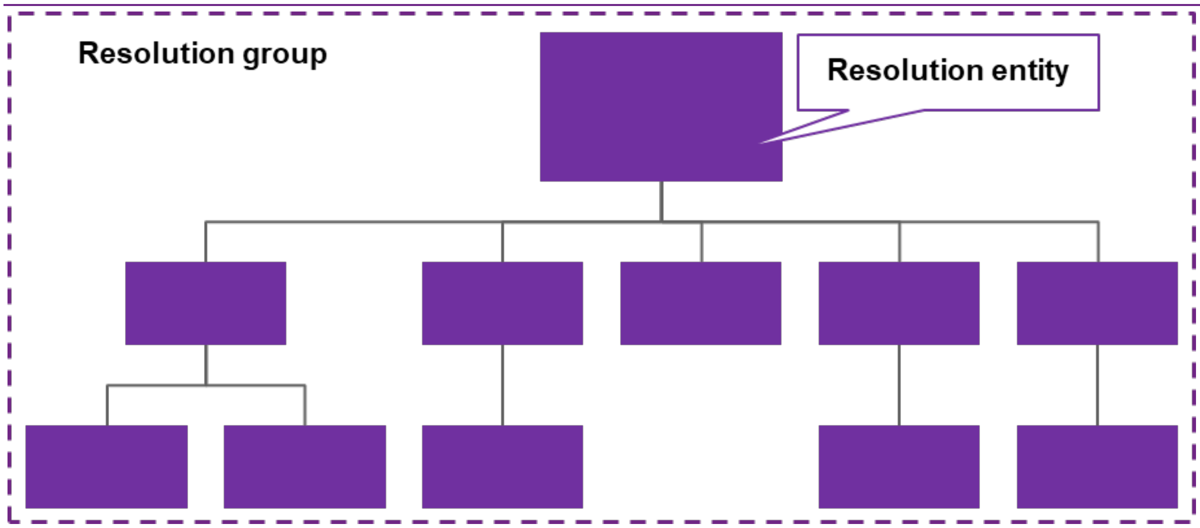
For reference only.

The FSB refers to two different approaches for entry into resolution, SPE and MPE. The alignment towards one approach over another is often unclear and involves the assessment of many factors such as the geographic location of the bank's critical functions, the location of TLAC amongst legal entities and characteristics of the bank's structural models.

SPE and MPE approaches[72]

SPE Involves the application of resolution powers at the top parent bank or holding company level by a single resolution authority in the jurisdiction responsible for the global consolidated supervision of a group. An SPE strategy operates through the absorption of losses incurred within the group by the parent bank or holding company (e.g., through the write-down and/or mandatory conversion of unsecured debt issued by that parent bank into equity (bail-in)). Provided that sufficient TLAC is available at the parent bank, operating subsidiaries should be able to continue as a going concern without entering resolution. However, host authorities may need to exercise powers to support the resolution led by the home authorities.

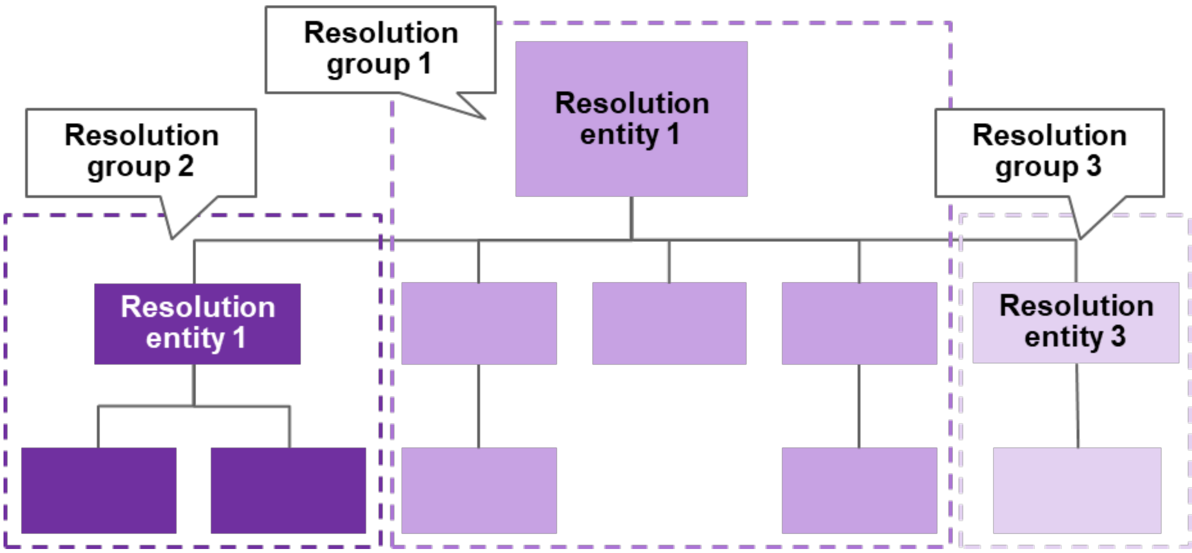
Figure 7: Illustration of a simplified SPE approach



[72] FSB, *Recovery and Resolution Planning for Systemically Important Financial Institutions: Guidance on Developing Effective Resolution Strategies*, July 16, 2013.

MPE Involves the application of resolution powers by two or more resolution authorities to different parts of the group and is likely to result in a break-up of the group into two or more separate parts. The group could be split on a national or regional basis, along business lines, or some combinations of each. The resolution powers applied to the separate parts need not be the same and could include resolution options, such as bail-in within resolution, use of a bridge entity, transfer of business or wind-down. MPE strategies nevertheless require actions to be coordinated across jurisdictions to avoid conflicts or inconsistencies that undermine the effectiveness of the separate resolution actions, a disorderly run on assets and contagion across the bank.

Figure 8: Illustration of a simplified MPE approach



Appendix C: Scenario Reporting Schedules

This appendix is required to be submitted in the resolution plan.

Sample Table of Key Drivers for Change in Peak ELA

The bank should include a table summarizing the key drivers for the change in peak ELA in the current plan compared to the previous resolution plan.

Numbers in the table below are for illustrative purposes only.

(in CDE$Bn)	Peak ELA in the Current Resolution Scenario	Peak ELA in the Previous Resolution Scenario	Change in the Peak ELA
Base case Peak ELA	100	80	**20**
Main drivers for Peak ELA Change (each driver with absolute value of impact greater than or equal to $1 Bn)			
Key Drivers	**Summary Comments**		**Impact in $CDE**
1. [Add a description]			8
2. [Add a description]			5
3. [Add a description]			4
4. [Add a description]			3
…			-3
Other (sum for all remaining factors with absolute impact less than $1Bn for each)			3
Sub total			**20**

Reporting Schedules

The bank should use CDIC's prescribed templates to promote uniformity, consistency, and comparability between resolution plans. The bank may only use its own internal reporting templates to replace Schedules 1-5, if the internal templates include the same information and at a level of granularity comparable to CDIC's prescribed schedules. The bank is requested to submit proposed reporting templates to CDIC for comments and approval before submitting them with the resolution plan.

In completing the Schedules, the bank should ensure that the information entered is consistent across Schedules and that all columns and rows are populated.[73]

[73] In accordance with *section 2.3,* the schedules should be populated up to T+2y beyond the point of non-viability (PoNV) or to the point at which all public sector funding is fully repaid—whichever is longer.

Schedule 1: Funding Uses and Sources Analysis

The purpose of Schedule 1 is to understand the timing of the funding gaps at the MLE level, and the timing and extent of the public sector financial assistance.

A completed schedule is required for each MLE. Each period duration should be consistent with the scenario narrative.

Information in Schedule 1 should be consistent with *Schedule 2: Inter-company Funding Flows Analysis and Schedule 3: Summary Pledging Analysis.*

Instructions for completing the prescribed template:

1. Provide aggregated cash flows in the periods specified.
2. Actual and projected balances may not apply to all cash flow items listed in the template, insert 0 for items that do not apply.
3. Additional rows can be added to the template, if necessary.
4. Starting in the Stabilization period, some of the outflows may become inflows as run-off rates level off and growth resumes, therefore, positive values may be used.

Schedule 2: Inter-Company Funding Flows Analysis

The purpose of Schedule 2 is to understand the funding required by the affiliates and illustrate inter-affiliate transfers, their timing and potential frictions.

A completed schedule is required for each resolution period. Each period duration should be consistent with the scenario narrative.

Information Schedule 2 should feed into *Schedule 1: Funding Uses and Sources Analysis.*

Instructions for completing the prescribed template:

1. Provide the analysis for the material legal entities,
2. The template includes the minimum drivers for inter-affiliate flows, additional rows can be added to the template to capture the bank's unique drivers,
3. The bank can propose a materiality threshold to focus on the main drivers for inter-affiliate flows,
4. Numbers in the template are for illustrative purposes only and should be deleted.

Schedule 3: Summary Pledging Analysis

The purpose of Schedule 3 is to show the evolution of asset encumbrance levels during resolution and the MLEs that hold the unencumbered assets. A completed schedule is required for each resolution period. Each period duration should be consistent with the scenario narrative.

Information in this schedule should feed into *Schedule 1: Funding Uses and Sources Analysis*.

Instructions for completing the prescribed template:

1. Provide the analysis for the MLEs by replicating the rows and creating sub-totals for each entity.

2. Consolidated Bank should be used as the reporting entity for peak ELA analysis.
3. Additional rows can be added to the template to capture additional asset types if needed.
4. Additional columns can be added to the template to capture the bank's unique drivers for pledging.

Schedule 4: Capital Events Summary

The purpose of Schedule 4 is to understand the assumed location and persistence of losses and their impact on MLEs. A completed schedule is required for each resolution period. Each period duration should be consistent with the scenario narrative.

Instructions for completing the prescribed template:

1. Provide the analysis for the MLEs.
2. Provide the positive and negative impacts that occur during the periods specified.
3. Repeat the events if they impact multiple MLEs.
4. Additional rows can be added to the template to capture additional events, if needed.
5. The CET 1 ratio and RWAs (bottom rows) apply only at the consolidated level only.

Information in Schedule 4 should feed into *Schedule 5: Summarized Balance Sheet*.

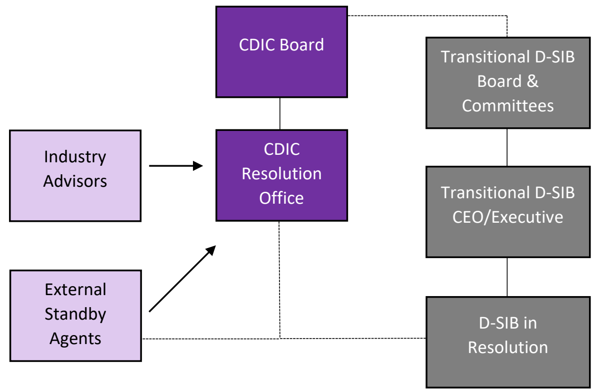
Schedule 5: Summarized Balance Sheet

The purpose of Schedule 5 is to capture the overall impact of the resolution actions on the bank's financial position. A completed schedule is required for each MLE. Each period duration should be consistent with the scenario narrative.

The information presented in this schedule should be consistent with the other schedules.

Appendix D: Self-Assessment of Governance

Inclusion of this appendix in the resolution plan is optional. It is intended to assist the bank prepare the relevant sections in the resolution plan.

<table>
<tr><th rowspan="2">TARGET OBJECTIVE</th><th colspan="3">CURRENT STATE</th><th>TARGET STATE</th></tr>
<tr><th>Identify relevant programs/policies (indicate if existing or planned).</th><th>Demonstrate how programs/policies achieve target objective and contribute to resolution preparedness.</th><th>Consider the following questions when assessment the current state and target state of readiness.</th><th>Propose a target state and work plan</th></tr>
<tr><td>1. The bank can activate its financial crisis response teams and governance protocol for resolution in coordination with CDIC.</td><td></td><td></td><td>Crisis Protocol: Does the bank have a clear governance structure for use in crisis? Does the protocol outline responsibilities and how key decisions will be made amongst Board, Senior Executive and Business Line Managers?
Coordination with CDIC: Assume CDIC's resolution governance structure is as follows:
</td><td></td></tr>
</table>

TARGET OBJECTIVE	CURRENT STATE			TARGET STATE
	Identify relevant programs/policies (indicate if existing or planned).	Demonstrate how programs/policies achieve target objective and contribute to resolution preparedness.	Consider the following questions when assessment the current state and target state of readiness.	Propose a target state and work plan
2. CDIC can swiftly install a new (or transitional) Board of Directors and Executive over resolution weekend, while upholding corporate government requirements to the extent possible.			• **Governance requirements**: Does the bank maintain a complete list of compliance requirements (domestic and international) for existing and newly recruited Board members and could CDIC leverage those processes quickly in the event that the Board and Executive Officers were replaced? • **Replacement of executive management and/or Board members**: Does the bank maintain an evergreen list of pre-selected external candidates to assist CDIC in the expeditious appointment of new Board members and/or executive management over resolution weekend? • **Charters**: Do existing Charters, by-laws, policies outline the responsibilities of the bank's Board, its Officers, its Committees and Executive members, and could those responsibilities conflict with resolution objectives? • **Resolution risks**: Beyond the loss of key decision makers, has the bank identified the risks in resolution that could potentially compromise the robustness of existing governance practices?	

Appendix E: Self-Assessment of Resourcing

Inclusion of this appendix in the resolution plan is optional. It is intended to assist the bank prepare the relevant sections in the resolution plan.

TARGET OBJECTIVE	CURRENT STATE			TARGET STATE
	Identify relevant programs/policies (indicate if existing or planned).	**Demonstrate how programs/policies achieve target objective and contribute to resolution preparedness.**	**Consider the following questions when assessment the current state and target state of readiness.**	**Propose a target state and work plan**
1. CDIC can rely on existing processes to identify and communicate with key employees across the bank at short notice.	• Financial crisis management programs, BaU policies, BCP, M&A procedures/strategies, etc. Please be specific.		• **Activation**: Are processes well documented and centralized such that they would be easy to activate in resolution? • **Testing**: When was the program last tested or reviewed by Internal Audit? What risks/stresses were being tested? Did the bank modify existing process to reflect the findings? • **Information**: How frequently is the underlying information updated? How long does it take to produce the list of key employees? Can the list be produced ex-ante and over resolution weekend? Is it a manual or automated process? What information about key employees would be included as output? • **Communication:** Which department/teams are responsible for contacting key employees? How many channels are available, and what are they? Are any channels outsourced or rely on third party data providers? Have all channels been tested? Who determines what message is communicated? Does the bank have messages developed? Is there a protocol to deal with employee concerns/Q&As in a timely fashion?	

TARGET OBJECTIVE	CURRENT STATE			TARGET STATE
	Identify relevant programs/policies (indicate if existing or planned).	**Demonstrate how programs/policies achieve target objective and contribute to resolution preparedness.**	**Consider the following questions when assessment the current state and target state of readiness.**	**Propose a target state and work plan**
2. The bank has the necessary strategies and resources identified to maximize retention of key employees			• **Retention programs:** What incentive programs exist? Are they enterprise-wide, or do they vary across the group? • Incentive programs: To what extent are the incentive programs tied to equity-based compensation or post-employment benefits? Are these applicable in a resolution scenario? • **Activation:** How quickly could those programs be implemented? • **Testing:** Have the relevant programs been tested, and when? What risks/stresses were being tested? Consider also relevant experience with retaining key employees in acquisitions.	
3. The bank is prepared with alternative strategies to fill vacancies among key positions in the event retention strategies are ineffective.			• **Back-up alternatives**: Has the bank considered alternative options/strategies in the event that retention policies do not succeed? What are these strategies and who is responsible for them? • **Succession planning:** What are the bank's succession plans for its key employees?	

Appendix F: Self-Assessment of Communications

Inclusion of this appendix in the resolution plan is optional. It is intended to assist the bank prepare the relevant sections in the resolution plan.

<table>
<tr><th rowspan="2">TARGET OBJECTIVE</th><th colspan="3">CURRENT STATE</th><th>TARGET STATE</th></tr>
<tr><th>Identify relevant departments, programs, policies (indicate if existing or planned).</th><th>Demonstrate how programs/policies achieve target objective and contribute to resolution preparedness.</th><th>Consider the following questions when assessment the current state and target state of readiness.</th><th>Propose a target state and work plan</th></tr>
<tr><td>1. The bank has the capability to communicate effectively in a crisis generally and/or a financial crisis specifically.</td><td></td><td></td><td>How quickly can the identified capabilities be engaged?
What is the “endurance” of these capabilities, resources, functions (e.g., will a crisis communications team/organization be established? Is that function only envisioned as part time or for a short duration?)
Are capabilities embedded in “business as usual” functions or resident in “crisis” functions?
If capabilities identified are not resident in a “crisis” function (e.g., BCM), are there clear protocols/procedures to align capabilities and requirements in the event of a financial crisis?
Has the bank assigned key crisis- management roles and responsibilities? Are these different than BAU?
What are the key processes that allow for the crisis communication function to be aligned with relevant resources (e.g., LOB) during a financial crisis?
What are the associated timelines for this transition?
Do call centre plans allow for scalability and allow flexible scope of scenarios?
Are there existing outsourcing arrangements that support crisis communications (e.g., telephony contracts)? Is there confidence that any underlying outsourcing arrangement can continue throughout a crisis?</td><td></td></tr>
</table>

TARGET OBJECTIVE	CURRENT STATE			TARGET STATE
	Identify relevant departments, programs, policies (indicate if existing or planned).	Demonstrate how programs/policies achieve target objective and contribute to resolution preparedness.	Consider the following questions when assessment the current state and target state of readiness.	Propose a target state and work plan
2. The bank has identified distinct stakeholder groups, relevant channels and message **content** for crisis communication in resolution.			Can the bank's crisis communications plan be easily leveraged for resolution? • Does it include a resolution stakeholder map identifying and linking target audiences with objectives, messages, channels, strategy and risks? • Is there a means to modify existing processes should messages need to be coordinated with CDIC before release? • Has a linkage been made between the content of stakeholder messages and underlying information requirements? (As an example, communications with derivative counterparties may require current financial information on net positions. Consider the need and time to produce the information required to support effective communication messages.)	
3. The bank has the appropriate mechanisms in place to **review, test and evaluate** its crisis communications specific to a financial crisis.			• Have the capabilities and plans been tested? If so, what was the scope, objective and results of those tests? Is there a plan/timeline to address any gaps? • Did the tests include foreign operations and external service providers? • Are there any future plans to test or review capabilities? What is the scope and anticipated timeline?	

Appendix G: Valuation Challenges in Resolution

For reference only.

Off-cycle and control environment	In any resolution, a valuation would need to be completed in a short period of time – particularly under an immediate conversion where the bail-in conversion amount is driven by a potential loss estimate. This compressed timeframe would make it very difficult to complete a comprehensive valuation in accordance with Canadian Institute of Chartered Business Valuators standards (as would be preferred by valuation practitioners) unless the D-SIB has sufficient readiness measures in place and the authorities have significant lead time to commence valuation readiness in the period leading up to resolution. Without additional preparedness measures, significant reliance would have to be placed on the D-SIB's internal systems, *ex-ante* valuation models and internal control processes, as well as other valuation work prepared during the pre-resolution stage which may not allow for a robust valuation in a resolution environment. A further challenge is that many of the financial reporting processes in place at the bank are tailored to month-end or quarter-end reporting requirements. Although some financial information can be extracted from the systems at any point in time (with manual adjustments, workarounds and sufficient time), there are likely to be challenges if the resolution date does not coincide with the end of a reporting period, particularly for positions that are not marked daily and asset classes that are vulnerable to market illiquidity and/or impairment concerns (e.g., it will be difficult to quickly assess the value of positions held at amortized cost.
Future outlook and forecasts	An approved and credible business plan is likely to be a central requirement of a comprehensive valuation (to provide an operational outlook and future forecast for the D-SIB) and would eventually be required to re-establish ratings. Business plans require significant time and organizational capacity to develop, review and vet. In the absence of these plans, the valuator will face inherent limitations with respect to the operational outlook and forecasted financial performance of the D-SIB.
Multi-jurisdictions and ring-fencing	Consideration will need to be given to the valuation complexity of assets held in foreign jurisdictions that are subject to differing regulatory, economic, and political considerations, and the potential for ring-fencing. Given the requirement to prepare the valuation in advance of ring-fencing measures, there are likely to be challenges associated with the valuation treatment of assets held in foreign jurisdictions.
Lack of meaningful market data and market illiquidity	Asset valuations, particularly security positions in the trading book, are heavily reliant on the availability of market data. In distressed illiquid market conditions, we expect that market data will either become unavailable or will not be meaningful (e.g., lack of broker quotes, disruption in Canadian Dollar Offered Rate (CDOR) benchmark rates, inability to create indices, etc.), thereby increasing the reliance on subjective estimates.

Appendix H: Self-Assessment of Valuation Readiness

This appendix is required to be submitted in the resolution plan. This checklist provides information that would support scoping of valuation(s) by a third-party valuator and should be updated to ensure that various valuation processes and challenges are current and remain valid. The Valuation Readiness Assessment checklist is expected to be submitted as a table in the format below.

Resolution Valuation Readiness Checklist

PREPARED BY: ______________________ REVIEWED BY: ______________________

Purpose	Detail	Valuation Type	Time & Resourcing	Update Frequency	Ability to Update	In/out Scope	Resolution Challenge	Assessment	Workarounds	Primary Group
1…	1.	Balance Sheet								
	2.	Balance Sheet & Enterprise								

The table below provides further guidance on the type of information to be provided within each column of the valuation readiness assessment checklist.

Field	Description
Purpose	Purpose of the valuation. Entries for this field are provided by CDIC (see below).
Detail	Detailed requirements, actions, etc. Entries for this field are provided by CDIC (see below).
Valuation Type	Balance Sheet or Enterprise. Entries for this field are provided by CDIC (see below).
Time & Resourcing	Indicate the time and resources required to gather the information, level of automation, involvement of third parties (i.e., service providers, such as Bloomberg, who provide data, independent valuation reports, or other inputs that support the bank's valuation processes).
Update Frequency	How frequently is the information updated?
Ability to Update	How frequently can the information be updated?
In/ Out Scope	Would this information need to be updated over the weekend (in-scope)?
Resolution Challenges	Is the information impacted by any of the resolution challenges, including off cycle reporting?
Assessment	Is the information available in resolution within a 48-hr timeframe?
Workarounds	If not available with the 48-hr timeframe what ex-ante or in crisis measures could expedite or compensate for the lack of information?
Primary Group	Group within the bank that has primary responsibly for the activity/information.

Banks are expected to use the following to complete the **Purpose, Detail** and **Valuation Type** columns of the checklist:

Purpose	Detail	Type of valuation
1. Provide an understanding of D-SIB's existing valuation processes and methodologies	1. An inventory of valuation policies and framework.	Balance sheet
	2. An inventory of all process maps and flow charts that relate to the bank's valuation procedures.	Balance sheet and Enterprise
	3. Documentation on the valuation methodologies and models (underlying the information in #16) for each of the bank's portfolios: i. By portfolio level, ii. By instrument class / loan type level, iii. Coverage of Level 1, 2, 3. Including key assumptions, limitations, and the extent of management judgment.	Balance sheet
	4. Documentation of any other valuation techniques used by the bank that are not covered by the documentation provided in #3 above.	Enterprise and balance sheet
	5. Documentation of other valuation techniques used in stress conditions or illiquid markets, including changes to assumptions, inputs, judgment.	Enterprise and balance sheet
2. Provide an understanding of D-SIB's valuation infrastructure and organization	6. Inventory of models used for valuation.	Enterprise and balance sheet
	7. Inventory of data inputs and their sources for all data used in valuation. (Internal)	Enterprise and balance sheet
	8. Inventory of data inputs and their sources for all data used in valuation. (External)	Enterprise and balance sheet
	9. Inventory of organization charts for all departments and teams engaged in the valuation process (e.g., Finance, IPV, Risk, Corporate Development) including contact details.	Balance sheet and enterprise
	10. Valuation Committee mandate and members.	Balance sheet
	11. Inventory of current external pricing/data vendors and their contact details.	Balance sheet
	12. Inventory of alternative data/pricing vendors.	Balance sheet
	13. Documentation of the Bank's IT infrastructure and key operating systems, including a mapping of instrument class / portfolio / legal entity to systems.	Balance sheet
	14. Inventory of critical systems required for valuation to be maintained during resolution.	Balance sheet
	15. Inventory of key controls supporting the Bank's valuation process.	Balance sheet
3. Leverage the bank's existing valuation processes to generate estimates and	16. Ability to provide a detailed breakdown of fair value hierarchy of instruments – Level 1,2,3 and supporting analysis, including a mapping / identification of each instrument class to: i. Valuation methodology and models – normal course, ii. Valuation methodology and models – stress conditions (e.g., changes in assumptions, inputs, judgment),	Balance sheet

Purpose	Detail	Type of valuation
allow for prioritization of asset/liability classes to aid efficiency	iii. Valuation system / platform / spreadsheet, iv. Valuation risk and uncertainties, v. Interconnectedness (e.g., hedging). Information availability by: i. Consolidated / aggregated level, ii. Legal entity level.	
	17. Ability to provide asset valuation (fair value and amortized cost) reports on loans prepared by the bank by: i. Loan level, ii. Portfolio level, iii. Legal entity level.	Balance sheet
	18. Ability to provide liability valuation (fair value and amortized cost) reports prepared by the bank by: i. Liability class (e.g., deposits, unsecured debt instruments, derivatives, subordinated debt), ii. Legal entity.	Balance sheet enterprise
	19. Ability to perform an impairment review (amortized cost assets).	Balance sheet and enterprise
	20. Ability to provide asset valuation reports performed by the bank or third parties.	Balance sheet and enterprise
	21. Ability to provide an amount and basis to calculate adjustments/reserves in derivatives/trading/securities portfolio: i. Independent Price Verification (IPV) Adjustments, ii. Credit Valuation Adjustments (CVA), iii. Funding Valuation Adjustments (FVA), iv. Close out/uncertainty, v. Any other adjustments.[74]	Balance sheet
	22. Ability to provide derivative exposure amounts by counterparty: i. Consolidated, ii. By legal entity.	Balance sheet
4. Provide an understanding of the historical P&L and balance sheet trends	23. Ability to provide historical balance sheets and income statements for the last 3 years along with detailed schedules (including other material assets such as deferred tax assets, goodwill, intangibles).	Balance sheet and enterprise
	24. Ability to provide legal entity balance sheets and income statements for the past 3 years along with relevant schedules.	Balance sheet and enterprise
	25. Ability to provide off balance sheet exposures (e.g., leases, securitization vehicles, guarantees) by legal entity – current and for the past 3 years.	Balance sheet and enterprise

[74] The intent behind the items "close out/uncertainty" and "any other adjustments" is to capture additional adjustments that may be necessary under the prudent valuation to account for market price uncertainty, close-out costs, etc. In the resolution plan, the bank can add all relevant adjustments that are either calculated in the business as usual, or would be calculated in a crisis, but are not listed in the CDIC's checklist.

Purpose	Detail	Type of valuation
5. Provide a basis for forward-looking assumptions for valuation	26. Ability to provide projected cost of funds / interest cost movements for the liability classes (e.g., deposits, loans) 3-5 year forward.	Balance sheet and enterprise
	27. Ability to provide interest yield on interest earning assets – current and projected 3-5 year forward.	Balance sheet and enterprise
	28. Ability to provide basis to calculate the Allowance for Loan & Lease Losses (ALLL) by portfolio/asset type, and the projected ALLL by portfolio/asset type 3-5 year forward.	Balance sheet
	29. Ability to provide financial projections and monthly budgets – cash flows and income by: i. Business line, ii. Consolidated entity. Budgeting and forecasting model for the bank.	Enterprise
	30. Ability to provide asset and liability run off schedules of the existing portfolio and estimated cash flows	Balance sheet
6. Provide a basis for an assessment of any asset quality adjustments (e.g., credit value adjustments)	31. Ability to provide a risk profile for each portfolio: i. Delinquency rates, ii. Default rates, iii. Charge-off rates, iv. Collections/recovery rate, v. Internal ratings.	Balance sheet and enterprise
7. Provide an understanding of capital position and requirements	32. Ability to calculate capital ratios and generate supporting schedules including risk weightings by asset class, and provide an inventory of internal models used for capital calculation as well as the status of their regulatory approval.	Balance sheet and enterprise
8. Provide an understanding of the impact of stress on valuation	33. Ability to provide results of stress tests: i. OSFI mandated and Enterprise-Wide Stress Testing, ii. Stress testing and sensitivity analysis by portfolio (including analysis of borrower and counterparty downgrades).	Balance sheet and enterprise

Appendix I: Self-Assessment of Liquidity and Funding

Inclusion of this appendix in the resolution plan is optional. It is intended to assist the bank prepare the relevant sections in the resolution plan.

TARGET OBJECTIVE	CURRENT STATE			TARGET STATE
	Identify relevant processes / programs / functions (indicate if existing or planned.	Demonstrate how processes / programs / functions achieve target objective and contribute to resolution preparedness.	Consider the following questions when assessment the current state and target state of readiness.	Propose a target state and work plan
1. Resolution funding needs of the D-SIB can be estimated with reasonable precision and speed in a resolution stress.			• **Reporting/forecasting under stressed conditions:** Information needs in resolution will require the ability to report by legal entity, jurisdiction, currency, at intra-day and forecast at varying time horizons. Considering these factors: i Which of the liquidity management processes/tools that the bank has in place currently could be leveraged for estimating funding needs upon entry to resolution and during the resolution process? ii Which of the identified tools would provide relatively more accurate estimates in stressed conditions? iii Are these processes sufficient to provide the information along the aforementioned dimensions or would they need to be adapted? • **Stress testing:** Are there any elements of the enterprise and regulatory stress testing frameworks could be leveraged for preparing or estimating funding needs in resolution? • **Preparation process:** Timeliness and accuracy of reporting in a crisis will be critical and will need to be managed against competing needs from the ongoing enhanced monitoring and pre-resolution requests. Considering these factors: i How efficient are the processes preparing the reports that could be leveraged in resolution (e.g., automated/manual, require a number of adjustments, prepared by multiple functions, using inputs from multiple systems)?How does the process ensure integrity and reliability of data ii At a minimum, what is the time required to generate the data and reports? What are the tradeoffs between the minimum vs. full reporting timeframe?	

TARGET OBJECTIVE	CURRENT STATE			TARGET STATE
	Identify relevant processes / programs / functions (indicate if existing or planned.	Demonstrate how processes / programs / functions achieve target objective and contribute to resolution preparedness.	Consider the following questions when assessment the current state and target state of readiness.	Propose a target state and work plan
			iii Are the assumptions underpinning the reports clearly documented?	
2. The D-SIB has a crisis funding strategy for resolution.			• **Preconditions for private funding programs:** Has the bank identified information or other requirements that would need to be in place in order to receive funding from investors in resolution (e.g., financials, collateral details, credit ratings, etc.)? Has the bank identified or established any processes that would facilitate reinstating its market footprint during resolution (e.g., shelf prospectus for securitization programs or debt issuances in resolution, preparations to expedite reinstating credit ratings)? • **Product and pricing strategies:** When developing crisis funding options, has the bank considered alternative funding products or arrangements (e.g., private consortia) and pricing strategies to attract market funding (including deposits) during and after resolution? • **Communication strategies:** Has the bank developed any communication plans aimed at deterring liquidity draws and bolstering market confidence in its corresponding funding strategies? • **Funding capacity:** Does the bank's contingency funding/liquidity plan contemplate pre-resolution actions that would reduce funding needs once in resolution (e.g., temper asset growth) or reduce funding complexity (e.g., lower reliance on foreign currency funding or cross border funding)? Please note that HQLA is not explicitly reserved for resolution, and the liquidity needs should be considered under a period longer than the 30-days horizon. • **Ability to pre-position collateral:** Does the bank's contingency funding/liquidity plan contemplate actions that can be taken pre-resolution to provide for sufficient eligible collateral, pre-positioned to access public funding sources once in resolution?	

TARGET OBJECTIVE	CURRENT STATE			TARGET STATE
	Identify relevant processes / programs / functions (indicate if existing or planned.	Demonstrate how processes / programs / functions achieve target objective and contribute to resolution plan preparedness.	Consider the following questions when assessment the current state and target state of readiness.	Propose a target state and work plan
3. The D-SIB has robust processes that are capable of supporting funding requirements in resolution.			• **Ability to track and monitor collateral and asset encumbrance:** Does the bank have the ability to track, monitor and report on collateral / asset encumbrance (e.g., usage, availability, limits) by legal entity and jurisdiction? How do the asset utilization limits differ between "business as usual" and stressed conditions? • **Legal rights to collateral:** Does the bank have a process to establish what legal entities have contractual rights to that collateral? How does this impact the ability to access collateral during a resolution event? • **MIS Capabilities:** Does the bank have the MIS capabilities to quickly produce information required to reinstate funding from investors in resolution (e.g., amount, quality, type, jurisdiction of assets)?	

Appendix J: Self-Assessment of Operational Continuity

Inclusion of this appendix in the resolution plan is optional. It is intended to assist the bank prepare the relevant sections in the resolution plan.

Purpose

The purpose of the attached template is to assist the bank with the preparation of the resolution plan by ensuring the key aspects of the FSB *Guidance on Arrangements to Support Operational Continuity in Resolution – Revised version* are included within its resolution plan submissions.

Demonstrate Resolvability

A resilient bank service delivery model supports the continuity of critical functions and separation of divestiture options as envisaged by the resolution strategy.

Through the resolution plan, the bank should demonstrate:

- All critical shared services are provided under contractual terms that can facilitate execution of the resolution strategy (e.g., continuity in resolution, assignability to support divestitures, cancellation to support wind-down),
- The bank is capable of generating timely information for third party contracts and intra-group service level agreements,
- The financial resources necessary to meet the contractual obligations for critical shared services are incorporated in the modelling of funding needs, and
- For the critical shared services that are at risk of termination in resolution, there are contingency options implementable within a timeframe that would avoid disruption to the continuity of critical functions.

The table below provides a brief description of the content as well as level of detail, the bank should include when completing the template.

Field	Description
Section	Refers to the section within the FSB *Guidance on Arrangements to Support Operational Continuity in Resolution – Revised version* (March 2024), that the criteria are taken from.
Area	The heading or sub-heading, of the section within the FSB *Guidance on Arrangements to Support Operational Continuity in Resolution – Revised version* (March 2024), that the criteria is taken from.
FSB Guidance Criteria	Briefly summarizes the target statement based on FSB guidance criteria.
Reference to relevant resolution plan section(s) or other sources (e.g., recovery plans, bank policy/procedures, prior submission etc.)	This field should capture the section(s) of the resolution plan (or another source/document) that contains the specific information addressing the FSB guidance criteria.
If not in resolution plan, reference to relevant section(s) of the work plan	This field should identify the relevant section(s) of the work plan that outlines activities that will address the FSB guidance criteria.
Comments	This field is for any additional comments/information that the bank feels would support its self-assessment against the guidance criteria.

Operational Continuity Self-Assessment Template

Section of the FSB Guidance	Area	FSB Guidance Criteria	Reference to Relevant Resolution Plan Section(s) or Other Source	If not in Resolution Plan, reference to Relevant Section(s) of the Work Plan.	Comments
3.1-3.4	**Service delivery models and resolvability**	The resolution plan contains a sufficient level of details about the bank's selected service delivery model, or combination of service delivery models. - This includes an updated mapping between critical functions, shared services, and legal entities, and - An assessment of the specific strengths and weaknesses of the selected model or combination of models.			
3.5-3.7	**Provision of services within a regulated legal entity**	For the provision of services within a regulated legal entity, the resolution plan includes details about services provided to other entities in the group. This includes details about contractual documentation and the transparent, arm's length pricing mechanisms in place. The resolution plan includes details about support arrangements for the retention or substitution of key employees from business lines that may be wound down or disposed of in resolution.			
3.8-3.11	**Provision of services by an intra-group service company**	For the provision of services by an intra-group service company, the bank considers the potential challenges for enforceability of SLAs or the continued performance of services that may arise during resolution. - The bank also describes the support arrangements that would ensure intra-group service companies have sufficient financial resources to cover its own operating costs throughout resolution.			
3.12-3.15	**Provision of services by a third-party service provider**	For the provision of services by a third-party service provider, the resolution plan addresses the contractual challenges that may arise during resolution with respect to the restrictions on the ability to transfer services, as well as the service provider's ability to modify the terms of the contract or existing contractual rights to terminate.			

Section of the FSB Guidance	Area	FSB Guidance Criteria	Reference to Relevant Resolution Plan Section(s) or Other Source	If not in Resolution Plan, reference to Relevant Section(s) of the Work Plan.	Comments
4.1-4.3	**Possible arrangements to support operational continuity**	The resolution plan includes sufficient details about the bank's arrangements to support operational continuity of the selected service model, during the two stages of resolution: (i) stabilization (ii) wind-down and/or restructuring In addition, the resolution plan includes considerations for how to manage the transition from ‘business as usual’ to operations during resolution.			
4.4 (i)	**Contractual provisions**	The resolution plan describes the contractual arrangements and SLAs, for both intra-group and third-party service providers, with consideration of networks of interdependencies, for the provision of critical shared services, including those that are digital in nature.			
4.4 (ii)	**Management information systems**	The resolution plan clearly describes management information systems that are capable of producing timely reports on the provision and receipt of critical shared services on a legal entity, line of business and critical function basis with consideration of the effects of third-party service providers’ supply chains on continuity of critical shared services in resolution.			
4.4 (iii)	**Financial resources**	The resolution plan includes details about the sufficiency of financial resources that would be available to facilitate the operational continuity of critical functions in resolution.			
4.4 (iv)	**Robust pricing structures**	The resolution plan describes robust cost and pricing structures for services that are predictable, transparent, and set on an arm’s length basis with clear links between the original direct cost of the service and the allocated cost.			
4.4 (v)	**Operational resilience and resourcing**	The resolution plan describes critical shared services that are operationally resilient, with consideration of the risks of concentration of service providers and lack of substitutability, and have sufficient capacity (ex. human resources and expertise) to support the restructuring phase.			
4.4 (vi)	**Governance**	The resolution plan describes critical shared services that have their own governance structure with clearly defined reporting lines, including consideration of governance arrangements relating to the digitalization of services.			
4.4 (vii)	**Rights of use and access**	The resolution plan clearly outlines the rights of use and continued access to operational assets related to critical shared services, with consideration of the risks of disruption by a failure or resolution of any particular group entity, domestically or in foreign jurisdictions.			

Section of the FSB Guidance	Area	FSB Guidance Criteria	Reference to Relevant Resolution Plan Section(s) or Other Source	If not in Resolution Plan, reference to Relevant Section(s) of the Work Plan.	Comments
4.5	**Operational continuity playbook**	The resolution plan considers the development and maintenance of an operational continuity 'playbook' to help facilitate operational continuity during resolution.			
4.6 (i)-(v)	**Documented services (terms and clauses)**	The resolution plan describes services, from third party and intra-group entities that are well documented and include: - Clear service parameters against which service provision can be measured, - Terms and conditions that do not alter as a result of entering resolution, - Terms that allow for services to be transferred or assigned in resolution, - Clauses that allow for service continuation following divestment as a result of resolution, and - Resolution-resilient clauses that prevent contract modification or termination solely as a result of intervention/resolution.			
4.8-4.9	**Resolution strategies and post-stabilization restructuring**	The resolution plan describes how the selected service model (or combination of models) used by the bank supports business separability and restructuring.			
4.10 - 4.11	**Cross-border provision of shared services**	The resolution plan includes detailed consideration of the regulatory intervention risks associated with stakeholder behaviour, at the time of resolution, for entities outside of the jurisdiction of the home resolution authority. The resolution plan identifies entities and services outside of the jurisdiction of the resolution authority, assesses their materiality, concludes on their impact to the resolution strategy, and proposes mitigating/remedial activities.			
Annex	**Indicative information requirements to facilitate operational continuity**	Overall, the resolution plan contains details about access (timely and accurate) to management information systems during resolution, as well as a detailed mapping of critical functions and critical shared service providers and recipients.			
A1	**Information requirements: Key employees required for the provision of critical shared services**	Overall, the resolution plan contains sufficient details about the identification and retention of key employees required for the provision of critical shared services.			

Section of the FSB Guidance	Area	FSB Guidance Criteria	Reference to Relevant Resolution Plan Section(s) or Other Source	If not in Resolution Plan, reference to Relevant Section(s) of the Work Plan.	Comments
A2	**Information requirements: Operational, legal and governance structure of critical shared services**	Overall, the resolution plan contains sufficient details about the operational, legal and governance structure of critical shared services.			
A3	**Information requirements: Contractual arrangements**	Overall, the resolution plan contains sufficient details about contractual arrangements governing the provision of critical shared services, including consideration of the risks to service disruption during resolution.			

Appendix K: Remediation of Internal and External Contracts

This appendix is required to be submitted in the resolution plan.

When completing the table below, the bank should consider the reach of the *CDIC Act* and its stay provisions[75]. The contracts should be assumed to behave in accordance with contractual terms and conditions of their governing jurisdictions.

The bank should satisfy itself that termination risk is adequately mitigated, and where residual risk remains, provide supporting rationale and options to address this risk in a crisis. Relying on the general governing law of a contract is not deemed as a sufficient safeguard to prevent termination of a contract, since there should be clarity on what statutory regime applies in the event of a resolution, as compared to a bilateral dispute between the contracting parties.

For the contracts at risk of termination that cannot be remediated by inclusion of resolution resilient clauses, the resolution plan should identify contingency options[76], at a contract level, to avoid or minimize disruption to the continuity of critical shared services. For such contracts, the resolution plan should clearly indicate the critical shared services they support, and the applicable MLEs.

The bank's work plan should incorporate the remedial actions including the associated timeframes to provide CDIC with visibility into the progress that is being made.

The following table should be completed as of the date of the resolution plan or as agreed with CDIC. All material contracts, including intragroup contracts (if applicable) and including those that have been fully remediated and those which are pending remediation, should be included in the table.

	Total number of material contracts	Number of contracts for which the CDIC Act stay provisions may not be enforceable or applicable, broken down by:				
		Subtotal	Include resolution-resilient clause	In progress to include resolution resilient clauses	Not to be remediated	Supporting rationale for exception
External contracts:						
Canadian law						
US law						
UK law						
Other jurisdictions *(specify jurisdictions)*						
Internal contracts (SLA)						
Material leases						

[75] For contracts that are governed by the laws of a foreign jurisdiction, the stay provisions under the *CIDC Act* should not be assumed to apply.
[76] Examples of contingency options include expedited replacement of third-party suppliers, prompt payment and/or pre-payment, moving the contract to the parent bank as the contracting party, and/or proactive outreach with the supplier as part of the crisis communication plan (i.e., the supplier is identified as a stakeholder with key messages developed ex-ante).

Appendix L: FMI Contingency Plan Templates

This appendix is required to be submitted in the resolution plan.

The purpose of the tables below is to assist the bank in preparing its risk analysis in its FMI contingency plans. The bank may tailor or replace the tables, if necessary, but should ensure that the same information at a level of granularity comparable to CDIC's prescribed tables is included. If CDIC's prescribed tables are replaced, the bank is requested to submit proposed alternate reporting templates to CDIC for comments and approval before submitting them with the resolution plan.

Engagement with FMI Intermediary(ies)

The table below outlines the information that the bank should include to analyze risks related to the rules and contractual requirements that govern a critical FMI intermediaries' relationship with the bank, on an individual-basis, in resolution.

This table should be included within the risk identification section (as outlined in *section 3.6.2.2*) of each FMI contingency plan.

Name of critical FMI intermediary	Description of services provided	Material legal entity served	Risks to continued service in resolution	Risk mitigating actions	Unmitigated risk	Status of resolution resilient language (complete, in progress, intermediary not willing to engage, not deemed necessary)
…						

Key Employees

The table below outlines the information that the bank should include to analyze risks related to key employees supporting continuity of access in resolution.

This table should be included within the risk identification section (as outlined in *section 3.6.2.2*) of each FMI contingency plan.

Number of key employees supporting the FMI in BAU	Estimate of incremental staff required in resolution or rationale for sufficiency of BaU resources	Operational group/line of business	Legal entity	Jurisdiction	Risks to continued service in resolution	Risk mitigating actions	Unmitigated risk
…							

Third-party service provider

The table below outlines the information that the bank should include to analyze risks of termination for critical third-party service providers supporting critical FMI access or FMI intermediary services, as a result of the bank being in resolution.

This table should be included within the risk identification section (as outlined in *section 3.6.2.2*) of each FMI contingency plan.

Name of critical third-party service provider/system	Description of services	Risk to continued service in resolution	Risk mitigating actions (including status of resolution resilient language if relevant)	Unmitigated risk
…				

Data and reporting requirements

The table below outlines the information that the bank should include to analyze risk related to meeting reporting requirements in resolution. For incremental reporting requirements in resolution, the bank is expected to use judgement, supported by a clear rationale (i.e., reporting requirements as informed by the FMIs response to the FSB questionnaire, or heightened reporting requirements as outlined by an FMI intermediary), when populating the template.

This table should be included within the risk identification section (as outlined in *section 3.6.2.2*) of each FMI contingency plan.

BaU FMI / FMI Intermediary reporting requirements	Frequency of reporting (daily, weekly, monthly, ad-hoc) in BAU and in-crisis	Expected incremental reporting in resolution	Risks to meeting incremental reporting requirements in resolution	Unmitigated risk
…				

Appendix M: Trading Book Wind-Down Template

This appendix is required to be submitted in the resolution plan.

Section 1: Trading book profile - Segmentation

When populating the template, the bank is expected to use judgement, supported by a clear rationale, ensuring that the resulting segmentation provides a good basis for differentiating between parts of the trading book that would be subject to different wind-down strategies in resolution. All position characteristics that significantly affect the wind-down approach should be reflected in the segmentation. However, not each field will not, however, be relevant for all parts of the trading book (e.g., the "OTC" field only applies to derivatives). In these cases, the bank may indicate that a differentiation along the dimension is not relevant or not applicable for the product type in question. Business area, product type, governing jurisdiction and booking entity should, however, always be seen as relevant.

The table below provides further guidance on the type of information to be provided in the respective fields. CDIC allows the bank to tailor the format of the template to align more closely, where possible, with the bank's current reporting as long as the bank is providing substantially the same scope of information.

Field	Description
Unique segment ID	Each segment line should have a unique identifier. The bank may choose a simple integer approach (1, 2, 3, 4…), or use decimals (1.1, 1.2, 2.1, 2.2…) or alphanumeric (A1, A2, A3, B1, B2…) to provide a hierarchical structure. These identifiers can be used when referring to a specific segment in text.
Business area	The bank may align with its internal business hierarchy or classification of its trading book. For example, the business area could be an asset class, e.g., "Fixed Income", "Commodities", "Foreign Exchange"/"Currency", "Equity", etc. From the information in this field, it should also be clear which trading positions are not part of the bank's trading or capital markets business, e.g., "Treasury" for positions held by Treasury.
Sub-business area	The bank may use this field, for example, to represent a desk, product set or region, e.g., "Interest Rate Derivatives".
Product type	The bank should classify products in a way that provides sufficient differentiation between products that would be subject to different wind-down strategies. The name of the product type should be self-explanatory, e.g., "Interest rate swaps". The bank can also differentiate between linear and non-linear products/financial instruments.
OTC	For derivatives, the bank should indicate whether they are over-the-counter (OTC), exchange-listed and/or cleared through a central counterparty (CCP).
Governing jurisdiction	Governing jurisdiction is defined as the jurisdiction specified in a contract that will govern any dispute that arises between the parties to the contract. Each unique segment should be limited to no more than one governing jurisdiction.
Booking entity	The legal entity in which the trading position is booked. Only entities identified as material legal entities need to be specified, all other entities can be captured as "Other entities".
Structural balance sheet hedge	The bank should indicate whether positions are used as structural balance sheet hedges ("Structural balance sheet hedge") or not ("- ").
[Placeholder for additional segmentation dimension]	The bank may use these fields to add additional segmentation dimensions where they find it relevant.

Field	Description
Fair value hierarchy level / Liquidity	The bank should indicate whether positions are Level 1, Level 2 or Level 3 according to the fair value hierarchy. In the event that this information is not easily available, banks may classify positions into buckets leveraging any other information that the bank's management uses to identify asset liquidity and price discovery. For example, there could be three buckets: (i) very liquid, where there are many market makers (e.g., exchange-listed or very liquid securities), (ii) relatively liquid, where there are some/few market makers (e.g., plain vanilla OTC derivatives), and (iii) illiquid, where there are very few or one market maker of the financial instrument (e.g., exotic OTC derivatives).
Fair value of segment in millions of CAD	The fair value in millions of Canadian dollars for the segment.
Notional amount in millions of CAD	Total notional in millions of Canadian dollars for the segment.
Description of segment and activities performed	The bank should provide a concise description of the activities associated with the segment. In particular, where the assets in the segment are identified as assets that cannot be sold, exited or moved, a brief description of the characteristics that prevent such actions should be provided in this field.

Section 2: Assignment of wind-down strategy

The template should summarize the list of assigned wind-down strategies and time to wind-down for each unique segment.

The table below provides guidance on the information to be provided in these fields.

Field	Description
Wind-down strategy	The expected exit strategy, e.g., from the list of example exit strategies in *Appendix N* or any other strategy as identified by the bank.
Single exit action / multiple exit actions	The bank should indicate whether a single exit action is expected or whether the segment is expected to be wound down through multiple exit actions spread over the wind-down period.
Time to wind-down	The bank should indicate the approximate time, expressed in months, required to wind-down the segment.

Section 3: Impact on liquidity and capital

In this template, the bank should outline the net liquidity impact and the expected losses[77] for each trading book segment for the selected points in time.

The table below provides guidance on the information to be provided in these fields.

Field	Description
Net cash flow in millions of CAD (compared to T_0)	For each wind-down segment, these fields should indicate the cumulative sum of liquidity inflows, net of liquidity outflows, at T_0, T+1M, T+2M, T+3M, T+6M, T+1y as well as to the end of the wind-down. If inflows are higher than outflows the net liquidity position should be shown as positive. If outflows are larger than inflows it should be shown as negative.

[77] Losses refer to losses incurred due to actions associated with the resolution (e.g., counterparty actions) and actions taken by the bank as part of their strategy for the trading book (e.g., liquidation of positions), not the expected losses due to market movements or counterparty defaults that are not the result of the trading-book wind-down.

Field	Description
Net impact on available non-cash collateral in millions of CAD (compared to T_0)	For the aggregate trading book (i.e., across all segments), these fields should indicate the cumulative sum of previously posted non-cash collateral becoming available through the wind-down net of any additional collateral requirements at T_0, T+1M, T+2M, T+3M, T+6M, T+1y as well as to the end of the wind-down. If collateral becoming available (i.e., freed up) is higher than incremental collateral requirements the net impact on available non-cash collateral should be shown as positive. If incremental non-cash collateral requirements are larger than collateral becoming available, it should be shown as negative. Note that only non-cash collateral should be shown, as the impact on cash collateral should be captured through the net cash flow.
Assumed average haircut (%)	This field should, if applicable, indicate the average haircut the bank assumes it would need to accept for the wind-down of the segment, given the proposed wind-down strategy and timeframe.
Aggregate cumulative realized losses in millions of CAD (from T_0)	For each wind-down segment, these fields should indicate the total cumulative realized losses from the wind-down, net of gains, experienced at T_0, T+1M, T+2M, T+3M, T+6M, T+1y as well as to the end of the wind-down. Losses should be shown as negative, or if gains are expected to be larger than losses, this should be shown as positive. These estimates should capture only losses resulting from the resolution (e.g., actions by counterparties or authorities) and actions taken by the bank as part of its strategy for the trading book (e.g., exit costs from liquidation of positions), and not the expected losses due to market movements or counterparty defaults that are not the result of the trading-book wind-down.

Appendix N: Examples of Wind-Down Strategies

For reference only.

Below is a list of examples of potential wind-down strategies. The list is not intended to be exhaustive, and the bank can define additional exit strategies not included in this list.

1. Hold to maturity (matures within wind-down time frame),
2. Hold to maturity (unable to wind-down within wind-down time frame),
3. Cash security sale or buyback,
4. Package and sell,
5. Exercise contractual option to terminate (voluntary termination by the bank, if contractually feasible),
6. Contract assumed to be terminated by the bank's counterparty,
7. Trade tear-up (cancellation for up-front payment),
8. Exchange-traded derivative closeout,
9. Negotiated closeout,
10. Novation,
11. Return of collateral, or
12. Compression.

Appendix O: Remediation of EFCs

This appendix is required to be submitted in the resolution plan.

The bank should include an update on the remediation status of the eligible financial contracts (EFCs) in scope for *Canada Deposit Insurance Corporation Eligible Financial Contracts By-law* (EFC By-law). The bank's work plan should incorporate planned remedial actions including the associated timeframes to provide CDIC with visibility into the progress that is being made on the remediation of EFCs subject to the *EFC By-law.*

The following tables should be completed as of the date of the resolution plan or as agreed with CDIC.

The bank may report on EFC compliance at the master agreement level.

Instructions for completing the templates:

1. Tables are segmented according to governing law of the EFC.
2. Indicate the total number of EFCs that are or are expected to be in scope.
3. Indicate the number of EFCs that are already remediated at the "as of" date.
4. Of the balance (un-remediated) EFCs, indicate both the count and the notional exposure under these EFCs. The notional exposure is intended to provide CDIC an indication of the materiality of un-remediated EFCs.
5. Indicate the notional exposure under un-remediated EFCs, which is expected to remain un-remediated for any reason. This could be because the associated counterparties will not agree to take the steps required to enable compliance with the by-law.
6. Provide additional commentary about the scope and materiality of the EFCs remaining un-remediated.

Figure 9: Remediation status of EFCs that are in scope of Phase I as of October 1, 2023

	Total number of EFCs in scope for Phase I timeline	Total Number of EFCs that have been remediated.	Un-remediated		
			Number	Notional Exposure (in millions of CAD)	Notional Exposure expected to remain indefinitely (in millions of CAD)
Canadian Law					
US Law					
UK Law					
Other jurisdictions					
Jurisdiction unclear					
Total					

Figure 10: Remediation status of EFCs that would fall in scope of Phase II as of October 1, 2024

	Total number of EFCs in scope for Phase II Timeline	Total Number of EFCs remediated	Un-remediated		
			Number	Notional Exposure (in millions of CAD)	Notional Exposure expected to remain indefinitely (in millions of CAD)
Canadian Law					
US Law					
UK Law					
Other jurisdictions					
Jurisdiction unclear					
Total					

Appendix P: Definitions of Test Types

For reference only.

Type of Test	Definition
Back test	Back tests are production tests whereby the output is compared against historical data. The objective of this testing activity is to validate the accuracy of the results produced under resolution conditions (i.e., compressed timeframe) to actual historical data covering the same period of time.
Fire drill	Fire drills are production tests with a narrow scope, in which information should be made available for review within a limited timeframe (T+48 hours unless otherwise noted) upon request. In a fire drill, the bank's employees responsible for producing the information should not have advance knowledge of the test. Test results must be within a reasonable pre-defined tolerance of accuracy. The accuracy should be validated by comparing the test information to the information produced without a time constraint to assess the accuracy of the compressed processes. The objective of this testing activity is to stress the bank's capabilities, without any preparation, that would be required to operate much faster in a crisis and establish a tolerance for reduced precision of the information as a result of the compressed timeframe.
Information session	Information sessions are training opportunities for the bank's key employees with respect to the resolution plan and related capabilities. The objective of this testing activity is to ensure that, as employee turnover or organizational changes occur, key employees have the requisite knowledge of the resolution plan and their respective roles and responsibilities.
Production	Production tests involve the production of a prescribed set of information. Production tests should be conducted within a compressed timeframe (T+48 hours unless otherwise noted), but unlike a fire drill may incorporate lead time to prepare. Test results must be within a reasonable pre-defined tolerance of accuracy. The accuracy should be validated by comparing the test information to the information produced without a time constraint to assess the accuracy of the compressed processes. The objective of this testing activity is to stress the bank's capabilities that would be required to operate much faster in a crisis and establish a tolerance for reduced precision of the information as a result of the compressed timeframe.
Simulation	Simulations involve the production of information and should be run in real-time to reproduce the constraints and environment of a crisis. Simulations should be grounded in a specific scenario. The objective of this testing activity is to validate the bank's capabilities to produce information under a compressed timeframe to support decision making required in a crisis environment.
Tabletop	Tabletops are typically walkthroughs led by a facilitator who guides participants through a discussion of one or more scenario events. The objective of this testing activity is to validate processes, roles and responsibilities, or decision making.

Appendix Q: Testing Inventory

This appendix lists the tests that are required to be included in the testing program in the resolution plan.

Resolvability Risk Area[78]	Capability	Type of Test	Testing Frequency
Loss absorbency (2.2)	2.2.1. Walk through the process to recapitalize the material legal entities (MLEs)[79] to confirm the roles, interdependencies, and process timelines.	Tabletop	Every 5 years Retesting to be considered based on test results and/or material changes.
	2.2.2. Produce information to estimate capital needs on a consolidated basis and by MLE[79] within a constrained timeframe for the purpose of recapitalization off-cycle.	Production	
Access to liquidity (2.3)	2.3.1. Walk through the process to generate a consolidated group view of liquidity for the group to confirm the roles, interdependencies, and process timelines.	Tabletop	Every 3 years Retesting to be considered based on test results and/or material changes.
	2.3.2. Produce information to estimate funding needs on a consolidated basis and by MLE[79] within a constrained timeframe.	Production / Fire drill	
	2.3.3. Produce information to forecast funding needs on a consolidated basis and by MLE[79] by material currencies.		
	2.3.4. Produce information to monitor and measure sources and positioning of liquidity by MLE[79] (including on an intra-day basis).		
	2.3.5. Produce information on the amount, level, type, eligibility, and legal rights of collateral by jurisdiction.		
	2.3.6. Test the overall capabilities (covering people, processes, systems and data/information) to manage, value, and track available and encumbered collateral supporting execution of bank's funding options (e.g., mobilization of the bank's assets/collateral to access central bank facilities during resolution) and continuity of access to critical FMIs.	Tabletop / Production	
Valuation in support of bail-in execution (2.4)	2.4.1. Walk through the valuation process to confirm the roles, interdependencies, and process timelines.	Tabletop	Every 3 years Retesting to be considered based on test results and/or material changes.
	2.4.2. Produce off-cycle information to update the high valuation risk balance sheet items and capital components that could materially impact loss estimate (test of timeliness).	Production / Simulation	
	2.4.3. Validate the accuracy of proxies used in updating the high valuation risk balance sheet items and capital components that could materially impact loss estimate off-cycle by comparing the estimates to actuals (test of accuracy).		
	2.4.4. Test the overall capabilities (covering people, processes, systems, and data/information) to calculate, off-cycle, the capital shortfall with updated balance sheet and capital components, including the application of expert adjustments and other workarounds.		

[78] CDIC's *D-SIB Resolution Plan Assessment Framework*.
[79] The scope should be based on the bank's resolution profile. The bank may test a sample of MLEs. When identifying an appropriate sample, the bank should consider those entities that are relevant to maintaining the bank's critical functions during resolution, regulated status, and jurisdiction. The bank may test groupings of MLEs, consistently with how they are treated in the resolution scenario.

Resolvability Risk Area[78]	Capability	Type of Test	Testing Frequency
Bail-in execution (2.4)	2.4.5. Produce complete and accurate information on all instruments impacted by a bail-in resolution (on an instrument-by-instrument basis) within a compressed timeframe of T+24 hours.[80]	Fire drill	Every 3 years Retesting to be considered based on test results and/or material changes.
	2.4.6. Calculate accrued interest and the amount of any declared and unpaid dividends for all instruments within a compressed timeframe of T+24 hours.		
	2.4.7. Test the overall capabilities (covering people, processes, systems, and data/information) to support the conversion of bail-in debt issued in Canada, including the information requirements and steps that must be taken by the bank to effect a conversion of bail-in debt as outlined in the bail-in playbook.	Tabletop / Production	Every 5 years Retesting to be considered based on test results and/or material changes.
	2.4.8. Test the overall capabilities (covering people, processes, systems, and data/information) to support the conversion of bail-in debt issued in foreign jurisdictions, including the information requirements and steps that must be taken by the bank to effect a conversion of bail-in debt as outlined in the bail-in playbook.[81]		
Trading book wind-down (2.5)	2.5.1. Validate the system capabilities to rapidly aggregate detailed trading book positions and exposure data and classify positions by maturity and liquidity to determine how and when positions can be exited.	Production	Every 5 years Retesting to be considered based on test results and/or material changes.
	2.5.2. Validate the system capabilities to produce the information on the eligible financial contracts, including identifying MLEs covered by the EFCs, governing law of the EFC as well as the trigger events and other factors that may contribute to early termination in resolution.		
	2.5.3. Produce information on collateral posted/received for each of the bank's legal entities in scope for the trading book wind-down.		
	2.5.4. Produce information on collateral posted/received for each material counterparty group.		
	2.5.5. Produce information on netting arrangements within 24 hours.		
	2.5.6. Produce information on the contact details for counterparties, FMIs, and home and host authorities that would need to be contacted to support the trading book wind-down.		
	2.5.7. Produce information identifying the key employees required to execute or support the wind down.		
	2.5.8. Test the overall capabilities (covering people and expertise, processes, systems, and data/information) to implement all wind-down strategies identified in the resolution plan.	Tabletop / Production	

[80] The identification of bail-inable instruments, including issuances and maturities during the off-cycle period, should be measured at a 100% accuracy rate.
[81] The timeline for required testing has been extended beyond 2025.

Resolvability Risk Area[78]	Capability	Type of Test	Testing Frequency
Continuity of access to FMIs (2.6)[82]	2.6.1. Test the overall capabilities (covering people, processes, systems, and data/information) to meet heightened response times and frequency of financial requirements (e.g., intra-day margin/collateral or pre-fund obligations, default/guarantee funds) imposed by an FMI or correspondent service provider. For the purposes of the test, the bank should make conservative assumptions on heightened response times and frequency of financial requirements.	Production / Simulation	Every 5 years Retesting to be considered based on test results and/or material changes.
	2.6.2. Test the overall capabilities (covering people, processes, systems, and data/information) to meet heightened response times and frequency of communication required by an FMI or correspondent service provider. For the purposes of the test, the bank should make conservative assumptions on heightened response times and frequency of communication.		
	2.6.3. Test the overall capabilities (covering people, processes, systems, and data/information) to meet heightened response times and frequency of reporting requirements (quantitative and qualitative) imposed by an FMI or correspondent service provider. For the purposes of the test, the bank should make conservative assumptions on heightened response times and frequency of reporting requirements.		
	2.6.4. Produce information identifying the key employees and validate the process to identify and deploy additional staff as required, to support an increase in the operational activity associated with maintaining access to an FMIs.	Tabletop	
Operational continuity, crisis capabilities and governance (2.7)	2.7.1. Produce complete and accurate information on the contractual arrangements supporting critical shared services.[83]	Production	Every 5 years Retesting to be considered based on test results and/or material changes.
	2.7.2. Walk through the divestiture process to confirm roles, interdependencies, and process timelines.[84]	Tabletop	
	2.7.3. Test the overall capabilities (covering people, processes, systems, and data/information) to manage the bank's internal communications during resolution, including communication with the key employees.	Tabletop	
	2.7.4. Walk through the process to communicate with external stakeholders to confirm the roles, interdependencies, and process timelines.	Tabletop	

[82] Banks do not have to conduct a test for each critical FMI. The banks can take a sample-based approached, where the testing plan should ensure that, at a minimum, each method of access (direct and indirect) is tested along with different jurisdictions (domestic and foreign).
[83] The bank may test a sample of critical shared services. The sample should be representative of the different functions that are in scope of the bank's critical shared services.
[84] The bank may test a sample of divestitures, prioritizing those divestitures that would have the most material impact on the capital or liquidity position of the bank, or are most complex to execute.

Resolvability Risk Area[78]	Capability	Type of Test	Testing Frequency
	2.7.5. Conduct information and awareness sessions and test key employees' knowledge concerning the resolution process and their responsibilities.[85]	Information session	Annually
	2.7.6. Produce information identifying the complete list of key employees, by legal entity and line of business, required in resolution and determine retention costs.	Simulation/ Production	Every 3 years Retesting to be considered based on test results and/or material changes.
	2.7.7. Validate the process to add/replace/re-assign all key employees (as identified in capability 2.7.6 above) due to time constraints, changing work environments, and potential conflicts of interest.	Tabletop	
	2.7.8. Walk through the process to activate the resolution plan and mobilize the crisis response team, including governance interaction between the parent bank and MLEs.	Tabletop	Every 5 years Retesting to be considered based on test results and/or material changes.
	2.7.9. Walk through the process to facilitate expeditious changes to the composition of the board of directors or executive management over a resolution weekend (e.g., process to initiate succession plans, leveraging lists of pre-selected/screened external candidates).		

[85] Key employees may be segmented for inclusion in the annual awareness session on a rotational basis. Not all key employees need to attend the awareness session each year.

Appendix R: Work Plan Template

This appendix is required to be submitted in the resolution plan.

Action item	Relevant resolution plan section(s)	Related work plan actions / supporting workstreams	Timing		Ownership		Progress update			Principal activities completed since the previous resolution plan submission	Internal testing plan
			Start	End	Lead	Oversight	Stage	Status	Comments		
1…											
2…											
3…											
4…											

Appendix S: Recommended Resolution Plan Table of Contents

For reference only. This appendix is intended to support the bank structure its resolution plan.

Table of Contents

1. Section 1 – Resolution profile & strategy

Resolution profile

Resolution strategy

2. Section 2 – Financial feasibility analysis

Assumptions for the resolution scenario

Resolution scenario analysis

3. Section 3 – Operational plan

Capabilities to support crisis preparedness

Bail-in execution

Valuation in resolution.

Capabilities to support recapitalization & funding actions

Operational continuity of critical shared services

Continuity of access to FMIs

Trading book wind-down plan

Execution of restructuring options

Key regulators & actions to satisfy regulatory requirements

4. Section 4 – Resolution plan testing

Testing program policies and procedures

Overview of testing program for the upcoming year

5. Section 5 – Impediments and work plan

Bank's work plan

6. Appendices[86]

[86] The Bank should use consistent nomenclature to ensure ease of reference between sections of the resolution plan and their corresponding appendices, where applicable.

Canada Deposit Insurance Corporation

Société d'assurance-dépôts du Canada

Canada